



# CAREER AND OCCUPATION DICTIONARY

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## FOREWORD

The Ministry of Labour and Human Resources is pleased to present the Second Edition of the Career and Occupation Dictionary. The first edition was published in 2004 with the objective of providing detailed information to the younger generation, particularly the middle and higher secondary school students on the types of occupations relevant to Bhutan.

The Dictionary had helped to guide job seekers and students in understanding the types of careers and occupations available in the country. The Dictionary has also provided information on courses available in various colleges and institutes across the country.

However, in the eight years since its publication, the private sector has grown, the labour market has changed and more educational centres have been established and as a result, many new occupations have emerged. As such, the Dictionary no longer reflects a complete picture of the present day scenario of career possibilities in the country.

In view of this, the Career and Occupational Dictionary has been revised and updated with more than 60 new careers/occupations as well as new information on training institutes and centres for higher learning. This new information was compiled along with a list of all technical institutes, colleges and centres of education and training where students, job seekers and trainees alike can apply to further their knowledge in their chosen fields.

I would like to extend my deep appreciation to the Department of Employment, Department of Occupational Standards and Department of Local Governance for their support and contributions towards the preparation of this Dictionary. The Department of Labour deserves a special appreciation and commendation for spearheading the revision and successfully launching this Second Edition of the Dictionary.



Dorji Wangdi  
**Labour and Human Resources Minister**



## INTRODUCTION

This **Career and occupational Dictionary** is intended primarily for senior high school students seeking information to assist them in planning their future careers. It has developed from a realization by government officials – as a result of their visits to high schools and discussion with students – that students’ receptions of available careers and occupations are extremely narrow and limited. Many students simply are not aware of the range of possible careers and occupations available to them, particularly in a situation where the private sector is expanding. This **Dictionary** aims to address, at least in part, this short-coming.

This *Career and Occupational Dictionary* provides you with information on many different careers and occupations, as well as information on the education and training qualifications that you need if you want to work in a particular career or occupation.

A number of matters must be clear from the outset.

**Firstly, this Dictionary does not give information about particular jobs.**

Within a particular occupation there are many different jobs. Jobs may be similar in name and in the work to be performed, but each one is different because of its own particular duties and tasks. Once you have chosen a career or occupation, and have completed the necessary education and training, you will then be able to apply for particular jobs.

**Secondly, this Dictionary does not tell you how to apply for a particular job.**

This will come later. The Dictionary describes the main things you will be required to do in a particular occupation, but is not intended to help you apply for an actual job.

**Thirdly, this Dictionary is a tool of employment promotion, not one of employment creation.**

Employment promotion means helping people to access those employment opportunities that are already available in Bhutan’s labour markets, or are

known to be available in the foreseeable future. This requires information on existing and future career opportunities, as provided in the *Dictionary*. Employment creation, however, involves generating new employment opportunities through the process of investment in new enterprises and projects. Once new opportunities are created, the *Dictionary* can guide students towards those new occupations but, in itself, has limited influence on the employment creation process. It is possible, however, that the *Dictionary* encourages some students to consider self-employment as a career option and, in this regard, it may have an indirect, albeit limited, impact on employment creation.



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## OCCUPATIONAL CLASSIFICATIONS

### ISCO 88

The careers and occupations in this Dictionary are presented in ten (10) main groups, as set out in the *International Standard Classification of Occupations, 1988*, commonly referred to as ISCO 88 from the international labour Organisation. ISCO 88 presents occupations in something of a hierarchy that, with a few exceptions, relates fairly to the nature and level of education and training required to perform them.

It is stressed that this hierarchy is related to education and training levels, and nothing more. It does not imply that occupations in the higher levels of the hierarchy should earn more than those in the lower levels, or 'that so-called, and 'professional' occupations are more prestigious and important than occupations at technician, skilled, and semi-skilled levels. Indeed, in the future it is possible that the wages of technicians, skilled, and semi-skilled workers will be higher than those professionals, depending on nation policies relating to wage level and structures, and the influence of market forces on wage determination.

Within each major group occupations are arranged into unit groups, minor groups and sub-major groups, primarily on the basis of aspects of skill specialisation. In the case of ISCO-08 Major Group 1, Managers, senior official and legislators, and Major Group 0, Military occupations, the concept of skill level is applied primarily at the second hierarchical level.

#### **Definitions of the four ISCO skill levels**

- 13 Definitions of each of the four ISCO skill levels are provided below. These definitions do not change the boundaries between the skill levels used in ISCO-88. They serve to clarify these boundaries and to deal with cases where formal educational requirements may not be the most suitable method of measuring the skill level of a particular occupation. Each definition provides examples of
- the typical or characteristic tasks performed at each skill level,
  - the types of skill required (in broad terms), and
  - the typical occupations classified at that skill level

### ***Skill Level 1***

- 14 Occupations at Skill Level 1 typically require the performance of simple and routine physical or manual tasks. They may require the use of hand held tools, such as shovels, or of simple electrical equipment, such as vacuum cleaners. They involve tasks such as cleaning; digging; lifting and carrying materials by hand; sorting, storing or assembling goods by hand (sometimes in the context of mechanised operations); operating non-motorised vehicles; and picking fruit and vegetables.
- 15 Many occupations at Skill Level 1 may require physical strength and/or endurance. For some jobs basic skills in literacy and numeracy may be required. If required these skills would not be a major part of the job.
- 16 For competent performance in some occupations at Skill Level 1, completion of primary education or the first stage of basic education (ISCED Level 1) may be required. A short period of on-the-job training may be required for some jobs.
- 17 Occupations classified at Skill Level 1 include office cleaners, freight handlers, garden labourers and kitchen assistants

### ***Skill Level 2***

- 18 Occupations at Skill Level 2 typically involve the performance of tasks such as operating machinery and electronic equipment; driving vehicles; maintenance and repair of electrical and mechanical equipment; and manipulation, ordering and storage of information.
- 19 For almost all occupations at Skill Level 2 the ability to read information such as safety instructions, to make written records of work completed, and to accurately perform simple arithmetical calculations is essential. Many occupations at this skill level require relatively advanced literacy and numeracy skills and good interpersonal communication skills. In some occupations these skills are required for a major part of the work. Many occupations at this skill level require a high level of manual dexterity.
- 20 The knowledge and skills required for competent performance in all occupations at Skill Level 2 are generally obtained through completion of the first stage of secondary education (ISCED Level 2). Some occupations require the completion of the second stage of secondary education (ISCED Level 3), which may include a significant component of specialised vocational education and on-the-job training. Some occupations require completion of vocation specific education undertaken after completion of secondary education (ISCED Level 4).

In some cases experience and on the job training may substitute for the formal education.

- 21 Occupations classified at Skill Level 2 include butchers, bus drivers, secretaries, accounts clerks, sewing machinists, dressmakers, shop sales assistants, police officers, hairdressers, building electricians and motor vehicle mechanics.

### ***Skill Level 3***

- 22 Occupations at Skill Level 3 typically involve the performance of complex technical and practical tasks which require an extensive body of factual, technical and procedural knowledge in a specialised field.
- 23 Occupations at this skill level generally require a high level of literacy and numeracy and well developed interpersonal communication skills. These skills may include the ability to understand complex written material, prepare factual reports and communicate with people who are distressed.
- 24 The knowledge and skills required at Skill Level 3 are usually obtained as the result of study at a higher educational institution following completion of secondary education for a period of 1 – 3 years (ISCED Level 5b). In some cases extensive relevant work experience and prolonged on the job training may substitute for the formal education.
- 25 Occupations classified at Skill Level 3 include shop managers, medical laboratory technicians, legal secretaries, commercial sales representatives, computer support technicians, and broadcasting and recording technicians.

### ***Skill Level 4***

- 26 Occupations at Skill Level 4 typically involve the performance of tasks which require complex problem solving and decision making based on an extensive body of theoretical and factual knowledge in a specialised field. The tasks performed typically include analysis and research to extend the body of human knowledge in a particular field, diagnosis and treatment of disease, imparting knowledge to others, design of structures or machinery and of processes for construction and production.
- 27 Occupations at this skill level generally require extended levels of literacy and numeracy, sometimes at a very high level, and excellent interpersonal communication skills. These skills generally include

- the ability to understand complex written material and communicate complex ideas in media such as books, reports and oral presentations.
- 28 The knowledge and skills required at Skill Level 4 are usually obtained as the result of study at a higher educational institution for a period of 3 – 6 years leading to the award of a first degree or higher qualification (ISCED Level 5a or higher). In some cases experience and on the job training may substitute for the formal education. In many cases appropriate formal qualifications are an essential requirement for entry to the occupation.
- 29 Occupations classified at Skill Level 4 include sales and marketing managers, civil engineers, secondary school teachers, medical practitioners, operating theatre nurses and computer systems analysts.
- Application of the 4 skill levels to the ISCO major groups
- 30 The relationship between the ten ISCO-08 major groups and the four ISCO-08 skill levels is summarised below in Table 1. Within Major group 1, occupations in Sub-major group 14, Hospitality, retail and service managers are at Skill Level 3. All other occupations in Major group 1 are at Skill Level 4. Within Major group 0, Military occupations, occupations in Sub-major group 01, Military officers are at Skill Level 4. All other occupations in Major group 0 are at Skill Level 1.

**Table 1: Mapping of ISCO-08 major groups to skill levels**

ISCO-08 major groups	Skill Level
1 – Managers, senior officials and legislators,	3 + 4
2 - Professionals	4
3 - Technicians and associate professionals	3
4 - Clerks	2
5 - Service and sales workers	2
6 - Skilled agricultural and fishery workers	2
7 - Craft and related trades workers	2
8 - Plant and machine operators, and assemblers	2
9 - Elementary occupations	1
10 – Military occupations (Armed Forces)	1 + 4

## **INDIVIDUAL ENTRIES**

This *Career and Occupation Dictionary* contains some 300 individual entries based on the *ISCO 88 Classification*, as outlined above. Each entry is presented in a standard format of eleven (11) headings, as follows.

### **Title:**

*This refers to the usual or common title by which the occupation is referred such as secondary teacher, light vehicle driver, photographer, or labourer.*

### **Description:**

*This provides a general indication of the main tasks and responsibilities typically associated with this occupation.*

### **Alternative and Related Titles:**

*This indicates some of the alternative titles by which the occupation is known. For example, a flight attendant is also known as an air hostess, cabin attendant, or steward.*

### **What does a ----- do?**

*This indicates in more detail the tasks and responsibilities associated with this occupation. In some cases there may be seven or eight items listed, in other cases it may only be three or four.*

### **What are the working conditions for -----?**

*This makes some reference to the level of salary/wages, hours of work and other terms of employment typically associated with this occupation. Actual salary/wage levels cannot be provided, as these will vary according to the particular job within the occupation being described.*

### **What is the working environment like?**

*This indicates whether this occupation involves indoor or outdoor work, the safety and health aspects of the occupation, and some reference to the tools and equipment that might be used.*

### **What knowledge and skills do I need to be a -----?**

*This indicates the typical and general things that a person needs to be able to know and do, in order to perform the typical tasks and responsibilities associated with this occupation*

**What personal qualities/attributes do I need to be a -----?**

*This indicates the general personal characteristics a person is required to have if they are to perform the tasks and responsibilities typically associated with this occupation, including things such as physical fitness and health, concentration levels, interests, and motivation. These are not concerned with knowledge and skills, but focus more on personality issues.*

**What are the education requirements to be a -----?**

*This indicates the level of formal education required (e.g. Class 8, Class 12, Certificate, Diploma or Degree required to enter or make a start in this occupation.*

**Can I study in Bhutan to become a -----?**

*This indicates the opportunities available in Bhutan to enable entry to the occupation, or whether study abroad is required. If study abroad is required, this section does not indicate specific institutions or countries where study to obtain the necessary entry requirements can be obtained. This is beyond the scope of the Dictionary and must be obtained from other sources.*

**What is the employment prospect for a ----- in Bhutan?**

*This indicates whether employment opportunities are likely to exist in this occupation, in Bhutan, in future. The information provided in this section is not based on any formal surveys or research and, thus, must be treated as quite subjective. You will need to obtain further information on employment prospects from other sources, including the Ministry of Labour and Human Resources, and the Royal Civil Service Commission.*

*As far as possible, this Career and Occupational Dictionary is gender neutral and makes very little reference to 'he' or 'her' or 'women', 'male', or 'female'. This is done on the clear understand that men and women have equal rights and the same opportunities to pursue any career or occupation related to their education level, interests, preferences, and choices, totally independent of gender consideration. Thus, all careers and occupations are open to all men and all women. Career and occupation choice should be based on abilities and interests, not gender. In some cases, of course, a particular occupation and its related jobs may have specific requirements that distinguish between men and women (e.g. a requirement for physical strength), but these must relate to those specific requirements and not be used as a way of excluding either men or women from a particular occupation group.*



## ***CHOOSING A CAREER***

### ***Occupations and Jobs***

In choosing a career you need to be aware of the difference between an occupation and a job. Career choice is concerned with finding an occupation that suits you. Once you have decided on an occupation, you can then start to think about a particular job. It is important, therefore, that you understand the difference between an occupation and a job.

### ***Occupation***

An occupation is a group of jobs that are reasonably similar with regard to the tasks performed and the knowledge, skills and abilities required for their successful performance.

Primary teacher, computer programmer, civil engineer, accountant, nurse, sales person, airline pilot, secretary, and security guard, are all examples of occupations.

### ***Job***

A job consists of a set of tasks, both mental and physical, and responsibilities that are undertaken in order to produce something or to provide a service. Many jobs are similar, but each one must be defined in accordance with the specific tasks to be performed in that job.

When you are choosing a career it is not necessary to focus on a particular job. You should focus on the general type of work that interests you rather than concern yourself with the specific details of a particular job.

### ***Position***

It is also important that you understand the difference between an occupations, a job and a position.

### ***Position***

A position, or post, usually refers to the level of a job within the organization or enterprise. A position tells you about the type of occupation involved but provides no information on the actual job itself. Here are some examples of position.

- Clerical Assistant, Grade 12
- Assistant Sales Manager

- Laboratory Technician, Level 1
- Secondary Teacher, Grade 6

These titles, however, tell you nothing about the actual job or work to be performed and will be of little help in choosing your career.

Career choice start with identifying occupations that interest you, and then finding out as much as possible about those occupations to see if they really meet you interests, and whether you have the necessary abilities to pursue them.

### ***THE IMPORTANCE OF INFORMATION***

Choosing a career is one of the most important decisions you will make in your life. Making career decisions requires information. What information do you require to make the right decision?

*Firstly, you need information about yourself.*

#### ***What am I good at?***

What are my personal qualities? This involves a degree of honest self-assessment, as well as ideas and contributions from friends, family, teachers' school counselors. Do I enjoy meeting people? Am I confident? Am I shy? Am I patient?

What can I do? Can I cook? Can I play sports? Can I talk people? Can I work with numbers? Can I write? Can I entertain others? Can I sketch and draw? Can I make things?

What are my interests? What do I like and enjoy? Do I like adventure? Am I interested in machinery? Do I like animals? Am I interested in computers? DO I like sports?

The answers to these questions will help you decide which careers might be suitable for you. The answers will help you narrow the choice. For example, if you do not like being outdoors you would not be interested in a career as a tour guide. If you find computers boring, you would not be interested in a career as a computer programmer or computer technician.

**Secondly, you need information about what people actually do in the career and occupations that you are interested in.**

What actual work is involved in the career I am interested in?

If you have an interest in being an accountant, an agricultural extension officer, a librarian, or a construction manager, how do you find out what these people actually do?

One method is to obtain information from a Career and Occupational Dictionary such as the one you are now reading.

Another way is to observe people doing different types of work, and seeing if the things they do meet your interests.

Another way is to meet some people doing work that interests you, and then asking them questions about their work.

This approach requires you to 'interview' someone already performing work that interests you. In your interview you should try to find out more than the things the person actually does. Try to find out the working conditions, the working environment, the technology used, and anything else that will inform you about the work so that you can decide whether it would suit you.

What did you study to enable you to get a job like this?

How Many years did it take?

How many hours do you work each day and each month?

Do you have to work additional or overtime hours?

What equipment do you work with?

What holidays do you get?

Do you have to travel in you work?

Is your work very stressful?

What do you like best about your work?

What do you like least?

Yet another way of finding out about the actual work involved in a career that interests you, is to do the actual work yourself for a while to find out exactly what is involved, or to be closely associated with a person doing the work as ,

for example, through work experience programs and work trials.

**Thirdly, you need information about what careers are available.**

*What job opportunities exist in the career in which I am interested?*

This means that you must have information about employment opportunities. There is no point in planning a career as an actor, a journalist, an architect, or a heavy equipment operator, unless there are employment opportunities in these fields.

Clearly, you need information about Bhutan's labour markets and the type of occupations that are in demand by employers. A labour market brings together employers who want to employ workers, on one hand, and workers who are seeking employment, on the other. The Employer needs workers and this represents the demand for people with particular skills and abilities. You represent part of the supply of labour: you are one of many people seeking to find a suitable occupation and job, based on your qualification, skills and abilities.

If there is no existing demand by employers for people in your preferred career, and no likely demand in future, training for such a career will leave you unemployed unless, of course, there are opportunities for you to be self-employed, and thus work for yourself.

Let's say that you have the necessary personal qualities and a real interest in becoming a journalist. This represents your tentative career choice. But if there is no demand from employers for journalists, your tentative career choice is unrealistic because there is no work available in this field. If you were to train for several years to be a journalist, your training would be wasted unless there are employment opportunities available to you after you finish your training.

It is relatively easy to get information about existing career opportunities. The Department of employment in the Ministry of Labour and Human Resources can tell you what occupations are required at present, because it regularly

receives vacancy notifications from employers.

Your main interest, however, is to get information about future employment opportunities. If, for example, you choose a career where there are employment opportunities now, can you be sure that those opportunities will still exist when you complete your education and training in 4 & 5 years' time? This involves making forecasts of future requirements in various occupational categories and this, too, falls within the responsibility of the Ministry of Labour and Human Resources.

Fourthly, you need information about the requirements to be able to enter a particular career.

If I want to be an architect what subjects should I study at school?

What minimum standards must I reach to enable me to enter University to study to be an architect?

How many years of study will be required?

When I finish my studies, is there anything else I must do before I can start to work as an architect?

## **MAKE PLAN**

You need information on the four things mentioned above, namely,

- What am I good at?
- What do people actually do in the career I am interested in?
- What career opportunities actually exist in the labour market?
- What do I need to be able to enter the career of my choice?

With this information you are in a position to make a career plan. It is advisable to make a number of career plans just in case your first choice proves to be impossible to achieve.

*Planning is essential. 'If you fail to plan, you plan to fail.'*

You should **write** your plan, and it should cover the following.

What is my objective? What career do I want to pursue?

My objective is to become a builder and eventually to have my own business as a building contractor.

What steps do I need to follow to achieve this objective/

How long will it take me to complete each step?

What problems can I expect to face in achieving my objective, and how will I address them?

When you are preparing your career plan, talk about it with your friends, family, teachers and career counselors. This will help you to be realistic and to make choices that related to your abilities, skills and interests.

## REGISTERED TRAINING PROVIDERS

Information on careers and occupations would be incomplete without some reference to the education and training institutions in Bhutan that provide a range of courses to prepare people for their chosen careers. Accordingly, this Careers and Occupational Dictionary is accompanied by a separate Directory of Registered Training Providers 2012 that provides information on education and training institutions throughout the Kingdom.

The Directory provides information concerning government, private institutions, and non-government organizations. Information on each institution includes the following

- Name and address
- Contact person and telephone / fax numbers
- E-mail address and website ( where applicable)
- Title of courses offered and duration
- Entry qualifications required
- Title of awards issued on completion
- When to apply for entry
- Documentation required in support of entry application.
- Assistance provided in finding employment or completion of training.

**The Directory of Registered Training Providers 2012** has been prepared as a separate publication but it best used as a companion document to **this Career and Occupational Dictionary**.

The courses provided by the Registered Training Providers may change in response to government policies and market demands, thereby requiring that information contained in the Directory be regularly updated.

The List of the Registered training providers with the Ministry of Labour and Human Resources is provided at the end.





## TASHI TAGAY



*The eight auspicious symbols are regarded as sacred objects. Their presence in homes and buildings attract good fortune; so they can be seen everywhere, in temples, monasteries, private homes, palaces and public buildings. They are depicted individually and in pairs, or as a group of eight. They are sometimes painted as a collective group assuming the simulated form of a vase shape.*

# Managers

## Major groups and sub-major groups

### 1. Managers

#### 1.1. Chief executives, senior officials and legislators

##### 1.1.1 Chief Executive Officer / Managing Directors

#### **Title: EXECUTIVE**

**Description:** An executive is a senior person responsible for the planning, organization, supervision and coordination of the activities of a corporation, company, Government Ministry, department, agency, authority, or educational institution, In the Royal Civil service an executive advises government on policy matters, and oversees the interpretation and implementation of government policies and legislation.

In the private and corporate sectors, an executive coordinates the preparation of policies and plans, and assumes responsibility for the performance of the corporation or company.

**Alternative and Related Titles: CHIEF EXECUTIVE MANAGING DIRECTOR/CHIEF EXECUTIVE OFFICER / MINISTRY SECRETARY / DEPARTMENT DIRECTOR / DIRECTOR GENERAL**

#### **What does an executive do?**

- Advises government, corporations or companies on policy matters.
- Advises on the preparation of laws, regulations and procedures.
- Coordinates the preparation of budgets.
- Presides over meetings.
- Evaluates performance of the organization and prepares reports on achievements and progress as well as problems and shortcomings.
- Represents the organization at national and international meetings.

#### **What are the working conditions for an executive?**

An executive normally enjoys good working conditions. In the royal Civil Service executives are employed in senior positions. The entry level to the Royal civil Service and the actual salary and benefits payable for each

position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. Conditions vary according to different levels of responsibility. In the private and corporate sectors, executives also enjoy good salaries and conditions, sometimes related to the overall financial performance of the corporation or company. The working hours for executives in all sectors reflect their high levels of responsibility and can be long and irregular, often involving evening and weekend work.

### **What is the working environment like?**

An executive spends a lot of time in an office and attending meetings, except when the executive is required to go on tour. The work does not involve physical exertion but the responsibility of the work and the need to meet deadlines sometimes creates stress. The working environment has few hazards of hostile conditions.

### **What knowledge and skills do I need to be an executive?**

- Ability to write and speak both Dzongkha and English.
- High-level communication skills, including public speaking.
- Management skills, with particular emphasis on performance management.
- Computer literacy.
- Knowledge of national/corporate policies and plans.
- Knowledge of national laws and regulations.
- Ability to lead and motivate others.

### **What personal qualities/attributes do I need to become an executive?**

- A high sense of responsibility.
- The ability to handle stress and meet time deadlines.
- An interest in serving others.

### **What are the education requirements to become an executive?**

You will need to complete Class 12, followed by a University Degree, usually of 3 or more year's duration. In addition, a post-graduate qualification in management or public administration is normally required, particularly in the Royal civil Service. Some executives in the corporate and private sector do not have University qualifications but, increasingly, executives require some years of work experience to prepare them for the high-level nature of their work.

### **Can I study in Bhutan to become an executive?**

Yes, it is possible to study a Bachelor's Degree in Bhutan, followed by post-graduate training. In many cases, executives undertake post-graduate studies abroad.

### **What are employment prospects for an executive in Bhutan?**

Executives are employed at senior levels of the Royal Civil Service. As the Civil Service is not expected to grow very much in future years, the number of opportunities for executives will depend on retirement and resignations. The best prospects for executives are within the private sector, which is expected to expand and become the leading sector in Bhutan's development.

#### 1.1.2 Gup

##### **Title: GUP**

##### **What does a Gup or village Headman do?**

Look after the village and the people of the village he heads:

- Regulate resources.
- Manage public health and safety.
- Levy taxes on land, grazing, cattle, entertainment and utilities.
- Prepare report on and expend Gewog budget.
- Conduct meetings and record proceedings and resolutions.
- Consult and collaborate with Dzongkhag administration.
- Work to bring about the overall development of the Gewog he represents.

##### **What are the working conditions for a Gup or village Headman?**

Working hours are the same as the Government working hours, except that, as a community leader, one is expected to work extra hours and on off days. By rural yard sticks are very attractive, so much so that the post is a revered one in the villages. Leave entitlements are commensurate with RCSC (civil) employees.

##### **What is the working environment like?**

- Functioning without much supervision. Being geographically distant from Dzongkhag administration.
- Telephone and office facilities ease work load and liaison duties.
- Involves indoor work but also requires extensive travel/ touring

supervision outdoor.

**What knowledge and skills do I need to be a Gup or village headman?**

- Must have passed the functional literacy and skills tests set by the ECB in order to be eligible in Election.
- Should have good written and spoken Dzongkha or English.
- Must have fair idea of government policies and rules / regulation.

**What personal qualities/attributes do I need to be a Gup or village Headman?**

- Strong civic sense.
- Interest to help people and understand their feeling.
- Eye for details, to observe people's problem.
- Good inter-personal qualities.
- Must have strong co-ordination and interaction skills.
- Must have communication skills and ability for social mobilization and advocacy.

**What are education requirements to be a Gup or village Headman?**

To become a *Gup* one needs to possess a functional literacy certificate as issued by the Election Commission of Bhutan (ECB). It is taken into consideration that he/she is literate in both Dzongkha and English adhering to the educational requirements of a class 12 pass certificate

**Can I study in Bhutan to become a Gup or Headman?**

Yes, you can study in Bhutan to become a Gup-although, there are no formal courses of instruction on how to become a gup.

1.1.3 Mangmi

**Title: MANGMI**

**What does a Mangmi do?**

- a. ensure that the public is informed of the activities of the Gewog Tshogde through the members;
- b. ensure that all births, deaths, marriages of residents, as well as separation and establishment of new *gung* are recorded on annual basis;

- c. report promptly to the Gup in case of breach of public peace, and law and order situation in the Gewog;
- d. assist the Dzongkhag Administration and Gewog Administration in execution of their duties;
- e. compile and submit annual records of population, houses, land and livestock to the Dzongkhag Administration not later than 31<sup>st</sup>December of every year;
- f. mediate and conciliate disputes of civil nature referred by the Tshogpas in the Gewog and forward unresolved issues to the Gewog Mediation Committee;
- g. officiate as the Gup in absence of the Gup;
- h. file revised asset declaration forms whenever any change occurs in the details of the affidavit filed;
- i. Perform such other activities as may be directed by the Gup and specified under any other laws in force in Bhutan.

**What knowledge and skills do I need to be a Mangmi?**

- a. serve the interests of their constituencies bearing in mind national interests, goals and policies;
- b. take active part in deliberations on the issues being raised in the Local Government;
- c. ensure public participation from his/her constituency in the formulation of five year and annual plans;
- d. Actively participate in the tendering, implementation and monitoring development activities in their respective constituencies.
- e. serve the interests of their constituencies bearing in mind national interests, goals and policies;
- f. take active part in deliberations on the issues being raised in the Local Government;
- g. ensure public participation from his/her constituency in the formulation of five year and annual plans;
- h. Actively participate in the tendering, implementation and monitoring development activities in their respective constituencies.

**What personal qualities/attributes do I need to be a Mangmi?**

- a. a citizen of Bhutan as evidenced by CID;

- b. registered in the civil registry of the government pertaining to that constituency and having his/her *Mitsi* in that place for not less than one year before the qualifying date of election;
- c. of the minimum age of twenty five years and maximum of sixty at the time of filing nominations;
- d. functionally literate and possess skills adequate to discharge his/her responsibilities as certified by the Election Commission of Bhutan;
- e. Fulfill other requirements as specified in the Constitution and the Electoral Laws.

### **What are the education requirements to become Mangmi?**

To become a *Mangmi* one needs to be functionally literate and mentally sound to effectively discharge his/her duties. It is taken into consideration that he/she is literate in both Dzongkha and English.

### **Can I study in Bhutan to become a Mangmi?**

Yes, you can study in Bhutan to become a Magmi-although, there are no formal courses of instruction on how to become a Magmi.

#### 1.1.4 Member of Parliament (National Assembly)

### **Title: MEMBER OF PARLIAMENT**

#### **What does a member of parliament do?**

- Form Government.
- Implement and monitor developmental programs/activities.
- Legislate and review laws.
- Frame policies.

### **What are the working conditions for Member of Parliament?**

An MP works in the National Assembly. He follows normal office time but sometimes he is required to work long hours especially during National Assembly Sessions.

### **What is the working environment like for Member of Parliament?**

An MP visits his constituencies twice in a year. Rest of the time, he works in office, reviewing the problems and development in his constituency.

### **What knowledge and skills do I need to be a member of parliament?**

- Should know the policies of the country.
- Should know current affairs of the country.
- The ability to interpret legislature.
- Should have the knowledge of the country, especially of his constituency.

### **What personal qualities/attributes do I need to be a member of parliament?**

- Good attitude
- Good communication skill.
- Lead and motivate people
- Good morality
- Willingness to help people.
- Commitment
- Willingness to sacrifice personal interest for the others.

### **What are the education requirements to be a Member of Parliament?**

- A Bachelor's degree is the minimum qualification required to become a member of parliament.

### **Can I study in Bhutan to become a Member of Parliament?**

Yes, it is possible to study a Bachelor's degree in Bhutan.

#### 1.1.5 Member of Parliament (National Council)

#### **Title: NATIONAL COUNCIL**

#### **What does a National council do?**

National Council has two primary functions;

#### **a. Legislative Function:**

- Review and amend existing laws; and
- Consider, pass, amend or reject any legislation passed by the National Assembly
- Initiate or prepare legislation except Money and Financial Bills;

#### **b. Review Functions**

- Review and comment on the policies, plans and programmes of Government;



- Review performance of the Government;
- Review implementation of resolutions and Laws passed by the Parliament; and
- Review issues of national importance.
- And the fulfill the needs and aspiration of the people through above, and render advice to The King, The Prime Minister and National Assembly on the matters of the national importance.

### **What are the working conditional Council?**

A National Council works in the council office. And follows normal office time, he works in office but sometimes he is required to work long hours during the council in sessions. All the members are equal in the National council;

Enjoy freedom of speech and immunity from arrest during sessions; and enjoy very good salary compared to other civil servant.

### **What is the working environment like?**

A National Council member visits his/her constituencies from time to time, especially in times of natural calamities, such as earthquakes, floods, outbreak of fires. For rest of the time, works in the office, reviewing the progress and development in his constituency. He also reviews and makes recommendations with regard to the Legislation.

### **What knowledge and skills do I need to be a national council?**

- Good attitude
- Good communication skill.
- Lead and motivate people
- Good morality
- Willingness to help people.
- Commitment
- Willingness to sacrifice personal interest for the others.

### **What are the education requirements to be a National Council?**

A Bachelor's degree is the minimum qualification required to become a member of parliament.

### **What are the education requirements to be a National Council?**

A Bachelors Degree in any field.

## **Can I study in Bhutan to become National Council?**

Yes, it is possible to get a bachelor's degree in Bhutan.

### 1.1.6 Thrompoen

#### **Title: THROMPOEN**

**Description:** The Thrompoen facilitate proper and planned growth of the urban centre and manage the affairs of the Municipal Corporation.

#### **Alternative and Related Titles: MAYOR**

#### **What does a Thrompoen do?**

- Act on behalf of the Thromde and in its name.
- Accord financial sanctions for activities
- Ensure proper implementation of the Thromdes rules and regulations
- Submit periodic reports to the Thromde tshogde and to the ministry responsible for urban development on the status of progress of work as well as the status of funds approved by the Thromde tshogde for activities contained in the plan; and
- Carry out any other functions as may be prescribed by laws.

#### **What are the working conditions for a Thrompoen?**

The work consists of broad functions and process of professional nature where decision-making is difficult and highly complex. The work is complex and sensitive as it involves approval of constructions, land acquisition and allotment

#### **What is the working environment like?**

The job involves frequent field visits in and around the urban areas. The job poses apparent risks of confrontation with property owners.

#### **What knowledge and skills do I need to be a Thrompoen?**

- Should have good command over written and spoken Dzongkha as well as English.
- Must have thorough knowledge of government policies, rules & regulations and procedures OR equivalent experience.

### **What personal qualities/attributes do I need to be a Thrompoen?**

- Good attitude
- Good communication skills
- Lead and motivate people
- Good morality
- Willingness to help people
- Commitment
- Willingness to sacrifice personal interest for the others

### **What are the education requirements to become a thrompoen?**

A Bachelor's degree is the minimum qualification required to become a Thrompoen

### **Can I study in Bhutan to become a Thrompoen?**

Yes, it is possible to get a bachelor's degree in Bhutan.

### **What are the employment prospects for a Thrompoen in Bhutan?**

As is the case for all elected Local Government members, there are as many posts for a *Thrompon* as there are *Thromdey* in the country (four *Thromdey*). Similarly, any change in the number of *Yenglag Thromdey* due to delimitations can increase the availability of posts.

#### 1.1.7 Tshogpa

### **Title: TSHOGPA**

#### **What does a Tshogpa do?**

- ensure that all developmental works and situations within his/her *Chiwog* are properly discussed with the people and submitted to the Gewog administration and the Gewog Tshogchung;
- ensure that any administrative matters, circulars and notifications from the Gewog administration and Gewog Tshogchung are properly informed to the people in his/her *Chiwog*;
- ensure that all births, deaths, marriages of residents, as well as separation and establishment of new *gung* within his/her *Chiwog* are recorded on annual basis and submitted to the Gewog administration;
- report promptly to the Gup/Gewog administration any cases of breach of public peace, and law and order situation in his/her

*Chiwog*;

- assist the Dzongkhag Administration and Gewog Administration in execution of their duties as and when required;
- compile and submit annual records of population, houses, land and livestock to the Gewog administration every year;
- Refer any disputes of civil nature to the *Mangmi*/Gup/Gewog administration for mediation and conciliation.

### **What knowledge and skills do I need to be a Tshogpa?**

To be a *Tshogpa* one needs to be physically and mentally sound in the discharge of his/her duties. As elected representatives of their *Chiwogs*, *Tshogpas* are required to have good communication and comprehension skills in order to understand what the people need and convey them to the Gewog Tshogchung.

### **What personal qualities/attributes do I need to be a Tshogpa?**

- a citizen of Bhutan as evidenced by CID;
- registered in the civil registry of the government pertaining to that constituency and having his/her *Mitsi* in that place for not less than one year before the qualifying date of election;
- of the minimum age of twenty five years and maximum of sixty at the time of filing nominations;
- functionally literate and possess skills adequate to discharge his/her responsibilities as certified by the Election Commission of Bhutan;
- Fulfill other requirements as specified in the Constitution and the Electoral Laws.

### **What are the education requirements to be a Tshogpa?**

To become a *Tshogpa* one needs to possess a functional literacy certificate as issued by the Election Commission of Bhutan (ECB).

### **Can I study in Bhutan to become a Tshogpa?**

While there are no educational standards set for a *Tshogpa* apart from the functional literacy certificate issued by the ECB, having a formal education at the highest level one is able to achieve is a welcome thought.

### **What are the employment prospects for a Tshogpa in Bhutan?**

As is the case for all elected Local Government members, there are as many

posts for a *Tshogpa* as there are *Chiwogs* in the country (1,168). Similarly, any change in the number of *Chiwogs* due to delimitations can increase or decrease the availability of posts.

## 1.2. Administrative and commercial managers

### 1.2.1 Finance Manager

**Title:** FINANCE MANAGER

**Description:** A finance manager plans, directs and coordinates the financial operation of an enterprise or organization.

**Alternative and Related Titles:** DEPARTMENT MANAGER; FINANCE / ACCOUNTANT. (A finance manager may be a qualified accountant but usually has different and wider responsibilities than an accountant.)

**What does a finance manager do?**

- Plans, directs and coordinates all financial operations and financial services in an enterprise or organization.
- Prepares budgets and oversees budget implementation.
- Prepares regular and periodic reports on the financial situation of the enterprise or organization.
- Supervises the work of subordinate staff including accounts, bookkeepers and clerks.
- Coordinates the selection, training and performance of the finance department staff.
- Ensures that the enterprise meets the requirements of the law concerning financial matters, including the payment of all taxes.
- Ensures that the enterprise conforms to its own financial policies and regulations.

**What are the working conditions for a finance manager?**

A finance manager normally enjoys good working conditions. In the royal Civil Service a finance manager is employed in senior positions. The entry level to the Royal Civil Service, and the actual salary and benefits payable for each position, are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the corporate and private sectors, finance managers receive salaries and benefits similar to other senior managers. Finance managers may be required

to work irregular hours, particularly at 'peak' times such as the preparation of budgets, or end of year financial reporting.

### **What is the working environment like?**

A finance manager spends most time indoors in an office situation, working with computers and supervising subordinate staff. The working environment is normally pleasant and free from hazards. A finance manager holds a very responsible position and may face periods of stress when important deadlines must be met, or on those occasions where financial irregularities are uncovered.

### **What knowledge and skills do I need to be a finance manager?**

- High-level numeracy skills.
- Good communication and interpersonal skills.
- Computer skills.
- Ability to motivate subordinates to the achievement of the organization's objectives.
- Ability to transform business concepts and ideas into workable financial plans.
- Knowledge of national laws and internal financial rules and regulations.

### **What personal qualities/attributes do I need to be a finance manager?**

- A high level of responsibility and self-discipline.
- Honesty and integrity.
- An interest in business.

### **What are the education requirements to become a finance manager?**

The normal qualification for a financial manager is a Bachelor of Commerce or Bachelor of Finance, or similar qualification, of 3-4 year's duration. Entry to such degree courses requires the completion of Class 12. Some financial managers also have additional qualifications in management (as distinct from finance or commerce), normally involving study abroad. Some financial managers also attend short courses in specific technical areas of management.

### **Can I study in Bhutan to become a finance manager?**

Yes, Colleges that offers a Bachelor of Commerce Degree that provides the necessary theoretical background for a career in finance management. Degree-

level study followed by on-the-job experience will enable you to eventually become a finances manager.

### **What are the employment prospects for a finance manager in Bhutan?**

There are good prospects for the employment of finance managers in Bhutan, particularly in the private and corporate sectors. Finance managers play a vital part in the success of any enterprise and, increasingly, such positions will be filled by people with specific technical qualifications in this field. It is also possible for finance managers to be self-employed as consultants, once they have acquired some years of professional experience.

#### 1.2.2 Human Resource Manager

##### **Title: HUMAN RESOURCE MANAGER**

**Description:** A human resource manager plans, directs and coordinates activities concerning personnel and industrial relations activities in an enterprise or organization.

**Alternative and Related Titles:** PERSONNEL MANGER / INDUSTRIAL RELATIONS MANAGER / LABOUR RELATIONS MANAGER / DEPARTMENT MANAGER / PERSONNEL / TRAINING MANAGER

##### **What does a human resource manager do?**

- Plans, directs and coordinates all activities concerning a wide range of human resource functions of concern to employees at all levels and of all types.
- Plans and implements procedures for the recruitment, training, promotion and career advancement of all staff.
- In consultation with other senior managers, determines wage and benefits policies and systems, and oversee that administration of wage and benefit payments.
- Ensures the enterprise complies with all labour laws and regulations and any collective bargaining agreements.
- Plans and implements safety, health and welfare programs in the enterprise.
- Represents the enterprise in negotiating wages, benefits and other conditions of employment with workers and their representatives.

- Plans and implements training and staff development programs for the benefit of the enterprise.
- Controls departmental expenditure and ensures the efficient use of resources in the department.
- Supervises and monitors department subordinate managers and staff.

### **What are the working conditions for a human resource manager?**

A human resource manager normally enjoys good working conditions. In the Royal Civil Service human resource managers are employed in senior positions. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the corporate and private sectors, human resource managers receive salaries and benefits similar to other senior managers. Human resource managers may be required to work irregular hours to handle particular needs and problems as they arise including recruitment interviews, work accidents, work stoppages, and welfare and personal problems affecting individual staff.

### **What is the working environment like?**

Most of the work of a human resource manager is done indoors in an office situation, in meetings with fellow managers, and in dealing with individual worker problems. The working environment normally is pleasant and free from hazards. A human resource manager is the interface between management and workers, and sometimes finds it stressful in finding a suitable balance between these competing demands that may involve varying degrees of disagreement and conflict.

### **What knowledge and skills do I need to be a human resource manager?**

- High-level communication skills to ensure effective communication with people at all levels. Listening skills are particularly important.
- Negotiation skills.
- Computer skills.
- The ability to motivate staff towards the achievement of the organization's objectives.
- Knowledge of industrial relations, pay systems, and training



**What person qualities/attributes do I need to be a human resource manager?**

- Tolerance of different and sometimes conflicting viewpoints.
- Diplomacy, coupled with firmness.
- An interest in business.

**What are the education requirements to become a human resource manager?**

A human resource manager normally has a Bachelor's Degree in Human Resource Management, Personnel Management, Psychology or other fields that are concerned with the human side of the organization. In some cases, a human resource manager may have a university degree in a technical field such as science, engineering, education or agriculture and undertake human resource management studies at a post-graduate level. Entry to degree undergraduate degree courses requires passes in Class 12.

**Can I study in Bhutan to become a human resource manager?**

Yes. The most suitable starting point is a Bachelor of Commerce Degree, with emphasis on subject such as psychology and personnel management.

**What are the employment prospects for a human resource manager in Bhutan?**

There is some scope for the employment of human resource managers in the Royal Civil Service as, for example, the Royal Civil Service commission, and in public corporations. In the future there is expected to be opportunities in the private sector, particularly in larger enterprises. In smaller private companies it is likely that the general manager undertakes responsibility for human resource matters, rather than employ a specialist manager.

There is scope for human resource managers to be employed as consultants in many different fields including career planning, dispute resolution, pay systems, human resource auditing and forecasting, and staff training and development.

1.2.3 Estate Manager

**Title: ESTATE MANAGER**

**Description:** An estate manager arranges the sale, purchase, rental and lease of real property including houses, office building, and land.

## **Alternative and Related Titles: REAL ESTATE AGENT, PROPERTY BROKER**

### **What does an estate manager do?**

- Collects information on properties available for sale or lease, the requirements of the owners of such property, and the needs of prospective buyers and tenants.
- Shows prospective buyers or tenants property for sale or lease.
- Explains the terms of sale or conditions of lease, including sale price or rental payments, to clients.
- Arranges the signing of lease agreements and the transfer of property rights between buyers and sellers.
- Collects rent payments and bond deposit monies from tenants on behalf of owners.
- Inspects properties before, during and after tenancies and with the owner's permission arranges maintenance and repairs.

### **What are working conditions for an estate manager?**

A real estate manager works in the private sector and receives a salary and benefits related to the level of the skill, experience and reputation of each individual. Some estate managers are employed on a commission basis with their salary directly related to the level of sales or rents collated. The hours of work for a real estate agent are irregular involving after hours and weekend work. An estate agent is required to travel to meet clients and inspect houses for sale and rent.

### **What is the working environment like?**

A real estate manager works both indoors and outdoors. The indoor work is concerned with making contract with clients, preparing sale and lease documents, and preparing reports. The outdoor work is concerned with inspecting houses. The work situation can be stressful when the level of business is low and little income is generated. Increasingly, estate agents are making greater use of the internet as a means of promoting their products.

### **What knowledge and skills do I need to be an estate manager?**

- High-level communication and interpersonal skills.
- Knowledge of real estate rules and regulations.
- Knowledge of commercial contracts

- Knowledge of local market conditions concerning property.
- Selling skills.
- Computer skills.
- Driving skills, and a driver's license.

**What personal qualities/attributes do I need to be an estate manager?**

- An interest in serving people.
- An interest in business.
- An interest in houses and property.
- Integrity and trust.
- Responsibility and reliability.

**What are the education requirements to become an estate manager?**

There are no formal education requirements to become an estate manager other than a good general education, and good reading and writing abilities. The main requirements for successful career as an estate manager related more to the personal attributes, and qualities.

**Can I study in Bhutan to become an estate manager?**

Yes, you can undertake formal degree studies in commerce as basis for this career but this not essential. You can acquire the required knowledge and skills through in-service training under the supervision of an experienced estate agent.

**What are the employment prospects for an estate manager in Bhutan?**

Employment opportunities for estate manager are expected to increase in future. This career also offers prospects for self employment with relatively small amount of capital required to commence business.

1.2.4 Sales Manager

**Title: SALES MANAGER**

**Description:** A sales manager plans, directs and coordinates the sales activities of the enterprise. Sometimes the sales manager also handles marketing and product promotion functions and in such cases is usually designated as a Sales and Marketing Manager.

## **Alternative and Related Titles: DEPARTMENT MANAGER: SALES/SALES AND MARKETING MANAGER**

### **What does a sales manager do?**

- Plans, directs and coordinates all activities concerning the sale of the organization's products and services.
- Plans sales strategies based on sales records and market research (usually undertaken by a specialist).
- Determines price levels, prepares price lists, decides discount and delivery terms, determines sales methods, and arranges after sales service activities.
- Prepares daily, weekly and monthly work plans for sales staff.
- Controls sales department expenditure and ensures the efficient use of the department's resources.
- Oversees the selection, training and performance of department staff.
- Supervises the sales work force.

### **What are the working conditions for sales manager?**

A sales manager is normally employed in the corporate and private sectors and receives salaries and benefits similar to other senior managers. A sales manager may receive a commission based on the actual level of sales (either value or volume), in addition to salary. A sales manager may be required to work irregular hours, although this is more likely for the sales persons working under the general supervision of the sales manager.

### **What is the working environment like?**

Most of the work of a sales manager is conducted indoors in office and meeting situations, but outdoor work is also required when the manager follows up the work of sales staff by visiting customers and assessing whether their needs are being met. The general working environment is usually hazard free. Sales managers, however, often have to handle stressful situations as, for example, when dealing with complaints from customers concerning late delivery, the delivery of incorrect quantities, or where goods have been damaged, or are unacceptable quality.

### **What knowledge and skills do I need to be a sales manager?**

- Very good communication and inter-personal skills.

- The ability to motivate sales personnel.
- Ability to convince customers.
- Computer skills.
- Driving skills I including possession of appropriate driving licenses.)
- Knowledge of products and their qualities.

**What personal qualities/attributes do I need to be a sales manager?**

- A willingness to serve others.
- Integrity and belief in the products and services being promoted and sold.
- Interest in business.

**What are the education requirements to become a sales manager?**

There are no special qualifications required to become a sales manager. Some sales managers may have a degree (e.g. Bachelor of Commerce) but this is not essential. A sales manager may learn on the job, starting from a position of sales person and progressively reaching the position of manager, based on experience gained on-the-job.

**Can I study in Bhutan to become a sales manager?**

Yes. The most suitable starting point is a Bachelor of Commerce Degree, with emphasis on subjects such as psychology and personnel management.

There are no formal courses for sales managers in Bhutan, but it is possible to learn on-the-job under the supervision of an experienced person.

**What are the employment prospects for a human resource manager in Bhutan?**

Sales management is still largely undeveloped in Bhutan. With the further development of the private sector, however, and the need for Bhutan to be more competitive in regional and international markets it is expected that sales management will receive greater attention.

1.2.5 Marketing Managers

**Title:** MARKETING MANAGER

**Description:** A marketing manager plans, directs and coordinates

the marketing and related advertising and promotional activities of an organization, directed to bringing its products and services to the notice of consumers.

**Alternative and Related Titles: DEPARTMENT MANAGER: MARKETING/ SALES MANAGER** (Although some enterprises combine sales and marketing responsibilities in one position, they are different tasks, requiring different skills and abilities. Marketing is concerned with promotion and advertising to stimulate buyer awareness and interest sales is concerned with the actual selling of goods to purchasers).

**What does a marketing manager do?**

- Plans, directs and coordinates the marketing activities of the enterprise or organization.
- Researches and studies the needs of consumers as a basis for decision making concerning new products and services products design, market size. Consumer habits and consumer preferences.
- Identifies market opportunities for the products of the enterprise and risks associated with those opportunities.
- Develops, implements, monitors and evaluates the marketing strategy of the enterprise.
- Controls expenditure of the marketing department and ensures the efficient use of its resources.
- Oversees the selection, training and performance of marketing staff.
- Supervises the work of marketing staff.

**What are the working conditions for a marketing manager?**

A marketing manager is employed in the corporation and private sectors and receives salaries and benefits similar to other senior managers. A marketing manager may be required to work irregular hours particularly when involved in conducting consumer surveys of launching programs to promote new products.

**What is the working environment like?**

Most of the work of a marketing manager is conducted indoors in office and meeting situations, but outdoor work is also required when the manager supervises consumer surveys and monitors the launching of campaigns for

new products and services. The marketing manager spends considerable time working in close association with other managers particularly those concerned with production, finance and sales. The general working environment is usually hazard free. Marketing managers, however, often have to handle stressful situations as, for example, when launching campaigns for new products where there is always a risk of failure and negative reactions from consumers. Such reactions can have an impact on the organization's profits and create stressful circumstances for a marketing manager and marketing personnel.

#### **What knowledge and skills do I need to be a marketing manager?**

- High-level communication skills, particularly the ability to listen.
- Observation skills
- Interviewing skills
- The ability to design questionnaires and survey instruments.
- The ability to motivate staff towards the achievement of the department's objectives.
- Ability to relate to other professionals, particularly advertising specialists, production managers and sales personnel.
- Knowledge of marketing strategies.

#### **What personal qualities/attributes do I need to be a marketing manager?**

- A high degree of creativity to enable new products and services to be effectively presented to consumers.
- Integrity to ensure that the organization's products are presented accurately, and
- An interest in business.

#### **What are the education requirements to become a marketing manager?**

The normal qualification for a marketing manager is a Bachelor's Degree in Commerce or Business, including major studies in marketing of 3-4 year's duration. Entry to such degree courses requires the successful completion of Class 12 increasingly, marketing managers study for a post-graduate Masters of Business Administration of 1-2 years.

#### **Can I study in Bhutan to become a marketing manager?**

Yes. It is possible to study for a Bachelor of Commerce, which is a suitable entry point for a career in marketing management. Post – graduate studies

in marketing are not available in Bhutan and thus study abroad is required.

### **What are the employment prospects for a marketing manager in Bhutan?**

Marketing as a profession is relatively new to Bhutan, but once its importance and benefits are more widely accepted more opportunities will become available for marketing managers. Professional approaches to marketing, including products diversification, packaging and promotion are required if Bhutan's products are to compete successfully on regional and international markets.

In future, it is likely that there will be opportunities for self-employment in the field of marketing and marketing management by providing consulting services in market research. It is also possible for a person to combine marketing and sales by actually promoting and selling selected products and services produced by others.

#### 1.2.6 Entrepreneur

### **Title: ENTREPRENEUR**

**Description:** Entrepreneurs work for themselves in their own business. It is possible to start a business in almost any field, based on a good idea and the necessary skills and motivation. Individual articles on this website contain information on whether self-employment is possible or usual in specific careers.

### **Alternative and Related Titles:**

### **What does an Entrepreneur do?**

The daily tasks of an entrepreneur vary enormously according to the type and size of their business. As well as providing the product or service at the core of their business, entrepreneurs are likely to spend a lot of time on other tasks including business research, finding finance, finding suppliers and negotiating prices, sales and marketing, customer relations, staffing issues and training and development.

There are no set hours for entrepreneurs and long hours may be necessary to suit the needs of customers or meet deadlines. Entrepreneurs may work in a wide range of places depending on their business.



### **What are the working conditions for an entrepreneur?**

- conduct market research and assess competitors
- finance the business in the form of loans, grants or their own savings
- find suppliers and negotiate prices
- set prices for their own products or services
- ensure that the product or service they supply meets a high standard
- promote their business and find customers
- deal with customer queries and complaints
- collect payments for goods or services and pay bills
- keep accurate financial and other records
- use financial records to see how well the business is performing
- understand and apply laws and regulations (such as health and safety, trading and employment law) relating to their business
- Keep up to date with new developments in their field.

### **What is the working environment like?**

There are no set hours for entrepreneurs but long hours are common, especially when building a new business.

### **What knowledge and skills do I need to be a Entrepreneur?**

- have a good business idea
- be self-motivated, confident and enthusiastic
- understand their customers' needs
- have sales, marketing and customer service skills
- be able to work alone or lead a team of staff
- be able to manage a varying workload
- be able to work under pressure and meet deadlines
- have problem-solving skills
- have creative ideas for improving their business
- be risk takers
- Be able to take advice.

### **What personal qualities/attributes do I need to be a Entrepreneur?**

- business and enterprise
- The sector relevant to their business.

### **What are the education requirements to become a Entrepreneur?**

It is possible to become an entrepreneur without formal qualifications. However, a good standard of maths and English is important. Some people spend time working for an employer before setting up their own business. This experience can provide valuable training and contacts that will be helpful later on.

### **Can I study in Bhutan to become a Entrepreneur?**

Yes. Diploma and certificate courses currently available in Bhutan provide a good starting point for a career in transport management.

### **What are the employment prospects for a Entrepreneur in Bhutan?**

Entrepreneurs progress by expanding their business. This could be by finding new customers or increasing the range of products and services they offer.

#### 1.2.7 Transport Manager

#### **Title: TRANSPORT MANAGER**

**Description:** A transport manager plans, directs and coordinates activities concerning the provision of transport services either for the movement of goods/commodities or people, or both.

#### **Alternative and Related Titles: DEPARTMENT MANAGER: TRANSPORT**

#### **What does a transport manager do?**

- Plans, directs and coordinates activities concerning the provision of transport and related services.
- Ensures the efficient use of enterprise resources.
- Plans and implements daily service operations including timetables and schedules, and the allocation of staff and vehicles.
- Plans and oversees the maintenance of vehicles and related equipment.
- Oversees the application of work safety procedures.
- Coordinates the selection, training and performance of staff.
- Supervises subordinate managers and staff.
- Controls departmental expenditure.

**What are the working conditions for a transport manager?**

Transport managers usually work in the private or corporate sectors and receive salaries and benefits similar to those for other senior managers. Working hours can be irregular depending on the nature of the transport services provided, and may involve evening and weekend work.

**What is the working environment like?**

A transport manager spends most time indoors in an office, in vehicle maintenance and repair areas, or at loading bays. The work involves some stress particularly concerned with delays resulting from accidents or the break down of vehicles. Depending on the actual location of the transport manager's office, the working environment may be noisy.

**What knowledge and skills do I need to be a transport manager?**

- Good communication and interpersonal skills.
- Basic skills in vehicle maintenance.
- Problem solving skills.
- Computer skills.
- Driving skills, including having the appropriate vehicle licenses.
- Good planning skills.
- The ability to lead and motivate others.

**What personal qualities/attributes do I need to be a transport manager?**

- An interest in vehicles.
- An interest in business.
- An understanding of the importance of meeting time deadlines.

**What are the education requirements to become a transport manager?**

There are no especial qualifications to become a transport manager. Some managers may have a degree, but this is not essential. Some may have started as an automotive mechanic and progressively move to a management position. Formal qualifications are less important than the ability to plan activities and motivate staff.

**Can I study in Bhutan to become a transport manager?**

There are no special courses in transport management available in Bhutan. Other courses, however, including degree, diploma and certificate courses

currently available in Bhutan provide a good starting point for a career in transport management.

### **What are the employment prospects for a transport manager in Bhutan?**

As Bhutan's private sector grows there will be greater use of vehicles for the movement of both goods and people, and thus more opportunities for the employment of transport managers. There is some scope for owner-managers in the transport sector, and thus some opportunities for self-employment.

#### 1.2.8 Supply Manager

##### **Title: SUPPLY MANAGER**

**Description:** A supply manager plans directs and coordinates the supply, storage and distribution activities of the enterprise or organization to ensure that necessary raw materials and other resource inputs, including services, are available as and when required.

##### **Alternative and Related Titles: PURCHASING MANAGER/DEPARTMENT MANAGER:SUPPLY**

##### **What does a supply manager do?**

- Plans, directs and coordinates the supply, storage and distribution activities of the enterprise.
- Assesses the needs of the enterprise for materials and services from external sources.
- Negotiates purchase contracts with suppliers to obtain the best price and quality arrangements for the enterprise.
- Plans, installs and maintains an inventory control system in the enterprise.
- Arrange for the distribution of suppliers within the enterprise in accordance with the needs of other departments.
- Oversees the selection, training and performance of department staff.
- Controls department expenditure and ensures the efficient use of departmental resources.
- Supervises subordinate staff.

**What are the working conditions for a supply manager?**

In the Royal Civil Service supply managers are employed in senior positions. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. In the corporate and private sectors a supply manager receives a salary and benefits similar to other senior managers. The hours of work are regular with few demands for evening or weekend work.

**What is the working environment like?**

A supply manager works indoors, involving office work, computers and meetings. The working environment is normally hazard free. A supply manager may, however, face considerable stress when vital raw materials prove difficult to procure on time, or when poor stores control results in theft or unaccounted losses.

**What knowledge and skills do I need to be a supply manager?**

- Good communication skills.
- Negotiating skills and techniques.
- Computer skills.
- Ability to motivate staff towards the achievement of the organization's objectives.
- Knowledge of supply sources.
- Knowledge of storage and control systems.

**What personal qualities/attributes do I need to be a supply manager?**

- Good judgment.
- A willingness to take calculated risks to take advantage of favorable supply situations.
- An interest in business.
- Honesty and trust.

**What are the education requirements to become a supply manager?**

Although a degree qualification is not essential for a career in supply management, increasingly supply managers have a Bachelor's Degree in Commerce or Business Administration, followed by specialized training in supply and stores management. Such degrees are usually of 3-4 year's duration and require the completion of Class 12 for entry.

### **Can I study in Bhutan to become a supply manager?**

Yes, a Bachelor's Degree in Commerce or BBA provides the basis for a career in supply management. Further studies abroad, however, with specialization in supply management is desirable.

### **What are the employment prospects for a supply manager in Bhutan?**

Government Departments and the private and corporate sectors provide opportunities for the employment of supply managers. Almost every medium to large organization needs a supply manager and as the private and corporate sectors expand, further employment opportunities can be expected.

A supply manager with several years experience can become self-employed by offering consulting services on particular aspects of supply, storage and distribution functions in an organization.

## **1.3 Production and specialized services managers**

### **1.3.1 Production Manager**

#### **Title: PRODUCTION MANAGER**

**Description:** A production manager directs and coordinates the production of goods usually in a factory environment, involving the use of machinery and equipment and workers, to transform raw materials into final products.

#### **Alternative and Related Titles: DEPARTMENT MANAGER/OPERATIONS MANAGER/FACTORY MANAGER**

#### **What does a production manager do?**

- Plans and coordinates activities concerned with the production of goods and commodities.
- Ensures the efficient use of productive resources to reach production targets.
- Controls production expenditure.
- Ensures the working environment is safe and healthy.
- Assists in the selection, training and performance of staff.
- Supervises section managers, forepersons, and line supervisors.
- Ensures product quality standards are met and maintained and that customer requirements are satisfied.

**What are the working conditions for a production manager?**

Production managers in the corporate or private sector enjoy good salaries and benefits related to their high level responsibilities. The hours of work may be irregular, sometimes requiring work in the evenings and at weekends.

**What is the working environment like?**

The actual working environment for a production manager varies according to the actual products being produced. In a cement factory, for example, the environment can be dusty and potentially harmful to health. In a timber processing plant, the environment may be both dusty and noisy. A production manager spends some time in an office but is required to spend time in supervising work in the factory itself. A production manager sometimes works under pressure, particularly when production deadlines have to be met or new products are being introduced.

**What knowledge and skills do I need to be a production manager?**

- High-level communication skills.
- The ability to prepare and implement work plans.
- Computer skills.
- The ability to analyze and solve problems.
- Knowledge of products and processes.

**What personal qualities/attributes do I need to be a production manager?**

- High levels of responsibility.
- The ability to organize things and be methodical.
- An interest in manufacturing processes-in finding out how products are produced.
- An interest in business.
- The ability to work under pressure and meet tight deadlines.

**What are the education requirements to become a production manager?**

Many production managers have University qualifications relating to the products being produced. For example, a production manager in a food-processing factory would normally have a qualification in food technology, and a production manager in a chemical factory would normally be a chemical engineer. Normally, you need to complete Class 12 and then complete a Bachelor's Degree of 3 or more years. As well as completing a technical degree (e.g. engineering, food technology), production managers frequently

undertake post-graduate studies in management.

### **Can I study in Bhutan to become a production manager?**

Yes, you can study for a Bachelor's Degree after completing class 12. For some industries it will be necessary to study abroad as, for example, food technology for production managers responsible for production management on-the-job, under the supervision of an experienced production manager.

### **What are the employment prospects for production managers in Bhutan?**

Production managers are employed in both the corporate and private sectors. The private sector is expected to grow in future years but this growth may focus more on the provision of service (e.g. hotels and catering, tourism) rather than the production of commodities. Opportunities for production managers will depend on the willingness of the private sector to invest in the production of raw materials (e.g. fruits, vegetables) and their transformation into final products (e.g. tinned and dried fruits, fruit juices.)

## 1.3.2 Construction Manager

### **Title: CONSTRUCTION MANAGER**

**Description:** A construction manager coordinates all matters concerning the planning, execution and supervision of building projects.

**Alternative and Related titles: BUILDING SITE SUPERVISOR/GENERAL MANAGER: CONSTRUCTION**

### **What does a construction manager do?**

- Plans building site activities to ensure that resources are used efficiently.
- Coordinates building site activities to ensure building projects are implemented according to building plans.
- Ensures projects are completed in accordance with agreed time schedules.
- Coordinates controls and manages sub-contractors, suppliers and site visitors.
- Ensures the building site is safe and free from hazards.
- Arranges final handover to clients on completion of construction.



**What are the working conditions for a construction manager?**

A construction manager usually has a professional qualification in building technology or engineering, and receives a salary and benefits similar to other professionals. The working hours may be irregular involving evening and weekend work, depending on the time-deadlines for completion of the building.

**What is the working environment like?**

A Construction manager usually works outdoors, from an office located on the actual building site. The actual working environment varies with weather conditions and can be wet, hot, cold or dusty. Sometimes a construction manager is required to work in remote locations, with living conditions that may be harsh.

**What knowledge and skills do I need to be a construction manager?**

- Good communication skills.
- The ability to motivate others, particularly sub-contractors, to complete their work to the required standard, and on time.
- Good time management.
- Computer literacy.
- Light vehicle license.
- Knowledge of construction methods and materials.

**What personal qualities/attributes do I need to be a construction manager?**

- An interest in practical things and a keenness to get things finished quickly and well.
- An interest in solving problems.
- A willingness to work outdoors and to work in a difficult environment.

**What are the education requirements to become a construction manager?**

The usual qualification for a construction manager is to complete Class 12 with mathematics and physical science, and then complete a Bachelor of Science Degree in building Management or similar qualification, usually of 3-4 years. Some construction managers on larger building sites have a degree in civil engineering.

### **Can I study in Bhutan to become a construction manager?**

No, there are no special courses in building management in Bhutan and thus it is necessary to study abroad. It is possible to study in another field (e.g. engineering) and learn about construction management through on-the-job experience, under the supervision of an experienced construction manager.

### **What are the employment prospects for construction managers in Bhutan?**

There are many opportunities for construction managers with both large and medium sized construction companies in the private sector. The private sector will play the leading role in Bhutan's construction industry and as the economy expands the demand for construction managers will grow.

Once a person has gained suitable experience as a construction manager, there are self-employment opportunities for building contractors who manage their own projects.

#### 1.3.3 Research and Development Manager

##### **Title: RESEARCH AND DEVELOPMENT MANAGER**

**Description:** A research and development manager plans, directs and coordinates the research and development activities of the enterprise with a view to improving its existing products and developing new ones.

##### **Alternative and Related Titles: DEPARTMENT MANAGER: RESEARCH AND DEVELOPMENT**

##### **What does a research and development manager do?**

- Plans, directs and coordinates research and development activities to improve internal processes and existing products, and develop new products and services.
- Plan and implement the overall research and development strategy for the enterprise.
- Negotiates with external agencies to undertake specific research and development work for the enterprise.
- Control department expenditure and ensure the efficient use of departmental resources.
- Oversee the selection, training and performance of department staff.

- Supervise department staff.
- Liaise with managers and staff in other departments on product development matters.
- Motivate department staff towards the achievement of the department's objectives.

**What are the working conditions for a research and development manager?**

A research and development manager is normally employed in the corporate and private sectors and receives a salary and benefits similar to other senior managers. Working hours are generally regular, although additional work hours may be required as new products are tested and evaluated.

**What is the working environment like?**

Most of the work of a research and development manager is conducted indoors in office and meeting situations. The research and development manager spends considerable time working in close association with other managers particularly those concerned with production, finance, and sales. The general working environment is usually hazard free. Research and development managers, however, often have to handle stressful situations as for example, when the enterprise faces severe competition and is under pressure to improve existing products or produce new ones in order to stay in business.

**What knowledge and skills do I need to be a research and development manager?**

- Communication skills.
- Negotiation skills.
- Knowledge of research strategies and statistical methods.
- Research skills and techniques.
- Computer skills.
- Ability to motivate others.

**What personal qualities/attributes do I need to be a research and development manager?**

- An interest in improving things.
- An interest in business

### **What are the education requirements- to become a research and development manager?**

The normal requirement for a research and development manager is a Bachelor's Degree in Commerce, Business, or related field with a specialization on research related subjects. Some research and development managers are qualified in engineering or science, with further qualifications in management theory and practice.

### **Can I study in Bhutan to become a research and development manager?**

A Bachelor's Degree in Commerce provides a reasonable starting point for a career in research and development

### **What are the employment prospects for a research and development manager in Bhutan?**

Employment opportunities are confined to the corporate and private sectors and are relatively few in number. Rather than employ a specialist research and development manager, this work is sometimes undertaken by a production manager in cooperation with marketing specialists.

There is a need, for Bhutan's enterprises to develop new products as a basis for business expansion and more opportunities can be expected in the research and development field in future.

#### 1.3.4 Computer System Manager

##### **Title: COMPUTER SYSTEMS MANAGER**

Description: A computer systems manager plans, directs and coordinates the computer operations of an organization's computer system to improve efficiency and assist in the achievement of the organization's objectives.

**Alternative and Related Titles: COMPUTER SERVICE MANAGEMENT / DEPARTMENT MANAGER: COMPUTER SYSTEM / INFORMATION TECHNOLOGY MANAGER / NETWORK MANAGER**

##### **What does a computer systems manager do?**

- Plans, directs and coordinates the computer system and related services of the organization or enterprise.
- Plans and implements the selection, installation use and

maintenance of computer equipment and software to ensure that required information is generated.

- Plans and implements the purchase of externally provided computer services.
- Plans and implements the purchase of externally provided computer services.
- Ensure that computer systems are up-graded and up-dated as appropriate in response to the changing needs of the organization.
- Controls department expenditure and ensure the efficient use of departmental resources.
- Oversees the selection, training and performance of department staff.
- Supervise department staff.
- Motivate department staff towards the achievement of the organization's objectives.

### **What are the working conditions for a computer manager?**

A computer manager normally enjoys good working conditions. In the Royal Civil Service computer managers/network administrators are employed in senior positions. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the corporate and private sectors a computer manager receives the same salary and benefits as other senior managers. The hours of work are regular except on occasions when computer systems fail and emergency action is required. A computer manager for a large corporation or company with a number of branch offices (e.g. a bank) may be required to undertake regular travel.

### **What is the working environment like?**

The working environment for a computer manager involves indoor work and regular involvement with computers and computer systems. Much of the actual computer work is done by computer technicians, but managers must provide the necessary leadership and guidance. The working environment is largely hazard free although periods of stress and frustration can be experienced during systems failure, and the introduction of new systems.

### **What knowledge and skills do I need to be a computer systems manager?**

- Good communication skills.
- Computer skills.
- Ability to solve problems.
- Ability to motivate staff towards the achievement of the organization's objectives.
- Ability to translate production and service needs into computer languages and services
- Knowledge of recent developments in computer systems.

### **What personal qualities do I need to be a computer systems manager?**

- A real interest in computers and computer systems.
- Creativity and innovation.
- An interest in business.

### **What are the education requirements to become a computer systems manager?**

The normal requirement for a computer systems manager is a Bachelor's Degree in Computer Science or related field, usually of 3-4 year's duration, requiring passes in Class 12 for entry. In addition, a computer systems manager would benefit from an additional qualification in the management field.

### **Can I study in Bhutan to become a computer systems manager?**

Yes, a Bachelor's Degree in Computer Science. The Degree provides a sound basis for a career in computer systems management.

### **What are the employment prospects for a computer systems manager in Bhutan?**

Bhutan offers good prospects for computer systems managers in government, as well as the corporate and private sectors. All organizations and enterprises accept the contributions computer systems make to enterprise efficiency, provided the computer system is properly planned and implemented.

Increasingly, computer systems specialists are in demand as consultants to small and medium enterprises to assist them to computerize inefficient manual systems, and take advantage of modern computer technology.

### 1.3.5 Project Manager

**Title: PROJECT MANAGER**

**Description:** Project managers take overall responsibility for the delivery of a project, including planning, co-ordination and financial control. They manage a project from the initial decision through to successful completion, on time and within budget. They hold initial discussions with the client, undertake planning, provide estimates of expenditure involved, select and lead a project team, recruit staff, order the materials and control all activities relating to the project. They manage relationships with the client throughout the project and are responsible for reporting on, and resolving, any issues that may arise.

**Alternative and Related Titles:**

**What does a Project manager do?**

- hold initial discussions with the client who may be funding the project
- undertake planning relevant to the objectives set out by the client
- carry out a risk assessment
- provide estimates of expenditure involved
- select and lead a project team
- recruit staff and order the materials
- organize the work and allocate resources
- control all activities relating to the project
- Monitor and report progress of the project to the client.

**What are the working conditions for a Project manager?**

They manage relationships with the client throughout the project and are responsible for reporting on, and resolving, any issues that may arise. They are also responsible for ensuring the most effective and efficient use of people and resources required for the duration of the project.

Skilled project managers are now viewed as vital to business success in all business areas including engineering, construction and manufacturing, as well as in many service-based areas.

### **What is the working environment like?**

The need to meet deadlines can sometimes mean working long hours, including evenings and weekends.

Much of the work is office based, but project managers also travel to visit clients and to see how projects are progressing. They may spend time away from home. If a project is abroad, they may be away from home for several days at a time.

### **What knowledge and skills do I need to be a Project manager?**

- have strong leadership and people management skills
- be capable of problem solving
- be able to meet deadlines
- have excellent communication skills, both spoken and written
- have strong organizational skills
- be skilled at negotiation
- work well in a team
- work well under pressure
- have good computer skills
- be able to understand complex information
- be able to work on several projects at the same time
- Have an understanding of budgetary control.

### **What personal qualities/attributes do I need to be a Project manager?**

- enjoy being part of a team
- Be interested in problem solving.

### **What are the education requirements to become a Project manager?**

Increasingly, Project managers have a Bachelor's Degree. Experience in a relevant subject may be gained at any level, from Apprenticeship to postgraduate, and people may start in this job without necessarily having a project management qualification, if they have relevant knowledge and experience of the sector.

### **Can I study in Bhutan to become a Project manager?**

Yes, Studying a Bachelor of Arts or Bachelor of Commerce which provides an entry point to a career in Project Management, but further specialized study abroad is required to provide the knowledge and skills not available in



Bhutan.

### **What are the employment prospects for a Project manager in Bhutan?**

As the corporate and NGOs grow and develop it is expected there will be employment opportunities for project managers, particularly in larger organizations. After working as part of the support team in a project, it may be possible to progress to team leader for part of a project and then to project manager. Project managers can progress to senior management posts. Some managers set up their own consultancy business.

## **1.4 Hospitality, retail and other services managers**

### **1.4.1 Public Relation Manager**

#### **Title: PUBLIC RELATION MANAGER**

**Description:** A public relations manager plans, directs and coordinates the public relations and public information activities of the organization or enterprise, by promoting the enterprise (as distinct from its individual products and services) in the wider community.

#### **Alternative and Related Titles: CUSTOM RELATION MANAGER**

#### **What does a public relations manager do?**

- Plans, directs and coordinates the public relations activities of the enterprise or organization.
- Negotiates advertising contracts with Television, radio and print media companies, and sporting and cultural organizations.
- Plans and implements information programs to inform the wider community of the objectives and achievements of the enterprise.
- Prepares press releases.
- Drafts speeches for other senior managers.
- Controls department expenditure and ensures the efficient use of departmental resources.
- Oversees the selection, training and performance of department staff.
- Supervises and motivates department staff towards the achievement of the organization's objectives.

### **What are the working conditions for a public relations manager?**

A public relations manager is employed in the corporation and private sectors and receives salaries and benefits similar to other senior managers. A public relations manager may be required to work irregular hours particularly when involved in conducting a major information campaign.

### **What is the working environment like?**

Most of the work of a public relations manager is conducted indoors in office and meeting situations. Considerable time is spent in discussions with other professionals to ensure that the information to be communicated to the wider community is correct and attractively presented. The general working environment is usually hazard free. Public relations managers, however, often have to handle stressful situations as for example when dealing with complaints from the public about the organization's activities. If, for example, the activities of an enterprise are seen by the wider public as having an adverse impact on the natural environment, the public relations manager would be expected to respond to such complaints as and when they arise.

### **What knowledge and skills do I need to be a public relations manager?**

- High-level communication skills, including writing skills for media releases and information campaigns.
- Negotiating skills.
- Ability to motivate staff towards the achievement of the organization's objectives.
- Computer skills
- Knowledge of public relations strategies.

### **What personal qualities/attributes do I need to be a public relations manager?**

- An outgoing personality and an interest in meeting people.
- Creativity in commencing a positive and honest impression of the enterprise and its activities.
- Integrity and loyalty

### **What are the education requirements to become a public relations manager?**

Increasingly, public relations managers have a Bachelor's Degree in Mass Communication or similar fields or, sometimes, in journalism. Some have a Bachelor of Arts Degree, and some may have studied for a Commerce Degree.

Such degrees usually take 3-4 years after the completion of Class 12.

**Can I study in Bhutan to become a public relations manager?**

Yes, Studying a Bachelor of Arts or Bachelor of Commerce which provides an entry point to a career in public relations, but further specialized study abroad is required to provide the knowledge and skills not available in Bhutan.

**What are the employment prospects for a public relations manager in Bhutan?**

As career Public relations is relatively new to Bhutan. As the corporate and private sectors grow and develop it is expected there will be some employment opportunities for public relations managers, particularly in larger organizations. There are opportunities for public relations managers to be self-employed by providing consulting services to government and the corporate and private sectors.

1.4.2 Food and Beverage Manager

**Title: FOOD AND BEVERAGE MANAGER**

**Description:** A restaurant manager plans, directs and coordinates the activities of a restaurant to meet the needs of customers.

**Alternative and Related Titles: GENERAL MANAGER: RESTAURANT**

**What does a food and beverage manager do?**

- Plans, directs and coordinates activities concerning the provision of food, beverage and other service to customers.
- Ensures that services provided are of the required standard and that resources are used efficiently.
- Ensures that services are delivered in accordance with agreed time schedules.
- Prepares and supervises the implementation of daily, weekly and monthly work plans.
- Plans menus in consultation with chefs and ensures necessary supplies are available.
- Prepares budgets and controls expenditure.
- Ensures that safety procedures are applied in the restaurant and kitchen, and that standards for hygiene are observed.

- Oversees the selection, training and performance of all staff.
- Supervises subordinate staff.

### **What are the working conditions for a food and beverage manager?**

Food and beverage managers usually work in the private sector. They normally work irregular hours, including evenings and weekends. They usually receive free meals when they are at work.

### **What is the working environment like?**

In most food and beverage manager enjoys a comfortable working environment, free from hazards and dangers. The manager spends most time indoors, working with subordinate staff, and meeting customers. The environment can sometimes be stressful during busy times, and when dealing with difficult and demanding customers.

### **What knowledge and skills do I need to be a food and beverage manager?**

- Good communication skills.
- The ability to speak one or more foreign languages is an advantage.
- The ability to supervise and motivate subordinate staff.
- Knowledge of the tourism and catering industry.

### **What personal qualities/attributes do I need to be a food and beverage manager?**

- A strong interest in assisting people.
- An interest in business.
- An out-going personality that can readily adjust to a variety of situations.
- Good attention to detail.
- Good dress sense and personal grooming.

### **What are the education requirements to become a food and beverage manager?**

Although it is not essential for a food and beverage manager to have a degree or diploma, some training is required. A food and beverage manager may be trained initially as a cook or a waiter and eventually become a manager. In large restaurants, a food and beverage manager may have a degree in hospitality or tourism management, or related field. Entry to such a degree

requires passes at Class 12.

### **Can I study in Bhutan to become a food and beverage manager?**

Yes, private training institute provides certificate level courses and training in food and beverage management. It is possible, however, to learn on-the-job under the supervision of an experienced manager.

### **What are the employment prospects for a food and beverage manager in Bhutan?**

As Bhutan's private sector grows, it is expected that more restaurants, some as part of hotels, will commence operations and that more employment opportunities for restaurant managers will become available. For persons with sufficient capital to build or purchase a restaurant, there is some scope for them to become owner-managers after some years of experience.

#### 1.4.3 Hotel Manager

##### **Title: HOTEL MANAGER**

**Description:** A hotel manager plans, directs and coordinates the activities of an enterprise concerned with the provision of accommodation, catering and related services for the benefit of customers.

##### **Alternative and Related Titles: GENERAL MANAGER: HOTEL**

##### **What does a hotel manager do?**

- Plans, directs and coordinates activities concerning the provision of accommodation, catering and other services to customers.
- Ensures that services provided are of the required standard and that resources are used efficiently.
- Ensures that services are delivered in accordance with agreed time schedules.
- Prepares and supervises the implementation of daily, weekly and monthly work plans.
- Prepares budgets and controls expenditure.
- Ensures that safety procedures are applied in the hotel, and that hygiene standards are maintained.
- Oversees the selection, training and performance of all staff.
- Supervises other managers and subordinate staff.

### **What are the working conditions for a hotel manager?**

Hotel managers work in the private sector and receive salaries and benefits similar to other senior managers in these sectors. They are often required to work long and irregular hours, particularly during 'high season' when the number of visitors and customers is high. In some hotels, managers are required to live on the premises, which can create a feeling that the manager 'is always at work.' When on duty, a hotel manager normally receives free meals.

### **What is the working environment like?**

In most hotels a manager enjoys a comfortable working environment, free from hazards and dangers. The manager spends most time indoors in an office, working with subordinate managers and staff, and meeting customers and guests. The environment is one of 'serving others' which can sometimes be stressful in meeting the diverse needs of difficult and demanding customers.

### **What knowledge and skills do I need to be a hotel manager?**

- High-level communication and inter-personal skills.
- The ability to speak one or more foreign languages is an advantage.
- The ability to identify and solve problems quickly.
- Computer literacy.
- Good planning skills.
- Knowledge of the tourism and catering industry.

### **What personal qualities/attributes do I need to be a hotel manager?**

- A strong interest in assisting people.
- An interest in business.
- An out-going personality that can readily adjust to a variety of situations.
- Good attention to detail.
- Good dress sense and personal grooming.

### **What are the education requirements to become a hotel manager?**

Although it is not essential for hotel managers to have a University Degree, increasingly, hotel managers have a Degree in Hospitality Management or similar field, followed by on-the-job management experience in an hotel. Entry to a degree course requires the completion of class 12. Some hotel managers

do not have a University Degree and acquire the necessary knowledge and skills through on-the-job experience under the supervision of an experienced hotel manager.

**Can I study in Bhutan to become a hotel manager?**

Yes, It is possible to complete degree studies in Bhutan as, for example, a Commerce Degree. After several years of experience as a junior or assistant manager you would be qualified for a position of hotel manger. Bhutan is in the process of establishing a tourism and hotel training school which, in future, will provide training in hotel management.

**What are the employment prospects for a hotel manager in Bhutan?**

As Bhutan’s private sector grows, it is expected that more hotels (large, medium and small) will be built and commence operations and that more employment opportunities for hotel managers will become available. For persons with sufficient capital to build or purchase a hotel, there is some scope for them to become owner-mangers after some years of experience.

1.4.4 Housekeeping Manager

**Title: HOUSEKEEPING MANAGER**

**Description:** Housekeeping Manager makes sure that places providing accommodation are clean, safe, welcoming and attractive. They work in hotels, conferences centers and hospitals.

**Alternative and Related Titles:**

**What does a Housekeeping manager do?**

- checking that staff maintain high standards of cleanliness and that rooms are correctly serviced
- supervising and training staff and planning staff rotas
- making sure there are supplies of linen, cleaning materials, soap and shampoo
- Stocktaking, paperwork and managing budgets.

Housekeeping Manager supervises and inspect the work of their team, making sure that all tasks have been carried out and no areas have been overlooked. They also make sure that damaged or faulty items are repaired or replaced and check that all equipment is in safe working order.

### **What are the working conditions for a Housekeeping manager?**

- Make sure that places providing accommodation are clean, safe, welcoming and attractive.
- Organize their staff to clean bathrooms and bedrooms, and to clean and prepare public rooms.
- They inspect the work of their team, making sure that all tasks have been carried out and no areas have been overlooked. Housekeepers make sure that any damaged or faulty item is repaired or replaced.
- They also check that equipment, such as vacuum cleaners, polishers and trolleys, is in safe working order.
- Oversee the work of room attendants and linen room staff.
- Works closely with a wide range of people, including cleaning staff, receptionists, administrative staff, managers and suppliers.

### **What is the working environment like?**

The work may involve unsocial hours. This could mean supervising housekeepers at work early in the morning, working in the evenings and nights, and possibly weekends and public holidays. Side by side Housekeeping Manager also have an office where they can deal with paperwork.

### **What knowledge and skills do I need to be a Housekeeping manger?**

- to be an excellent organizer
- an eye for detail
- to be good at training, supporting and motivating staff
- Practical management and organization to provide high standards of service.

### **What personal qualities/attributes do I need to be a Housekeeping manager?**

- to be an excellent organizer
- an eye for detail
- to be good at training, supporting and motivating staff
- good numeracy skills
- a knowledge of cleaning techniques
- tact in dealing with guests, accommodation users and staff
- to be able make quick decisions and solve problems on the spot
- To be physically fit and prepared to work hard.



### **What are the education requirements to become a Housekeeping manager?**

Although it is not essential for a housekeeping manager to have a degree or diploma, some training is required. In large hotels, a housekeeping manager may have a degree in hospitality or tourism management, or related field. Entry to such a degree requires passes at Class 12. Entry is possible through an Apprenticeship in hospitality.

### **Can I study in Bhutan to become a Housekeeping manager?**

There is no special training provided in Bhutan to become a housekeeping manager. It is possible, however, to learn on-the-job under the supervision of an experienced manager and undertake courses in private training institutes that provide training in restaurant management.

### **What are the employment prospects for a Housekeeping manager in Bhutan?**

As Bhutan's private sector grows, it is expected that more hotels business, will commence operations and that more employment opportunities for housekeeping managers will become available. For persons with sufficient capital to build or own a hotel, there is some scope for them to become owner-managers after some years of experience.

## 1.4.5 Restaurant Manager

### **Title: RESTAURANT MANAGER**

**Description:** A restaurant manager plans, directs and coordinates the activities of a restaurant to meet the needs of customers.

### **Alternative and Related Titles: GENERAL MANAGER: RESTAURANT**

### **What does a restaurant manager do?**

- Plans, directs and coordinates activities concerning the provision of food, beverage and other service to customers.
- Ensures that services provided are of the required standard and that resources are used efficiently.
- Ensures that services are delivered in accordance with agreed time schedules.
- Prepares and supervises the implementation of daily, weekly and monthly work plans.

- Plans menus in consultation with chefs and ensures necessary supplies are available.
- Prepares budgets and controls expenditure.
- Ensures that safety procedures are applied in the restaurant and kitchen, and that standards for hygiene are observed.
- Oversees the selection, training and performance of all staff.
- Supervises subordinate staff.

### **What are the working conditions for a restaurant manager?**

Restaurant managers usually work in the private sector. They normally work irregular hours, including evenings and weekends. They usually receive free meals when they are at work.

### **What is the working environment like?**

In most restaurants a manager enjoys a comfortable working environment, free from hazards and dangers. The manager spends most time indoors, working with subordinate staff, and meeting customers. The environment can sometimes be stressful during busy times, and when dealing with difficult and demanding customers.

### **What knowledge and skills do I need to be a restaurant manager?**

- Good communication skills.
- The ability to speak one or more foreign languages is an advantage.
- The ability to supervise and motivate subordinate staff.
- Knowledge of the tourism and catering industry.

### **What personal qualities/attributes do I need to be a restaurant manager?**

- A strong interest in assisting people.
- An interest in business.
- An out-going personality that can readily adjust to a variety of situations.
- Good attention to detail.
- Good dress sense and personal grooming.

### **What are the education requirements to become a restaurant manager?**

Although it is not essential for a restaurant manager to have a degree or diploma, some training is required. A restaurant manager may be trained

initially as a cook or a waiter and eventually become a manager. In large restaurants, a restaurant manager may have a degree in hospitality or tourism management, or related field. Entry to such a degree requires passes at Class 12.

**Can I study in Bhutan to become a restaurant manager?**

There is no special training provided in Bhutan to become a restaurant manager. It is possible, however, to learn on-the-job under the supervision of an experienced manager and undertake training in restaurant management from private training providers.

**What are the employment prospects for a restaurant manager in Bhutan?**

As Bhutan's private sector grows, it is expected that more restaurants, some as part of hotels, will commence operations and that more employment opportunities for restaurant managers will become available. For persons with sufficient capital to build or purchase a restaurant, there is some scope for them to become owner-managers after some years of experience.



*PELYAB*



*Pelyab (Endless Knot) symbolises the Buddha's endless wisdom and compassion. It indicates continuity as the underlying reality of existence. It is conjectured that it may have evolved from an ancient naga symbol with two stylized snakes.*

# Professionals

## 2. Professionals

### 2.1. Science and engineering professionals

#### 2.1.1 Aeronautics Engineer

**Title: AERONAUTICAL ENGINEER**

**Description:** An aeronautical engineer applies scientific and technological principles to research, design, develop, maintain and test the performance of aircraft systems. They also work on the different components that make up the aircraft and systems.

**Alternative and Related Titles:**

**What does an Aeronautical Engineer do?**

They focused on enhancing high-quality flight safety and standards as well as reducing system costs. Increasingly, the role addresses the environmental impact of air travel. Aeronautical engineering offers a wide range of roles in research, design, development, testing, manufacture and maintenance. Many engineers specialize in a particular area such as propulsion, computational fluid dynamics, aerodynamics or materials and structures.

**What are the working conditions for an Aeronautical Engineer?**

- applying the principles of science and technology to create aircraft, components and support equipment;
- researching and developing design specifications;
- supervising the assembly of airframes and the installation of engines, instruments and other equipment;
- resolving issues that arise during the design, development and testing processes;
- measuring and improving the performance of aircraft, components and systems;
- project managing, including scheduling resources and staff and managing budgets;
- working with teams, suppliers, clients and managers to agree budgets, timescales and specifications;
- modifying designs to improve safety features or minimise fuel consumption and pollution;

**What is the working environment like?**

An Aeronautical engineer mainly works indoors in an office situation and may spend considerable time on-aircraft. A Aeronautical engineer is sometimes confronted with stressful situations as, for example, while developing repair procedures as well as working out and managing schedules for repair and maintenance; and investigating aircraft accidents; meets with an problem.

**What knowledge and skills do I need to be an Aeronautical Engineer?**

- undertaking systematic manufacturing, involving the assembly and modification of components;
- participating in flight test programmes to measure take-off distances, rate of climb, stall speeds, maneuverability and landing capacities;
- maintaining aircraft for full operation including making regular inspections, maintenance and servicing;
- developing repair procedures as well as working out and managing schedules for repair and maintenance;
- investigating aircraft accidents;
- collating information, interpreting data and publishing the results of specific projects in technical report form;
- using computer-aided design (CAD) software to create designs and plans;
- storing paperwork for approved data (drawings, technical instructions, assessments and calculations);
- Communicating technical and regulatory advice to clients, teams, suppliers and other professionals within the aerospace industry and presenting data to groups and individuals.

**What personal qualities/attributes do I need to be an Aeronautical Engineer?**

- Ability to work independently, but also as part of a team.
- An interest in mathematics.

**What are the education requirements to become an Aeronautical Engineer?**

The normal requirement for a career in Aeronautical engineering is a Bachelor's Degree in Engineering, usually of 4 year's duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects.

## **Can I study in Bhutan to become an Aeronautical Engineer?**

No.

## **What are the employment prospects for an Aeronautical Engineer in Bhutan?**

An expansion in air travel means that large numbers of aeronautical engineers are needed.

### 2.1.2 Aircraft Pilot

#### **Title: AIRCRAFT PILOT**

**Description:** An aircraft pilot operates and controls mechanical, electrical and electronic equipment in order to fly and navigate aircraft for the transport of passengers and freight. In other countries, pilots are normally classified as private (flies purely for pleasure and not for payment), commercial, or military (where a pilot serves as a member of the armed forces.) In Bhutan, with the exception of helicopter pilots, all pilots are commercial pilots.

**Alternative and Related Titles: COMMERCIAL PILOT/FLIGHT ENGINEER, AIRCRAFT, FLIGHT NAVIGATOR/CO-PILOT/FIRST OFFICER**

#### **What does a pilot do?**

- Files and navigates aircraft in accordance with established control and operating procedures.
- Prepares and submits flight plans in advance of take-off, as required by regulations.
- Controls the operation of mechanical, electrical and electronic equipment, and ensures that instruments, controls and equipment function properly.
- Takes responsibility for in-flight safety and emergency procedures.
- Directs and supervises the work of cabin crew and other subordinate staff.
- Operates in close cooperation with other pilots (e.g. first officer) during flights.
- Completes post-flight reports and paper work.



### **What are the working conditions for a pilot?**

In Bhutan, Druk Air Corporation Ltd and Tashi Airlines is the sole employer of commercial pilots. Because of the very high level of training and responsibility required, pilots receive very high salaries and are also paid traveling allowances when they are required to stay outside Bhutan. A pilot is required to work irregular hours in accordance with airline schedules, which, in the case of Bhutan, are partly dependent on weather conditions in the Paro Valley. For safety reasons, however, pilots are strictly restricted in the number of flying hours they may undertake per month. A pilot is required to wear a uniform, and is normally paid an allowance for this from the employer. Six-monthly health checks are required for all pilots.

### **What is the working environment like?**

The working hours of a pilot are mostly spent in the cockpit of an aircraft, with smaller amounts of time spent on office work. By its very nature, flying involves risks but by following strict international and national regulations and safety procedures the actual danger for pilots and passengers is minimized. The working environment for a pilot is largely confined to an aircraft's cockpit, which is relatively small and isolated from the remainder of the aircraft.

### **What knowledge and skills do I need to be a pilot?**

- Good communication skills.
- Computer skills.
- Mathematical skills.
- Detailed knowledge of civil aviation regulations and safety rules and procedures
- Detailed knowledge of the specifications and characteristics of each different aircraft to be flown.
- Ability to fly in all types of weather.

### **What personal qualities/attributes do I need to be a pilot?**

- High levels of medical fitness are required (even though flying does not involve much physical effort it is mentally demanding and tiring, particularly when flying through different time zones) and pilots must pass strict medical examinations every 6 months.
- Good eyesight and good sense of colors (not color blind).
- Good hearing.

- Emotional stability and patience.
- High responsibility (in that the pilot is in charge of a large, sophisticated and expensive aircraft and the passengers and crew.)

### **What are the education requirements to become a pilot?**

It is not essential for a pilot to have a University Degree. The main requirement to become a commercial pilot is to be able to fly an aircraft competently and safely. This requires that the pilot obtain a license that requires at least 200 hours of training, flying and examinations, under the supervision of the government agency responsible for civil aviation. Once a pilot has a commercial license, further training of up to 4 year is required for on-ground, flight simulator and practical training with an airline company to qualify for the particular type of aircraft to be flown. By this stage a person qualifies to be employed as a co-pilot/first officer.

### **Can I study in Bhutan to become a pilot?**

No. Commercial pilots receive their training overseas.

### **What are the employment prospects for a pilot in Bhutan?**

The number of commercial pilots required by Druk Air and Tashi Airlines will increase over the years as their flight route increases. It is possible to obtain a commercial pilots license in another country and seek to become a pilot abroad, working for another airline. Obtaining a commercial license, however, is very expensive because of the hours required.

## 2.1.3 Architect

### **Title: ARCHITECT**

**Description:** An architect designs houses, government buildings (office blocks, schools, hospitals) and private sector buildings, based on a combination of considerations including functions, aesthetics, and finance.

**Alternative and Related Titles:** LANDSCAPE ARCHITECT (designs exterior spaces for human use and enjoyment within the constraints of environmental protection)/TOWN PLANNER

**What does an architect do?**

- Finds out the needs of the client for the building to be constructed.
- Investigates the proposed building site and adjacent buildings.
- Investigates the availability of suitable and alternative building materials.
- Prepares sketches of floor plans and buildings.
- Prepares detailed building plans and specifications combining structural, mechanical and service aspects (plumbing, electrical, heating, air conditioning) that comply with laws and regulations.
- Liaise with quantity surveyors, engineers, and building contractors.
- Supervise building construction.

**What are the working conditions for architects?**

In the Royal Civil Service architect are normally employed as middle level professionals. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. In the corporate and private sector architects are employed as a professional and receive salaries and benefits similar to those for other professionals. Architects may be required to work irregular hours to meet particular deadlines. Architects employed by government may be required to travel to different Dzongkhags as part of their duties.

**What is the working environment like?**

Architects work both indoors and outdoors. Their indoor work focuses on the preparation of plans and specifications. Their outdoor work is concerned with assessing building sites and supervising the construction of buildings.

The working environment relies on the use of computers, modern communications particularly the internet and e-mail.

**What knowledge and skills do I need to be an architect?**

- Good communication and inter-personal skills.
- The ability to translate concepts and ideas into sketches and plans.
- Basic sketching and drawing skills.
- Mathematical and numerical skills.

- Ability to understand clients' financial requirements.
- Ability to drive a vehicle.
- High-level computer skills.

### **What personal qualities do I need to be an architect?**

- Imagination and creativity
- Interest in the natural environment

### **What are the education requirements to become an architect?**

You will need to complete Class 12, preferably with mathematics and technical drawing as main subjects. After Class 12 you will need to complete a University Degree in Architecture, usually 4 or 5 years. After completing a degree it is necessary to have 1-2 years practical experience under the guidance of a qualified and registered architect before you can become a registered architect.

### **Can I study in Bhutan to be an architect?**

No. You will need to study abroad.

### **What are the employment prospects for architects in Bhutan?**

Architects are employed by Government both in Thimphu and other Dzongkhag. Large construction companies also employ architects. There are good prospects for self-employment after some years of experience.

## 2.1.4 Chemical Engineer

### **Title: CHEMICAL ENGINEER**

**Description:** A chemical engineer applies the knowledge of chemistry and physics to the design of processes concerning the production of chemical, plastics and mineral products.

**Alternative and Related Titles: METALLURGICAL ENGINEER / METALLURGIST**

### **What does a chemical engineer do?**

- Designs manufacturing processes where chemicals are processed into final products, or into intermediate products for further processing.

- Applies scientific knowledge to the efficient production of final product from raw materials (e.g. extraction of metals for ores, production of fertilizer, paper, plastics and explosives.)
- Conducts research and builds experimental plants and processes to test and evaluate new products using chemicals, or to produce new chemical products.
- Cooperates with other technical specialists (e.g. finance, marketing) in assessing the economic viability of new products and papers.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

### **What are the working conditions for a chemical engineer?**

In the Royal Civil Service a chemical engineer is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Chemical engineers employed in the corporate are professionals and receive salary and benefits similar to other professionals. The hours of work for a chemical engineer can be irregular depending on the actual position held and particular projects, such as the introduction of new processes or the production of new chemical products in a factory. Evening and weekend work may be involved.

### **What is the working environment like?**

A chemical engineer mainly works indoors in an office situation and in attending meetings. A chemical engineer may spend considerable time on-site' when testing new processes and producing new chemical products. A chemical engineer is sometimes confronted with stressful situations as, for example, when the introduction of new processes or products experiences difficulties and problems. The working environment for a chemical engineer involves exposure to various chemicals which, in themselves, are a hazard, but adherence to strict safety standards minimizes the dangers.

### **What knowledge and skills do I need to be a chemical engineer?**

- High level analytical skills.
- Communication skills.
- Computer skills.

### **What personal qualities/attributes do I need to be a chemical engineer?**

- An interest in mathematics, physics and chemistry.
- An interest in business.

### **What are the education requirements to become a chemical engineer?**

The normal requirement for a career in chemical engineering is a Bachelor's Degree in Engineering, usually of 4 year's duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects.

### **Can I study in Bhutan to become a chemical engineer?**

Sherubtse College offers a Bachelor of Science (General) Degree that provides a general grounding for a career in science, and Royal Bhutan Institute of Technology Bachelor of Technology Degree that provides a general grounding for a career in engineering, but neither course provides specialized study in chemical engineering. A career as a chemical engineer requires study abroad.

### **What are the employment prospects for a chemical engineer in Bhutan?**

Few opportunities exist in government service but some opportunities are available in the corporate sector. Bhutan has a very small industrial sector and makes little use of chemical processes and produces few chemical products, thereby limiting opportunities for employment in Bhutan.

## 2.1.5 Civil Engineer

### **Title: CIVIL ENGINEER**

**Description:** A civil engineer conducts research and advises on the design and construction of major structures including roads, bridges, dams, and airports as part of the effective functioning of a community.

### **Alternative and Related Titles: CIVIL CONSTRUCTION ENGINEER**

### **What does a civil engineer do?**

- Conducts research and develops new and improved theories related to civil engineering.
- Designs and advises on designs for structures including bridges, roads, airports, flood control systems, and waste disposal systems.
- Specifies construction methods, materials and quality standards

for construction projects.

- Oversees and directs on-site construction work.
- Establishes control systems to ensure the efficient functioning of structures, as well as safety and environmental protection.
- Organizes and directs the maintenance and repair of existing structures.
- Maintains technical contact with other specialists and professionals.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

### **What are the working conditions for the civil engineer?**

In the Royal Civil Service, a computer system designer is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. The hours of work for a civil engineer can be irregular depending on the actual construction schedule for projects. Evening and weekend work may be involved. A civil engineer may need to travel to construction sites some of which may be in remote areas.

### **What is the working environment like?**

A civil engineer is required to work both indoors and outdoors. Indoor work involves both office work and meetings with clients. Outdoor work is mostly concerned with site assessment and construction supervision. A civil engineer is sometimes confronted with stressful situations concerning time delays in the completion of projects, site accidents, and negative impact on the environment of poorly designed projects.

### **What knowledge and skills do I need to be a civil engineer?**

- High-level mathematical skills.
- Good communication and inter-personal skills.
- Computer skills.
- Leadership skills and the ability to motivate others.

### **What personal qualities/attributes do I need to be a civil engineer?**

- An interest in structures and their relation to the environment.
- An interest in the improvement and protection of the environment.

### **What are the education requirements to become a civil engineer?**

The normal requirement for a career in civil engineering is a Bachelor's Degree in Engineering, usually of 4 year's duration. Entry to such a degree course is Class 12 with passes in mathematics and science subjects.

### **Can I study in Bhutan to become a civil engineer?**

Yes, you can study for a Bachelor of Technology Degree at College of Science and Technology, Rinchending. This provides an introduction to work as a civil engineer but advancement in a civil engineering career normally requires higher-level studies abroad.

### **What are the employment prospects for a civil engineer in Bhutan?**

Employment opportunities exist in government departments and Dzongkhags as well as the corporate sector. Large construction and engineering companies in the private sector employ civil engineer, but few such enterprises exist in Bhutan at present. As the economy develops it is expected that employment opportunities for civil engineer in the private sector will increase.

## 2.1.6 Computer Hardware Engineer

### **Title: COMPUTER HARDWARE ENGINEER**

**Description:** Computer hardware engineers design and develop computers and the computerized parts of other appliances. These include computer chips, circuit boards, displays, sensors, keyboards, modems, printers and test equipment. They are involved with the mechanical, electronic and electrical components of computers and computer systems such as processing units, memory and storage, data cabling and switching.

### **Alternative and Related Titles:**

### **What does a Computer Hardware engineer do?**

On a day-to-day basis, hardware engineers work on the original design of computer components and systems. They use computer software to help in digital design and specifications. They may also:

- design microchips, printed circuit boards and embedded systems
- Be responsible for testing and identifying any problems.



**What are the working conditions for a Computer Hardware Engineer?**

Computer hardware engineers are responsible for designing and developing computers and the computerized parts of other appliances. These include computer chips, circuit boards, displays, sensors, keyboards, modems, printers and test equipment. They are involved with the mechanical, electronic and electrical components of computers and computer systems such as processing units, memory and storage, data cabling and switching. This is a challenging and highly technical role.

On a day-to-day basis, hardware engineers work on the original design of computer components and systems, using computer software to assist in digital design and specifications.

**What is the working environment like?**

Work at a computer terminal in an open plan office environment or in a workshop. The job may involve a limited amount of travelling to different sites.

**What knowledge and skills do I need to be an Computer Hardware engineer?**

- have strong technical skills
- have good interpersonal and communication skills
- be adaptable and able to pick up new techniques
- be able to work on their own or in a team
- be able to work to tight deadlines, handling complex information
- be thorough and precise in their work, enjoying troubleshooting and problem solving
- be able to pay attention to detail
- be able to handle more than one problem or task at the same time
- be able to use their initiative
- have logical and enquiring minds
- Have good eyesight and normal colour vision.

**What personal qualities/attributes do I need to be a Computer Hardware engineer?**

- keeping up to date with advances in computers
- Solving scientific and technical problems in a logical manner.

### **What are the education requirements to become Computer Hardware engineer?**

The most common route into this work is with a relevant honours degree, such as computer engineering, electronic engineering or computer systems engineering.

### **Can I study in Bhutan to become an computer hardware engineer?**

Yes, however advancement in an computer hardware engineering career normally requires higher-level studies abroad.

### **What are the employment prospects for an computer hardware engineer in Bhutan?**

Employment opportunities exist in government departments, as well as the corporate sector

#### 2.1.7 Electrical Engineer

##### **Title: ELECTRICAL ENGINEER**

**Description:** An electrical engineer is concerned with the design and effective operation of systems concerned with the generation, distribution and optimum use of electrical energy.

##### **Alternative and Related Titles: ELECTRIC POWER GENERATION ENGINEER**

##### **What does an electrical engineer do?**

- Identifies researches and collects information concerning electrical power systems.
- Advises on and designs systems for electric power generation, transmission and distribution.
- Advises on and designs systems for electrical motors and other electrical equipment.
- Specifies electrical installation requirements in factories and large buildings.
- Establishes control standards and procedures to ensure efficient functioning and safety of electrical generating and distribution systems, motors and equipment.
- Organizes and directs the maintenance and repair of existing

electrical systems.

- Maintains contact with other technical specialists and professionals.
- Prepares scientific papers and reports.
- Supervises subordinate staff

### **What are the working conditions for an electrical engineer?**

In the Royal Civil Service an electrical engineer is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. The hours of work for an electrical engineer can be irregular depending on the actual position held and its location. Evening and weekend work may be involved.

### **What is the working environment like?**

An electrical engineer is required to work both indoors and outdoors. Indoor work involves both office work and meetings with clients. Outdoor work is mostly concerned with site assessment for power distribution systems. An electrical engineer is sometimes confronted with stressful situations concerning time delays in the completion of projects, and power blackouts.

### **What knowledge and skills do I need to be an electrical engineer?**

- Creative thinking abilities.
- Logical thinking.
- Problem solving skills.
- Mathematical abilities.
- Computer skills.

### **What personal qualities/attributes do I need to be an electrical engineer?**

- Ability to work independently, but also as part of a team.
- An interest in mathematics.

### **What are the education requirements to become an electrical engineer?**

The normal requirement for a career in electrical engineering is a Bachelor's Degree in Engineering, usually of 4 year's duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects.

### **Can I study in Bhutan to become an electrical engineer?**

Yes, you can study for a Bachelor of Technology Degree at College of Science and Technology, Rinchending. This provides an introduction to work as an electrical engineer, but advancement in an electrical engineering career normally requires higher-level studies abroad.

### **What are the employment prospects for an electrical engineer in Bhutan?**

Employment opportunities exist in government departments, as well as the corporate sector (e.g. Bhutan Power Corporation, Chhuka Power Corporation, Kurichu Power Corporation, Punatshangchhu I&II, Mangdechhu Hydro Power). Large construction and engineering companies in the private sector employ electrical engineers, but few such enterprises exist in Bhutan at present.

After some years of relevant experience electrical engineers can work as self-employed consultant to government and the corporate and private sectors.

## 2.1.8 Electronic Engineer

### **Title: ELECTRONICS ENGINEER**

**Description:** An electronics engineer conducts research and advises on the design and construction of electronic systems and equipment concerning the storage, retrieval, transfer, and processing of information.

### **Alternative and Related Titles: TELECOMMUNICATION ENGINEER**

#### **What does an electronics engineer do?**

- Advises on the design of and designs electronic devices, systems, motors, and equipment including computers and telecommunications equipment.
- Specifies production or installation methods, materials and quality standards for electronic equipment and systems.
- Directs the production and installation work for electronic systems.
- Establishes control standards and procedures to ensure the efficient functioning and safety of electronic systems.
- Organizes and directs the maintenance and repair of existing electronic systems.

- Maintains contact with other technical specialists and professionals.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

**What are the working conditions for an electronics engineer?**

In the Royal Civil Service an electronic engineer is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. The hours of work for an electronic engineer can be irregular depending on the actual position held and its location. Evening and weekend work may be involved.

**What is working environment like?**

An electronics engineer mainly works indoors in an office situation and in attending meetings. An electronics engineer is sometimes confronted with stressful situations as, for example, when a computer system falls and must be made operational in the shortest possible time. The working environment for an electronic engineer is mainly hazard free.

**What knowledge and skills do I need to be an electronics engineer?**

- Creative thinking abilities.
- Logical thinking.
- Problem solving skills.
- Mathematical abilities.
- Computer skills.

**What personal qualities/attributes do I need to be an electronics engineer?**

- An interest in computers and computer systems.
- Ability to work independently, but also as part of a team.
- An interest in mathematics.

**What are the education requirements to become an electronics engineer?**

The normal requirement for a career in electrical engineering is a Bachelor’s Degree in Engineering, usually of 4 year’s duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects.

### **Can I study in Bhutan to become an electronics engineer?**

Yes, you can study for a Bachelor of Technology Degree at College of Science and Technology, Rinchending. This provides an introduction to work as an electronics engineer, but advancement in an electronics engineering career requires higher-level studies abroad.

### **What are the employment prospects for an electronics engineer in Bhutan?**

Employment opportunities exist in government departments and corporations with responsibility for the development of the nation's telecommunications system.

After some years of relevant experience electronic engineers can work as self-employed consultants to government and telecommunications companies.

## 2.1.9 Environmental Engineer

### **Title: ENVIRONMENTAL ENGINEER**

**Description:** Environmental Engineer seeks to understand the natural world and how it is affected by human activities. It is a vast field, addressing issues such as land management and conservation, climate change, flood control, population growth and alternative energy supplies.

### **Alternative and Related Titles: ENVIRONMENTAL SCIENTIST**

### **What does an Environmental Engineer do?**

- studying the conservation of plants and animals, working to protect their natural habitats and promote biodiversity
- developing renewable energy supplies, advising oil and gas companies on the likely effects of a new pipeline or monitoring wildlife near a refinery
- helping to identify, minimize and manage environmental effects arising from development proposals, for example housing, power stations and airport runways
- advising on the environmental effects of waste disposal and developing new methods
- collecting and analyzing water samples to see if they meet safety and environmental standards, investigating the cause of abnormalities and proposing solutions

- working to protect communities from rising water levels by improving flood defences
- assessing air quality to see if it meets safety and environmental standards, investigating the cause of abnormalities and proposing solutions
- Helping businesses identify how they affect the environment and how they can operate in a way that minimizes and manages these effects.

### **What are the working conditions for Environmental Engineer?**

Environmental scientists usually work as part of a team. They often advise colleagues or managers, some of whom may not have a scientific background, by writing reports or making presentations.

An increasing number of scientists work as consultants, as part of a firm or on a freelance basis. In many cases they are brought in to assist with environmental impact assessments, which are required for many developments before permission is granted.

### **What is the working environment like?**

The working hours and environment depend on the role. A few environmental scientists work standard full-time hours. However, particularly those who work as consultants or project workers may require intensive research or analysis which could involve working longer hours.

Some work is likely to be carried out in an office or laboratory.

### **What knowledge and skills do I need to be Environmental Engineer?**

- a sound background in science, biology or geography
- an inquisitive nature and good research skills
- a precise and methodical approach
- planning and problem-solving skills
- the ability to analyze and interpret data
- to be able to communicate effectively with all kinds of people
- the ability to explain technical subjects to non-scientific people
- to work well as part of a multidisciplinary team
- To have a practical outlook and enjoy working outdoors.

### **What personal qualities do I need to be Environmental Engineer?**

- science
- geography
- Environmental issues.

### **What are the education requirements to become Environmental Engineer?**

Most entrants have a relevant degree. It is also possible to take a first degree in any science subject, followed by postgraduate study in a specialist area of environmental science.

### **Can I study in Bhutan to become Environmental Engineer?**

There is no degree course in Environmental Engineer in Bhutan, although Sherubtse College offers a Bachelor of Science (General) Degree that provides a basic background in some areas of concern to an Environmental. Specialized studies in Environmental Engineer can be undertaken abroad.

### **What are the employment prospects for an Environmental Engineer in Bhutan?**

Environmental Engineer usually works for government and large engineering companies. In Bhutan at present, opportunities are confined to government, usually as a middle level professional.

#### 2.1.10 Hydrologist

##### **Title: HYDROLOGIST**

**Description:** A hydrologist is concerned with the planning and utilization of surface water resources to ensure that sufficient water can be supplied to the nation at reasonable cost.

**Alternative and Related Titles:** SURFACE WATER HYDROLOGIST / GEOHYDROLOGIST (A geo-hydrologist is concerned with underground water resources.)

##### **What does a hydrologist do?**

- Assesses available supplies of surface water.
- Projects future needs and demands for water for industrial, agricultural and domestic use.



- Makes proposals for improved water management programs.
- Evaluates hydrological data including such things as dam capacity, river flows, rainfall figures, and flood frequencies.

### **What are the working conditions for a hydrologist?**

In the Royal Civil Service a hydrologist is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work may be irregular in cases of particular need or emergency, such as excessive rainfall and flooding rivers.

### **What is the working environment like?**

A hydrologist works both indoors and outdoors. In door work takes place in both office and laboratory. Outdoor work takes place in a variety of locations sometimes in uncomfortable situations (e.g. excessive rainfall) and may be in remote areas.

### **What knowledge and skills do I need to be a hydrologist?**

- The ability to analyze and interpret statistical information.
- Investigative techniques (as for example with the estimation of flood levels)
- The ability to prepare reports.
- Computer skills.

### **What personal qualities do I need to be a hydrologist?**

- An interest in water resources including rainfall, rivers and dams.
- Willingness to work outdoors, sometimes in difficult environments.
- A good sense of observation.

### **What are the education requirements to become a hydrologist?**

The minimum requirement to become a hydrologist is a Bachelor's Degree in Science with subjects such as hydrology, statistics, computer science, and physical geometry. Entry to such courses requires Class 12 with passes in mathematics and science. Study in geography is also beneficial.

### **Can I study in Bhutan to become a hydrologist?**

There is no degree course in hydrologist in Bhutan, although Sherubtse College offers a Bachelor of Science (General) Degree that provides a basic background in some areas of concern to a hydrologist. Specialized studies in hydrology can be undertaken abroad.

### **What are the employment prospects for a hydrologist in Bhutan?**

Hydrologists usually work for government and large engineering companies. In Bhutan at present, opportunities are confined to government, usually as a middle level professional.

Hydrologists can be self-employed as consultants to engineering firms and government, or work as employees of large construction companies. Such opportunities, however, are very limited in Bhutan.

#### 2.1.11 Mechanical Engineer

##### **Title: MECHANICAL ENGINEER**

**Description:** A mechanical engineer designs and oversees the manufacturer of machines and machine components, industrial plant, equipment and systems, and advises on and directs their functioning maintenance and repair. Mechanical Engineers can specialize in different fields including transport, agriculture, mining, power generation, industries, and bio-medical engineering (e.g. design of heart valves, artificial kidney machines.)

##### **Alternative and Related Titles:**

##### **What does a mechanical engineer do?**

- Advises on and designs machinery and tools for manufacturing, mining construction, and agricultural work.
- Advises on and designs non-electric motors and engines used in the population of vehicles, or for driving industrial machinery.
- Advises and designs road vehicle bodies, suspension system systems, brakes and other components.
- Advises on and designs heating, ventilation and refrigeration equipment.
- Advises on and designs non-electrical parts of apparatus or products such as computers, precision instruments, cameras,

and projectors.

- Specifies and checks the production and installation methods of agricultural and other machines, tools, motors, engines, industrial plant, equipment and systems.
- Establishes control standards and procedures to ensure the efficient functioning and safety of machinery, machines and equipment.
- Locates and corrects malfunctions in machinery, machines and equipment.
- Maintains contact with other technical specialists and professionals.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

### **What are the working conditions for a mechanical engineer?**

In the Royal Civil Service a mechanical engineer is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Mechanical engineers employed in the corporate are professionals and receive salary and benefits similar to other professionals. The hours of work for mechanical engineer can be irregular depending on the actual projects such as the installation of new machinery in a factory. Evening and weekend work may be involved.

### **What is the working environment like?**

A mechanical engineer mainly works indoors in an office situation and in attending meetings. A mechanical engineer may spend considerable time on-site when installing and testing new machinery and equipment, when new machinery and equipment is being installed but not functioning as planned. The working environment for a mechanical engineer is mainly hazard free, although care is required when working with moving parts and complicated machinery.

### **What knowledge and skills do I need to be a mechanical engineer?**

- Ability to analyze and solve problems.
- Ability to make complex calculations.
- Good communication and inter-personal skills.

- Computer skills.

**What personal qualities/attributes do I need to be a mechanical engineer?**

- An interest in machinery and experimentation.
- High degree of responsibility and accuracy – mistakes can have very serious consequences.
- Perseverance – some solutions to problems take a long time to develop.

**What are the education requirements to become a mechanical engineer?**

The normal requirement for a career in electrical engineering is a Bachelor’s Degree in Engineering, usually of 4 year’s duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects.

**Can I study in Bhutan to become a mechanical engineer?**

Yes, you can study for a Bachelor of Technology Degree at College of Science and Technology. This provides an introduction to work as an engineer but advancement in a mechanical engineering career requires higher-level studies abroad.

**What are the employment prospects for a mechanical engineer in Bhutan?**

Few opportunities exist in government service but some opportunities are available in the corporate sector. Bhutan has a very small industrial sector and most items of machinery and equipment are imported, thereby limiting opportunities for the employment of mechanical engineers in Bhutan.

2.1.12 Metallurgical Engineer

**Title: METALLURGICAL ENGINEER**

**Description:** A metallurgical engineer is concerned with researching and developing the most suitable methods for extracting metals such as gold, diamonds, and copper, from the ore bodies in which they are located.

**Alternative and Related Titles: METALLURGIST, CHEMICAL ENGINEER**

**What does a metallurgical engineer do?**

- Designs, tests and operates processes and machinery to extract metals and minerals from ore bodies as efficiently as possible.

- Establishes and supervises safety standards for the extraction process.
- Investigates the properties of metals and alloys, develops new alloys, and advises on and supervises alloy manufacture and processing.
- Maintains liaison with other professionals including geologists, mining engineers, finance managers and accountants.
- Supervises and motivates subordinate staff.
- Prepares scientific reports and papers.

**What are the working conditions for a metallurgical engineer?**

In the Royal Civil Service a metallurgical engineer is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Metallurgical engineers employed in the corporate sector are professionals and receive salary and benefits similar to other professionals. The hours of work for a metallurgical engineer can be irregular depending on the actual position held and particular projects, such as the introduction of new processes for the extraction of minerals or the production of new alloys. Evening and weekend work may be involved.

**What is the working environment like?**

A metallurgical engineer mainly works indoors in an office situation and in attending meetings. A metallurgical engineer spends considerable time ‘on-site’ when testing new extraction processes and producing new alloys. A metallurgical engineer is sometimes confronted with stressful situations as, for example, when the introduction of new extraction processes or the production of alloys experience difficulties and problems. The working environment for a metallurgical engineer involves exposure to various chemicals which, in themselves, are a hazard, but adherence to strict safety standards minimizes the dangers.

**What knowledge and skills do I need to be a metallurgical engineer?**

- Good communication skills.
- High-level computer skills.
- Problem solving skills and logical thinking.
- The ability to motivate and lead subordinate staff.

- Mathematical skills.

**What personal qualities/attributes do I need to be a metallurgical engineer?**

- An interest in metals and minerals.
- A keen interest in business to ensure that as much metal is recovered as possible, at the lowest cost.
- Perseverance and patience to perfect new processes, which may take a long period.

**What are the education requirements to become a metallurgical engineer?**

The normal requirement for a career in metallurgical engineering or metallurgy is a Bachelor’s Degree in Engineering (Metallurgy) or a Bachelor of Science (Chemical Engineering), usually of 4 year’s duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects.

**Can I study in Bhutan to become a metallurgical engineer?**

The Bachelor of Technology Degree at College of Science and Technology provides an introduction to work as an engineer but does not provide specialized study in metallurgical engineering. A career as a metallurgical engineer requires study abroad.

**What are the employment prospects for a metallurgical engineer in Bhutan?**

Few opportunities exist in government service. Bhutan’s mining industry is undeveloped at present but some future opportunities may become available as this industry develops. Establishing extraction plants is expensive and may not be economically viable in Bhutan, thereby further reducing the prospects for the employment of metallurgical engineers.

2.1.13 Mining Engineer

**Title: MINING ENGINEER**

**Description:** A mining engineer designs, develops and maintains commercial scale methods of extracting minerals and rock products from the earth. Mine managers are usually mining engineers.

**Alternative and Related Titles: MINE MANAGER**

### **What does a mining engineer do?**

- Plans, manages and controls the engineering aspects of mining, oil and gas extraction.
- Determines the most suitable methods of mining and extraction, including the type of machinery to be used and, for underground mining, the layout of shafts and tunnels.
- Plans and implements safety standards and procedures and first aid, especially underground.
- Plans and supervises drilling, blasting, loading, transport, ventilation, and environmental aspects of mine operations.
- Maintains technical contact with other specialists including geologists, mechanical, civil, and electrical engineers.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

### **What are the working conditions for a mining engineer?**

In the Royal Civil Service a mining engineer is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Mining engineers employed in the corporate sector are professionals and receive salary and benefits similar to other professionals. The hours of work for a mining engineer can be irregular, particularly if the mine faces extraction problems or experiences an accident. Evening and weekend work may be involved.

### **What is the working environment like?**

A mining engineer works both indoors and outdoors. Indoor activities involve both office work and meetings. Outdoor work involves site assessment and supervision. Mining engineers are also required to work underground to assess extraction problems and find solutions. Although this may be for relatively short periods at any one time the environment is dirty, confined in space, dusty, and unpleasant. Mines, particularly underground mines, are dangerous places and mining engineers are required to be extremely conscious of safety factors.

### **What knowledge and skills do I need to be a mining engineer?**

- High level communication and inter-personal skills.

- Good organization and management skills.
- Ability to motivate subordinate staff.
- Computer skills.
- Negotiation skills as part of labour/unions-management relations.

**What personal qualities/attributes do I need to be a mining engineer?**

- Good physical condition and good health.
- Creativity and a willingness to innovate.
- High levels of responsibility.
- Interest in business.
- No fear of being underground (for underground mining engineers)

**What are the education requirements to become a mining engineer?**

The normal requirement for a career in mining engineering is a Bachelor’s Degree in Engineering or a Bachelor of Science in Mining Engineering, usually of 4 year’s duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects. After completion of degree studies mining engineers are required to undergo 3 years of practical training before they can be registered as a professional mining engineer.

**Can I study to become a mining engineer in Bhutan?**

The Bachelor of Technology Degree at College of Science and Technology provides a foundation for work as an engineer but does not offer special courses in mining engineering. A career in mining engineering will require study abroad.

**What are the employment prospects for a mining engineer in Bhutan?**

Bhutan’s mining industry is undeveloped and there are few opportunities for the employment of mining engineers at present.

2.1.14 Production Engineer

**Title: PRODUCTION ENGINEER**

**Description:** Production or manufacturing engineers work with companies that make things - from food, drink and chemical products to clothing, cars, aircraft and printing equipment. They design, build and maintain all the



systems in factories, including automated and computer-controlled machines. They develop production lines and systems for all kinds of manufacturing processes. These can include anything from filling cans or bottles to packaging medicines or assembling trucks or computers. Their work may involve investigating operational problems affecting production, improving existing operations, bringing in new methods and processes and training and managing staff.

**Alternative and Related Titles:**

**What does a Production Engineer do?**

They develop production lines and systems for all kinds of manufacturing processes. These can include anything from filling cans or bottles to packaging medicines or assembling trucks or computers.

The latest technology is used in this work, and production engineers are responsible for planning, managing and maintaining the production methods and processes.

**What are the working conditions for a Production Engineer?**

Production engineers usually have a day-to-day responsibility for providing technical expertise and diagnosing and solving problems. They work with production staff, including operatives and technicians, to keep assembly, manufacturing and packaging systems working smoothly and efficiently.

If their job involves a management role, production engineers will be involved in meetings with other technical and management staff, and they will have to produce reports on production issues and budgets for new or replacement systems. They may also liaise with suppliers and customers, ensuring that service departments handle product defects correctly and recalling products if necessary.

**What is the working environment like?**

They may work on the shop floor, at a desk with a computer or in meetings. Protective clothing may be required when visiting the shop floor.

Manufacturing machinery can be noisy, and in older, traditional industries the environment can be hot, dirty and dusty. Modern production lines are quieter

and usually operate in an air-conditioned, dust-free environment.

### **What knowledge and skills to I need to be a Production Engineer?**

- have a thorough understanding of the manufacturing process
- work well with a wide range of people
- be able to plan and prioritise tasks
- be good at analysing and solving problems
- have good communication skills
- have strong numerical skills
- Understand the importance of health and safety.

### **What personal qualities/attributes do I need to be a Production Engineer?**

- engineering and manufacturing
- Keeping up to date with new developments in technology.

### **What are the education requirements to become a Production Engineer?**

The Diploma in engineering and Diploma in manufacturing and product design may be relevant for this area of work. Many production engineers are graduates.

### **Can I study in Bhutan to become a Production Engineer?**

Yes. The Bachelor of Technology Degree at College of Science and Technology provides a foundation for work as an engineer but does not offer special courses in Production engineering. A career in production engineering will require study abroad.

### **What are the employment prospects for a Production Engineer in Bhutan?**

Employment opportunities are largely confined to the corporate and private companies. Opportunities exist for self-employed after some years of experience.

#### 2.1.15 Survey Engineer

##### **Title: SURVEY ENGINEER**

**Description:** To create a capable base for middle-level planners and supervisors for sustaining the art and science involved in the making of maps and cadastral record maintenance.

## **Alternative and Related Titles:**

### **What does a Survey Engineer do?**

- Ought to fill up gaps between what is learnt and what is required by the job at Home.
- Surveying and mapping in the mountainous region requires knowledge of special techniques and lots of patience.
- Cultivation of leadership qualities, by leading survey teams as a Camp Officer whose duties are minor field planning, supervision, liaisoning and management.
- Every move or decision a surveyor makes can affect a map sheet and that of a Camp Officer can influence a project.
- Dealing with Public during survey operations is a tricky business.

### **What are the working conditions for a Survey Engineer?**

Personal contacts are with employees in the same agency and also with user/client organizations and Dzongkhags.

### **What is the working environment like?**

The work environment involves some physical exertion such as long periods of sitting, standing, walking, and driving on dangerous paths and roads at odd hours and exposure to disease like malaria. This is all due to the nature of the job and the topographical conditions.

### **What knowledge and skills to I need to be a Survey Engineer?**

- Should have sound command over written and spoken Dzongkha as well as English.
- Knowledge of some dialects of the country would be considered as added advantage.
- Sincerity and hardworking
- Ambitious

### **What are the education requirements to become a town planner?**

The normal entry requirement for a career as a Survey Engineer is Bachelors with 500 Survey Engineering Course.

### **Can I study in Bhutan to become a town planner?**

Yes. The B.Sc. (A) at Sherubtse College provides a foundation for 500 Survey

Engineering Course but does not offer special courses. A career in 500 Survey Engineering Course will require study abroad.

### **What are the employment prospects for a town planner in Bhutan?**

Employment opportunities are largely confined to the Royal Civil Service both in Thimphu and various Dzongkhags. Opportunities exist for self-employed after some years of experience

#### 2.1.16 Town Planner

##### **Title: TOWN PLANNER**

**Description:** A town planner investigates the best use to be made of land urban areas for the benefit of all residents.

##### **Alternative and Related Titles: REGIONAL PLANNER/ARCHITECT**

##### **What does a town planner do?**

- Collects information and prepares plans to ensure that all demands for space in a given area are accommodated including factories, shops, offices, houses, recreational areas, transport, power, water and waste disposal services.
- Coordinates the contributions of specialists (e.g. engineers, economists, architects, sociologists) in the planning process.
- Administers the implementation of urban and regional development plans.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

##### **What are the working conditions for a town planner?**

In the Royal Civil Service a town planner is normally employed as middle level professionals. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. The hours of work for a town planner normally are regular. Some travel to Dzongkhags may be required.

##### **What is the working environment like?**

A town planner mostly works indoors in an office situation, or participating

in meetings and discussions. The working environment includes working with maps and models and computers. Outdoor work involves site visits to assist in the transformation of paper plans to actual reality. The environment can be stressful, particularly in cases where there are disagreements between various parties on land usage in a particular area. The working environment is generally free from hazards.

**What knowledge and skills to I need to be a town planner?**

- High level communication and inter personal skills.
- Computer skills.
- The ability to transfer ideas into maps, drawings and sketches.
- Ability to make accurate calculations.
- Ability to drive a vehicle and possession of necessary licenses.

**What personal qualities/attributes do I need to be a town planner?**

- Imagination and creativity.
- An interest in protecting the natural environment.
- The ability to visualize concepts.
- Objectivity and impartiality to address the competing interests of different user groups.

**What are the education requirements to become a town planner?**

The normal entry requirement for a career as a town planner is a Bachelor's Degree in Town and Regional Planning, usually of 4 year's duration. Entry to such a degree requires Class 12 with passes in mathematics, physical sciences, and preferably geography.

**Can I study in Bhutan to become a town planner?**

No. You will need to study abroad to become a town planner.

**What are the employment prospects for a town planner in Bhutan?**

Employment opportunities are largely confined to the Royal Civil Service both in Thimphu and various Dzongkhags where towns are growing or new towns are planned.

Opportunities exist for self-employed after some years of experience, possibly in partnership with an architect. Such opportunities, however, are limited in Bhutan at present.

## 2.2. Health professionals

### 2.2.1 Chiropractor

**Title: CHIROPRACTOR**

**Description:** A chiropractor treats and prevents functional disorders of the neuro-muscular system through manual manipulation known as 'adjustment'. A chiropractor is not a medical doctor and does not prescribe drugs or perform surgical operations.

**Alternative and Related Titles: PHYSIOTHERAPIST**

**What does a chiropractor do?**

- Diagnoses and treats neuro-muscular and skeletal problems affecting health, and treats spinal problems and sporting injuries.
- Provides manual spinal manipulation (adjustment) to assist patients to return to normal functions.
- Prescribes corrective exercises to help the healing process in patients.
- Uses X-rays to help locate the source of a patient's problem.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

**What are the working conditions for a chiropractor?**

In the Royal Civil Service a chiropractor is normally employed as a senior or middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. The working hours are regular except in cases where emergency treatment is required.

**What is the working environment like?**

A chiropractor spends, most working time indoors preparing for and undertaking adjustments in a surgery. A chiropractor normally works in a clean and comfortable environment in which a lot of time is spent in manipulation work. This involves many hours spent standing, involving physical exertion. Difficult cases may involve the chiropractor in some degree of stress, but less than that experienced by a medical doctor.

### **What knowledge and skills do I need to be a chiropractor?**

- Good observation skills with the ability to focus on details.
- Manual dexterity for massage and manipulation work.
- Good communication skills.

### **What personal qualities/attributes do I need to be a chiropractor?**

- Good physical fitness to undertake massage and manipulation work on a day-to-day basis.
- Ability to work independently and handle responsibility.
- Ability to work independently and handle responsibility.
- Sympathy and understanding towards patients.
- An interest in business for chiropractors seeking to be self-employed.

### **What are the education requirements to become a chiropractor?**

A career as a chiropractor normally requires the completion of a Bachelor's Degree in Science of 3-4 years' duration, followed by further specialized study. Entry to the degree course requires Class 12, with passes in science and mathematics. A period of internship, normally 1 year, is required before a chiropractor can receive a license to practice.

### **Can I study to become a chiropractor in Bhutan?**

No. Study abroad is required.

### **What are the employment prospects for a chiropractor in Bhutan?**

The main opportunities for employment as a chiropractor are in the Royal Civil Service. There are no prospects at present to be employed as a chiropractor in the private and corporate sector, but the future could see some prospects for private clinics and self-employment after several years of relevant experience.

## 2.2.2 Dietitian

### **Title: DIETICIAN**

**Description:** A dietitian conducts research and develops concepts and methods for the preparation of diets for general and therapeutic purposes. (A dietitian is not a medical doctor.)

## **Alternative and Related Titles: DIET CONSULTANT/NUTRITIONIST**

### **What does a dietician do?**

- Develops and test nutritional diets.
- Plans and directs the preparation of diets for individuals and groups in hospitals or for workers in a particular sector.
- Plans, prepares and implements programs for nutrition education and nutrition rehabilitation.
- Advises on dietary and nutritional aspects of health programs.
- Maintains contact with other health professionals.
- Prepares and gives talks on diet and nutrition.
- Supervises the work of subordinate staff.

### **What are the working conditions for a dietician?**

A dietician is a government official normally engaged in the implementation of health policies relating to diet and nutrition. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for a dietician are generally regular.

### **What is the working environment like?**

A dietician generally works indoors preparing programs for nutrition education and preparing reports. The environment is normally pleasant and hazard free. Sometimes a dietician accompanies a medical team on ward visits in hospitals to advise diet requirements for patients.

### **What knowledge or skills do I need to be a dietician?**

- Good communication and interpersonal skills.
- Knowledge of nutrition and diet requirements.
- Ability motivates people to change their dietary behavior.
- Training skills.
- Computer skills.

### **What personal qualities/attributes do I need to be a dietician?**

- An interest in helping people.
- An interest in promoting healthy life styles through improved diet.



- Responsibility and reliability.
- Sincerity.

### **What are the education requirements to become a dietician?**

A career as a dietician normally requires degree level studies in dietetics or nutrition. Such courses are of 3 to 4 year's duration and require Class 12 for entry, preferably with passes in science subjects.

### **Can I study in Bhutan to become a dietician?**

No. There are no formal courses for dieticians in Bhutan. Study abroad is required.

### **What are the employment prospects for a dietician in Bhutan?**

Dieticians are government officials within the Ministry of Health. There is no employment prospects in the private or corporate sectors although self-employment as consultant is possible after some years of experience.

## 2.2.3 Drungtsho

### **Title: DRUNGTSHO**

**Description:** A Drungtsho examines patients, diagnoses illnesses and diseases prescribes medication, treats injuries, diseases and other ailments, and provides routine traditional medicine treatment and therapy to the patients and manages the 20-40-bedded hospital.

### **Alternative and Related Titles:**

### **What does a Drungtsho do?**

- **Treatment:** Examines patients, diagnoses, prescribes medicine, advises on diet and behavior and counsels for better health and maintain patient history of diseases for future planning.
- **Conducts Therapy:** Such as '*Ser-khab*', moxibustion, bloodletting, cupping, massage and maintain record of these.
- **Preparation of Medicine:** Prepares extemporaneous medicines or combination for specific treatment.
- **Management:** Manages the traditional medicine unit in a 20-40-bedded hospital. Plans, implements and monitors traditional medicine activities

- **Survey:** Participates in survey of medicinal plants, minerals, hot springs, medicinal water & other natural resources those have medicinal values. Documents them; sees possibility of incorporating these into traditional medicinal services. Advises the local people on positive health effects of these resources especially hot spring & medicinal water.
- **Reporting:** Refers patients with unusual cases to Senior Physicians and prepares patient reports for future planning of production and treatment.
- **Out call visit:** Takes services to the people during emergency and to religious centers such as meditation center.
- Monitors status of patients in the wards and does ward rounds

Attends emergency duties as and when required in calamities etc.

#### **What are the working conditions for a Drungtsho?**

- With modern medical officers and staff for exchanging information on treatment & referral and diagnostic services.
- With production and research unit - for production activities.
- With Forest and Agriculture Department for medicinal plants survey & cultivation.
- Contacts with farmers and local inhabitants for collection activities.

#### **What is the working environment like?**

- Long hours of standing and risk of contacting infectious & contagious diseases during the therapy & treatment procedure and as a result of constant contact with people who are infected with dangerous diseases.
- Long distance and strenuous walking in wretched weather conditions and scaling high altitude for collection of medicinal herbs, roots and minerals.
- Often required to come in contact with human waste.
- Exposure to sharp and dangerous tools and gadgets.

#### **What knowledge and skills do I need to be a Drungtsho?**

The work involves treating a variety of diseases and conditions as per SO-WA-RIG-PA. This involves application of different methods often requiring

critical analyses and innovative application of methodologies prescribed in SO-WA-RIG-PA.

- *Choekey* (classical language)
- *Dzongkha* (national language)
- Local dialects

**What personal qualities/attributes do I need to be a Drungtsho?**

- A strong interest in working with people.
- Emotionally balanced.
- High ethical and moral standards.
- High responsibility and dedication to the profession.
- Tactful, calm and patient.
- Able to work quickly under pressure, but without sacrificing accuracy.
- Not upset at the sight of patient suffering from illness.

**What are the education requirements to become a Drungtsho?**

Entry to the medical profession is very competitive. High level passes in Class 12 either from Higher Secondary School or from Institute of Language and Cultural Studies.

**Can I study in Bhutan to become a Drungtsho?**

Yes. If you wish to follow a career as a drungtsho you can study a five year degree course at the National Institute of Traditional Medicine in Thimphu. The entry level to this course is Class 12.

2.2.4 Medical Doctors

**Title: MEDICAL DOCTOR**

**Description:** A medical doctor examines patients, diagnoses illnesses and diseases prescribes medication, treats injuries, diseases and other ailments, and performs minor surgical operations.

**Alternative and Related Titles: PHYSICIAN / GENERAL PRACTITIONER / PSYCHIATRIST** (A psychiatrist is a medical doctor with special training in the diagnosis and treatment of mental disorders) **PATHOLOGIST/ DRUNGTSHO** (In Bhutan a drungtsho is a medical practitioner who has been trained in traditional medicine practice and techniques.)

### **What does a medical doctor do?**

- Conducts medical examinations and makes diagnoses of patients to assess illnesses, disorders and injuries.
- Prescribes and gives treatment for diagnosed illnesses, disorders and injuries.
- Provides advice and applies preventive medical treatment and methods to patients.
- Maintains a clinical history of each patient.
- Participates in the development and implementation of public health laws and regulations for promoting and safeguarding community health.
- Refers patients to specialist medical professionals for further diagnosis and special treatment.
- Prepares scientific reports and papers.
- Supervises the work of subordinate staff, including nurses and administrative staff.

### **What are the working conditions for a medical doctor?**

In the Royal Civil Service a medical doctor is employed as a senior level professional. The salary and benefits for a medical doctor are good and reflect the many years of training and high standards required for this profession. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Medical doctors are not permitted to establish a private practice in Bhutan, but can be employed in the corporate sector and receive salary and benefits generally higher than other professionals. The hours of work for a medical doctor can be irregular depending on the actual position held. Doctors are required to attend to emergencies at all hours and weekend and evening work is accepted as normal.

### **What is the working environment like?**

A medical doctor works indoors in a hospital, clinic or surgery. A doctor is required to work with various items of equipment to assist in the diagnosis of illness and diseases. A medical doctor, particularly when working in an emergency situation faces considerable stress related to the consequences of making a wrong decision.

### **What knowledge and skills do I need to be a medical doctor?**

- Good communication skills and the ability to explain medical matters in simple language.
- Computer skills.
- Ability to drive a vehicle, together with a driver's license.
- Ability to perform minor surgical procedures. (Major surgery is performed by a specialist surgeon).
- Knowledge of diseases.
- Diagnostic skills.

### **What personal qualities/attributes do I need to be a medical doctor?**

- A strong interest in working with people.
- Emotionally balanced.
- High ethical and moral standards.
- High responsibility and dedication to the profession.
- Tactful, calm and patient.
- Able to work quickly under pressure, but without sacrificing accuracy.
- Not upset at the sight of patient's blood or person suffering from illness.

### **What are the education requirements to become a medical doctor?**

Entry to the medical profession is very competitive. The number of places at Universities to study medicine is far less than the number of people who would like to become a doctor. High level passes in Class 12 in Mathematics and Science are essential. The completion of a medical degree usually takes 5 years, followed by 2 years of internship before a doctor is permitted to practice.

### **Can I study in Bhutan to become a medical doctor?**

No. You will have to study abroad if you wish to follow a career in modern medicine. If you wish to follow a career as a drungtsho you can study a five year degree course at the National Institute of Traditional Medicine in Thimphu. The entry level to this course is Class 12.

### **What are the employment prospects for a medical doctor in Bhutan?**

Employment opportunities for medical doctors are confined to the Royal Civil Service within the Ministry of Health. At present, a medical doctor in

Bhutan is not permitted to be self-employed and establish a private clinic or practice, although it is possible to work for a corporate to attend to the medical requirements of employees and their families.

### 2.2.5 Dentist

**Title: DENTIST**

**Description:** A dentist is concerned with the prevention, diagnosis and treatment of problems and diseases of the teeth, gums and mouth.

**Alternative and Related Titles: DENTAL SURGEON**

**What does a dentist do?**

- Makes diagnoses of teeth, gums and mouth and advises on appropriate treatment.
- Provides information to patients on dental care concerning the control of tooth decay, how to maintain oral hygiene, and how to remove plaque.
- Give corrective treatment to patients by removing teeth, filling cavities, treating abscesses and gum infections, and straightening teeth.
- Takes impressions of the mouth that are used to make false teeth, crowns, plates and bridges.
- Participates in public action to maintain and improve standards of oral health and dental care.
- Prepares scientific papers and reports.
- Supervises subordinate staff.
- Manages a dental practice (for dentists in private practice) including staff, finance, equipment, and space.

**What are the working conditions for a dentist?**

In the Royal Civil Service a dentist is normally employed as a senior or middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Many dentists throughout the world work in private practice where their income depends on their reputation and ability but, at present, dentists in Bhutan are not permitted to establish a private practice.

**What is the working environment like?**

A dentist works indoors in a surgery that must maintain high standards of cleanliness. A dentist is required to work with various items of equipment and may be required to stand for periods when treating patients. A dentist can face stressful situations particularly in cases of emergency.

**What knowledge and skills do I need to be a dentist?**

- Good communication skills.
- Manual dexterity to enable delicate work to be performed quickly and with care.
- Ability to use dental tools and equipment.

**What personal qualities/attributers do I need to be a dentist?**

- An outgoing and friendly personality.
- The ability to concentrate under pressure.
- Not afraid at the sight of patients' blood.

**What are the education requirements to become a dentist?**

There is high competition for the University places to enable a person to study to be a dentist. High-level passes in Class 12 including mathematics and science are essential. A University Degree in Dentistry takes 4 to 5 years, followed by a one-year internship before a dentist is allowed to practice.

**Can I study to become a dentist in Bhutan?**

No. Study abroad is required.

**What are the employment prospects for a dentist in Bhutan?**

Employment opportunities for dentists are confined to the Royal Civil Service within the Ministry of Health. At present, a dentist in Bhutan is not permitted to establish a private clinic or practice. All dentists are required to work as government employees.

### 2.2.6 Medical Laboratory Technician

**Title: MEDICAL LABORATORY TEHNICIAN**

**Description:** A medical laboratory technician prepares tissue sections for examination by a pathologist to assist in the prevention and cure of diseases.

## **Alternative and Related Titles:**

### **What does a medical laboratory technician do?**

- Provides information based on laboratory analysis to medical doctors and pathologists to enable them to make a diagnosis and provide patient treatment.
- Prepare human tissues for examination to assist in diagnosis.
- Undertakes tests on donated blood to identify blood groups and detect the presence of diseases (e.g. aids, hepatitis).
- Maintains detailed records of all tests undertaken, to be made available in cases of query and dispute.
- Takes steps to ensure that specimens do not get misplaced or exchanged.

### **What are the working conditions for a medical laboratory technician?**

A medical laboratory technician in the Royal Civil Service normally will be employed as a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The working hours are irregular involving emergency work in hospitals at weekends and after hours.

### **What is the working environment like?**

A medical laboratory technician works indoors with most time spent in a laboratory, preparing specimens for analysis. The working environment is one in which extreme care must be taken with each sample, and handled with great care as if it is a potential source of serious infection. The recording of specimens also requires detailed attention because of the consequences of specimens being lost, exchanged or contaminated. The high level of care required can create a stressful working environment.

### **What knowledge and skills do I need to be a medical laboratory technician?**

- Good communication skills.
- Knowledge of the procedures for preparing specimens.
- Ability to work with extreme accuracy.
- Ability to operate laboratory equipment.



**What personal qualities/attributes do I need to be a medical laboratory technician?**

- An interest in helping people.
- An interest in laboratory testing.
- A high level of concern for accuracy and precision.
- High level of concentration.
- Responsible and reliability.
- High respect for confidentiality.

**What are the education requirements to become a medical laboratory technician?**

A career as a medical laboratory technician normally requires a Bachelor of Science Degree. The entry requirement is Year 12 with passes in mathematics and physical sciences.

**Can I study in Bhutan to become a medical laboratory technician?**

Yes, you can study for a Technicians' Certificate at the Royal Institute of Health and Science, under the responsibility of the Ministry of Health. This course is of two year's duration and requires an entry level of Class 10. Higher level studies for medical laboratory technicians will have to be done overseas.

**What are the employment prospects for a medical laboratory technician in Bhutan?**

Medical laboratory testing and analysis is a key component of the work of the medical profession. Greater reliance on medical testing means more opportunities for medical laboratory technicians. The only opportunities in this career at present are in the Royal Civil Service. There are no opportunities for self-employment.

2.2.7 Nursing

**Title: NURSING**

**Description:** A nursing is a medical professional who assists sick, injured and disabled persons to regain health and to relieve them of pain and discomfort.

**Alternative and Related Titles:** NURSE / MATRON / NURSING SISTER / MIDWIFE (A midwife delivers or assists in the delivery of babies, provides

ante-natal and post-natal care, and instructs parents on baby care).

### **What does a nursing do?**

- Provides care and treatment, both curative and preventive, to sick, injured disabled and other patients.
- Assists medical doctors in their tasks, deals with emergencies and gives first aid treatment in the absence of a medical doctor.
- Administers medicines and drugs and applies surgical dressings and give other forms of treatment, as prescribed by doctors.
- Maintains records on patient treatment and progress.
- Supervises and coordinates the work of nursing and other non-medical staff in operating theatres and assists surgeons during operations.
- Provides professional nursing care to patients in their own homes, and gives care and dice within workplaces and the community.

### **What are the working conditions for a nursing?**

In government service a nursing is normally employed as a middle level professional or as technical support staff. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The working hours for a nurse in a hospital may be irregular to meet the 24-hour needs of patients. A nurse may be employed by large corporations, with a salary and benefits similar to those received by other professionals.

### **What is the working environment like?**

A nurse works indoors in a hospital or clinic in a clean and sterile environment. A nurse wears a uniform and maintains the highest standard of personal hygiene. A nurse may spend many hours standing whilst attending to patients and this can be physically tiring. By caring for people with diseases, a nurse runs some risk of contracting diseases as shown, example, by the SARS virus. A nurse may have many patients to attend and giving them all the time and attention they require can be very demanding and stressful.

### **What knowledge and skills do I need to be a nurse?**

- High-level communication skills.
- The ability to use medical equipment.

- Computer skills (for accessing patients' records).

#### **What personal qualities/attributes do I need to be a nurse?**

- A high sense of moral responsibility with an emphasis on reliability, thoroughness, and self-discipline.
- Willingness to serve other including kindness, tactfulness, consideration, tolerance.
- Good physical fitness.
- Very high standards relating to hygiene and cleanliness.
- Initiative to deal with emergencies.
- Ability to work with patients that suffer pain and who terminally ill.

#### **What are the education requirements to become a nurse?**

A career in nursing at the level of a registered nurse requires the completion of a Degree or Diploma in Nursing, usually of 3 or 4 years; duration. Entry to such a degree requires the completion of Class 12, with passes in mathematics and science. It is also possible to become a nursing auxiliary who works under the direct supervision of a registered nurse. A nurse auxiliary is required to complete a one-year course in a hospital after the completion of year 10.

#### **Can I study to become a nurse in Bhutan?**

Yes. The Royal Institute of Health Science, Thimphu, offers a 3-year Diploma Course in General Nursing. The completion of Class 12 is required for entry to this course for which the number of places is restricted. Nurses seeking higher studies in specialized fields of nursing are required to study abroad.

#### **What are the employment prospects for a nurse in Bhutan?**

There are good employment opportunities for nurse throughout the country in the hospitals and basic health units of the Ministry of Health. There are a few opportunities for employment as a clinic nurse in large corporations.

### 2.2.8 Nutritionist

#### **Title: NUTRITIONIST**

**Description:** Apply knowledge of nutrition and health science to help people restore and maintain good health. They take into account genetic, lifestyle and environmental factors.

## **Alternative and Related Titles: NUTRITIONAL THERAPIST**

### **What does a Nutritional therapist do?**

When working with a client, a nutritional therapist will first establish why the client is seeking help and ask the patient about their health history to gain a greater understanding of the problem. This includes comprehensive questions about clients' medical and family history, diet and lifestyle.

The therapist may also

- examine the client's skin, hair, nails and tongue
- use diagnostic tests to investigate the problem further (usually performed by specialist laboratories, using samples of urine, stool, saliva, blood, hair or sweat).

The information gathered is used to identify the nutritional status of the client. This includes diagnosing any food allergies and intolerances and other factors that could be contributing to specific health problems. The therapist then recommends a tailor-made programme for the client. This may include:

- suggestions about which foods to avoid and which to increase
- recommendations about taking nutritional supplements
- natural detoxification programmes
- Beneficial lifestyle changes for the client.

The work includes keeping accurate, detailed, confidential records. Self-employed nutritional therapists also have to market their services and keep financial records.

### **What are the working conditions for a Nutritional therapist?**

In the Royal Civil Service a Nutritional therapist works as a member of a health team by helping people to regain their health and physical mobility. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for a Nutritional therapist are regular.

### **What is the working environment like?**

An Nutritional therapist works indoors usually on a one-to-one basis with an individual patient. Various items of equipment are used to assist patients to develop their physical skills. Nutritional therapists often offer early

morning and evening appointments to fit around clients' commitments. Most nutritional therapists work part time and many combine this work with another job. The environment is one that requires encouragement on the part of the occupational therapist and willingness on the part of the patient.

#### **What knowledge and skills do I need to be a Nutritional therapist?**

- get on well with clients from a wide range of backgrounds
- gain clients' confidence
- have a sensitive, reassuring manner
- communicate complex information and treatment plans clearly
- have an understanding of scientific and nutritional concepts
- have excellent listening skills
- enjoy solving problems logically
- be able to maintain an emotional distance from clients' problems
- respect client confidentiality
- know when to refer a client to a doctor or other health professional
- have commercial ability if self-employed

#### **What personal qualities/attributes do I need to be a Nutritional therapist?**

- An interest in helping people.
- Innovation and creativity.
- Sense of humor.
- An ability to work independently without supervision.
- Patience.
- have an interest in health and well-being and a genuine desire to help people
- be interested in science, particularly biology and chemistry

#### **What are the education requirements to become an occupational therapist?**

A career as a Nutritional therapist normally requires a Bachelor of Science (Nutritional Therapy) or M.Sc (Nutritional Therapy). Such degrees are normally of four year's duration after the completion of secondary schooling, with passes in mathematics and science. It is possible to work as an unqualified Nutritional therapist by learning on the job and through practical experience.

#### **Can I study in Bhutan to become an occupational therapist?**

There are no formal courses in Nutritional therapy in Bhutan at present.

## **What are the employment prospects for an occupational therapist in Bhutan?**

A Nutritional therapist can be employed in the Royal Civil Service. Some therapists go into research or teaching, either wholly or combined with their work as a therapist.

### 2.2.9 Occupational Therapist

#### **Title: OCCUPATIONAL THERAPIST**

**Description:** An occupational therapist assists people with some form of disability to regain health and physical movement, and integrate as fully as possible in mainstream society.

#### **Alternative and Related Titles:**

#### **What does an occupational therapist do?**

- Assesses patients' physical and mental abilities to identify problems affecting their personal care, vocational training, holding a job, their education, participating in sports, and utilizing leisure time.
- Prepares a treatment plan based on individual assessment.
- Guides and participates in activities to help patients reach their improvement level objectives.
- Assists and teaches patients with permanent disabilities to use their remaining skills.
- Advises on adaptations to the patient's living and working environment.
- Assists in providing adapted devices to enable patients to function more independently.

#### **What are the working conditions for an occupational therapist?**

In the Royal Civil Service an occupational therapist works as a member of a health team by helping people to regain their health and physical mobility. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for an occupational therapist are regular.

**What is the working environment like?**

An occupational therapist works indoors usually on a one-to-one basis with an individual patient. Various items of equipment are used to assist patients to develop their physical skills. The environment is one that requires encouragement on the part of the occupational therapist and willingness on the part of the patient.

**What knowledge and skills do I need to be an occupational therapist?**

- High level communication and interpersonal skills.
- Knowledge of occupational therapy procedures and techniques.
- Knowledge of different types of disability.
- Teaching skills.

**What personal qualities/attributes do I need to be an occupational therapist?**

- An interest in helping people.
- Acceptance of persons with disabilities.
- Innovation and creativity.
- Sense of humor.
- An ability to work independently without supervision.
- Patience.

**What are the education requirements to become an occupational therapist?**

A career as an occupational therapist normally requires a Bachelor of Science (Occupational Therapy) or Bachelor of Occupational Therapy Degree. Such degrees are normally of four year's duration after the completion of secondary schooling, with passes in mathematics and science. It is possible to work as an unqualified occupational therapist by learning on the job and through practical experience.

**Can I study in Bhutan to become an occupational therapist?**

There are no formal courses in occupational therapy in Bhutan at present.

**What are the employment prospects for an occupational therapist in Bhutan?**

An occupational therapist can be employed in the Royal Civil Service or with an NGO concerned with assisting disabled persons to find employment and integrate into society.

## 2.2.10 Pathologist

### **Title: PATHOLOGIST**

**Description:** A pathologist is a medical doctor who examines human tissue removed by biopsy or surgery, and applies scientific knowledge to the nature, causes and development of human diseases and disorders.

### **Alternative and Related Titles: FORENSIC PATHOLOGIST/MEDICAL EXAMINER/MEDICAL DOCTOR**

#### **What does a pathologist do?**

- Interprets the results of examinations and tests to assist in patient diagnosis and recovery.
- Applies science and scientific advances to improve the accuracy and efficiency of medical diagnosis and treatment.
- Assists and advises medical doctors on the types of tests necessary for a complete and thorough patient diagnosis.
- Ensures through tests that blood and blood products are safe for transfusion purposes.
- Performs autopsies to investigate unexpected and suspicious deaths.
- Prepares scientific papers and reports. Supervises the work of subordinate staff.

#### **What are the working conditions for a pathologist?**

The salary and benefits for a pathologist are good and reflect the many years of training and high standards required for this profession. A pathologist works for works in the Royal Civil Service, normally as a senior level professional. Entry level to the Civil Service and the actual salaries and benefits paid are determined by the Royal Civil Service Commission and change from time to time. The hours of work for a pathologist are regular, except in cases where urgent laboratory tests are required at short notice.

#### **What is the working environment like?**

A pathologist works indoors pending most time in a laboratory conducting tests and analyzing test results. A pathologist is required to work with various items of equipment to assist in laboratory testing, conducting autopsies, and assisting in the diagnosis of illness and diseases. A pathologist faces



considerable stress related to the consequences of making a wrong decision relating to laboratory tests and advice given concerning medical diagnosis.

**What knowledge and skills do I need to be a pathologist?**

- A strong interest in helping people.
- Emotionally balanced.
- High ethical and moral standards.
- High responsibility and dedication to the profession.
- Tactful, calm, and patient.
- Able to work quickly under pressure, but without sacrificing accuracy.
- Not upset at the sight of corpses, blood and human tissue.

**What are the education requirements to become a pathologist?**

A pathologist is a medical doctor and thus studies medicine in the first instance. Entry to the medical profession is very competitive. The number of places at Universities to study medicine is far less than the number of people who would like to become a doctor. High-level passes in Class 12 in mathematics and science are essential. The completion of a medical degree usually takes 5 years, followed by 2 years of internship before a doctor is permitted to practice. After completing a medical degree a pathologist may undertake further study at post-graduate level.

**Can I study in Bhutan to become a pathologist?**

No. Study abroad is required.

**What are the employment prospects for a pathologist in Bhutan?**

Employment as a pathologist in Bhutan is confined to the Royal Civil Service within the Ministry of Health. It is not possible in Bhutan at present for a pathologist to be self-employed and operate a private clinic or laboratory.

2.2.11 Pharmacist

**Title: PHARMACIST**

**Description:** A pharmacist is responsible for the control, dispensation, distribution and sale of medicines and drugs, thereby establishing the links between pharmaceutical product companies, and doctors and their patients.

A pharmacist is not a medical doctor.

### **Alternative and Related Titles: PHARMACEUTICAL CHEMIST**

#### **What does a pharmacist do?**

- Directs the preparation of medicaments according to the prescriptions of medical, dental and veterinarian practitioners.
- Checks prescriptions to ensure recommended dosages are not exceeded, and that instructions can be understood by patients.
- Advises patients on possible drug incompatibilities.
- Dispenses medicaments and drugs in hospitals or sells them in pharmacies.
- Maintains records of drugs issued, particularly narcotics, poisons and those of a habit-forming nature.
- Tests drugs to determine their identity, purity and strengths.
- Participates in the development of drug controls and regulations.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

#### **What are the working conditions for a pharmacist?**

In government service a pharmacist is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. The working hours for a pharmacist in a hospital may be irregular to meet the 24-hour needs of patients. A pharmacist may be self-employed or be engaged as a salaried employee in the private sector. In such cases the salary and benefits depend on the reputation of the pharmacist and the extent of completion.

#### **What is the working environment like?**

A pharmacist works in doors either in a hospital or a dispensary where drugs and medicines are distributed to patients. Some work on drug testing requires work in a laboratory. The responsibilities of a pharmacist concerning drug control and correct dispensation of medicines can lead to stress in particular situations.

**What knowledge and skills do I need to be a pharmacist?**

- Good communication skills.
- Computer skills.
- Knowledge of legislation concerning the use of medicaments and drugs.

**What personal qualities/attributes do I need to be a pharmacist?**

- A high level of responsibility and integrity.
- Ability to work without supervision.
- An emphasis on accuracy
- An interest in business for those pharmacists seeking to be self-employed

**What are the education requirements to become a pharmacist?**

A career in pharmacy requires a Bachelor of Pharmacy Degree, usually of 4 years' duration, followed by a one-year internship to gain practical experience and to meet the requirements for registration as a pharmacist. Entry to a degree course requires Class 12 with passes in Mathematics and Science, and preferably including biology.

**Can I study to become a pharmacist in Bhutan?**

No. Study abroad is required.

**What are the employment prospects for a pharmacist in Bhutan?**

The main employment opportunities are in the Ministry of Health, working as a mid-level professional in a government hospital. In other countries pharmacists are employed by large companies engaged in the manufacture of drugs and medicines. It is possible in Bhutan for a pharmacist to be self-employed, by owning and operating a pharmacy business.

### 2.2.12 Physiotherapist

**Title: PHYSIOTHERAPIST**

**Description:** A physiotherapist treats disorders of bones and muscles and parts of the circulatory system through manipulative methods, ultra sound, heating, laser or other techniques to enable people cope with day-to-day living. A physiotherapist is not a medical doctor.

## **Alternative and Related Titles: CHIROPRACTOR/PODIATRIST**

### **What does a physiotherapist do?**

- Advises healthy individuals and groups on correct body posture for work and other activities to avoid injuries and strain, and to strengthen muscles.
- Advise healthy people on the correct use of the body to prevent injury.
- Examines individuals to diagnose disorders of bones, muscles and parts of the circulatory system.
- Decides on treatment based on diagnosis and treats disorders by using manipulative and other techniques.
- Massages clients to improve circulation or soothe or stimulate nerves, or stretch contracted tendons.
- Examines body deformities and disorders to determine and specify artificial limbs and other appliances, helps for them and explains their use.
- Prepares technical papers and reports.

### **What are the working conditions for a physiotherapist?**

A physiotherapist is employed by the government as a member of a medical team who assists in the alleviation of pain and restoration of good health through massage and other forms of manipulation. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for a physiotherapist are regular.

### **What is the working environment like?**

A physiotherapist works in doors in a surgery or treatment room characterized by cleanliness, treatment tables for massage and manipulative work, and mechanical and electrical equipment. A physiotherapist spends many hours standing and doing manual manipulative work. This can be tiring and requires a good level of physical fitness.

### **What knowledge and skills do I need to be a physiotherapist?**

- Good communication and interpersonal skills.
- Knowledge of massage and manipulation techniques.

- Knowledge of the use of equipment for massage and manipulation.
- Massage skills.

**What personal qualities/attributes do I need to be a physiotherapist?**

- An interest in the functions and operations of the human body.
- An interest in serving people.
- Responsible and caring manner.
- Physical fitness to enable long periods of manipulative work to be undertaken.
- Responsibility.
- Patience.

**What are the education requirements to become a physiotherapist?**

A career as a physiotherapist normally requires a Bachelor of Science (Physiotherapy) or Bachelor of Physiotherapy Degree. These degrees normally take 3-4 years after the completion of secondary schooling.

**Can I study in Bhutan to become a physiotherapist?**

No. You will need to study overseas after the completion of Class 12.

**What are the employment prospects for a physiotherapist in Bhutan?**

A physiotherapist is an important member of a medical team and employment opportunities exist in the Ministry of Health. In future there may be opportunities for self-employment in this field.

2.2.13 Veterinarian

**Title: VETERINARIAN**

**Description:** illness and injuries in animals, inoculates animals against infectious diseases, and performs surgical operations. Veterinarian may specialize as, for example, in the treatment of domestic animals or, alternatively, with commercial animals with the emphasis on disease prevention.

**Alternative and Related Titles: VETERINARIAN SURGEON**

**What does a veterinarian do?**

- Conducts examinations and diagnoses diseases and injuries of

animals.

- Provides medical and surgical treatment to animals, as a response to diagnosis.
- Tests and inoculated animals against diseases.
- Provides advices on the care and breeding of animals.
- Inspects the quality and purity of food for human consumption made wholly or partly from raw materials of animal origin.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

### **What are the working conditions for a veterinarian?**

In the Royal Civil Service a veterinarian is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. The hours of work are standard except in emergency cases when veterinarians will be required for additional hours until the problem is identified and solved.

### **What is the working environment like?**

Veterinarians spend time both indoors and outdoors. Indoor work normally relates to the treatment of domestic animals and in testing laboratories. Outdoor work involves testing and treating commercial animals wherever they may be located. Outdoor work sometimes requires visits to remote locations.

### **What knowledge and skills do I need to be a veterinarian?**

- Good communication skills.
- Good observation and analytical skills.

### **What personal qualities/attributes do I need to be a veterinarian?**

- A keen interest in and respects for animals.
- A caring and sympathetic manner.
- An interest in business for those seeking to be self-employed.

### **What are the education requirements to become a veterinarian?**

A career as a veterinarian normally requires the completion of a Degree in Veterinary Science of 5-6 years' duration. Entry to veterinary science degrees is very competitive and requires high level passes in mathematics and science

subjects at Class 12, including biology. Only the best students succeed in gaining entry to such courses.

**Can I study to become a veterinarian in Bhutan?**

No. Study abroad is required.

**What are the employment prospects for a veterinarian in Bhutan?**

The main prospects for employment as a veterinarian are with the Royal Civil Service in the Ministry of Agriculture either with regard to livestock, or wild life management. It is not possible as present for a veterinarian to establish a private practice in Bhutan. All veterinarians are employed by government.

2.2.14 Optometrist

**Title: OPTOMETRIST**

**Description:** An optometrist prescribes and fits spectacles and contact lens and advises on their use and the use of other visual aids for the benefit of clients. An optometrist is not a medical doctor.

**Alternative and Related Titles: OPTICIAN, OPHTHALMOLOGIST (An ophthalmologist is a medical doctor.)**

**What does an optometrist do?**

- Examines eyes and conducts vision tests to determine the presence of visual and ocular abnormalities.
- Prescribes glasses, contact lens and other treatment to improve vision.
- Refers cases of eye diseases which may require medical treatment to medical doctors (ophthalmologists.)
- Advises on the proper use of glasses and contact lens, appropriate lighting for work or reading, and on the use of other visual aids.
- Fits prescribed lens into frames and fits frames and contact lens to customers.
- Supervises the work of subordinate staff.

**What are the working conditions for an optometrist?**

An optometrist is usually a government official normally engaged in testing and prescribing glasses and other treatment to improve the vision of

clients. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for an optometrist are generally regular. In many countries optometrists work in the private sector, frequently as self-employed persons.

### **What is the working environment like?**

An optometrist works indoors in an environment characterized by modern testing equipment, lenses, and frames. The environment is clean, orderly and hazard free.

### **What knowledge and skills do I need to be an optometrist?**

- Good communication and interpersonal skills.
- Manual ability to operate equipment.
- Knowledge of eye testing equipment and procedures.
- Analytical skills.

### **What personal qualities/attributes do I need to be an optometrist?**

- An interest in helping people.
- An interest in promoting eye hygiene.
- Responsibility.
- Integrity.

### **What are the education requirements to become an optometrist?**

A career as an optometrist normally requires degree level studies in optometry, usually of 4 year's duration and requires Class 12 for entry, preferably with passes in science subjects.

### **Can I study in Bhutan to become an optometrist?**

No. There are no formal courses in optometry in Bhutan. Study abroad is required.

### **What are the employment prospects for an optometrist in Bhutan?**

There will always be need for optometrists but the number required will be relatively small. In future there is likely to be self-employment opportunities for optometrists.



## 2.3. Teaching professionals

### 2.3.1 Lecturers

**Title:** LECTURER

**Description:** A lecturer at this level conducts research, and plans and presents lectures, tutorials and seminars to post-secondary school students.

**Alternative and Related Titles:** PROFESSOR/ /MASTER TEACHER

**What does a lecturer do?**

- Designs and modifies curricula in preparing courses of study for students.
- Presents lectures and conducts tutorials, seminars and laboratory experiments.
- Stimulates discussion and independent thought amongst students.
- Supervises, as appropriate, experimental and practical work undertaken by students.
- Administers marks and evaluates examination papers and tests.
- Directs research activities of students.
- Prepares technical papers, articles and books.
- Attends conferences and seminars.
- Participates in decision-making processes concerning academic and budgetary matters of the institution or department.

**What are the working conditions for a lecturer?**

In government service a higher education teacher at Sherubtse College, National Institute of Education, and Royal Bhutan Institute of Technology, is employed as senior or middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A lecturer works standard hours whilst on duty, but is required to spend many additional hours preparing lectures and assignments and marking papers.

**What is the working environment like?**

A lecturer spends most time indoors presenting lectures, conducting classes, attending meetings, or in an office undertaking administrative work. A

lecturer works in a largely hazard-free environment although some stress can be experienced in meeting deadlines. A lecturer may become involved in research activities that may involve field-work, to conduct surveys and collect information.

### **What knowledge and skills do I need to be a lecturer?**

- Good communications skills.
- High-level pedagogical skills.
- Analytical skills
- Ability to motivate students to reach their full potential.
- Detailed knowledge of subject specializations.

### **What personal qualities/attributers do I need to be a lecturer?**

- An interest in assisting young people in achieving their career objectives.
- An interest in teaching and learning.
- Integrity and responsibility.

### **What are the education requirements to become a lecturer?**

Lecturer requires a Bachelor's Degree in their technical field followed by post-graduate studies to Masters or Doctorate level. Degree level studies can be pursued in Bhutan, but higher-level studies will require study abroad. (A professor in Bhutan is required to have a Ph.D., but his is not essential for other categories of higher education teachers.)

### **Can I study in Bhutan to become a lecturer?**

A Bachelor's Degree from one of Bhutan's higher education institutions provides a starting point for a career as a higher education teacher but, in itself, is insufficient. Post-graduate study at an overseas institution is required. Alternatively, it is possible to remain in Bhutan and pursue a Masters of Education Degree by distance education through Universities abroad.

### **What are the employment prospects for a lecturer in Bhutan?**

Employment opportunities for higher education teachers will increase as Bhutan's higher education system continues to expand. Opportunities will be related to particular fields of study with greater opportunities expected in physical and life sciences, and fewer in social sciences. Bhutan's policy of encouraging the maximum possible participation of its population in training

and education will provide increased opportunities for lecturer.

### 2.3.2 Zorig Chusum Trainer

**Title: ZORIG CHUSUM TRAINER**

**Description:** A Zorig Chum Trainer imparts skills and knowledge of traditional art and crafts to trainees in zorig chum field. Trainer usually have long years of work experience in their respective profession. Trainer teaches one or more subjects for academic or vocational purposes at various levels for students who have completed middle secondary school.

**Alternative and Related Titles: ZORIG CHUSUM INSTRUCTOR**

**What does a Zorig Chusum Trainer do?**

- Designs and adapts curricula in accordance with institute requirements and prepares academic and/or vocational courses of study.
- Prepares and gives lessons in required subjects and supervises students' class work and discipline.
- Prepares, assigns and corrects exercises and assignments.
- Prepares, administers and marks tests to assess and evaluate student performance.
- Prepares reports on trainees' progress and confers with other teachers and parents.
- Participates in meetings concerning institute policies and procedures and their implementation.
- Organizes and assists in extra-curricula activities (e.g. hobby clubs, debating societies, and sporting teams) as required.

**What are the working conditions for a Zorig Chusum Trainer?**

A zorig chusum Trainer in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The salary and benefits for a zorig chusum Trainer at private institutes are a matter for negotiation between the trainer and the employer. The hours of work for a trainer are considerably longer than the hours actually spent at institute. Additional hours are spent in preparing lessons, marking

assignments and test, and performing various administrative duties.

### **What is the working environment like?**

A zorig chusum Trainer spends most time indoors teaching lessons and supervising classes. The environment is largely hazard free although some trainers suffer anxiety and stress, particularly when they are inexperienced.

### **What knowledge and skills do I need to be a Zorig Chusum Trainer?**

- Good communication skills.
- High-level teaching skills.
- Ability to motivate students to reach their full potential.
- Detailed knowledge of subject specializations.
- Ability to convey to trainees core values such as respect, honesty and responsibility.

### **What personal qualities/attributes do I need to be a Zorig Chusum Trainer?**

- An interest in assisting teenagers to reach their full potentials.
- An interest in teaching and learning.
- Integrity and responsibility.
- An interest in assisting in the development of young people in non-academic areas (e.g. leadership, sports, discipline).

### **What are the education requirements to become a Zorig Chusum Trainer?**

The standard qualification for a career as a zorig chusum Trainer required minimum qualification of class 10 with certificate in a particular field.

### **Can I study in Bhutan to become a Zorig Chusum Trainer?**

Yes. Thimphu Institute of Zorig Chusum and Choki Traditional Art School, Thimphu and Trashi Yangtse Institute of Zorig Chusum in Trashiyangtse provide training after the completion of Class 10.

### **What are the employment prospects for a zorig chusum trainer in Bhutan?**

There are good employment opportunities for zorig trainer in Bhutan in both government and private school. Bhutan's zorig institutes system is still expanding, and this will generate more teaching opportunities in future. In addition, there are lots of ordinary school teachers teaching in zorig schools who, progressively, will be replaced by skilled zorig trainers.

### 2.3.3 Special Education Teacher

**Title: SPECIAL EDUCATION TEACHER**

**Description:** A special education teacher teaches physically and intellectually disabled children and adults, those with learning difficulties as well as those who are visually and aurally disabled, at various levels of education.

**Alternative and Related Titles: REMEDIAL TEACHER/DISABLED PERSONS TEACHER**

**What does a special education teacher do?**

- Designs and modifies curricula and prepares lessons and activities in accordance with stipulated requirements.
- Gives instruction using special techniques and aids appropriate to the learners' disabilities and levels.
- Encourages learners to develop their confidence and develop a sense of achievement.
- Encourages the integration of persons with disabilities into mainstream classes and activities.
- Administers tests and evaluates progress.
- Discusses learners' progress and problems with other teachers and parents.

**What are the working conditions for a special education teacher?**

A special education teacher in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A special education teacher can also be employed by an NGO on terms and conditions negotiated between the employer and the individual teacher. The hours of work for a special education teacher are considerably longer than the hours actually spent at school. Additional hours are spent in preparing activities and meeting with parents.

**What is the working environment like?**

A special education teacher spends most time indoors conducting and supervising lessons and activities for children. The working environment is

largely hazard free, although some special education teachers suffer anxiety and stress, particularly when they are inexperienced.

**What knowledge and skills do I need to be a special education teacher?**

- High level communication and inter-personal skills.
- Knowledge of a wide range of subjects.
- Knowledge of different types of disability.
- Special teaching skills to assist children who have learning difficulties.

**What personal qualities/attributes do I need to be a special education teacher?**

- A genuine interest in assisting disabled persons to learn and grow.
- An interest in promoting opportunities for disable persons.
- Integrity and responsibility.
- Creativity and imagination.
- Patience.

**What are the education requirements to become a special education teacher?**

The basic education requirements for a special education teacher are the same as those for a primary or secondary teacher. In addition, a special education teacher needs to undertake special training courses through workshops and other in-service activities or through specialized training abroad.

**Can I study in Bhutan to become a special education teacher?**

Yes. You can study to be a primary or secondary teacher and then take some special courses in-country or overseas on specific aspects of special education.

**What are the employment prospects for a special education teacher in Bhutan?**

There is a growing need for special education teachers not only for teaching different types of disabled persons (deaf, blind, physically impaired, mentally impaired) but also for teaching children with above average abilities, as well as those who are slow learners.

## 2.3.4 Driving Instructor

**Title: DRIVING INSTRUCTOR**

**Description:** Driving instructors teach members of the public to drive and prepare them for the driving test required to gain a driving license. Their main task is to instruct their clients to be safe and responsible drivers.

**Alternative and Related Titles:**

**What do driving instructors do?**

Instructors tailor lessons for each of their student's needs, explaining and demonstrating:

- specific techniques and man oeuvres, such as eco-safe driving and reverse parking
- vehicle handling in different road and weather conditions
- How to identify and respond to road hazards or potentially dangerous situations.

During a lesson, driving instructors assess performance and provide continuous feedback, advising students on road regulations and their driving technique.

**What are the working conditions like?**

Their hours of work can vary according to demand, but most instructors work between 35 and 40 hours a week. This includes working evenings and at weekends. Many are self-employed or franchised instructors.

**What is the working environment like?**

A driving instructor works both indoors and outdoor doing both theory class and practical in training ground and highways as per the schedule.

**What skills do I need to be a driving instructor?**

Driving instructors need to:

- be experienced and competent drivers
- have excellent communication skills
- be able to concentrate for long periods of time
- be able to demonstrate and explain information accurately and clearly
- Have an interest in how people learn.

### **What personal qualities/attributes do I need to be a driving instructor?**

- A real interest in teaching clients.
- An interest in driving.
- Honesty and integrity.
- Responsibility and reliability.

### **What education requirements are needed to be a driving instructor?**

No formal academic qualifications are required to become a driving instructor, although numeracy and literacy are beneficial. Instructors however must pass three tests (checking on theoretical driving knowledge, practical driving ability and instructional ability) in order to be able to register as professional driver.

With experience and further specialist qualifications, instructors can teach advanced driving skills or move into training corporate or fleet drivers and drivers of passenger transport vehicles, large goods vehicles or emergency vehicles.

### **Can I study in Bhutan to become a driving instructor?**

Yes. You can undertake professional Driving Courses from Private driving schools after obtaining ordinary license.

### **What are the employment prospects for driving instructor in Bhutan?**

Private driving schools are now found in a wide throughout the country and thereby providing very good employment opportunities for a driving instructor.

## 2.3.5 Primary Teachers

### **Title: PRIMARY TEACHER**

**Description:** A primary teacher teaches a range of subjects for pupils at elementary/primary levels (usually within the age range 7 – 12 years) up to their entry to secondary school at the completion of Class 6.

### **Alternative and Related Titles:**

### **What does a primary teacher do?**

- Prepares programs of learning and instruction in such areas as



writing, reading arithmetic and other subjects within prescribed or recommended curriculum.

- Prepares, administers and marks tests, projects and assignments of pupils and evaluates progress.
- Provides remedial lessons to pupils as required.
- Organizes and supervises extra-curricula activities.
- Encourages personal development of each pupil and discusses pupil progress with other teachers and parents.
- Encourages discipline and loyalty.
- Prepares reports on pupil's progress.

### **What are the working conditions for a primary teacher?**

A primary teacher in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for a secondary teacher are considerably longer than the hours actually spent at school. Additional hours are spent in preparing lessons, marking assignments and test, and performing various administrative duties.

### **What is the working environment like?**

- Good communications skills.
- High-level interactive teaching skills.
- Analytical skills
- Ability to motivate and encourage children to learn
- Basic knowledge of a wide range of subjects.
- Ability to encourage discipline and convey to pupils core values such as respect, honesty and responsibility.

### **What personal qualities/attributes do I need to be a primary teacher?**

- An interest in assisting young children to learn and grow.
- An interest in teaching and learning.
- Integrity and responsibility.
- Creativity and imagination.
- Patience.

### **What are the education requirements to become a primary teacher?**

The standard qualification for a career as a primary teacher is a degree in education. Entry to a degree course requires the completion of Class 12. In Bhutan the normal qualification for a primary teacher is a Bachelor of Education (Primary) Degree with Class 12 as the entry requirement.

### **Can I study in Bhutan to become a primary teacher?**

Yes. The Paro College of Education (Paro) and Samtse College of Education (Samtse) both offer a Bachelor of Education (Primary) Degree after the completion of Class 12. A person who wants to follow a career as primary teacher can also have a degree other than education (e.g. Arts, Commerce) and then undertake a 9-month course leading to a Post Graduate Certificate in Education at the Paro College of Education and Samtse College of Education.

### **What are the employment prospects for a primary teacher in Bhutan?**

Bhutan's primary education system is still expanding and employment opportunities for primary teachers will continue to grow. It is also possible for a primary teacher to become a secondary teacher.

## 2.3.6 Secondary School Teacher

### **Title: SECONDARY EDUCATION TEACHER**

**Description:** A secondary teacher teaches one or more subjects for academic or vocational purposes at various levels for students who have completed primary school.

**Alternative and Related Titles: ADULT LITERACY TEACHER (teaches reading, writing and comprehension to adults.)**

### **What does a secondary teacher do?**

- Designs and adapts curricula in accordance with school requirements and prepares academic and/or vocational courses of study.
- Prepares and gives lessons in required subjects and supervises students' class work and discipline.
- Prepares, assigns and corrects exercises and assignments.
- Prepares, administers and marks tests to assess and evaluate student performance.

- Prepares reports on students' progress and confers with other teachers and parents.
- Participates in meetings concerning school policies and procedures and their implementation.
- Organizes and assists in extra-curricula activities (e.g. hobby clubs, debating societies, and sporting teams) as required.

### **What are the working conditions for a secondary teacher?**

A secondary teacher in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The salary and benefits for a secondary teacher at a private school are a matter for negotiation between the teacher and the employer. The hours of work for a secondary teacher are considerably longer than the hours actually spent at school. Additional hours are spent in preparing lessons, marking assignments and test, and performing various administrative duties.

### **What is the working environment like?**

A secondary teacher spends most time indoors teaching lessons and supervising classes. The environment is largely hazard free although some teachers suffer anxiety and stress, particularly when they are inexperienced.

### **What knowledge and skills do I need to be a secondary teacher?**

- Good communication skills.
- High-level teaching skills.
- Ability to motivate students to reach their full potential.
- Detailed knowledge of subject specializations.
- Ability to convey to students core values such as respect, honesty and responsibility.

### **What personal qualities/attributes do I need to be a secondary teacher?**

- An interest in assisting teenagers to reach their full potentials.
- An interest in teaching and learning.
- Integrity and responsibility.
- An interest in assisting in the development of young people in non-academic areas (e.g. leadership, sports, discipline).

### **What are the education requirements to become a secondary teacher?**

The standard qualification for a career as a secondary teacher is a degree in a particular field (e.g. arts, commerce), followed by a period of teacher training, usually of one year's duration. Entry to a degree course requires the completion of Class 12. In Bhutan the normal qualification for a secondary teacher is a Bachelor of Education (Secondary) Degree with Class 12 as the entry requirement. Progress in a secondary teaching career may require post-graduate training.

### **Can I study in Bhutan to become a secondary teacher?**

Yes. The Paro College of Education (Paro) and Samtse College of Education (Samtse) both offer a Bachelor of Education (Secondary) Degree of three years duration, after the completion of Class 12. A person with a first degree other than education (e.g. Arts, Science, Commerce), and seeking to become a teacher, can undertake a 9-month course leading to a Post Graduate Certificate in Education at the Paro College of Education and Samtse College of Education.

### **What are the employment prospects for a secondary teacher in Bhutan?**

There are good employment opportunities for secondary teacher in Bhutan in both government and private school. Bhutan's secondary education system is still expanding, and this will generate more teaching opportunities in future. In addition, there are hundreds of expatriate teacher in Bhutan's secondary schools who, progressively, will be replaced by Bhutanese teachers. A secondary teacher can progress through various Royal Civil Service levels and eventually become a head teacher or school principal.

#### 2.3.7 Teachers Counselors

##### **Title: TEACHER COUNSELOR**

**Description:** A teacher counselor advises students, teachers and parents on the nature of various careers and occupations and their related employment prospects and opportunities.

**Alternative and Related Titles: VOCATIONAL GUIDANCE OFFICER / SCHOOL COUNSELLOR / CAREER AND COUNSELLING FOCAL TEACHER**

**What does a teacher counselor do?**

- Prepares career and occupational information for use by students, teachers and parents.
- Advises students, teachers and parents on career and occupational prospects and the education and training requirements to enter such careers and occupations.
- Advises students on the availability of education and training opportunities associated with careers and occupations.
- Conducts workshops for teachers on career guidance activities.
- Conducts information sessions for students on career and occupational opportunities and the education and training opportunities offered by education and training institutions, both public and private.
- Prepares technical papers and reports.
- Supervises subordinate staff.

**What are the working conditions for a teacher counselor?**

A career guidance officer in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A career guidance officer spends considerable time traveling to secondary schools to advise students and teachers on career opportunities. The hours of work can be irregular depending on travel commitments to schools. Career and Counseling Focal Teachers in schools who undertake career and counseling duties do this work in addition to their normal teaching loads.

**What is the working environment like?**

A full time teacher counselor spends time visiting schools and the rest of the time in an office situation preparing counseling materials and arranging special programs for students and teachers. A career and counseling focal teacher in a school works in a normal classroom.

**What knowledge and skills do I need to be a teacher counselor?**

- High level communication and inter personal skills.
- Knowledge of career opportunities in Bhutan
- Knowledge of education and training requirements to enable a

person to pursue a particular career.

- Good writing skills.
- Interviewing skills.
- Counseling skills.
- Ability to lead and motivate others.

### **What personal qualities/attributes do I need to be a teacher counselor?**

- A genuine interest in helping young persons to make informed career choices.
- Empathy and understanding.
- Honesty and integrity.

### **What are the education requirements to become a teacher counselor?**

The normal education requirement for a career as a teacher counselor is a degree in education that qualifies a person to be a teacher. In addition, a teacher counselor needs to undertake special training courses in guidance and counseling, either through short courses or through post graduate studies overseas. Career and Counseling Focal Teachers in schools are qualified teachers but in most cases have not received formal training in guidance and counseling.

### **Can I Study in Bhutan to become a teacher counselor?**

Yes. You can study to be a secondary teacher in Bhutan and then acquire guidance and counseling skills through in-service training. Alternatively, after completing degree studies in Bhutan you could undertake post-graduate studies in guidance and counseling abroad.

### **What are the employment prospects for a teacher counselor in Bhutan?**

A teacher counselor plays a very important role in Bhutan's education system and its relation to the nation's labour markets. There is a need to appoint specialist career teachers in schools and this will lead to additional employment prospects in the career guidance field.

## 2.3.8 Technical and Training Institute (TTI) Trainers

### **Title: TECHNICAL AND TRAINING INSTITUTE (TTI) TRAINERS**

**Description:** A TTI Trainer imparts skills and knowledge of technical and vocational field. Trainer teaches one or more subjects for academic

or vocational purposes at various levels for students who have completed middle secondary school.

### **Alternative and Related Titles: TTI INSTRUCTOR**

#### **What does a TTI Trainer do?**

- Designs and adapts curricula in accordance with institute requirements and prepares academic and/or vocational courses of study.
- Prepares and gives lessons in required subjects and supervises students' class work and discipline.
- Prepares, assigns and corrects exercises and assignments.
- Prepares, administers and marks tests to assess and evaluate student performance.
- Prepares reports on trainees' progress and confers with other teachers and parents.
- Participates in meetings concerning institute policies and procedures and their implementation.
- Organizes and assists in extra-curricula activities (e.g. hobby clubs, debating societies, and sporting teams) as required.

#### **What are the working conditions for a TTI Trainer?**

A TTI Trainer in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for a trainer are considerably longer than the hours actually spent at institute. Additional hours are spent in preparing lessons, marking assignments and test, and performing various administrative duties.

#### **What is the working environment like?**

A TTI Trainer spends most time in both outdoor and indoors teaching lessons, doing practical and supervising classes. The environment is largely hazard free although some trainers suffer anxiety and stress, particularly when they are inexperienced.

#### **What knowledge and skills do I need to be a TTI Trainer?**

- Good communication skills.

- High-level teaching skills.
- Ability to motivate students to reach their full potential.
- Detailed knowledge of subject specializations.
- Ability to convey to trainees core values such as respect, honesty and responsibility.

#### **What personal qualities/attributes do I need to be a TTI Trainer?**

- An interest in assisting teenagers to reach their full potentials.
- An interest in teaching and learning.
- Integrity and responsibility.
- An interest in assisting in the development of young people in non-academic areas (e.g. leadership, sports, discipline).

#### **What are the education requirements to become a TTI Trainer?**

The standard qualification for a career as a TTI Trainer required minimum qualification of class 10 with certificate in a particular field. TTI Trainer requires ToT Certificate issued by Department of Human Resources, Ministry of Labour and Human Resources.

#### **Can I study in Bhutan to become a TTI Trainer?**

Yes. Samthang Institute of Automobile Engineering, Wangdue Phodrang, Khuruthang Institute of Electrical Engineering, Punakha, Chumey Institute of Civil Engineering, Bumthang and Thimphu Institute of Automobile Engineering in Thimphu provide training after the completion of Class 10.

#### **What are the employment prospects for a TTI trainer in Bhutan?**

There are good employment opportunities for TTI trainer in Bhutan. Bhutan's Technical and Vocational Teaching system is still expanding, and this will generate more teaching opportunities in future.

### 2.3.9 Special Education Teacher

#### **Title: SPECIAL EDUCATION TEACHER**

**Description:** A special education teacher teaches physically and intellectually disabled children and adults, those with learning difficulties as well as those who are visually and aurally disabled, at various levels of education.



## **Alternative and Related Titles: REMEDIAL TEACHER/DISABLED PERSONS TEACHER**

### **What does a special education teacher do?**

- Designs and modifies curricula and prepares lessons and activities in accordance with stipulated requirements.
- Gives instruction using special techniques and aids appropriate to the learners' disabilities and levels.
- Encourages learners to develop their confidence and develop a sense of achievement.
- Encourages the integration of persons with disabilities into mainstream classes and activities.
- Administers tests and evaluates progress.
- Discusses learners' progress and problems with other teachers and parents.

### **What are the working conditions for a special education teacher?**

A special education teacher in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A special education teacher can also be employed by an NGO on terms and conditions negotiated between the employer and the individual teacher. The hours of work for a special education teacher are considerably longer than the hours actually spent at school. Additional hours are spent in preparing activities and meeting with parents.

### **What is the working environment like?**

A special education teacher spends most time indoors conducting and supervising lessons and activities for children. The working environment is largely hazard free, although some special education teachers suffer anxiety and stress, particularly when they are inexperienced.

### **What knowledge and skills do I need to be a special education teacher?**

- High level communication and inter-personal skills.
- Knowledge of a wide range of subjects.
- Knowledge of different types of disability.
- Special teaching skills to assist children who have learning

difficulties.

**What personal qualities/attributes do I need to be a special education teacher?**

- A genuine interest in assisting disabled persons to learn and grow.
- An interest in promoting opportunities for disabled persons.
- Integrity and responsibility.
- Creativity and imagination.
- Patience.

**What are the education requirements to become a special education teacher?**

The basic education requirements for a special education teacher are the same as those for a primary or secondary teacher. In addition, a special education teacher needs to undertake special training courses through workshops and other in-service activities or through specialized training abroad.

**Can I study in Bhutan to become a special education teacher?**

Yes. You can study to be a primary or secondary teacher and then take some special courses in-country or overseas on specific aspects of special education.

**What are the employment prospects for a special education teacher in Bhutan?**

There is a growing need for special education teachers not only for teaching different types of disabled persons (deaf, blind, physically impaired, mentally impaired) but also for teaching children with above average abilities, as well as those who are slow learners.

**2.4. Agriculture and Forest Professionals**

**2.4.1 Agriculture Extension Officer**

**Title: AGRICULTURAL EXTENSION OFFICER**

**Description:** An agricultural extension officer is a government official who provides technical advice to farmers on the growing of crops and the raising of animals as economic resources.

**Alternative and Related Titles: FARMING ADVISOR**

**What does and agricultural extension officer do?**

- Advises farmers on the way to improve the quality of their crops and animals and increase their yields from such crops and animals.
- Advises farmers on measures to be taken to conserve natural assets and protect the environment.
- Advises farmers on measures to deal with soil erosion and pest infestation.
- Collects data and estimates quantities and cost of materials and labour required for special farming projects.
- Applies knowledge of scientific principles and practice to identify and solve farmers 'problems.
- Prepares scientific papers and reports.
- Supervises the work of junior extension officers.

**What are the working conditions for an agricultural extension officer?**

An agricultural extension officer is a government official employed in technician activities. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. Agricultural extension officers are required to travel as part of their work and the hours of work can be irregular.

**What is the working environment like?**

An agricultural extension officer normally works outdoors by providing farmers with advice and assistance. The environment can be hot, cold, or wet depending on seasonal conditions and the location of farms.

**What knowledge and skills do I need to be an agricultural extension officer?**

- Good communication and interpersonal skills.
- Knowledge of crops and animals...
- Analytical and problem solving skills.
- Good observation skills.

**What personal qualities/attributes do I need to be an agricultural extension officer?**

- An interest in helping people.
- An interest in agriculture animal husbandry.

- Responsibility and reliability.
- Willingness to work in remote locations.

**What are the education requirements to become an agricultural extension officer?**

An agricultural extension officer needs to complete Higher secondary schooling and then study at degree or diploma level in agriculture or a related field. Formal study needs to be followed by on the job training under the supervision of an experienced extension officer.

**Can I study in Bhutan to become an agricultural extension officer?**

Yes. You can study for a Degree /Diploma on Agriculture or a Degree /Diploma in Animal Husbandry at the College of Natural Resources at Lobeyesa.

**What are the employment prospects for an agricultural extension officer in Bhutan?**

Agriculture in Bhutan employs more people than any other economic activity. The work of agricultural extension officers plays an import role in the development of agricultural and there are good employment opportunities for extension officers.

2.4.2 Agronomist

**Title: AGRONOMIST**

**Description:** An agronomist conducts research and develops concepts, theories and operational methods concerned with soils and soil management with a view to production and higher yields. An agronomist is a scientist concerned with the growing of land crops, whether under dry land conditions or irrigation.

**Alternative and Related Titles: AGRICULTURAL SCIENTIST, SOIL SCIENTIST**

**What does an agronomist do?**

- Researches field crops, grasses and develop new and improved methods of cultivation and for improved methods for the exploitation of grazing lands.
- Researches the characteristics, capability and productivity of

soils and applies findings to the development of improved agriculture, horticultural and forestry practices.

- Advises on the choice of crops best suited to a particular location to ensure best quality.
- Advises on soil preparation, planting of crops, irrigation, harvesting and grading of crops.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

### **What are the working conditions for an agronomist?**

An agronomist in the Royal Civil Service would normally be employed as a middle level professional. The entry level to the Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. An agronomist may sometimes be required to work irregular hours, particularly when on field assignments.

### **What is the working environment like?**

An agronomist spends a lot of time working outdoors visiting farms and talking to farmers in groups as well as individually. This may involve travel to remote locations and time spent a way from home. An agronomist also spends time in a laboratory conducting tests and using the results to improve the methods for growing crops.

### **What knowledge and skills do I need to be an agronomist?**

- High-level communication skills including the ability to communicate with farmers having relatively low levels of education
- Good analytical skills.
- Computer skills.
- Driving skills (as well as a driving license).
- Observation skills.

### **What personal qualities/attributes do I need to be an agronomist?**

- An interest in crops and soils.
- An interest in improving things.
- A willingness to work outdoors, sometimes in remote locations.
- Responsibility towards the environment.

### **What are the education requirements to become an agronomist?**

A career as an agronomist usually requires a Bachelors Degree in Agricultural Science (usually of 4 year's duration) with a specialization in agronomy. Entry to such a degree requires Class 12 with passes in mathematics and science.

### **Can I study in Bhutan to become an agronomist?**

Sherubtse College offers a Bachelor of Science (General) Degree that provides a general basis for a career as an agricultural scientist or agronomist, but does not offer specialized study in these fields. A career as an agronomist will require study abroad.

### **What are the employment prospects for an agronomist in Bhutan?**

Employment opportunities for an agronomist are largely confined to the Royal Civil Service within the Ministry of Agriculture. Employment is normally as a middle level professional. After some years of experience, an agronomist may work as a self-employed consultant, offering consultancy services to government.

## 2.4.3 Ecologist

### **Title: ECOLOGIST**

**Description:** An ecologist is concerned with the influence human beings have on the natural environment.

**Alternative and Related Titles:** ENVIRONMENTALIST/ENVIRONMENTAL ECOLOGIST

### **What does an ecologist do?**

- Undertakes studies to assess the impact of human beings and development activities on the natural environment concerning buildings, mining, major infrastructure projects (roads, dams, housing) and agricultural practices.
- Advises on how to rectify the negative impact of people on the environment.
- Assists in the management of projects to ensure minimal negative impact on the natural environment.
- Analyzes and interprets information to prevent ecological problems from arising, and help solve ecological problems.

**What are the working conditions for an ecologist?**

An ecologist in the Royal Civil Service would most likely be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. An ecologist may sometimes be required to work irregular hours, particularly when on field assignments.

**What is working environment like?**

Ecologists work in both indoor and outdoor situations. The indoor work involves a combination of office and laboratory activities. Some of the outdoor work involves visits to remote locations. Such field work can be physically demanding.

**What knowledge and skills do I need to be an ecologist?**

- High level analytical skills
- Ability to communicate with people at all levels (e.g. farmers, high level managers, government officials).
- Report writing skills.
- Observation skills, particularly concerning the natural environment.
- A light vehicle driving license is an advantage.
- Computer skills.

**What personal qualities/attributes do I need to be an ecologist?**

- An interest in nature and preservation.
- Good health and fitness for outdoor work.
- Integrity and commitment to the importance of protecting the natural environment.
- Ability to respond to complaints from persons with vested interests and to handle disagreements.

**What are the education requirements to become an ecologist?**

You will need to complete Class 12 preferably with mathematics and science subjects and including biology. After Class 12 you will need to complete a University Degree usually a Bachelor of Science in natural sciences including botany, zoology, geology, and soil sciences. This will usually take 3-4 years.

### **Can I study to become an ecologist in Bhutan?**

Yes. You can study for a Bachelor of Science at Sherubtse College, which provides the foundation for a career as an ecologist. Post graduate study will need to be undertaken abroad.

### **What are the employment prospects for ecologists in Bhutan?**

Ecologists can work in agriculture, forestry, nature conservation, infrastructure development, and regional development. Most employment opportunities are in the Royal Civil Service. Ecologists may also work as employees or self-employed consultants in the private sector but, at present, such opportunities are limited in Bhutan.

#### 2.4.4 Environmentalist

##### **Title: ENVIRONMENTALIST**

**Description:** To help the public make decisions about how we use natural resources and interact with our surroundings. Through research, publications and lobbying, these professionals distribute information on the current and future condition of our environment. The primary purpose of this position is to ensure implementation of the activities of the sections, following the approved work plan and budget of the respective division.

##### **Alternative and Related Titles:**

##### **What does an Environmentalist do?**

- Conducts monitoring and compliance in development projects (public and private) under the EA Act 2000 and associated guidelines; and monitoring of water and air related activities.
- Conducts site visits for field verification of project proposals;
- Reviews and assesses project proposals for environmental clearance and maintain a database for EA Clearance and on air and water.
- Prepares and updates, from time to time, sector guidelines and environmental codes of best practice (ECOPs) for relevant sectors;
- Ensure implementation of planned activities/programs of the section
- Provides technical and logistical support for workshops and



- seminars on activities conducted by the section;
- Provides support and assist in the preparation of progress reports of the section;
- Supports and report to Head of the Section and Division.

### **What are the working conditions for an Environmentalist?**

Environmentalists spend the majority of their time in an office, but many others divide their time between fieldwork and office or laboratory work. Many environmentalists often take field trips that involve physical activity. Environmentalists in the field may work in warm or cold climates, in all kinds of weather. In their research, they may dig or chip with a hammer, scoop with a net, and carry equipment in a backpack.

### **What is the working environment like?**

Requires frequent field visits to issue environmental clearances, collection of data for water, air and other pollutants information, inspections and other research related works. The work involves certain discomforts from exposure to heat and rain during the field trips and other toxic waste and chemicals when visiting industries and laboratories.

### **What knowledge and skills do I need to be an Environmentalist?**

- National Environment Strategy, "The Middle Path"
- Environment Assessment Act 2000 and its Regulations
- Sectoral Guidelines on Environmental Assessment
- Other sectoral acts related to environment
- Directives of the Cabinet and the CCM
- Directives of the National Environment Commission

### **What personal qualities/attributes do I need to become an Environmentalist?**

Personal contacts are with individuals mostly from the private sector requesting for environmental clearance. Mostly the request is for setting up industries, mining and road construction. Contacts are also with Government officials from line ministries for environmental clearance such as roads, bridges, quarry-sites and community farm roads.

### **What are the education requirements to become an Environmentalist?**

You will need to complete Class 12 preferably with mathematics and science subjects and including biology. After Class 12 you will need to complete a

University Degree usually a Bachelor of Science in natural sciences including botany, zoology, geology, and soil sciences. This will usually take 3-4 years.

### **Can I study in Bhutan to become an Environmentalist?**

Yes. You can study for a Bachelor of Science with Environmental Science at Sherubtse College and Royal Thimphu College, which provides the foundation for a career as an Environmentalist. Post graduate study will need to be undertaken abroad.

### **What are the employment prospects for an Environmentalist in Bhutan?**

Bhutan's forest resources are very important and preservation of natural Environment is a high priority. This will create an on-going need for the employment of Environmentalist.

#### 2.4.5 Forestry Officer

**Title: FORESTRY OFFICER**

**Description:** A forestry officer plans, manages and provides technical advice on the growing protection and use of trees as an economic resource.

**Alternative and Related Titles: FOREST RANGER / FORESTER / FOREST GUARD**

#### **What does a forestry officer do?**

- Advises on ways of raising the quality of output of forests and of increasing forestry yields.
- Advises on measures to conserve natural forest assets and to protect the environment.
- Advises on measures to deal with soil erosion and pest infestation in forests.
- Collects data and estimates quantities and cost of materials and labour required for special forest projects.
- Organizes demonstrations, gives lectures and distributes materials to promote the adoption of improved forestry practices and techniques.
- Applies knowledge of scientific principles and practice to identify and solve problems.
- Supervises the work of junior forestry officers.

**What are the working conditions for a forestry officer?**

A forestry officer is a government official working at the level of a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The working hours for a forestry officer are regular but travel to remote locations may involve work after hours and at weekends.

**What is the working environment like?**

A forestry officer spends a lot of time outdoors, sometimes in remote locations. The working environment can be hot, cold or wet depending on seasonal factors and the actual location of forests. The time indoors is spent preparing reports and proposals for new forestry projects.

**What knowledge and skills do I need to be a forestry officer?**

- Good communication and interpersonal skills.
- Knowledge of forests, soils and pests.
- Good analytical skills.
- Good observation skills.
- Reporting skills.

**What personal qualities/attributes do I need to be a forestry officer?**

- An interest in the natural environment and environmental protection.
- An interest in forests.
- Responsibility.
- Integrity.

**What are the education requirements to become a forestry officer?**

A forestry officer normally has a diploma in forestry or a degree in agricultural science of 3 year's duration after the completion of secondary schooling.

**Can I study in Bhutan to become a forestry officer?**

Yes. You can study for a Degree /Diploma in Forestry at the College of National Resources. (A course is also available for forest guards at the Bhutan Forestry Institute. This is a certificate course of one year's duration after Class 10.)

### **What are the employment prospects for a forestry officer in Bhutan?**

Bhutan's forest resources are very important and their preservation is a high priority. This will create an on-going need for the employment of forestry officers.

#### 2.4.6 Livestock Officer

##### **Title: LIVESTOCK OFFICER**

**Description:** Provide professional service to the farmers in terms of livestock production, processing and marketing and to the development of livestock industry as a whole.

##### **Alternative and Related Titles:**

##### **What does a Livestock Officer do?**

- Carry out day to day plant/farm/extension management activities
- Carry out health feeding & breeding activities
- Produce & distribute livestock inputs (poultry, piglets, Bulls, Frozen semen, fodder seed, fingerlings)
- Prepare the plan and budget for less complex projects.
- Identify, negotiate and institute contract input production and procurement of required inputs
- Mobilize staff and resources for setting up participatory livestock production trials
- Process, procure and maintain the appropriate stock of livestock inputs through efficient management of farm/plants.
- Supervise monitoring of inputs and programmes and analyze outputs for its relevancy Supervise staff under him
- Associate with information technology & publication services
- Data collection & record keeping
- Design, apply & deliver extension technologies
- Problem analysis and solution
- Supervise and monitor programs/units, write reports- monthly, quarterly, half yearly, and annually.
- Liaise and carryout public relation job.
- Act as resource person in the in country training programme.
- Do common administrative job in absence immediate controlling officer.

- Prepare plans and specifications,
- Assist the supervisor in substantial portion of complex work.
- Monitor trails (on farm pilot trails), field visits, and timely collection of data.
- Any other work assigned by superiors from time to time

### **What are the working conditions for a Livestock Officer?**

The job involves taking technical decisions on activities like extension, animal management, plant duties and dealing with farmers. Should be able to cope up with adverse agro-climatic conditions and avert risks. The job is quite challenging given the topography and scattered nature settlement the country has.

### **What is working environment like?**

The work is mostly in the field and manual work. Involves substantial amount of physical exertion. The job may also demand working in remote places without any basic *amenities and adverse conditions*, Supervises the work of extension/farm staff. While posted at extension he will be controlling livestock activities in a Dungkhang/Dzongkhag.

### **What knowledge and skills do I need to be a Livestock Officer?**

The job warrants good skills in human resource management. The work involves mainly work towards producing technically sound input for optimum production in field situation. It will also involve in producing a market-oriented product. The job also demands efficient extension techniques in delivering technologies to masses most of whom are still illiterate.

### **What personal qualities/attributes do I need to be a Livestock Officer?**

He/she has to have good rapport with workers and superior. One also needs to have good contacts with farmers and clients.

### **What are the education requirements to become a Livestock Officer?**

A Livestock Officer normally has a degree in BVSc / B.Sc in Animal Science/ Fisheries/Dairy Sc/ B.Sc. Agriculture.

### **Can I study in Bhutan to become a Livestock Officer?**

No.

### **What are the employment prospects for a Livestock Officer in Bhutan?**

Most employment opportunities for Livestock Officer are found in the Royal Civil Service, as extension staff in Dzongkhag and Drungkhag. There are very few opportunities for the employment of livestock officer in the private and corporate sectors.

#### 2.4.7 Park Manager

##### **Title: PARK MANAGER**

**Description:** Park manager work managing parks and open and green spaces for the benefit of local residents and visitors. They supervise and allocate work to teams of gardeners and landscaping staff.

The role gives the opportunity for hands-on work as well as opportunities for those who wish to get into the managerial side of park and green space management.

##### **Alternative and Related Titles: PARK OFFICER**

##### **What does parks manager do?**

- organizing the maintenance of parks and open spaces
- planning landscaping and planting programmes
- arranging areas and facilities for sport and recreation
- ensuring that staff get the supervision and training they need
- Consulting local people and preparing proposals for developing new and existing parks.

##### **What are the working conditions like?**

Park officers work standard office hours, though they may need to be flexible according to the season and the jobs in hand. They may occasionally have to work evenings or weekends.

There is some office-based work, but most of their time is spent outdoors in all weathers, visiting parks and open spaces where teams and equipment are based. Some parks officers manage work at sites that are some distance apart.

##### **What is the working environment like?**

Park Manager may work indoors or outdoors. They often work long hours

and need a lot of concentration in their work. They may also need to travel to remote locations and in the jungle. The working environment is usually pleasant and may be required to work quickly resulting in possible stress and anxiety.

The working environment can be hot, cold or wet depending on seasonal factors and the actual location of forests. The time indoors is spent preparing reports and proposals for new projects.

**What skills do I need to be a parks manager?**

- have good knowledge of parks management
- be enthusiastic and able to motivate others
- be a good planner and project manager, able to prioritize tasks
- have good staff management and communication skills
- be able to work within budgets and to meet deadlines
- Have a genuine interest in parks and landscape design.

**What are the education requirements to be a park manager?**

A park manager normally has a degree in agricultural science after the completion of secondary schooling.

**Can I study in Bhutan to become a park manager?**

Yes. You can study for B. Sc Forestry at the College of Natural Resources, Lobesa.

**What are the employment prospects for a forestry officer in Bhutan?**

Bhutan's forest resources are very important and their preservation is a high priority. This will create an on-going need for the employment of forestry officers.

2.4.8 Taxonomist

**Title: Taxonomist**

**Description:** A botanist studies plants and their environment, including the identification and classification of plants, the structure and functions of different plant parts, and the courses of a cure for plant diseases.

## **Alternative and Related Titles:**

**BOTANIST, PLANT TAXONOMIST, ETHNOBOTANIST, PLANT PHYSIOLOGIST, PLANT PATHOLOGIST, PLANT GENETICIST.** (These relate to different specializations within the broad field of botany.)

## **What does a botanist do?**

- Identifies and classifies plants based on field research and laboratory work.
- Conducts research on the different ways people make use of plants for food and medicines.
- Studies the growth, development and bio-chemical processes of plants.
- Studies plant diseases and researches solutions to disease problems.

## **What are the working conditions for a botanist?**

A botanist in the Royal Civil Service would normally be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A botanist may sometimes be required to work irregular hours, particularly when on field assignments.

## **What is the working environment like?**

A botanist works indoors doing both office and laboratory work. A botanist sometimes works in remote locations when undertaking field assignments in an environment that may be physically challenging.

## **What knowledge and skills do I need to be a botanist?**

- High-level analytical abilities
- Good attention to detail.
- Computer skills.

## **What personal qualities/attributes do I need to be a botanist?**

- An interest in nature and plants.
- An inquiring mind.
- A willingness to work outdoors.



### **What are the education requirements to become a botanist?**

The normal requirement for a career in botany is a Bachelor's Degree in Science (Botany) usually of 3-4 year's duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects, including biology.

### **Can I study in Bhutan to become a botanist?**

Sherubtse College offers a Bachelor of Science (General) Degree that provides a general grounding for a career in science but does not provide specialized study in botany. A career as a botanist requires study abroad.

### **What are the employment prospects for a botanist in Bhutan?**

Most employment opportunities for botanists are found in the Royal Civil Service, as teachers and College lecturers. There are very few opportunities for the employment of botanists in the private and corporate sectors.

## **2.5. Physical and Social Science Professionals**

### **2.5.1 Anthropologist**

#### **Title: ANTHROPOLOGIST**

**Description:** An anthropologist studies the distribution and origin of population groups as well as their life style and culture. An anthropologist is concerned with both the biological and cultural aspects of humans around the world and throughout time.

**Alternative and Related Titles:** BIOLOGICAL ANTHROPOLOGIST / ETHNOLOGIST / CULTURAL ANTHROPOLOGIST / ARCHAEOLOGIST / LINGUIST

#### **What does an anthropologist do?**

- Traces the origins and evolution of humanity by studying changing characteristics and cultural and social institutions, including class, ethnicity, gender and religion.
- Studies the interaction of people with the environment in which they live and work.
- Studies the early history of cultures finding, excavating, dating, and analyzing the materials remains of past societies.
- Studies human communication processes, including the function, structure and history of languages.

- Prepares academic papers and reports.
- Supervises the work of subordinate staff, including research assistants and field staff.

### **What are the working conditions for an anthropologist?**

In the Royal Civil Service an anthropologist is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. An anthropologist is expected to travel to remote areas, which makes it difficult to work regular hours.

### **What is the working environment like?**

An anthropologist spends extensive periods in the field making observations, making notes, taking photographs, making excavations, and analyzing fossil sand remains. The time spent in an office situation is normally spent writing reports. The working environment in the field can sometimes involve considerable hardships and long periods away from home.

### **What knowledge and skills do I need to be an anthropologist?**

- High level analytical skills.
- Ability to communicate with people from all population groups.
- Good language skills including the ability to communicate in non-familiar languages.
- High level research skills.
- Good interviewing skills.
- Good observation skills.
- Report writing skills.

### **What personal qualities/attributes do I need to be an anthropologist?**

- A genuine interest in humans and their cultures.
- An interest in details.
- Patience and tact.
- Honesty, Integrity and trust.
- A willingness to work in remote locations.

### **What are the education requirements to become an anthropologist?**

A career as an anthropologist normally requires a university degree of 3-4

years after Class 12. Many anthropologists have post-graduate qualifications.

**Can I study in Bhutan to become an anthropologist?**

No. Study abroad is required.

**What are the employment prospects for an anthropologist in Bhutan?**

There are few employment opportunities for anthropologists in Bhutan present. Bhutanese students could study abroad and become anthropologists in other countries. Employment as an anthropologist in Bhutan would normally take place through a research institution.

2.5.2 Biologist

**Title: BIOLOGIST**

**Description:** A biologist conducts research, develops concepts theories and operational methods and applies scientific knowledge on the origin, anatomy, and other basic characteristics of plant and animal life. Biologists specialize in different fields such as botany, zoology, entomology, and biochemistry.

**Alternative and Related Titles: BOTANIST, ZOOLOGIST, ENTOMOLOGIST, BIOCHEMIST, MICROBIOLOGIST**

**What does a biologist do?**

- Conducts research and develops concepts and operational methods concerning the characteristics of plant and animal life.
- Conducts field and laboratory experiments concerning the identification and classification all forms of plant and animal life.
- Studies and conducts experiments concerning the structure, development and characteristics of micro-organisms such as bacteria.
- Studies and conducts experiments concerning the factors involved in the origin, development, and transmission of hereditary characteristics in human beings, animals and plants.
- Studies and conducts experiments concerning the structure and functions of living cells, and the influence of physical and chemical factors upon normal and abnormal cells.
- Prepares scientific papers and reports.
- Supervises the work o technicians and subordinate staff.

**What are the working conditions for a biologist?**

A biologist in the Royal Civil Service would normally be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A biologist may sometimes be required to work irregular hours, particularly when conducting important laboratory experiments.

**What is the working environment like?**

A biologist works indoors doing both office and laboratory work. A biologist sometimes undertakes field assignments, depending on the particular area of specialization. Field assignments in Bhutan frequently involve a harsh and difficult working environment. The general environment is generally non-hazardous, although microbiologists need to take precautions when conducting experiments involving bacteria or viruses.

**What knowledge and skills do I need to be a biologist?**

- High-level analytical abilities
- Good attention to detail.
- Computer skills.
- Ability to perform highly specialized research.

**What personal qualities/attributes do I need to be a biologist?**

- An interest in nature and plants.
- An inquiring mind.
- An interest in laboratory work.
- Patience, determination and discipline.

**What are the education requirements to become a biologist?**

The normal requirement for a career in biology is a Bachelor's Degree in Science (Biology), usually of 4 year's duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects, preferably including biology.

**Can I study in Bhutan to become a biologist?**

Sherubtse College offers a Bachelor of Science (General) Degree that provides a general grounding for a career in science but does not provide specialized study in biology. A career as a biologist requires study abroad.

### **What are the employment prospects for a biologist in Bhutan?**

Most employment opportunities for biologists are found in the Royal Civil Service particularly as teachers and College lecturers. There are very few opportunities for the employment of biologists in the private and corporate sectors.

#### 2.5.2.1. Chemist

**Title: CHEMIST**

**Description:** A chemist studies the composition, structure and properties of different materials, and the processes and changes such materials undergo in different circumstances.

**Alternative and Related Titles: PHYSICAL CHEMIST / ANALYTICAL CHEMIST / BIO-CHEMIST / INDUSTRIAL CHEMIST**

**What does a chemist do?**

- Investigates chemical reactions in living and non-living materials.
- Analyzes the substances present in samples.
- Applies chemical knowledge to the manufacture of commercial products.
- Undertakes laboratory research and analyzes and interprets the results.

**What are the working conditions for a chemist?**

In the Royal Civil Service a chemist is likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstance. The hours of work are generally regular.

**What is the working environment like?**

The work of a chemist is done indoors, involving laboratory work as well as office tasks. Most of the time is spent in a laboratory conducting experiments and analyzing materials. Some exposure to biological hazards is possible, but in most cases chemists work in a comfortable environment that is hazard free.

### **What knowledge and skills do I need to be a chemist?**

- High-level analytical skills.
- Report preparation skills.
- High-level computer skills.

### **What personal qualities/attributes do I need to be a chemist?**

- An inquiring mind and an interest in finding out 'why'.
- An interest in general science, physics and chemistry.

### **What are the education requirements to become a chemist?**

The minimum requirement for a chemist is a Bachelor of Science Degree in Chemistry with major studies in chemistry, physics and mathematics. Entry to such a University course requires the completion of Class 12 with high level passes in mathematics and science.

### **Can I study in Bhutan to become a chemist?**

Sherubtse College offers a Bachelor of Science (General) Degree that provides a starting point for a career as a chemist. Advance studies in chemistry are not available in Bhutan at present. Overseas study is required.

### **What are the employment prospects for a chemist in Bhutan?**

Chemists usually work for government, universities, research organizations and large manufacturing corporations such as Bhutan Ferro Alloys Ltd. or Bhutan Carbide and Chemicals Ltd.

Chemist can also be self-employed as consultants after gaining appropriate experience. Such opportunities, however, are limited in Bhutan at present.

## 2.5.3 Economist

### **Title: ECONOMIST**

**Description:** An economist conducts research to improve and develop economic concepts and theories used to describe and understand the behavior of national and international markets for goods, services, labour, and capital, and the behavior of enterprises and consumers and governments, to formulate economic policies and propose solutions to current or expected economic problems.

**Alternative and Related Titles:** **MACROECONOMIST, MICROECONOMIST, ECONOMETRICAN.** Economists may specialize in particular fields and thus be designated as **AGRICULTURAL ECONOMIST, LABOUR ECONOMIST, FINANCE ECONOMIST, INTERNATIONAL TRADE ECONOMIST.**

**What does an economist do?**

- Advises on the efficient allocation of resources at national and enterprise levels.
- Studies and researches economic data and trends relating to national and international trade, banking and finance, incomes and prices, employment and unemployment, productivity, investment and consumer behavior.
- Compiles, analyzes and interprets economic data based on economic theories, models, and statistical applications.
- Advises on economic policies and recommends alternative action to be taken to address economic problems.
- Prepares scholarly papers and reports.
- Supervises the work of subordinate staff, particularly research officers.

**What are the working conditions for an economist?**

An economist in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. Economists are also employed in the corporate sector, particularly banks, and enjoy wages and benefits similar to other professionals. The hours of work are regular with limited demands for after hours and weekend work.

**What is the working environment like?**

An economist normally works in an office engaged in research and the preparation of reports and papers. The environment is characterized by statistical information and, increasingly, the use of computers.

**What knowledge and skills do I need to be an economist?**

- Good communication skills.
- Analytical skills and problem solving abilities.

- Research skills.
- Computer skills
- Knowledge of economic theories.
- Knowledge of sources of information.

**What personal qualities/attributes do I need to be an economist?**

- A broad interest in social and economic matters.
- Objectivity.
- Responsibility.

**What are the education requirements to become an economist?**

The normal starting point for a career as an economist is the completion of a Bachelor of Economics Degree of 3-4 year’s duration after Class 12. Post-graduate study in a particular area of specialization is common.

**Can I study in Bhutan to become an economist?**

Yes, you can study for a Bachelor of Arts in Economics at Sherubtse College/ Royal Thimphu College. The course is of 3 year’s duration, with an entry requirement of Class 12. Post-graduate studies in economics are not available in Bhutan.

**What are the employment prospects for an economist in Bhutan?**

Employment opportunities exist for economists in the Royal Civil Service, the Royal Monetary Authority, banks, and the corporate sector in such fields as economic policy development, research and lecturing. There is scope for an economist to be self-employed as a consultant after some years of practical experience.

2.5.4 Geologist

**Title: GEOLOGIST**

**Description:** A geologist is concerned with the study of earth materials, particularly rocks, soil and sedimentary material.

**Alternative and Related Titles:** GEOHYDROLOGIST (studies the distribution of rocks underneath the soil)/PALAENTOLOGIST (studies fossils)/ENGINEERING GEOLOGIST (studies the physical and chemical properties of rocks and soil associated with the building of dams, roads,



tunnels and structures.)

### **What does a geologist do?**

- Prepares maps of geological information to show the distribution of different rocks in a given area.
- Studies deposits of minerals to assess economic viability or mining purposes.
- Studies sedimentary deposits in river valleys, beaches, and oceans to assess erosion and the impact of human activities on the environment.

### **What are the working conditions for a geologist?**

A geologist in the Royal Civil Service would be most likely employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A geologist may sometimes be required to work irregular hours, particularly when on field assignments.

### **What is the working environment like?**

A geologist works both indoors and outdoors. Indoor work involves both office and laboratory work. Geologists usually undertake considerable outdoor work, sometimes in difficult terrain and sometimes in remote locations. This work can be physically challenging.

### **What knowledge and skills do I need to be a geologist?**

- Good observations skills.
- High-level analytical abilities.
- Computer skills.
- Ability to use sophisticated measuring equipment.
- A light-vehicle driving license is an advantage.

### **What personal qualities/attributes do I need to be a geologist?**

- An interest in the natural environment and nature.
- A willingness to work outdoors in difficult environments.
- Physical fitness for outdoor work.

### **What are the education requirements to become a geologist?**

The normal requirement for employment as a geologist is a Bachelor's Degree in Science (usually 3-4 years) with specializations in geology, chemistry, physics or mathematics, and preferably with computer science and statistics.

Entry to such a course requires the completion of Class 12 with passes in mathematics and science. It is also possible to take technician level studies in geology involving the completion of a Diploma that is of shorter duration than a degree, and involves more practical work.

### **Can I study in Bhutan to become a geologist?**

No degree courses in geology are available in Bhutan at present. Overseas study is required.

### **What are the employment prospects for a geologist in Bhutan?**

The most likely employment opportunities are with government (Mines, Public Works and Construction) and educational institutions. Large mining, oil and gas companies, and engineering firms also employ geologists, but few opportunities exist at present in Bhutan.

After several years of appropriate experience, it is possible for a geologist to work as a self-employed consultant for government and the private and corporate sectors. Such opportunities, however, are limited at present.

## 2.5.5 Mathematician

### **Title: MATHEMATICIAN**

**Description:** A mathematician conducts research, improves and develops mathematical concepts and theories and advises on their practical application, in such fields as engineering, business, and medicine.

### **Alternative and Related Titles: ACTUARY/OPERATIONS RESEARCHER**

### **What does a mathematician do?**

- Studies, improves and develops mathematical theories and techniques.
- Advises on applying mathematical principles, models and techniques to a wide range of fields including engineering and

medicine.

- Analyzes management problems and formulates mathematical models to assist in solving problems, normally using computer applications.
- Designs and advises on the operation of social insurance schemes covering health, old age pensions, and unemployment insurance.
- Prepares scientific papers and reports.
- Participates in conferences and scientific meetings.
- Supervises and motivates subordinate staff.

### **What are the working conditions for mathematician?**

In the Royal Civil Service mathematicians are normally employed as middle level professionals. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A mathematician works regular hours.

### **What is the working environment like?**

A mathematician works indoors usually in an office, and makes considerable use of information technology. The working environment generally is hazard free and relatively free from stress.

### **What knowledge and skills do I need to be a mathematician?**

- The ability to think logically.
- Good communication skills.
- High-level computer skills.
- The ability to prepare detailed and accurate reports.
- The ability to motivate subordinate staff.

### **What personal qualities do I need to be a mathematician?**

- An interest in numbers, and solving problems using logical analysis.
- An interest in doing things systematically and accurately.

### **What are the education requirements to become a mathematician?**

The normal requirement for a career as a mathematician is a Bachelor's Degree in Mathematics, or Science with major studies in mathematics. Entry to such a degree required Class 12 with passes in mathematics and science.

Advancement in this career usually requires higher-level studies to masters and doctorate level.

### **Can I study in Bhutan to become a mathematician?**

Sherubtse College offers a Bachelor of Science (General) Degree that provides a starting point for a career as a mathematician. Further study abroad is required to develop higher-level knowledge and skills in this field.

### **What are the employment prospects for a mathematician in Bhutan?**

Mathematicians are normally employed by Universities as researchers and lecturers, and in high schools as mathematics teachers. There are some employment opportunities in private secondary schools as mathematics teachers. There are some opportunities for employment by insurance companies, but relatively few other opportunities in the private and corporate sector.

Mathematicians can operate as private consultants after some years of experience particularly to the insurance industry.

## 2.5.6 Meteorologist

### **Title: METEOROLOGIST**

**Description:** A meteorologist is concerned with the observation and analysis of weather conditions with a view to providing essential information for weather forecasting.

### **Alternative and Related Titles: CLIMATOLOGIST**

### **What does a meteorologist do?**

- Collects and analyzes data concerning weather characteristics.
- Applies computer technology to the analysis of data

### **What are the working conditions for a meteorologist?**

In the Royal Civil Service a meteorologist is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing

circumstances. The hours of work for a meteorologist are generally regular.

**What is the working environment like?**

Most of the work of a meteorologist is done indoors either in an office or a laboratory. Some outdoor observation of weather conditions is also required. A meteorologist uses meteorological measuring equipment and makes considerable use of computer applications.

**What knowledge and skills do I need to be a meteorologist?**

- High-level analytical skills
- Good observation skills
- The ability to make deductions from data collected.
- Ability to use meteorological equipment.
- High-level computer skills.

**What personal qualities/attributes do I need to be a meteorologist?**

- An interest in all types of weather conditions.
- An interest in research and statistical information.

**What are the education requirements to become a meteorologist?**

The minimum requirement to become a meteorologist is a Bachelor of Science Degree in Meteorology or, possibly, physics. Entry to such a degree course requires Class 12, including passes in mathematics and physical sciences.

**Can I study in Bhutan to become a meteorologist?**

No, there is no degree course in meteorology in Bhutan. Study abroad is required. The Bachelor of Science Degree (General) at Sherubtse College provides a basic grounding in science, but does not provide specialized studies in meteorology.

**What are the employment prospects for meteorologists in Bhutan?**

Meteorologists normally work for government or universities, but there are few prospects at present in Bhutan. Self-employed meteorologists are not common, and there are few such opportunities in Bhutan.

## 2.5.7 Physicist

**Title: PHYSICIST**

**Description:** A physicist studies the behavior of atoms and their components, the different forces of nature and their relationships, and the physical properties of matter. A physicist provides an insight into the workings and secrets of nature.

**Alternative and Related Titles: THEORETICAL PHYSICIST / EXPERIMENTAL PHYSICIST**

**What does a physicist do?**

- Collects information and uses this as a basis for developing theories.
- Undertakes laboratory work to test existing theories
- Undertakes mathematical calculations in support of experiments and observations.

**What are the working conditions for a physicist?**

In the Royal Civil Service a physicist is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are generally regular.

**What is the working environment like?**

A physicist usually works indoors in an office and a laboratory, relatively free from hazards and in conditions that are generally comfortable. A physicist makes extensive use of computers and laboratory equipment in support of experimental work.

**What knowledge and skills do I need to be a physicist?**

- The ability to analyze data and conduct investigations.
- The ability to use mathematical calculations, based on formulas.
- Observation skills.
- High-level computer skills.

**What personal qualities/attributes do I need to be a physicist?**

- An inquiring mind and an interest in finding out 'why'.
- An interest in nature and technology.
- An interest in scientific details.

**What are the education requirements to become a physicist?**

The minimum requirement is a Bachelor of Science Degree with major studies in physics and mathematics. Entry to such a University course requires the completion of Class 12 in mathematics and science at high levels.

Many physicists continue their studies to Masters and Ph.D. level.

**Can I study in Bhutan to become a physicist?**

A Bachelor of Science Degree (General) provides a basic grounding in physics, but further study abroad is required to become a professionally recognized physicist.

**What are the employment prospects for physicists in Bhutan?**

Physicists normally work for government, universities and research organizations but there are few prospects at present in Bhutan. Physicists can be employed as consultants after gaining appropriate experience but there are few opportunities in Bhutan.

### 2.5.8 Psychologist

**Title: PSYCHOLOGIST**

**Description:** A psychologist is not a medical doctor but has a degree in psychology. This may be a doctoral degree, but his is different from being a medical doctor. A psychologist treats behavioral disorder and some mental illnesses by encouraging behavioral changes. A psychologist researches and studies mental processes and behavior of human beings as individuals or in groups, and applies this knowledge to promote personal, social educational or occupational adjustment and development.

**Alternative and Related Titles: INDUSTRIAL PSYCHOLOGIST, COUNSELLOR**

### **What does a psychologist do?**

- Plans and executes psychometric tests to measure human characteristics such as intelligence, aptitudes and potential.
- Interprets and evaluates test results to provide advice to individuals.
- Analyzes the effect of hereditary, social, occupational and other factors on individual thought and behavior.
- Conducts counseling and therapeutic interviews with individuals and groups.
- Provides information and advice to individuals to prevent emotional and personality problems from arising.
- Studies psychological factors in the diagnosis, treatment and prevention of mental illnesses and emotional or personality disorders.
- Conducts research and prepares scholarly papers.
- Supervises the work of subordinate staff.

### **What are the working conditions for a psychologist?**

In the Royal Civil Service a psychologist is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. At present there are few psychologists employed in the private or corporate sectors. The hours of work for a psychologist are regular.

### **What is the working environment like?**

A psychologist mostly works in an office conducting interviews and tests to help people overcome existing problems and difficulties. Increasingly, psychologists are spending more time in the community identifying potential problems as part of an emphasis on preventive work. A psychologist spends a lot of time conducting interviews and analyzing results.

### **What knowledge and skills do I need to be a psychologist?**

- High level communication and interpersonal skills.
- Knowledge of psychological techniques including interviewing and psychometric testing.
- Computer skills.
- Interviewing skills.



- Analytical skills and problem solving abilities.
- Ability to work with all kinds of people from different situations.

**What personal qualities do I need to be a psychologist?**

- A genuine interest in helping people to solve their problems.
- Sensitivity.
- Patience.
- Dedication and responsibility.
- Integrity.
- A mature, well balanced personality.

**What are the education requirements to become a psychologist?**

A career as a psychologist requires a university degree in psychology (or one of its specializations such as educational psychology, industrial psychology) which normally takes five years after Class 12. After the completion of a degree, in most countries a psychologist is required to undertake an internship of one year at an approved institution before registration as a psychologist is possible.

**Can I study in Bhutan to become a psychologist?**

No. Study abroad is required.

**What are the employment prospects for a psychologist in Bhutan?**

There are limited employment opportunities for psychologists on Bhutan with the best prospects in the field of education and psychometric testing. After a number of years of experience it is possible for a psychologist to be self-employed and provide consulting services to government and industry as well as individuals.

2.5.9 Statistician

**Title: STATISTICIAN**

**Description:** A statistician conducts research, improves and develops statistical concepts, and advices on their practical application to business and other fields.

**Alternative and Related Titles:**

### **What does a statistician do?**

- Studies, improves and develops statistical theories, and methodologies.
- Plans, organizes and conducts statistical surveys, including the design of questionnaires and survey instruments.
- Advises on data collection methods and techniques and determines the reliability of statistical findings.
- Processes, analyzes, interprets and evaluates statistical information.
- Prepares scientific papers and reports.
- Attends conferences and scientific meetings.
- Supervises and motivates subordinate staff.

### **What are the working conditions for a statistician?**

In the Royal Civil Service statisticians are normally employed as middle level professionals. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A statistician usually works regular hours.

### **What is working environment like?**

A statistician works indoors usually in an office, and makes considerable use of computer information technology. The working environment generally is hazard free and relatively free from stress.

### **What knowledge and skills do I need to be a statistician?**

- High-level analytical skills.
- Good communication skills.
- High-level computer skills.
- Ability to prepare detailed and accurate reports.

### **What personal qualities/attributes do I need to be a statistician?**

- A strong interest in and aptitude for mathematics.
- Logical reasoning.
- Concern for accuracy.

### **What are the education requirements to become a statistician?**

The normal requirement for a career as a statistician is a Bachelor's Degree

in Statistics, Mathematics, or Science with major studies in statistics and mathematics. Advancement in this career usually requires higher-level studies to masters and doctorate level.

### **Can I study in Bhutan to become a statistician?**

Sherubtse College offers a Bachelor of Science (General) Degree that provides a starting point for a career as a statistician. Entry to this degree is Class 12, with passes in mathematics and science. Further study abroad is required to develop higher-level knowledge and skills in this field.

### **What are the employment prospects for a statistician in Bhutan**

Statisticians are normally employed by Universities as researchers and lectures. They are also employed by the Royal Civil Service for the design of statistical surveys, the compilation of statistical information, and the analysis of statistical data. There are some opportunities for employment by insurance companies, but relatively few other opportunities exist in the private and corporate sector.

Statisticians can operate as private consultants after some years of experience particularly to the insurance industry and investment companies, but also to government departments.

## 2.5.10 Sociologist

### **Title: SOCIOLOGIST**

**Description:** A sociologist studies and describes the social structure of societies and the way in which groups including families, tribes, and religious, business and political institutions behave towards each other.

### **Alternative and Related Titles: ANTHROPOLOGIST, DEMOGRAPHER**

### **What does a sociologist do?**

- Conducts research on the origin, development, structure, social patterns, organization and inter-relationships of human society.
- Advises on the practical application of research findings to assist in the formulation of social and economic policies for the population.
- Investigates subjects of social concern including housing

conditions, recreational patterns, alcohol consumption, drug abuse, sexual behavior, as related to particular groups of people.

- Researches the effects of different styles of leadership on individuals and in small groups.
- Prepares scholarly papers and reports.
- Supervises the work of subordinates, such as research assistants.

### **What are the working conditions for a sociologist?**

A sociologist in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. Sociologists may also be employed in the corporate sectors and enjoy wages and benefits similar to those paid to other professionals. The hours of work are regular except when undertaking survey work in the field.

### **What is working environment like?**

A sociologist works both outdoors and indoors. The indoor work involves designing surveys, analyzing and interpreting data, and writing reports involving the use of computers. The outdoor work focuses on conducting surveys and in depth interviews on such topics as housing conditions, recreational patterns, drinking patterns, and drug abuse, as applied to designated groups in society.

### **What knowledge and skills do I need to be a sociologist?**

- High level communication and interpersonal skills.
- Knowledge of research techniques including the design of survey instruments.
- Interviewing skills.
- Computer skills.
- Analytical skills and problem solving abilities.
- Writing skills.

### **What personal qualities/attributes do I need to be a sociologist?**

- An interest in social issues.
- Objectivity.
- Responsibility.

**What are the education requirements to become a sociologist?**

The normal starting point for a career as a sociologist is the completion of a Bachelor of Arts Degree, with a specialization in sociology, of 3-4 year's duration after Class 12. Post-graduate study in a particular area of specialization is common.

**Can I study in Bhutan to become a sociologist?**

Yes, you can study for a Bachelor of Arts in Economics or Geography at Sherubtse College/ Royal Thimphu College. The course is of 3 year's duration, with an entry requirement of Class 12. These courses will provide a broad foundation for the further study required to become a sociologist. Specialized study and post-graduate courses in sociology are not available in Bhutan.

**What are the employment prospects for a sociologist in Bhutan?**

Most employment opportunities for sociologists in Bhutan exist in the Royal Civil Service, involving research and teaching in particular. There is scope for a sociologist to be self-employed as a consultant after some years of practical experience.

**2.6. Business and administration professionals****2.6.1 Charter Accountant****Title: CHARTER ACCOUNTANT**

**Description:** An accountant prepares, analyzes and interprets financial reports and statements based on records processed by bookkeepers and support staff. (An accountant is different from a bookkeeper. An accountant is a person with professionally recognized qualifications. A bookkeeper is engaged in clerical work, and formal qualifications are not essential.)

**Alternative and Related Titles: AUDITOR/FINANCE MANAGER****What does an accountant do?**

- Advises on, plans and installs budgetary and control systems for an organization's financial operations.
- Prepares and certifies financial statements including balance sheets and profit and loss statements for presentation to management, shareholders and other statutory bodies.

- Prepares budgets of expenditure and forecasts of profits.
- Conducts financial investigations in cases of suspected fraud, insolvency and bankruptcy.
- Audits financial records to verify accuracy.
- Supervises the work of subordinate staff including bookkeepers and finance clerks.

### **What are the working conditions for an accountant?**

An accountant in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the private and corporate sectors an accountant is normally regarded as part of the management team, with salary and benefits similar to those professionals. The working hours for an accountant are regular, although some additional hours may be required when preparing budgets and annual financial reports to meet set deadlines.

### **What is working environment like?**

Typically, an accountant works in an office with financial records and documents, and a computer, supervising the work of bookkeepers and clerks. The environment is normally hazard free. Accountants sometimes experience stressful situations, particularly where funds cannot be fully accounted for. An accountant bears first line responsibility for any financial irregularities, and this can create anxiety and stress when accounts do not balance and money appears to be missing.

### **What knowledge and skills do I need to be an accountant?**

- High-level numeracy and calculation skills.
- Computer skills
- Good problem identification and problem solving skills.
- Ability to supervise and motivate staff.
- Report preparation skills.
- Knowledge of laws and regulations concerning financial and accounting matters.

### **What personal qualities/attributes do I need to be an accountant?**

- An interest in money and finance.

- Honesty and integrity.
- Discretion in handling confidential information.
- Accuracy and precision.

### **What are the education requirements to become an accountant?**

A career as an accountant normally requires a Bachelor's Degree in Commerce or Accountancy, usually of three year's duration after the completion of Class 12. Membership of a professional body of accountants is required for recognition as a professional accountant and for further progress in an accounting career.

### **Can I study in Bhutan to become an accountant?**

Yes. You can study for a Bachelor of Commerce Degree at Gaedug College of Business Studies/ Royal Thimphu College. The entry requirement is Class 12. At present there is no professional body of accountants to give legal recognition to the status of an accountant. It is possible, however, to obtain this recognition from an overseas body. Subject to meeting its standards and technical requirements.

### **What are the employment prospects for an accountant in Bhutan?**

As industry further develops in Bhutan the employment opportunities for accountants will expand. There is also considerable scope for a qualified accountant to be self-employed offering accounting services to small and medium sized enterprises.

## 2.6.2 Public Relation Manager

### **Title: PUBLIC RELATION MANAGER**

**Description:** People working in public relations (PR) look after an organisation's image and reputation. They help to build and maintain good relationships with the media and with the organisation's public such as their customers, suppliers, investors and employees.

PR is part of the marketing and communications mix. It covers areas such as corporate communications, media relations or public affairs. People practising PR might work in-house for an organisation, or as an account executive within a consultancy with numerous clients.

## **Alternative and Related Titles:**

### **What does a Public Relation Manager do?**

- developing communication strategies and planning PR campaigns
- monitoring and safeguarding their organizations' reputation
- writing various communications and items of literature, including online blogs, news releases, brochures, speeches and multimedia presentations
- media relations, preparing statements and acting as a spokesperson
- Arranging events and launches and preparing award entries.

### **What are the working conditions for a Public Relation Manager?**

Public relations (PR) play a vital part in every organisation. It focuses on building and maintaining a positive relationship and reputation with different audiences including consumers, investors and other stakeholders, suppliers and employees. Increasingly, PR encompasses protecting online reputations and corporate and social responsibility (this relates to how an organisation is ethically meeting the environmental and social challenges today).

People practising PR might work in-house for an organisation, or may be an account executive within a consultancy, looking after a number of clients. PR, as part of the marketing and communications mix, covers areas like corporate communications, media relations or public affairs, so job titles and daily activities vary greatly.

### **What is the working environment like?**

PR officers usually work standard office hours, Monday to Friday, but with some flexibility as they may need to respond to tight deadlines or handle a crisis event. Part-time and flexitime working arrangements may be possible once experienced.

The work is largely office based, although it often involves frequent travel to meetings, conferences and other events.

### **What knowledge and skills do I need to be a Public Relation Officer?**

- strong communication and influencing skills



- excellent writing ability to clearly articulate messages
- organizational and time management ability
- creativity and initiative
- knowledge of different communication channels
- confidence speaking in public and advising senior management
- the ability to work well under pressure, to tight deadlines
- good research and analytical skills, to identify potential PR opportunities
- attention to detail
- good team working skills
- Self-assurance, particularly when pitching ideas to others.

**What personal qualities/attributes do I need to be a Public Relation Officer?**

- strong written, spoken and influencing skills
- the ability to plan, organize and manage different tasks
- creativity and initiative
- team working skills
- An interest in maintaining good working contacts with the media.

**What are the education requirements to become a Public Relation Manager?**

Bachelor Degree

**Can I study in Bhutan to become a Public Relation Manager?**

Yes.

**What are the employment prospects for a Public Relation Manager in Bhutan?**

There are good prospects for the employment of Public Relation Manager in Bhutan, particularly in the private and corporate sectors. PR play a vital part in the success of any enterprise and, increasingly, such positions will be filled by people with specific technical qualifications in this field.

**2.7. Information and communications technology professionals**

**2.7.1 Database and network professionals**

**Title:** DATABASE AND NETWORK PROFESSIONAL

**Description:** Database and network professional plan, manage and

maintain the databases that private companies and public sector organizations use to help them organize their work, design business strategies and target their communication.

### **Alternative and Related Titles: DATABASE ADMINISTRATOR**

#### **What does a Database and network professional do?**

- contributing to database design
- setting up and testing new databases
- monitoring database efficiency
- maintaining the security and integrity of information
- creating complex query definitions that allow data to be extracted
- training others in how to input and extract information
- Controlling access to the database.

#### **What are the working conditions for a database and network professional?**

Databases are searchable lists of related information, such as customer details, sales records or inventories. Database administrators plan, manage and maintain the databases that private companies and public sector organisations use to help them organise their work, design business strategies and target their communication.

Levels of responsibility vary widely, ranging from inputting information to complete management of data. Database administrators may also test and implement new systems.

#### **What is the working environment like?**

Working hours are usually standard office hours. There are opportunities for part-time work. Some administrators provide out-of-hours support remotely and may be on call.

Database administrators spend a great deal of their time in an office working at a computer workstation, analysing information and dealing with telephone enquiries.

In larger companies, they may travel to different office sites for meetings, presentations and to conduct training. A driving licence may be useful.

**What knowledge and skills do I need to be a database and network professional?**

- knowledgeable about IT and web applications
- organized, analytical and methodical
- understand the laws regarding privacy and data storage
- business focused
- Interested in keeping up to date with changing technology.

**What personal qualities/attributes do I need to be a database and network professional?**

- using IT and the internet
- Working in an environment where the technology is constantly evolving.

**What are the education requirements to become a database and network professional?**

Degree level

**Can I study in Bhutan to become a database and network professional?**

There are no special sources for database and network professional in Bhutan and study abroad is normally required. Alternatively, you could acquire the required knowledge and skills by building on natural talents under the supervision of an experienced designer.

**What are the employment prospects for a database and network professional in Bhutan?**

Career in graphic design are closely related to the professional marketing of goods and series. As the marketing industry remains undeveloped in Bhutan employment opportunities in this field are limited.

2.7.2 Graphic Designer

**Title: GRAPHIC DESIGNER**

**Description:** A graphic designer applies artistic and creative techniques to products design, the design of annual reports, magazines, product packaging, labels, posters and books, and other aspects of sales promotion and marketing.

## **Alternative and Related Titles: GRAPHIC ARTIST/COMMERCIAL ARTIST**

### **What does a graphic designer do?**

- Designs commercial advertising images to assist in the promotion of and sale of products.
- Designs promotional material including leaflets, pamphlets, brochures, posters, logos, and for the design of packaging materials.
- Conveys messages to a wider audience through the use of visual communication techniques.
- Applies computer technology to the design of promoting materials.
- Works in close cooperation with production, marketing and sales personnel in the organization.

### **What are the working conditions for a graphic designer?**

A graphic designer normally works in the private sector and receives salary and benefits related to the level of skill, experience and reputation of the individual. Some graphic designers are self-employed with their earnings related to their reputation and creativity. The hours of work for a graphic designer can be irregular as it is necessary to adjust to the needs of the client.

### **What is the working environment like?**

Graphic designers work indoors in a studio in an environment characterized by sketches, drawings, designs and colors. Increasingly, graphic designers rely on computers to assist them with their work. The environment is one of activity and creativity. Graphic designers can experience some stress related to their need to meet deadlines set by clients.

### **What knowledge and skills do I need to be a graphic designer?**

- High level communication skills relying on design, illustration and color as well as verbal skills.
- Knowledge of drawing and graphic techniques.
- Drawings skills.
- Computer skills.
- Ability to transform concepts and ideas into real terms.

**What personal qualities/attributes do I need to be a graphic designer?**

- An interest in artistic communication.
- An interest in marketing.
- Creativity and imagination.
- Ability to work under pressure.

**What are the education requirements to become a graphic designer?**

There are no formal education requirements to become a graphic designer other than a good general education and the ability to read, write and draw. Increasingly, however, people interested in a career as a graphic artist undertake a degree in Fine Arts. This normally takes three years after the completion of secondary schooling.

**Can I study in Bhutan to become a graphic artist?**

There are no special sources for graphic artists in Bhutan and study abroad is normally required. Alternatively, you could acquire the required knowledge and skills by building on natural talents under the supervision of an experienced designer.

**What are the employment prospects for a graphic designer in Bhutan?**

Career in graphic design are closely related to the professional marketing of goods and series. As the marketing industry remains undeveloped in Bhutan employment opportunities in this field are limited.

### 2.7.3 Software and applications developer and analysis

**Title: SOFTWARE AND APPLICATIONS DEVELOPER AND ANALYSIS**

**Description:** Software developers and programmers are responsible for designing, developing, testing and implementing software for their clients to improve business efficiency and productivity. They may also develop and improve existing programmes by analysing and identifying areas that may need to be changed.

**Alternative and related titles: SOFTWARE DEVELOPER****What does software and application developer do?**

They work closely with analysts, designers and commercial staff to write new programming codes from scratch or adapt existing software. They develop

user interfaces, carry out any necessary tests to the system to spot bugs in the software and ensure that staff and operators are familiar with the new or revised system.

### **What are the working conditions for a software developer?**

Software developers and programmers usually work normal office hours, but may work extra hours, including weekends and evenings, to meet deadlines. They usually work in an open plan office. Some travelling may be required.

### **What is the working environment like?**

A software developer works indoors with computers, computer programs, and people.

### **What knowledge and skills do I need to be a software developer?**

A software developer should:

- have excellent IT skills
- be good at problem solving
- be quick to understand new IT packages and techniques
- have good communication skills
- be thorough and precise in their work
- be interested in new developments in IT.

### **What personal qualities/attributes do I need to be a software developer?**

- An interest in working with computers.
- Interest in solving problems.
- Ability to work under pressure.
- A degree of patience.

### **What are the education requirements to become a software developer?**

Software developers are usually educated to degree level, though some may have qualifications at Higher National Diploma level along with work experience. Another option is vocational training combined with professional certification or through an Apprenticeship.

Most training is on the job and includes in-house training courses and qualifications. Several organizations offer membership and professional development. Many private sector suppliers offer training and qualifications in specific aspects of IT.

It is possible to specialize in a technical hands-on role, or move into team management. Experienced programmers can also use their business experience and knowledge to work as IT consultants.

**Can I study in Bhutan to become a software developer?**

Yes, you can study for a Bachelor of Science in Computer Science at Sherubtse College. This is a three-year course, with entry after Year 12.

**What are the employment prospects for a software developer in Bhutan?**

Software developers and programmers are employed across all industry sectors, from finance and retail to engineering, transport and public organizations.

Also software developers are now found in a wide variety of government and business services, thereby providing very good employment opportunities.

#### 2.7.4 System Analyst

**Title: SYSTEM ANALYSIS**

**Description:** A computer systems designer conducts research to improve and develop computer concepts and operational methods and advise on and engage in their practical application.

**Alternative and Related Titles: COMPUTER ANALYST / DATA BASE ANALYST / SYSTEMS ANALYST / INFORMATION TECHNOLOGIST, COMPUTER SYSTEMS DESIGNER**

**What does a computer systems designer do?**

- Researches the principles and operational methods of computers and computer systems used for information communication and processing.
- Maintains data systems and data bases to ensure their validity and safety.
- Analyzes computer user requirements through consultations, to determine hardware and software configurations.
- Writes program specifications and prepares technical reports and instruction manuals for users.
- Designs, writes, maintains and up-dates software which controls

the overall functioning of computers, and that link computer hardware and software applications.

- Designs and implements communication networks and linkages between different computer installations.
- Prepares scientific papers and reports.

### **What are the working conditions for a computer systems designer?**

In the Royal Civil Service, a computer system designer is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. In the corporate and private sector a computer systems designer is employed as a professional with salary and benefits similar to those for other professionals. The hours of work are regular with a relatively low need for evening and weekend work.

### **What is the working environment like?**

A computer systems designer normally works in an office situation, with constant use of computers and software programs. The working environment is usually pleasant and hazard free. A computer systems designer can face stressful situations when systems do not operate as planned.

### **What knowledge and skills do I need to be a computer systems designer?**

- Good communication skills.
- High-level computer skills.
- Logical thinking skills.
- Ability to analyze and solve problems.

### **What personal qualities/attributes do I need to be a computer systems designer?**

- An interest in computers and their application.
- Interest in the way organizations operate, and how their various functions fit together.

### **What are the education requirements to become a computer systems designer?**

The normal qualification for a career in computer systems design is a Bachelor's Degree in Computer Science or Information Technology, usually of



3-4 year's duration. This might be followed by post-graduate studies or short courses for specific applications.

### **Can I study in Bhutan to become a computer systems designer?**

Yes, it is possible to study for a Degree in Computer Science at Sherubtse College/Royal Thimphu College. Entry to the degree course requires passes in Class 12. Post-graduate study in computer systems is not currently available, and must be done abroad.

### **What are the employment prospects for a computer systems designer in Bhutan?**

There are good employment prospects in this field in government, as well as the corporate and private sectors. As Bhutan continues to embrace computer technology at all levels there is a need for the design of systems within government and industry that operate efficiently and respond to the needs of users.

There is some scope for computer systems designers to work as self-employed consultants, offering their services to government and industry on a fee-for-service basis. These opportunities are expected to increase as the private and corporate sectors grow and computer culture becomes the norm.

## 2.7.5 Web designer

### **Title: WEB DESIGNER**

**Description:** Web designers/developers are responsible for the design, layout and coding of a website. They are involved with the technical and graphic aspects of a website, how the site works and how it looks. They can also be involved with the maintenance and updating of an existing site.

### **Alternative and Related Titles:**

### **What does a Web designer do?**

- gathers the content elements including text, images, logos, video, sound and animation
- lays out the web pages, placing elements to fit the design that has been agreed
- tests the website interaction and identifies any technical problems

- tests the website performance on different search engines and platforms
- Uploads the site onto a server and registers it with search engines.

### **What are the working conditions for Web designer?**

A web designer/developer often works as part of a team, which may include a web writer/editor and an account manager. They may advise clients on ways of using the web to meet their business needs.

Web designers/developers are responsible for the design, layout and coding of a website. They are involved with the technical and graphic aspects of a website, how the site works and how it looks. They can also be involved with the maintenance and updating of an existing site.

Their role is a combination of computing expertise, including ensuring the site loads correctly and that all its functions work properly, and creativity. Websites commonly integrate user actions, graphics, multimedia and design features.

### **What is the working environment like?**

They work closely with the client or business function responsible for the website. A business may rely on its site to sell products and services, to provide information or to get viewers to respond, so the job of the web designer/developer involves making the site as attractive, clear and easy to use as possible.

Many designers/developers are self-employed and may work from home. Part-time and flexible hours may be available.

It is usual to work in an open plan office. Some travelling may be required if designers/developers need to meet clients.

### **What knowledge and skills do I need to be web designer?**

- have skills in website coding and graphics software packages
- have creativity and imagination
- be adaptable and able to pick up new techniques
- be able to work on their own or in a team
- be able to work with clients and other people involved in the

- project or business
- be able to communicate their ideas clearly
- be able to work to tight deadlines
- be thorough and precise in their work
- Be able to handle a number of tasks at the same time.

**What personal qualities/attributes do I need to be web designer?**

- keeping up to date with web technology and design trends
- The internet and the possibilities it offers businesses.

**What are the education requirements to become a web designer?**

Web designers/developers can start their careers via a number of different routes. They may study information technology, specialising in web development or begin by studying for design qualifications. Many have a degree or foundation degree, but some employers will be more interested in a strong portfolio of work and experience.

The Diplomas in information technology or creative and media may be relevant.

**Can I study in Bhutan to become web designer?**

Yes, it is possible to study for a Degree in Computer Science at Sherubtse College/ Royal Thimphu College. Entry to the degree course requires passes in Class 12. Post-graduate study in computer systems is not currently available, and must be done abroad.

**What are the employment prospects for web designer in Bhutan?**

There are good employment prospects in this field in government, as well as the corporate and private sectors. As Bhutan continues to embrace computer technology at all levels there is a need for the design of systems within government and industry that operate efficiently and respond to the needs of users.

Many designers/developers are self-employed and may work from home. Part-time and flexible hours may be available.

## 2.8. Legal, social and cultural professionals

### 2.8.1 Archivist

#### **Title: ARCHIVIST**

**Description:** An archivist conducts research, collects and appraises materials and objects of historical, cultural and artistic interest, and ensures their safekeeping and preservation.

#### **Alternative and Related Titles: CURATOR**

#### **What does an archivist do?**

- Researches and appraises historically significant and valuable documents (e.g. government papers, photographs, sound recordings, films) and arranges for their safety and preservation.
- Supervises the preparation of indexes and bibliographies and reference aids to enable collected materials to be accessible to users.
- Supervises the classification and cataloguing of collected materials and objects.
- Researches the origin and use of materials and objects collected.
- Organizes, develops and maintains collections of artistic, cultural, scientific or historically significant items in museums and art galleries.
- Organizes exhibitions and displays of collected materials and objects.
- Prepares scholarly papers and reports.
- Supervises the work of subordinate staff.

#### **What are the working conditions for an archivist?**

An archivist in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular.

#### **What is the working environment like?**

An archivist works in a museum or gallery in an environment characterized by books, valuable documents and photographs, and works of art. Archive

materials have to be protected against theft and damage and thus the environment must be safe from fire and water hazards, pests, and ensure that every possible precaution is taken against the deterioration that is natural for paper. The environment is characterized by system and order, as well as the safety and protection of valuable assets.

**What knowledge and skills do I need to be an archivist?**

- Research skills.
- Knowledge of techniques for the prevention of deterioration of paper.
- Knowledge of computer systems.
- Computer skills.
- Ability to lead and motivate others.
- Good general knowledge.

**What personal qualities/attributes do I need to be an archivist?**

- An interest in history.
- Concern for neatness and accuracy.
- An interest in systems and orderly arrangements.

**What are the education requirements to become an archivist?**

An archivist normally has a degree in social sciences (e.g. Arts, Economics, Public Administration) and sometimes pursues post-graduate studies.

**Can I study in Bhutan to become an archivist?**

Yes, you can study for a bachelors degree in Bhutan and then learn the practical aspects of being an archivist under the supervision of an experienced person.

**What are the employment prospects for an archivist in Bhutan?**

There are few opportunities for the employment of archivists in Bhutan. There are no opportunities for self-employment in this field.

2.8.2 Curator

**Title: CURATOR**

**Description:** Curator is responsible for the entire collection management, standards of documentation, records and interpretation of the collection of the museum.

## **Alternative and Related Titles:**

### **What does Curator do?**

- Carry out collection development and management programme;
- Implement development and management of exhibitions and audio-visual programming, activities, materials and events which attract and serve a wide range of audiences, including schools;
- Conduct research and documentation of the collections in all discipline or areas;
- Instruct in production and budgeting of exhibitions including proposals, design costing, construction, scheduling, maintenance and repairs;
- Participate in the creation of exhibitions and public programmes;
- Carry out acquisition and de-accessioning of the artifacts;
- Design and implement a collection research programme;
- Instruct to create conducive environment for research and learning in the museum.
- Participate in circulation of traveling exhibitions and achievement of revenue targets associated with the exhibitions;
- Participate in selection, evaluation, preservation, restoration and exhibition of objects;
- Integrate the museum's information database on its collections with national or international networks;

### **What are the working conditions for Curator?**

He is the pivot of all the information sourcing and management for all types of artifacts in the museum. This position is responsible for complex work of identification, dating and history of the collections and it is intellectually complex and steps involved in it are difficult in gathering correct information and making them accessible to the users. The position has to design and develop new systems and processes related to museum management to suit the needs of the clients.

The individual is required to undertake analysis of the updated different museum systems and processes to identify artifacts and create alternative designs for the museum as per the demand of the users. The entire museums in the country would depend on this position to benchmark the systems and

processes of the museum.

This position requires designing good classification, cataloguing, retrieval, archival and protection techniques and it demands different skills and competencies, which again warrants analytical and synthesis ability.

### **What is the working environment like?**

Curator is responsible and constantly at risk of the artifacts in his possession of being lost, destroyed by natural calamities and man-made threats in which loss of cultural property and history might occur permanently. He/she is constantly under mental and physical exertion during the entire tenure of service. This job is different from other clerical jobs where mental discomfort like fear is there.

The curator's position in a museum is crucial one and his breadth of work performance within a museum and its effect in functioning of the museum depend on it. Scope of his work is wide-ranging from conserving and preserving of our cultural heritage to safeguarding the artifacts to pass on to our future generation

Curator should be the think tank for disseminating the information on history and culture of our country and for developing conducive environment for appreciation of our cultural value. The effect of the work of this position would have significant impact on the socio cultural spheres of our nation.

### **What knowledge and skills do I need to be curator?**

- Fluency in English, *Choekey*,
- Dzongkha and other languages
- Right attitude, dedication and commitment in the profession.
- Knowledge on object classification, documentation, subscription, procurement, information technology and computer skills are must.
- Government rules and regulations;
- Museum Rules & Regulations
- Museum ethics

### **What personal qualities/attributes do I need to be curator?**

The curator is required to maintain frequent contacts with different museums,

conservation centers and other related institutions within and outside the country to keep abreast of the new technology and developments in the museum management. Frequency of such contacts is to share experiences and information resources.

### **What are the education requirements to become curator?**

Bachelors Degree.

### **Can I study in Bhutan to become curator?**

Yes, Degree studies may provide you with technical studies in a particular field but do not qualify you to be curator. You can become a curator by Specializing knowledge and demonstrated excellence in one discipline or area of the museum's collection; Knowledge of collecting ethics and current evidence of scholarly research/publication/Museum Management.

### **What are the employment prospects for curator in Bhutan?**

Employment opportunities for curators in Bhutan are limited and largely confined to government.

## 2.8.3 Author

### **Title: AUTHOR**

**Description:** An author writes literary works for publication or presentation in dramatic form.

**Alternative and Related Titles: WRITER, EDITOR, JOURNALIST, AUTHOR-ILLUSTRATOR** (Some authors prepare the illustrations for their stories)

### **What does an author do?**

- Conducts research and collects information for the preparation of technical and literary works.
- Creates and writes literary works for publication including text books, novels, biographies, children's stories, short stories, poems or plays for presentation in dramatic form.
- Writes scripts for stage, film, radio and TV productions.



- Writes critical appraisals of literary, musical and other artistic performances.

### **What are the working conditions for an author?**

An author is usually self employed who either writes on a free-lance basis, or is engaged on a retainer. Most authors, however, write a manuscript and then search for a publisher. The most famous authors usually have publishers pursuing them. The earnings of an author are very variable. If an author has a manuscript accepted for publication the author normally receives a royalty on each copy sold. If a manuscript is not accepted for publication, the author does not receive an income. Because of the uncertainty of income many authors can only afford to be writers on a part time basis. Authors do not work regular hours. As self-employed persons they work the hours that suit them.

### **What is the working environment like?**

An author works indoors in an environment characterized by books, documents and computers. Sometimes an author works outdoors when conducting research but increasingly authors rely on the internet for research purposes. Modern authors make considerable use of computer technology. Authors may suffer stress and anxiety when they are waiting for a publisher's decision.

### **What knowledge and skills do I need to be an author?**

- High level writing skills.
- Knowledge of technical subjects for non-fiction work.
- The ability to create characters and situations for fiction work.
- Computer skills.
- Good vocabulary and knowledge of grammar.
- The ability to transform ideas and images into words.

### **What personal qualities/attributes do I need to be an author?**

- A genuine interest in writing, whether fiction or non-fiction.
- Imagination and creativity.
- An interest in details.
- Patience.

### **What are the education requirements to become an author?**

There are no formal education requirements to become an author, apart from the ability to read and write. Many authors acquire the required knowledge and skills through practice and practical experience.

### **Can I study in Bhutan to become an author?**

There are no formal training courses or education that you can undertake to become an author in Bhutan. Degree studies may provide you with technical studies in a particular field but do not qualify you to be an author. You can become an author by writing and practicing and having your work constructively criticized by others.

### **What are the employment prospects for an author in Bhutan?**

There are few people in Bhutan who make their living as authors. Bhutan, however, is rich in subjects of interest to authors and the future is expected to see more Bhutanese becoming authors, perhaps on a part-time basis at first.

## 2.8.4 Interpreter

### **Title: INTERPRETER**

**Description:** In Bhutan an interpreter is generally understood to mean a person who translates written documents from English to Dzongkha or vice versa, while maintaining the accuracy, meaning, spirit and feeling of the original document.

**Alternative and Related Titles:** Translator (An translator translates oral language during tshogdu chhenmo sessions or in any other situation where it is necessary to communicate the works and meanings expressed in one language into another. Except for the thogdu chhenmo sessions, interpreters' services are not widely used or required.)

### **What does an interpreter do?**

- Reads and studies the original text to understand meaning.
- Translates the original text of one language into another language as, for example, from Dzongkha to English, or English to Dzongkha.
- Uses dictionaries and other sources to determine meanings of words and phrases.

- Translates a wide range of written materials, documents and literature.
- Makes sure that phrases and terminologies in chathrims or acts, and technical, medical and scientific texts are accurately translated.
- Revises translations done by others.
- Develops and applies computer technology to improve the quality and efficiency of translations.

### **What are the working conditions for a interpreter?**

As there are very few people who are proficient and adequately qualified to understand, read, write and use a high standard of Dzongkha and English, translators are much in demand and earn good money. An experienced and highly competent translator can translate about 25 pages of even the most complicated and complex work in a week. Translators generally work regular hours but some after hours and weekend work may be required in special situations.

### **What is the working environment like?**

A interpreter works indoors all the time, working with a computer or typewriter for long hours, with full mental alertness and concentration. An interpreter is sometimes required to work to strict time deadlines, and this can sometimes be stressful.

### **What knowledge and skills do I need to be a interpreter?**

- Excellent command of both Dzongkha and English.
- Working knowledge of chhoekey.
- Good research skills and broad general knowledge.
- Able to work accurately and objectively.
- High memory retention and good concentration.
- Good computer skills.
- Thorough understanding of Bhutan's tradition and culture, and social and political system and institutions.

### **What personal qualities/attributes do I need to be a interpreter?**

- Meticulous work attitude and approach.
- Interest in language and learning.
- Self-motivated and hardworking.

- Able to maintain confidentiality.

### **What are the education requirements to become an interpreter?**

There is no predetermined education requirement although a Bachelor of Arts Degree is desirable. If you do not have a degree but possess all the skills listed above, you can become a translator.

### **Can I study to become an interpreter in Bhutan?**

Yes, you can learn basic skills on your own, or with the help of a senior interpreter. For specialization you will need to study abroad.

### **What are the employment prospects for interpreters in Bhutan?**

The National Assembly Secretariat, Dzongkha Development Authority, BBSC, kuensel, government departments and ministries, and international organizations based in Bhutan use the services of interpreters. At the moment few people who have taken up interpreter as a full-time profession and there are good job prospects for competent translators.

## 2.8.5 Journalist

### **Title: JOURNALIST**

**Description:** A journalist researches, investigates, and writes news stories, commentaries and features for newspapers, magazines, radio and TV stations.

**Alternative and Related Titles:** REPORTER / EDITOR / CORRESPONDENT / PRODUCER (All these are positions that a journalist may hold.)

### **What does a journalist do?**

- Gathers news and information by interviewing people and attending events.
- Carries out research to provide background information for stories.
- Analyzes and verifies information for accuracy.
- Writes news stories for publication and broadcast.
- Reviews and edits copy to ensure it follows required style and format.
- Proofreads manuscripts.
- Writes editorials and commentaries on topics of current interest.

**What are the working conditions for a journalist?**

Journalists lead very busy, existing and interesting lives. They constantly travel and meet and interact with people from different backgrounds, professions and nationalities. The working hours for a journalist can be irregular requiring after hours and weekend work to accommodate current events and to meet publication deadlines.

**What is the working environment like?**

Journalists work indoors as well as outdoors in all kinds of weather. As they work long irregular hours and are often under pressure to meet deadlines they face considerable stress.

**What knowledge and skills do I need to be a journalist?**

- Exceptional command of either English or Dzongkha or both.
- Good communication skills...
- Able to write clear, concise, objective and accurate material, quickly.
- Good general knowledge.
- Computer and shorthand skills.
- Able to speak clearly when working on radio and television.
- Able to work according to strict deadlines.
- Able to live and work in all work environments and conditions.

**What personal qualities/attributes do I need to be a journalist?**

- Interest in current events, reading and writing.
- Curious and inquisitive.
- Interest in people and traveling.

**What are the education requirements to become a journalist?**

You need a University Degree in any discipline, including a degree or diploma in journalism. Having exceptional communication and writing skills would be a definite advantage.

**Can I study to become a journalist in Bhutan?**

Yes, you can get basic in-house training in journalism after you are recruited by media organizations after completion of bachelors' Degree in any field. For extensive studies or specialization you will have to go abroad.

### **What are the employment prospects for journalists in Bhutan?**

There is a high turnover rate in the journalistic profession and there are always openings for new journalists. Journalism also opens many new opportunities and avenues. With some years of journalistic experience you can work as a consultant, writer, researcher, or publicity officer. In the not too distant future large government and commercial organizations may recruit journalists to write documents, reports and media releases. You can be self-employed and work as a freelance journalist.

### 2.8.6 Judge

#### **Title: JUDGE**

**Description:** Judges preside over law courts and make judgments based on the evidence presented.

#### **Alternative and Related Titles:**

#### **What does a Judge do?**

- listen to information and evidence presented in court
- come to a decision based on the facts
- Instruct and advise the jury on evidence during court proceedings.
- Pass sentences.

#### **What are the working conditions for a Judge?**

A Judge in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances.

#### **What is the working environment like?**

They may preside over civil cases and hearings in family courts. Judges who hear civil and family cases will often try to resolve difficulties between parties. This may be by awarding compensation or making a legally binding order for the parties to behave in a particular way.

Judges work in courts and in offices referred to as 'chambers'. Their working hours vary, depending on when the court is in session, and can involve evening work.

### **What knowledge and skills do I need to be a Judge?**

- have a thorough knowledge of all aspects of the law
- be able to understand and interpret complex legal information and arguments
- be able to communicate well with many different people
- be able to work independently and rely on their own judgement
- be polite and considerate to people who are very upset and emotional
- take responsibility for the consequences of their decisions
- be interested in the law and giving a service to the community.

### **What personal qualities/attributes do I need to be a Judge?**

- A highly developed sense of fairness and justice.
- A willingness to serve people.
- Honesty and trustworthiness.
- Objectivity.
- Self-confidence.

### **What are the education requirements to become a Judge?**

Bachelors Degree in law that normally takes 5 years after Class 12 with post-graduate studies to equip them for special fields of law such as taxation law, company law, family law, and labour law.

### **Can I study in Bhutan to become a Judge?**

No. Study abroad is required.

### **What are the employment prospects for a Judge in Bhutan?**

There are employment opportunities for Judge in the Royal Civil Service. As Bhutan's legal system develops there will be additional opportunities for Judge.

## 2.8.7 Lawyer

### **Title: LAWYER**

**Description:** A lawyer gives legal advice to an employer or clients on a wide variety of civil and criminal law matters, and pleads cases and conducts prosecutions in courts of law. Some lawyers are 'non-practicing' in the sense they do not represent clients but are involved in drafting laws, teaching and

research, and related activities.

**Alternative and Related Titles: ATTORNEY / ADVOCATE / BARRISTER / SOLICITOR / MAGISTRATE / JUDGE**

**What does a lawyer do?**

- Conducts research on legal principles and court judgments.
- Drafts legislation, and prepares regulations based on existing laws.
- Provides legal advice to managers and employers, and conducts legal business on behalf of private clients.
- Assist managers and clients to negotiate settlements in matters involving legal disputes.
- Examines the circumstances of disputes or reported crimes to ascertain facts and their legal implications.
- Prepares pleadings for plaintiffs or defendants and conducts cases on their behalf.
- Draws up legal documents including commercial contracts, leases, and other documents.
- Supervises the work of subordinate staff.

**What are the working conditions for a lawyer?**

A lawyer in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A lawyer employed in the corporate or private sector is a senior professional and receives a salary and benefits similar to other professionals and senior managers. The hours of work are regular but a lawyer may be required to spend additional time 'after hours' preparing briefs, and giving advice.

**What is the working environment like?**

A lawyer works indoors, either in an office or court-room. In a court room the environment is formal and the lawyer must behave in accordance with strict procedures. The working environment is generally hazard-free, although a lawyer may experience stress and anxiety when handling important cases in court.



**What knowledge and skills do I need to be a lawyer?**

- High-level communication skills.
- Good analytical skills.
- Detailed knowledge of laws and regulations.
- Good writing skills and ability to explain difficult legal concepts in simple language.
- Computer skills
- Advocacy skills for courtroom work.
- Problem identification and problem solving skills.

**What personal qualities/attributes do I need to be a lawyer?**

- A highly developed sense of fairness and justice.
- A willingness to serve people.
- Honesty and trustworthiness.
- Objectivity.
- Self-confidence.

**What are the education requirements to become a lawyer?**

The usual qualification for a career as a lawyer is a Bachelors Degree in law that normally takes 5 years after Class 12. Some lawyers undertake post-graduate studies to equip them for special fields of law such as taxation law, company law, family law, and labour law.

**Can I study in Bhutan to become a lawyer?**

No. Study abroad is required.

**What are the employment prospects for a lawyer in Bhutan?**

There are employment opportunities for lawyers in the Royal Civil Service, and also as advisers in the corporate and private sectors. As Bhutan's legal system develops there will be additional opportunities for lawyers. There is considerable scope for lawyers to be self-employed or in partnership with other lawyers offering their services to individuals, companies and government on a fee-for service basis.

### 2.8.8 Librarian

**Title:** LIBRARIAN

**Description:** A librarian collects and stores published or recorded

materials in various formats, and retrieve and accesses information for users, as requested.

**Alternative and Related Titles: INFORMATION OFFICER, DOCUMENTALIST, INFORMATION SCIENTIST**

**What does a librarian do?**

- Organizes, develops and maintains a systematic collection of books, periodicals and other print materials, and audio-visual and other non-print materials.
- Prepares catalogues to organize and classify library materials.
- Selects and recommends acquisitions of library materials for users.
- Organizes and administers a loan system for users of library materials.
- Organizes information networks to enable access to materials held by other libraries.
- Retrieves information and materials on specific topics for users from the collection itself or from inter-library networks.
- Monitors developments in library science and practice and modifies existing and develops new information services to meet emerging needs.
- Prepares scholarly papers and reports
- Supervises the work of subordinate staff.

**What are the working conditions for a librarian?**

A librarian in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular with few requirements for overtime work. Few librarians are employed in the private or corporate sectors.

**What is the working environment like?**

A librarian is an environment characterized by information in a wide variety of forms, not only books and periodicals. The environment is organized and orderly to ensure that materials can be easily located and retrieved. The environment must also provide for the protection of materials against fires,

water, pests, and natural deterioration.

**What knowledge and skills do I need to be a librarian?**

- Good communication and interpersonal skills.
- Knowledge of library classification systems.
- Good general knowledge.
- Computer skills.
- Ability to lead and motivate others.
- Ability to organize.

**What personal qualities/attributes do I need to be a librarian?**

- Interests in helping people satisfy their information needs.
- An interest in tidiness and system.
- Responsible and reliable.

**What are the education requirements to become a librarian?**

Increasingly, most librarians have a degree in library science or information science. This is normally of three year's duration after Class 12. Formerly, librarians acquired the knowledge and skills to be a librarian through on the job training and practical experience but now it is common to study for a degree as the entry point to a career in library science.

**Can I study in Bhutan to become a librarian?**

There are no formal courses in library or information science in Bhutan. It is possible, however, to learn to be a librarian through practical experience under the supervision of an experienced librarian.

**What are the employment prospects for a librarian in Bhutan?**

Employment opportunities for librarians in Bhutan are limited and largely confined to government. There are no opportunities for self-employment as a librarian.



## KHORLO



*The Khorlo (wheel) is one of the most important Buddhist symbols, as it represents the teachings of the Buddha. The Buddha was the one who “turned the wheel of the dharma” and thus the wheel symbol is the Dharmachakra, or “wheel of law.” The Tibetan term for this symbol, chos kyi’khor lo, means “the wheel of transformation.”*

# Technicians and Associate Professionals

3. **Technicians and associate professionals**
  - 3.1. **Science and engineering associate professionals**
    - 3.1.1 Air Safety technicians

**Title: AIR SAFETY TECHNICIAN**

**Description:** An air safety technician performs technical tasks concerning the design, installation, operation, maintenance and repair of air traffic control and air navigation systems.

**Alternative and Related Titles:**

**What does an air traffic safety technician do?**

- Provides technical support in the development of electronic and electro mechanical equipment of air navigation equipment and systems.
- Tests prototypes of new electronic and electro mechanical equipment of air navigation equipment.
- Contributes to the preparation of cost estimates and technical training specifications for air traffic control and safety equipment.
- Provides technical support for the supervision, construction, installation and operation of ground based air navigation equipment, its maintenance and repair to ensure compliance with standards.
- Applies knowledge of air traffic safety engineering principles and practices in order to identify and solve problems arising at work.
- Modifies existing ground based air navigation equipment to adapt it to new air traffic control procedures.
- Controls and calibrates ground-based air navigation instruments to ensure maximum accuracy and safety of flight, take off and landing operations.

**What are the working conditions for an air traffic safety technician?**

An air traffic technician is employed as a technical level within the Royal Civil Service. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The working hours are generally regular although at large airports shift work is

normal.

**What is the working environment like?**

An air safety technician works indoors in an environment characterized by modern electronic equipment and computers. The technician may experience periods of stress in times of equipment failure but in general the working environment is orderly and systematic.

**What knowledge and skills do I need to be an air traffic safety technician?**

- Good communication skills.
- Knowledge of the operation of electronic equipment.
- Computer skills.
- Analytical abilities.
- Ability to follow instructions and interpret drawings and diagrams.

**What personal qualities/attributes do I need to be an air traffic safety technician?**

- An interest in electronic equipment.
- A high concern for people's safety.
- Responsibility and reliability.
- Accuracy and precision.

**What are the education requirements to become an air traffic safety technician?**

A career as an air traffic safety technician normally requires the completion of diploma level studies in electronics or electronics engineering. The entry to such courses is Class 12 and the standard duration is 3 years.

**Can I study in Bhutan to become an air traffic safety technician?**

Yes, the Bachelor of Technology or the diploma level course at College of Science and Technology/ Jigme Namgyal Polytechnic provides a foundation for a career as an air traffic safety technician. The Degree course is of 4 year's duration with entry at Class 12, the Diploma course is of 3 year's duration. On completion of these courses, further training overseas is required to provide the knowledge and skills required for sophisticated electronic equipment.

## **What are the employment prospects for an air traffic safety technician in Bhutan?**

Bhutan has one airport and very few flights each day. Accordingly, the employment opportunities for air traffic safety technicians are limited. It is possible to gain employment in another country. There are no opportunities for self-employment in this field.

### **3.1.2 Air Traffic Controller**

#### **Title: AIR TRAFFIC CONTROLLER**

**Description:** An air traffic controller directs aircraft movements in airspace and on the ground, using radio, radar and lighting systems.

#### **Alternative and Related Titles:**

#### **What does an air traffic controller do?**

- Directs and controls aircraft in flight when approaching and leaving airports.
- Directs and controls aircraft movement on the ground at airports.
- Examines and approves flight plan submitted by air pilots.
- Informs pilots, flight crew and operations staff about weather conditions, operational facilities, flight plans and air traffic.
- Applies knowledge of principles and practice of air traffic control in order to identify and solve problems arising in their work.
- Initiates and organizes air emergency, search and rescue services and procedures.
- Supervises the work of subordinate staff.

#### **What are the working conditions for an air traffic controller?**

An air traffic controller is employed as a technical level within the Royal Civil Service. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. An air traffic controller at a busy airport is required to do shift work, including work at weekends. In Bhutan, weekend works is required but there is no night work for air traffic controllers.



**What is the working environment like?**

An air traffic controller works indoors at a control center at an airport ensuring that the flow of air traffic to and from the airport is orderly. At a busy airport where there are many flights every hour the environment can be stressful in that a mistake by the traffic controller could lead to a major accident.

**What knowledge and skills do I need to be an air traffic controller?**

- High level communication skills.
- Knowledge of flight rules and procedures.
- Ability to operate modern electronic equipment and instruments.
- Good observation skills.
- Ability to give clear instructions.

**What personal qualities/attributes do I need to be an air traffic controller?**

- An interest in aircraft.
- A high concern for safety.
- Good hearing and eyesight.
- High responsibility.
- The ability to remain calm when under pressure.
- The ability to concentrate for long periods.

**What are the education requirements to become an air traffic controller?**

An air traffic controller normally requires the completion of Class 12 followed by in service training over several years. This in service training includes both theory and practical training at an airport.

**Can I study in Bhutan to become an air traffic controller?**

No. Study abroad is required.

**What are the employment prospects for an air traffic controller in Bhutan?**

Bhutan has one airport and very few flights each day. Accordingly, the employment opportunities for air traffic controllers are limited. It is possible to gain employment in another country. There are no opportunities for self-employment in this field.

### 3.1.3 Aircraft mechanic

**Title: AIRCRAFT MECHANIC**

**Description:** An aircraft mechanic services, repairs and overhauls aircraft engines and accessories including the hydraulic system for the landing gear. In Bhutan, aircraft engine mechanics concentrate on services and operational repairs rather than full scale engine overhauls.

**Alternative and Related Titles: AIRCRAFT FITTER**

**What does an aircraft mechanic do?**

- Fits, examines, tests and services aircraft engines.
- Replaces engine components as required.
- Replace complete engines.
- Undertakes engine overhauls.
- Maintains hydraulic systems.

**What are the working conditions for an aircraft mechanic?**

There is only one employer of aircraft mechanics in Bhutan, namely, Druk Air Corporation. The wages and benefits for mechanics are determined by the Corporation. The hours of work for an aircraft mechanic can be irregular when operational problems occur and need to be attended to immediately with a view to having aircraft back in the air in the shortest possible time.

**What is the working environment like?**

An aircraft mechanic works in and outside aircraft, both when in a hangar and on the tarmac. The environment is one where precision and accuracy are paramount, but with a need to do things quickly to enable airlines to fly according to schedule. When repairs and maintenance take longer than planned flights have to be cancelled or rescheduled, resulting in tension and frustration.

**What knowledge and skills do I need to be an aircraft mechanic?**

- High level analytical skills.
- Ability to use testing equipment and hand tools.
- Knowledge of different aircraft and their engines and features.
- Ability to read and interpret plans, drawings and diagrams and follow instructions.

- Good communication skills.

**What personal qualities/attributes do I need to be an aircraft mechanic?**

- An interest in aircraft and how they fly.
- A concern for precision and accuracy.
- High sense of responsibility concerning safety.
- Good eyesight.
- Good color vision.
- A clear appreciation of the consequences of making mistakes.

**What are the education requirements to become an aircraft mechanic?**

An aircraft mechanic requires be qualifying and accrediting as a mechanic for a particular type of aircraft. Even if the mechanic has a degree or diploma in engineering or related field, it is still necessary to have the experience and experience and qualifications for each type of aircraft the mechanic is required to work on.

**Can I study in Bhutan to become an aircraft mechanic?**

You can obtain a Degree or Diploma at College of Science and Technology / Jigme Namgyal Polytechnic in automotive or auto electrical but these do not qualify you to be an aircraft mechanic. It is necessary to be trained overseas on the type of aircraft you will be required to work on.

**What are the employment prospects for an aircraft mechanic in Bhutan?**

Bhutan has a very limited demand for aircraft mechanics due to the small size of its aircraft fleet. Although Bhutan is introducing larger aircraft the number will remain small, thereby providing very limited employment opportunities for aircraft mechanics.

3.1.4 Auto electrician

**Title: AUTO ELECTRICIAN**

**Description:** An auto electrician installs, repairs, tests and troubleshoots electric and electronic systems connected to the operating system of motor vehicles.

**Alternative and Related Titles:** *AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN/AUTO ELECTRICAL FITTER/AUTO ELECTRICAL*

**MECHANIC** (These are formal titles. In most auto workshops auto electricians are simply called electricians’).

### **What does an auto electrician do?**

- Installs electrical equipment such as gauges, lighting, alternators and starter motors in vehicles.
- Installs electrically operated accessories such as radios, heating or demisting equipment, air conditioners, driving lamps and anti-theft systems.
- Uses meters, test instruments and circuit diagrams to find electrical faults.
- Repairs or replaces faulty ignition, electrical wiring, fuses, lamps and switches.
- Solders or welds when repairing electrical parts.
- Advises customers on installation and service and repair requirements and explains costs.

### **What are the working conditions for an auto electrician?**

An auto electrician works in the private sector and may be either an employee or self-employed. An auto electrician who is an employee receives wages and benefits related to the level of skill and experience. An auto electrician with a good reputation may attract a higher wage. An auto electrician may progress to a supervisory or management position after some years of service. The working hours for an auto electrician are regular although some overtime work is required from time to time.

### **What is the working environment like?**

Auto electricians mostly work outdoors at auto workshops, vehicle dealerships and service stations. They also work in the motor vehicle and in workshops. The working environment is similar to that for auto mechanics although auto electricians have less exposure to grease and oil.

### **What knowledge and skills do I need to be an auto electrician?**

- Manual dexterity.
- Good eyesight and color vision.
- Able to read, understand and interpret instruction manuals, schematics and diagrams.
- Able to lift, kneel, bend, stoop and stretch and work in confined

spaces if required.

- Knowledge of different makes and models of vehicles.
- Knowledge of electrical and electronic systems.
- Able to accomplish a task from start to finish.
- Able to approach work in a systematic and thorough way.

**What personal qualities/attributes do I need to be an auto electrician?**

- Interest in practical work.
- An interest in vehicles.
- Good eyesight.
- Good color vision (not color blind).
- An interest in details.
- Ready to work with different problems and tasks every day.
- Enjoy keeping up with and learning about new technology.

**What are the education requirements to become an auto electrician?**

You must complete higher secondary school and then pursue specialized training either Diploma/ Degree.

**Can I study to become an auto electrician in Bhutan?**

Yes. You can either take up the four year auto electrician's course at the TTIs or the Diploma on electrical engineering at the Jigme Namgyal Polytechnic.

**What are the employment prospects for auto electricians in Bhutan?**

Auto electrician has excellent employment prospects. There is scope for an auto electrician to become self-employed after some years of experience.

### 3.1.5 Cartographer

**Title: CARTOGRAPHER**

**Description:** A cartographer produces maps from a variety of sources including aerial photographs, historical manuscripts, and statistical reports.

**Alternative and Related Titles: MAP MAKER**

**What does a cartographer do?**

- Analyzes source material used for the preparation of maps (e.g. photographs, drawings, statistical records.)

- Draws different kinds of maps including topographical maps, climate maps, geographical maps, road maps, and street plans.
- Applies computer technology to map production.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

### **What are the working conditions for a cartographer?**

In the Royal Civil Service a cartographer is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Cartographers employed in the corporate sector are professionals and receive salary and benefits similar to other professionals. The hours of work for a cartographer are regular with few demands for evening and weekend work.

### **What is the working environment like?**

A cartographer works indoors in an office situation or a specially equipped drawing room. A cartographer makes extensive use of computers and other equipment to assist in the map drawing process. The working environment normally is pleasant and hazard free.

### **What knowledge and skills do I need to be a cartographer?**

- High level computer skills
- Drawing skills (although computer technology has largely replaced the need for drawing skills.)
- Ability to motivate staff towards the achievement of the organization's objectives.

### **What personal qualities/attributes do I need to be a cartographer?**

- Attention to detail.
- Accuracy.
- Good spatial perception.

### **What are the education requirements to become a cartographer?**

The normal requirement for a career in cartography is a Diploma or Bachelor's Degree in Cartography. Entry to such a course requires Class 12 with passes in mathematics and science, and preferably geography. Courses in cartography

combine both theory and practice.

**Can I study in Bhutan to become a cartographer?**

No. Study abroad is required.

**What are the employment prospects for a cartographer in Bhutan?**

Employment opportunities are limited and confined to government, which has responsibility for map-making in Bhutan.

After several years of relevant experience a cartographer may become self-employed and provide consulting services to government and large corporations. Such opportunities, however, are limited at present.

### 3.1.6 Draught Persons

**Title: DRAUGHT PERSON**

**Description:** A draught person transforms the ideas and concepts of engineers and architects into scale drawings.

**Alternative and Related Titles: TECHNICAL DRAUGHTPERSON**

**What does a draught person do?**

- Transforms concepts and ideas of other professionals into detailed drawings and plans.
- Prepares building plans, plans for machines and plans for structures.
- Prepares urban development plans.
- Prepares urban development plans.
- Applies computer technology to the preparation of detailed plans.
- Consults with professionals (engineers, architects) to that detailed plans accurately reflect their concepts and ideas.

**What are the working conditions for a draught person?**

A draught person in the Royal Civil Service normally will be employed as a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances.

A draught person in the private or corporate sector is usually employed as a technician or associate professional working under the supervision of others. The salary and benefits are similar to other technicians but below those applying to professionals such as engineers and architects. The hour of work for a draught person are regular, with after hours and weekend work confined to circumstances where deadlines must be met.

### **What is the working environment like?**

A draught person works indoors with a drawing board and drawing instruments. Increasingly drawings are prepared using computers and special computer programs. The work of a draught person requires good light and seating arrangements that are comfortable to encourage good posture and reduce back and shoulder strain.

### **What knowledge and skills do I need to be a draught person?**

- Good visualization skills to enable concepts to be transformed into two and three dimensional drawings.
- Ability to communicate with professional persons.
- Knowledge of draughting procedures and techniques.
- Good computer skills.

### **What personal qualities/attributes do I need to be a draught person?**

- A strong interest in details.
- A high concern for accuracy.
- Responsibility and reliability.

### **What are the education requirements to become a draught person?**

A career as a draught person usually requires the completion of a two or three year diploma course. Entry to such courses requires Class 12 with passes in mathematics, physical sciences and technical drawing. These courses usually involve a combination of theoretical study and practical training within an approved enterprise.

### **Can I study in Bhutan to become a draught person in Bhutan?**

No. It is necessary to study abroad.

### **What are the employment prospects for a draught person in Bhutan?**

The development of Bhutan's infrastructure will require the services of



engineers and architects who, in turn, require the services of a draught person. As Bhutan grows the demand for draught persons will increase with opportunities in both the Royal Civil Service as well as the private and corporate sectors. After acquiring suitable experience there is scope for a draught person to become self-employed, but the set-up cost for computer equipment is considerable.

### 3.1.7 Electrical Mechanic

**Title:** ELECTRICAL MECHANIC

**Description:** An electrical mechanic installs, adjusts, repairs and services electrical machinery and equipment in factories, workshops and buildings.

**Alternative and Related Titles:** ELECTRICAL FITTER

**What does an electrical mechanic do?**

- Installs, adjusts and services various types of electrical machinery, motors, generators, and control apparatus.
- Repairs and various types of electrical motors in factories and workshops.
- Repairs electrical parts in domestic appliances.
- Inspects and tests manufactured electrical products.

**What are the working conditions for an electrical mechanic?**

An electrical mechanics works in the private sector and may be either an employee or self-employed. A electrical mechanic who is an employee receives wages and benefits related to the level of skill and experience. An electrical mechanic with a good reputation may attract a higher wage. The working hours for an electrical mechanic are regular although some over time work is required from time to time, and there made be a need to undertake emergency repairs. An electrical mechanic is required to travel to areas where electrical machinery and equipment is located.

**What is the working environment like?**

Electrical mechanics mostly work indoors in factories for the service and repair of electric motors and machines. Working with electricity requires high standards of safety and the use of appropriate protective clothing. Electrical mechanics do not work with the oil and grease of industrial mechanics but the

environment can still be dirty and unpleasant.

### **What knowledge and skills do I need to be an electrical mechanic?**

- Able to diagnose problems and find solutions.
- Able to stand, crouch, kneel, and bend to service and repair machinery or equipment.
- Knowledge of different types of electric motors and machines.
- Knowledge of factors likely to affect the safe operation of electric motors and machines.
- Ability to work with hand tools.
- Ability to drive a vehicle, including possession of the necessary license.

### **What personal qualities/attributes do I need to be an electrical mechanic?**

- Interest in practical and manual work.
- Enjoy working with hands using a variety of hand and power tools.
- Enjoy keeping up with advances in technology.
- An interest in electricity, and electric motors and machines.
- An interest in business (for those mechanics planning self-employed).

### **What are the education requirements to become an electrical mechanic?**

You must at least complete Class 8 with good scores in mathematics and Science and then undergo specialized training.

### **Can I study to become an electrical mechanic in Bhutan?**

You can start a career as an electrical mechanic by studying to be an auto electrician at the TTIs and Jigme Namgyal Polytechnic in Dewathang, or take up a electrical engineering Degree course at the College of Science and Technology. After completing these courses the knowledge and skills required to be an electrical mechanic can be acquired through on the job training under the supervision of an experienced electrical mechanic.

### **What are the employment prospects for electrical mechanics in Bhutan?**

As Bhutan's industries grow and take advantage of the nation's electric power supplies electric motors, machinery and equipment can be expected to be used more widely. Accordingly, employment opportunities for electrical

mechanics are expected to increase. There is scope for an electrical mechanic to become self employed after some years of experience.

### 3.1.8 Electronic mechanic

**Title:** ELECTRONICS MECHANIC

**Description:** An electronics Mechanic conducts research and advises on the design and construction of electronic systems and equipment concerning the storage, retrieval, transfer, and processing of information.

**Alternative and Related Titles:** TELECOMMUNICATION ENGINEER / ELECTRONIC ENGINEER

**What does an electronics Mechanic do?**

- Advises on the design of and designs electronic devices, systems, motors, and equipment including computers and telecommunications equipment.
- Specifies production or installation methods, materials and quality standards for electronic equipment and systems.
- Directs the production and installation work for electronic systems.
- Establishes control standards and procedures to ensure the efficient functioning and safety of electronic systems.
- Organizes and directs the maintenance and repair of existing electronic systems.
- Maintains contact with other technical specialists and professionals.
- Prepares scientific papers and reports.
- Supervises subordinate staff.

**What are the working conditions for an electronics Mechanic?**

In the Royal Civil Service an electronic engineer is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. The hours of work for an electronic engineer can be irregular depending on the actual position held and its location. Evening and weekend work may be involved.

**What is working environment like?**

An electronics mechanic mainly works indoors in an office situation and in attending meetings. An electronics mechanic is sometimes confronted with stressful situations as, for example, when a computer system falls and must be made operational in the shortest possible time. The working environment for an electronic mechanic is mainly hazard free.

**What knowledge and skills do I need to be an electronics mechanic?**

- Creative thinking abilities.
- Logical thinking.
- Problem solving skills.
- Mathematical abilities.
- Computer skills.

**What personal qualities/attributes do I need to be an electronics mechanic?**

- An interest in computers and computer systems.
- Ability to work independently, but also as part of a team.
- An interest in mathematics.

**What are the education requirements to become an electronics mechanic?**

The normal requirement for a career in electrical engineering is a Bachelor's Degree in Engineering, usually of 4 year's duration. Entry to such a degree course is Class 12, with passes in mathematics and science subjects.

**Can I study in Bhutan to become an electronics mechanic?**

Yes, you can study for a Bachelor of Technology Degree at College of Science and Technology. This provides an introduction to work as an electronics engineer, but advancement in an electronics engineering career requires higher-level studies abroad.

**What are the employment prospects for an electronics mechanic in Bhutan?**

Employment opportunities exist in government departments and corporations with responsibility for the development of the nation's telecommunications system.

After some years of relevant experience electronic mechanic can work as self-employed consultants to government and telecommunications companies.

### 3.1.9 Fashion Designer

**Title: FASHION DESIGNER**

**Description:** Fashion designers are involved in designing clothing, accessories and shoes. Some design expensive, one-off pieces, while others work in a team creating a range of mass-produced garments. Some designers specialise in one particular area, such as sportswear.

**Alternative and Related Titles: CLOTHING DESIGNER**

**What does Fashion Designer do?**

- producing design concepts
- making sketches by hand or on the computer
- developing patterns
- overseeing production
- analyzing trends in fabrics, colours and shapes.

**What are the working conditions for Fashion Designer?**

Fashion/clothing designers usually work two seasons ahead, so it is important for them to liaise with buyers and trend forecasters to predict the coming fashions. The design process starts with the designer creating initial sketches by hand or using computer software. At this point, it is important for them to consider who will be buying the designs and how much they would be willing to pay.

Designers discuss their initial ideas with the design team, usually consisting of a garment technologist, pattern cutter and sample machinist, as well as the marketing team. Sample garments are then created to check the fit and style of the piece. When clothes go to production, the fashion designer is usually on hand to sort out any problems with cutting or stitching. He or she can work predominantly alone or as part of a small design team.

**What is the working environment like?**

Designers normally work standard office hours, but they may work longer when preparing samples for buyers or collections for catwalk shows. Fashion designers usually work in a studio or small workshop. They may attend fashion shows, fairs and exhibitions, as well as visiting clients.

### **What knowledge and skills do I need to be fashion designer?**

- creativity and an eye for colour, texture and pattern
- the ability to visualize a design
- technical skills in pattern cutting, grading and garment construction
- the ability to draw by hand as well as using computer packages
- good communication and organizational skills
- good business skills as well as commercial awareness
- the ability to work to tight deadlines and within a budget
- good negotiation and sales skills to market their designs
- The ability to keep ahead of trends in colour, fabric and style.

### **What personal qualities/attributes do I need to be fashion designer?**

- Interest in practical and manual work.
- Enjoy working with hands using a variety of hand and power tools.
- trends in fashion and clothing
- art and design
- Turning designs from concepts into reality.

### **What are the education requirements to become fashion designer?**

You must at least complete Higher Secondary School and then undergo specialized training. Fashion/clothing designers can work for fashion houses producing designer labels, as part of a design team for a retail chain, or for clothing manufacturer that produces large quantities of clothing for the mass market.

### **Can I study to become fashion designer in Bhutan?**

There are no specialized courses for fashion designer in Bhutan.

### **What are the employment prospects for fashion designer in Bhutan?**

As Bhutan's filming industrial grow and activities become more frequent, employment opportunities for fashion designer will increase. There is scope for fashion designer to become self-employed after some years of experience.

### 3.1.10 Industrial mechanic

**Title:** INDUSTRIAL MECHANIC

**Description:** An industrial mechanic installs, repairs and services engines (except motor vehicles and aircraft), agricultural machinery, and mechanical equipment.

**Alternative and Related Titles:** FARM MECHANIC

**What does an industrial mechanic do?**

- Installs engines.
- Examines, services and repairs engines (other than vehicles and aircraft).
- Examines, services and repairs agricultural and industrial machinery.
- Oils and greases engines and machines.
- Inspects and tests new machinery and mechanical equipment for conformity with standards and specifications.

**What are the working conditions for an industrial mechanic?**

An industrial mechanic works in the private sector and may be either an employee or self-employed. A mechanic who is an employee receives wages and benefits related to the level of skill and experience. An industrial mechanic with a good reputation may attract a higher wage. The working hours for an industrial mechanic are regular although some overtime work is required from time to time. An industrial mechanic is required to travel to areas where engines, industrial and machinery are located.

**What is the working environment like?**

Industrial mechanics work both outdoors and indoors. The outdoor work often takes place in rural areas for the repair and servicing of agricultural machinery. Indoor work mostly takes place in factories for service and repair of industrial machines. Industrial mechanics can expect dirty conditions, and grease and oil on their hands and clothes is considered normal. Industrial mechanics may wear protective clothing but the nature of the work requires that the hands remain exposed.

### **What knowledge and skills do I need to be an industrial mechanic?**

- Able to diagnose problems and find solutions.
- Able to stand, crouch, kneel, bend and lift machinery or equipment.
- Knowledge of different types of engines and machines.
- Knowledge of factors likely to affect the safe operation of engines and machines.
- Able to work in a dirty, greasy, cold or hot environment.
- Able to work with hand tools.
- Ability to drive a vehicle, including possession of the necessary license.

### **What personal qualities/attributes do I need to be an industrial mechanic?**

- Interest in practical and manual work.
- Enjoy working with hands using a variety of hand and power tools.
- Enjoy keeping up with advances in technology.
- An interest in engine and machines.
- An interest in business (for those mechanics planning self-employment).

### **What are the education requirements to become an industrial mechanic?**

You must at least complete middle secondary school with good scores in Mathematics and Science and then undergo specialized training.

### **Can I study to become an industrial mechanic in Bhutan?**

There are no specialized courses for industrial mechanics in Bhutan. You can start a career as an industrial mechanic by studying to be a motor vehicle mechanic at the TTIs, or take up a mechanical engineering diploma course at the Jigme Namgyal Polytechnic. After completing these courses the knowledge and skills required to be an industrial mechanic can be acquired through on the job training under the supervision of an experienced industrial mechanic.

### **What are the employment prospects for industrial mechanics in Bhutan?**

As Bhutan's industrial grow and agricultural activities become more mechanized, employment opportunities for industrial mechanics will increase. There is scope for an industrial mechanic to become self-employed



after some years of experience.

### 3.1.11 Interior Designer

**Title:** INTERIOR DESIGNER

**Description:** An interior designer applies artistic techniques and innovation to the interior decoration of houses, offices, shops and public buildings. This starts with the planning of houses and building and continues to actual decoration once the house or building is complete

**Alternative and Related Titles:** INTERIOR DECORATOR/FASHION DESIGNER/INTERIOR ARCHITECT

**What does an interior designer do?**

- Plans a functional and attractive environment in houses and buildings to meet human requirements, consistent with the available space.
- Plans and creates decorating schemes using various mediums including paint, cloth, artworks, floor and wall coverings, lighting and indoor plants for homes offices and public buildings.
- Advises on furniture and furnishings to harmonize aesthetic and functional requirements for homes offices and public buildings.
- Designs and paints stage scenery for plays, performances and film sets.
- Consults with clients to determine particular needs.
- Prepares detailed sketches and drawings of interior designs for presentation to clients.

**What are the working conditions for an interior designer?**

An interior designer works in the private sector either as an employee or as a self-employed person. An interior designer working as an employee will receive a salary and benefits related to the level, experience and reputation of the individual. A self employed interior designer can earn considerably more than an employee, but this normally depends on the reputation of the designer. The hours of work for an interior designer are irregular as they must normally adjust their schedules to meet the requirements of their clients.

### **What is the working environment like?**

An interior designer mostly works indoors in an environment characterized by plans, drawings, color charts, fabric and interior surface samples. The environment is one of creativity, artistry, and color. An interior designer is sometimes required to work under pressure to meet the deadlines of clients and this can create some stress and anxiety.

### **What knowledge and skills do I need to be an interior designer?**

- Good communication and interpersonal skills.
- Knowledge of architectural design, technical drawing and building materials.
- Knowledge of interior finishes and color combinations.
- Ability to translate designs and ideas into practical reality.

### **What personal qualities/attributes do I need to be an interior designer?**

- An interest in helping people.
- An interest in design and color.
- Creativity, imagination and artistic flair.
- Responsibility.
- Flexibility to accommodate the needs and interests of different clients.

### **What are the education requirements to become an interior designer?**

There are no formal education requirements to become an interior designer other than a good general education, the ability to read and write, and a sense of creativity and imagination. Increasingly, however, interior designer undertake degree level studies in Fine Arts. This degree normally takes 3 years after the completion of secondary schooling.

### **Can I study in Bhutan to become an interior designer?**

There are no special courses for interior designers in Bhutan and study abroad is normally required. Alternatively, you could acquire the necessary knowledge and skills through on the job training under the supervision of an interior designer with a particular knowledge of Bhutan's cultural and religious environment.

### **What are the employment prospects for an interior designer in Bhutan?**

Interior design in Bhutan is a reflection of religious and cultural values and

these may be taken into account in balancing new concepts of interior design with tradition and spiritual values. Employment opportunities for interior designers exist in Bhutan but require people with a deep understand of the country's culture, religion and traditions.

### 3.1.12 Lab Technician

**Title: LAB TECHNICIAN**

**Description:** Laboratory technicians carry out routine laboratory tests and perform a variety of technical support functions to help scientists, technologists and others with their work. The actual nature of the job will depend upon the employer, but they can work in research and development, scientific analysis and testing, education and manufacturing. They are employed in a wide range of scientific fields that affect almost every aspect of our lives. They could be involved in helping to diagnose disease, supporting medical specialists in a hospital or health environment, or checking products in the food, drink or pharmaceutical industries.

**Alternative and Related Titles:**

**What does a Lab Technician do?**

Laboratory technicians carry out routine laboratory tests and perform a variety of technical support functions to help scientists, technologists and others with their work. The actual nature of the job will depend upon the employer, but they can work in research and development, scientific analysis and testing, education and manufacturing. They are employed in a wide range of scientific fields that affect almost every aspect of our lives. They could be involved in:

- helping to diagnose disease
- supporting medical specialists in a hospital or health environment
- checking products in the food, drink or pharmaceutical industries
- measuring pollution levels
- analyzing samples in criminal investigations
- helping to develop new products or processes in industry
- helping to test materials and equipment in a manufacturing company
- Supporting teachers, lecturers and students in schools, colleges or universities.

Some laboratory technicians' work in veterinary science, dealing with animals, while others work in hospitals and medical centres, dealing with problems associated with human beings. They work closely with scientists, technologists and managers, as well as other support and administrative staff.

### **What are the working conditions for Lab Technician?**

Most laboratory technicians work standard office hours. They are based in laboratories, which are usually clean and may require sterile conditions. They may wear protective clothing, including coats, gloves, masks, goggles, or all-over, sealed, protective suits. Some of their work may be outdoors.

### **What is the working environment like?**

Most laboratory technicians work standard daytime hours. Some employers operate shifts or on-call rotas covering early mornings, evenings, nights, and weekends.

Laboratory technicians are based in laboratories, which are usually clean and may require sterile conditions. They may wear protective clothing, including coats, gloves, masks, goggles, or all-over sealed protective suits. Some jobs involve working with hazardous substances, materials and equipment, such as chemicals, bacteria and radiation, and it is essential that health and safety precautions are followed at all times.

Fieldwork may involve working outdoors in all weather conditions and travelling to different sites.

### **What knowledge and skills do I need to be Lab Technician?**

- be good at science
- have good practical and technical skills
- have an enquiring mind
- enjoy problem solving
- have a logical and methodical approach to work
- work accurately and pay great attention to detail
- have good numeracy and IT skills
- be good at concentrating and doing repetitive work
- be able to work well independently and in a team
- have normal colour vision
- Be willing to take on responsibility.

**What personal qualities/attributes do I need to be Lab Technician?**

- be interested in science
- enjoy research and practical work

**What are the education requirements to become Lab Technician?**

A career as a medical laboratory technician normally requires a Bachelor of Science Degree. The entry requirement is Year 12 with passes in mathematics and physical sciences.

**Can I study in Bhutan to become a lab technician?**

Yes, you can study for a Technicians' Certificate / Higher level studies for laboratory technicians will have to be done overseas.

**What are the employment prospects for a lab technician in Bhutan?**

Laboratory testing and analysis is a key component of the work. Greater reliance on testing means more opportunities for laboratory technicians. The opportunities in this career at present are in the Royal Civil Service and private enterprise.

### 3.1.13 Quality Control Inspector

**Title: QUALITY CONTROL INSPECTOR**

**Description:** A quality control inspector makes sure that manufactured products meet the specified standards, before they progress to the next phase of production or are sent out to customers.

**Alternative and Related Titles:****What does a Quality Control Inspector do?**

A quality control inspector makes sure that manufactured products meet the specified standards before they progress to the next phase of production or are sent out to customers.

The role varies widely, depending on the sector. For example:

- a quality control inspector working in engineering might use special gauges and other equipment to check that parts have been properly assembled or welded
- in the food sector, an inspector might make sure that cakes are a

standard size and colour, and that they have been packaged in line with specified requirements

- in the clothing industry, an inspector might examine seams and stitching to ensure they are neat and strong, or check that all products are produced to the same size and standard
- In a pharmaceutical company, an inspector might check test records to decide whether batches of drugs are safe for use by patients.

### **What are the working conditions for a Quality Control Inspector?**

In the Royal Civil Service a surveyor is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Quality control inspectors may work closely with other colleagues. For example, sales or account managers may liaise with the inspector to pass on concerns from clients that need to be addressed in the production process.

Inspectors may also deal with external auditors and inspectors, who visit to check the production process and quality control systems. In some cases, inspections may be made by regulators, such as those who work with food, pharmaceuticals or nuclear materials.

### **What is the working environment like?**

Quality control inspectors usually work standard full-time hours. Inspectors are usually based in a workshop, laboratory or office. However, they often visit the factory floor or warehouses to check the production process, collect samples and talk to production staff. They may spend a lot of time on their feet.

Depending on the sector, factory premises may be clean and airy or dirty and dusty. They can also be noisy. Protective clothing, such as overalls, plastic overshoes and hairnets, may be worn, for safety reasons and to avoid contaminating the products.

### **What knowledge do I need to be a Quality Control Inspector?**

- responsible, accurate and thorough, with a sharp eye for detail
- methodical and willing to work within set procedures and time

constraints

- able to stay alert while doing repetitive tasks
- skilled at communicating with others verbally and in writing, and influencing people to improve standards
- good with numbers, and able to analyze and interpret statistics
- equipped with the right technical or scientific knowledge, depending on the sector in which he or she works
- computer literate and able to work with computer-based quality systems
- Able to act on his or her own initiative and work as part of a team consisting of members from other departments, such as engineering and production.

#### **What personal qualities/attributes do I need to be Quality Control Inspector?**

- enjoy doing careful, detailed work
- be interested in getting things absolutely right

#### **What are the education requirements to become Quality Control Inspector?**

A degree or diploma in the engineering field or in the social sciences provides a good foundation for a career as a Quality Control Inspector, but is not essential. The role of quality control inspector is usually taken on by people with experience in the relevant industry. They often start out in production or engineering roles. Apprenticeships offer training in some fields, such as engineering and food and drink manufacturing.

#### **Can I study in Bhutan to become a Quality Control Inspector?**

Yes

#### **What are the employment prospects for a Quality Control Inspector in Bhutan?**

Employment opportunities are confined in following enterprises;

- pharmaceuticals
- chemicals
- cosmetics
- building and construction
- food and drink
- automotive
- aerospace

- textiles
- electrical
- plastics
- polymers
- composites
- oil and gas
- petrochemicals
- Nuclear.

### 3.1.14 Surveyor

**Title: SURVEYOR**

**Description:** A surveyor records and sets out exact measurements of both man made and natural features of the earth’s surface. A surveyor is concerned with the preparation of maps and the marking of boundaries.

**Alternative and Related Titles: GEODETIC ENGINEER / CARTOGRAPHER / CADASTRAL SURVEYOR / ENGINEERING SURVEYOR / LAND SURVEYOR**

**What does a surveyor do?**

- Makes measures of surfaces to establish official land, air space, and water boundaries.
- Measures distances, directions and angles between points, and elevations of points on, above and below the earth’s surface.
- Researches legal records, looks for evidence of previous boundaries, and analyzes the data to determine the location of boundary lines.
- Write descriptions and prepares plans and maps of land for deeds, lease and other logal documents.
- Provides information relevant to the shape, contour, location and elevation of land and land features.
- Selects known survey reference points and determines the precise location of important features in the survey area.
- Uses global positioning systems to locate precisely points on the earth’s surface by using radio signals transmitted by satellite.
- Testifies, as required, in courts of law to provide expert testimony in cases of boundary disputes.



- Prepares scientific papers and reports.
- Supervises the work of subordinates.

### **What are the working conditions for a surveyor?**

In the Royal Civil Service a surveyor is most likely to be employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. Surveyors employed in the corporate sector are professionals and receive salary and benefits similar to other professionals, but such employment is not common in Bhutan. The hours of work for a surveyor may be irregular, particularly when undertaking fieldwork and surveys in remote locations. In such cases, evening and weekend work can be expected.

### **What is the working environment like?**

A surveyor works indoors in an office situation, but also spends a lot of time outdoors undertaking measures of distance, direction and elevations. Field activities involve the use of sophisticated equipment. A surveyor makes extensive use of computers and other equipment to assist in the preparation of reports, plans and maps. The working environment normally is pleasant and hazard free, but field work in remote places can involve some exposure to hazards.

### **What knowledge do I need to be a surveyor?**

- Good communication skills.
- Good computer skills.
- Ability to motivate others to the achievement of objectives.
- Driving skills, together with necessary licenses.

### **What personal qualities/attributes do I need to be a surveyor?**

- A keen interest in precision and accuracy.
- A high sense of responsibility.
- A reasonable degree of physical fitness to undertake outdoor work.

### **What are the education requirements to become a surveyor?**

The normal requirement for a career in surveying is Bachelor's Degree in Engineering (Surveying). Such courses are of 4 to 5 year's duration with entry

requiring Class 12, with passes in mathematics and science.

**Can I study in Bhutan to become a surveyor?**

No. Study abroad is required.

**What are the employment prospects for a surveyor in Bhutan?**

Employment opportunities are limited and confined to government, which has responsibility for surveying activities in Bhutan.

After several years of relevant experience a surveyor may become self-employed, sometimes in partnership with an architect, and provide consulting services to government and large corporations. Such opportunities, however, are limited at present.

3.1.15 Motor Winder

**Title: MOTOR WINDER**

**Description:** Motor Winder repair damage, caused by accidents or everyday wear and tear, to vehicles such as cars, vans and buses.

**Alternative and Related Titles: MOTOR VEHICLE PANEL, PAINT AND MET (MECHANICAL, ELECTRICAL AND TRIM) TECHNICIANS**

**What does a Motor Winder do?**

When vehicles are damaged in accidents or by everyday wear and tear, they are taken to a body repair workshop, and it is the job of the motor vehicle panel, paint and MET (mechanical, electrical and trim) technicians to put right the damage to the bodywork.

Some technicians do the entire repair job from start to finish. Others specialise in one part of the process, such as fitting panels, repairing dents and scratches or painting.

When a vehicle comes in for repair:

- the level of damage is checked and the customer is told whether a part needs to be replaced or can be repaired
- if damaged parts of the body are to be replaced, they are removed
- checks are made to see if the chassis (the steel structure of the

- vehicle) needs to be straightened
- if the chassis is damaged, hydraulic equipment is used to realign the vehicle
- Logs are kept of the work carried out and the customer is informed of any additional work required.

### **What are the working conditions for a motor winder?**

The MET technicians remove and replace all the mechanical, electrical and trim components. The vehicle body and paintwork is then repaired by the panel technician and paint technician. The vehicle is then passed back to the MET technician who puts back undamaged parts and any new ones that are required, such as the suspension or cooling system.

Damaged external panels are repaired or replaced and then bolted or welded back on to the vehicle. The damaged section is then prepared for painting and cleaning. The technicians cover the areas that are not to be painted, and apply several layers of paint to the section with a spray gun, before finishing with a coat of lacquer.

Panel, paint and MET technicians often work together in a team, and also work with mechanics, auto electricians, sales managers and the customers themselves.

They work with a range of equipment, depending on the specific activity they are undertaking. This equipment can be high-tech and complex, so it is important that they work carefully and safely.

### **What is the working environment like?**

Technicians usually work standard hours. There are often opportunities for paid overtime in the evenings and at weekends. Shift and night work is often paid as per the Labour and Employment Act, 2007. They usually work indoors in workshops or paint-spraying booths. Depending on the employer, these can be spacious and modern. They may get cold in the winter when doors are left open for access, but are usually warmer than mechanical workshops because of the need for paintwork to dry.

Although spraying booths and workshops have to be well ventilated, they can still be dusty and smell of fumes. The work can be physically demanding

as they need to get to all parts of a vehicle. They may have to lie in or under vehicles.

Depending on their particular work, they may wear specialist protective clothing such as masks, goggles and gloves.

**What knowledge do I need to be a motor winder?**

- good at working with their hands
- able to use tools and equipment
- methodical workers with good organizational skills
- of professional appearance and manner
- able to work on their own and as part of a team
- aware of safety procedures
- able to follow spoken and written instructions
- Able to communicate clearly with customers.

**What personal qualities/attributes do I need to be a motor winder?**

- motor vehicles
- Keeping up to date with changes in technology.

**What are the education requirements to become a motor winder?**

You must complete higher secondary school and then pursue specialized training either Diploma/ Degree.

**Can I study in Bhutan to become a motor winder?**

Yes. You can either take up the four year auto electrician’s course at the TTIs or the Diploma on electrical engineering at the Jigme Namgyal Polytechnic.

**What are the employment prospects for a motor winder in Bhutan?**

The numbers of vehicles is increasing in Bhutan day by day, which causes problems of traffic congestion followed by accidents. Motor winder has excellent employment prospects. There is scope for a motor winder after some years of experience.

## 3.2. Health Associate Professionals

### 3.2.1 Dental assistant

**Title:** DENTAL ASSISTANT

**Description:** A dental assistant assists a dentist by preparing patients for examination, treatment and surgical procedures, and the sterilization and maintenance of dental equipment.

**Alternative and Related Titles:** ORAL HYGIENIST (An oral hygienist is more than a dental assistant but a professional dental health educator who assists people to attain optimum oral health, including diet and other preventive measures.)

**What does a dental assistant do?**

- Meets patients and prepares them for dental examination and treatment.
- Conducts basic medical examinations, prior to reference to a dentist.
- Prepares instruments and materials, including injections, dental surgical procedures.
- Assists a dentist in taking X-rays.
- Ensures the proper sterilization of instruments and the maintenance of dental equipment.
- Maintains office records and undertakes general office work.

**What are the working conditions for a dental assistant?**

A dental assistant is a government officer engaged in dental work under the supervision of a qualified dental surgeon. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular except when emergency treatment is required.

**What is the working environment like?**

A dental assistant works indoors in an environment characterized by specially designed dental chairs and modern dental equipment and instruments. The environment places strong emphasis on cleanliness and order.

### **What knowledge and skills do I need to be a dental assistant?**

- Good communication skills.
- Knowledge of dental equipment and instruments.
- Knowledge of dental procedures.
- Computer skills.
- Close attention to detail.

### **What personal qualities/attributes do I need to be a dental assistant?**

- Strong interest in helping and working with people, including children.
- Friendly, polite and empathetic manner.
- Neatness in dress and appearance.
- Close attention to cleanliness and personal hygiene.
- Interest in business.

### **What are the education requirements to become a dental assistant?**

A career as a dental assistant does not require a formal qualification. The completion of higher secondary school is sufficient, with the basic skills being learned on-the-job under the supervision of a dentist or experienced dental assistant.

### **Can I study to become a dental assistant in Bhutan?**

Yes. A person can learn to be a dental assistant in Bhutan by working under the supervision of a dentist and an experienced dental assistant.

### **What are the employment prospects for a dental assistant in Bhutan?**

The number of opportunities for dental assistants is directly related to the number of dentists in Bhutan. Each dentist would normally have at least one dental assistant. As the employment opportunities for dentists increase, so do the opportunities for dental assistants.

## 3.2.2 General Nursing Midwife

### **Title: GENERAL NURSING MIDWIVES**

**Description:** General Nursing Midwives care for mothers and their babies throughout the antenatal period and during the labour and birth.

### **Alternative and Related Titles: MIDWIVES**

### **What does a General Nursing Midwives do?**

Midwives care for mothers and their babies from the time the pregnancy is confirmed, throughout the antenatal period, during the labour and birth and for at least ten days after the birth. They also support the woman's partner.

As soon as a woman finds out she is pregnant, her doctor, health centre or hospital maternity unit will arrange an appointment with a local midwife. The midwife then becomes the main point of contact during the pregnancy. At the first appointment, the midwife gathers details about the woman's medical history and makes an initial assessment:

A midwife's duties include:

- talking through what to expect at various stages of pregnancy
- monitoring the health of the mother and baby during pregnancy
- explaining the choices open to her for screening (checking the health of the baby and mother), type of delivery and pain relief and helping her to make informed decisions
- organizing appointments for scans, screening, tests and parenting programmes as required
- identifying high-risk pregnancies and arranging specialist care if needed
- advising and motivating the mother to make healthy lifestyle choices, such as giving up smoking, adopting a healthy diet, exercising and avoiding alcohol and medication that could harm her or the child
- running antenatal classes or workshops to teach individual women and their partners, as well as small groups, about pregnancy, the process of birth and pain control techniques
- promoting breastfeeding
- teaching the skills needed to care for young babies such as bathing, changing and feeding
- looking after the mother and baby during labour and birth
- Referring women to other medical professionals if necessary.

### **What are the working conditions for midwives?**

A midwives work as a government servant under the supervision of health professionals. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil

Service Commission, and vary in accordance with changing circumstances. The hours of work are regular but shift work is normal.

A midwife is a member of the healthcare team that gives information and advice to different sections of the community, by talking to people about health issues, spacing and planning families and nutrition, diet and exercise during pregnancy.

They also work closely with other professionals, including hospital doctors, general practitioners (GPs), health visitors, nurses, social workers and physiotherapists.

### **What is the working environment like?**

Midwives in the Ministry of Health work shifts and rotas and may include on-call duties to give cover 24 hours a day, seven days a week, as babies can be born at any time. Part-time work and flexible hours are often available.

Midwives may be based in hospital maternity units, birth centres or, increasingly, in the health centres and clinics. They may spend time travelling from their base to women's homes. The majority of babies are born in hospital, but a small proportion are born at home.

Some midwives wear a uniform. During the birth and medical examinations, they wear protective clothing and follow strict hygiene precautions.

Midwives may spend many hours standing whilst attending to patients and this can be physically tiring.

### **What knowledge and skills do I need to be midwives?**

- be intuitive, caring and kind and be able to build trust with women and their families
- be able to answer questions and offer advice
- be observant and alert to the emotional and physical needs of the mother and baby
- have excellent communication skills to explain medical issues to people with no specialist knowledge
- have a good knowledge of the physiology of pregnancy, birth and childbearing



- be objective, non-judgmental and able to deal professionally with the needs of women from a wide range of backgrounds and cultures
- stay calm under pressure
- work well alone and be able to make decisions
- work well in a team
- have physical and mental stamina
- be able to keep accurate records

**What personal qualities/attributes do I need to be midwives?**

- A high sense of moral responsibility with an emphasis on reliability, thoroughness, and self-discipline.
- Willingness to serve others including kindness, tactfulness, consideration, tolerance.
- Good physical fitness.
- Very high standards relating to hygiene and cleanliness.
- Ability to work with patients that suffer pain and who are terminally ill.
- be interested in the physical and psychological process of pregnancy and birth
- Have a genuine desire to help women and babies.

**What are the education requirements to become midwives?**

Midwives can acquire the required knowledge and skills through in service training in a hospital, under the supervision of health professionals. A nursing aid normally is required to complete a degree in midwifery/a two-year foundation degree, in a hospital.

**Can I study to become midwives Bhutan?**

Yes. The Royal Institute of Health Science, Thimphu, offers training for midwives and it is possible for nursing aids to learn on the job through in service training after pursuing higher secondary school.

**What are the employment prospects for midwives in Bhutan?**

Employment opportunities for midwives exist in the country’s hospitals and basic health units. Some employment opportunities also exist for midwives in large factories in the corporate sector.

### 3.2.3 Nurse

**Title: NURSE**

**Description:** Nurses work with patients who are ill or injured, giving support and advice to patients and their families and promoting good health.

**Alternative and Related Titles:**

**What does a nurse do?**

Nurses work with patients who are ill or injured, or who need care due to age or disability. As well as providing care for patients and supporting their treatment and recovery, nurses give support and advice to patients' families and carers. They also promote good health.

Nurses work in a variety of different settings and their duties vary. For example:

- on a hospital ward, a nurse may check a patient's medical history and devise a care plan, check blood pressure and temperature, observe and record changes in the patient's condition, give medication and change dressings
- in an accident and emergency unit, a nurse may decide on the order in which patients should be treated (known as triage) and treat a wide range of conditions, from wounds to heart attacks
- in an operating theatre, nurses assist surgeons and other healthcare professionals by preparing and passing instruments and caring for patients in the recovery room
- in health centre, a nurse may run clinics for people with conditions such as asthma or diabetes, carry out health screening and give injections
- In the community, nurses offer care and support to patients in their homes or workplaces.

**What are the working conditions for a nurse?**

A nurse works as a government servant closely with other members of the healthcare team including doctors, radiographers, physiotherapists, pharmacists and healthcare assistants. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing

circumstances. The hours of work are regular but shift work is normal.

### **What is the working environment like?**

A nurse aid works indoors in a hospital or clinic in a clean and sterile environment. A nursing aid wears a uniform and maintains the highest standard of personal hygiene. A nurse may spend many hours standing whilst attending to patients and this can be physically tiring.

Most nurses wear uniform as well as protective clothing such as gloves and masks when required.

### **What knowledge and skills do I need to be a nurse?**

- High-level communication skills.
- Knowledge of nursing procedures.
- The ability to use medical equipment.
- Ability to follow instructions.
- be able to relate to people from different backgrounds and cultures
- have practical skills
- remain calm in difficult situations
- pay attention to detail
- be able to gain the trust of patients and their families
- be non-judgmental
- have the confidence to make decisions and work independently
- work well in a team
- Be able to prioritise.

### **What personal qualities/attributes do I need to be a nurse?**

- A high sense of moral responsibility with an emphasis on reliability, thoroughness, and self-discipline.
- Willingness to serve others including kindness, tactfulness, consideration, tolerance.
- Good physical fitness.
- Very high standards relating to hygiene and cleanliness.
- Ability to work with patients that suffer pain and who are terminally ill.
- helping people
- human biology and health issues

### **What are the education requirements to become a nurse?**

A nurse can acquire the required knowledge and skills through in service training in a hospital with other members of the healthcare team including doctors, radiographers, physiotherapists, pharmacists and healthcare assistants. A nurse normally is required to complete a course in a hospital after the completion of higher secondary school with science background.

### **Can I study to become a nurse Bhutan?**

Yes. The Royal Institute of Health Science, Thimphu, offers training for nurses.

### **What are the employment prospects for a nurse in Bhutan?**

Employment opportunities for nurse exist in the country's hospitals and basic health units. Some employment opportunities also exist for nurse in large factories in the corporate sector.

#### 3.2.4 Nursing assistant

#### **Title: NURSING ASSISTANT**

**Description:** A nursing aid provides nursing care for the sick, injured and others in need of care, and in the absence of a medical doctor or a professional registered nurse deals with medical emergencies.

#### **Alternative and Related Titles: NURSING ASSOCIATE PROFESSIONAL, NURSING AID**

#### **What does a nursing aid do?**

- Provides nursing care and treatment and advice to ill, injured, disabled and others in need of assistance.
- Assists medical doctors and professional nurses in their tasks by administering medicines and drugs, applying surgical dressings, and giving other forms of treatment under instructions and guidance of a doctor or professional nurse.
- Assists in giving first aid treatment in emergencies.
- Provides nursing care to patients in their own homes.
- Provides nursing services within the community and work places.

**What are the working conditions for a nursing aid?**

A nursing aid works as a government servant under the supervision of a qualified nurse. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular but shift work is normal.

**What is the working environment like?**

A nurse aid works indoors in a hospital or clinic in a clean and sterile environment. A nursing aid wears a uniform and maintains the highest standard of personal hygiene. A nursing aid may spend many hours standing whilst attending to patients and this can be physically tiring.

**What knowledge and skills do I need to be a nursing aid?**

- High-level communication skills.
- Knowledge of nursing procedures.
- The ability to use medical equipment.
- Ability to follow instructions.

**What personal qualities/attributes do I need to be a nursing aid?**

- A high sense of moral responsibility with an emphasis on reliability, thoroughness, and self-discipline.
- Willingness to serve others including kindness, tactfulness, consideration, tolerance.
- Good physical fitness.
- Very high standards relating to hygiene and cleanliness.
- Ability to work with patients that suffer pain and who are terminally ill.

**What are the education requirements to become a nursing aid?**

A nursing aid can acquire the required knowledge and skills through in service training in a hospital, under the supervision of a qualified nurse. A nursing aid normally is required to complete a one-year course in a hospital after the completion of Class 10.

**Can I study to become a nursing aid Bhutan?**

Yes. The Royal Institute of Health Science, Thimphu, offers training for nurses and it is possible for nursing aids to learn on the job through in service

training after Class 10.

### **What are the employment prospects for a nursing aid in Bhutan?**

Employment opportunities for nursing aids exist in the country's hospitals and basic health units. Some employment opportunities also exist for nursing aids in large factories in the corporate sector.

### 3.2.5 Occupational Therapist

#### **Title: OCCUPATIONAL THERAPIST**

**Description:** An occupational therapist assists people with some form of disability to regain health and physical movement, and integrate as fully as possible in mainstream society.

#### **Alternative and Related Titles:**

#### **What does an occupational therapist do?**

- Assesses patients' physical and mental abilities to identify problems affecting their personal care, vocational training, holding a job, their education, participating in sports, and utilizing leisure time.
- Prepares a treatment plan based on individual assessment.
- Guides and participates in activities to help patients reach their improvement level objectives.
- Assists and teaches patients with permanent disabilities to use their remaining skills.
- Advises on adaptations to the patient's living and working environment.
- Assists in providing adapted devices to enable patients to function more independently.

#### **What are the working conditions for an occupational therapist?**

In the Royal Civil Service an occupational therapist works as a member of a health team by helping people to regain their health and physical mobility. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for an

occupational therapist are regular.

### **What is the working environment like?**

An occupational therapist works indoors usually on a one-to-one basis with an individual patient. Various items of equipment are used to assist patients to develop their physical skills. The environment is one that requires encouragement on the part of the occupational therapist and willingness on the part of the patient.

### **What knowledge and skills do I need to be an occupational therapist?**

- High level communication and interpersonal skills.
- Knowledge of occupational therapy procedures and techniques.
- Knowledge of different types of disability.
- Teaching skills.

### **What personal qualities/attributes do I need to be an occupational therapist?**

- An interest in helping people.
- Acceptance of persons with disabilities.
- Innovation and creativity.
- Sense of humor.
- An ability to work independently without supervision.
- Patience.

### **What are the education requirements to become an occupational therapist?**

A career as an occupational therapist normally requires a Bachelor of Science (Occupational Therapy) or Bachelor of Occupational Therapy Degree. Such degrees are normally of four year's duration after the completion of secondary schooling, with passes in mathematics and science. It is possible to work as an unqualified occupational therapist by learning on the job and through practical experience.

### **Can I study in Bhutan to become an occupational therapist?**

There are no formal courses in occupational therapy in Bhutan at present.

### **What are the employment prospects for an occupational therapist in Bhutan?**

An occupational therapist can be employed in the Royal Civil Service or with an NGO concerned with assisting disabled persons to find employment and integrate into society.

### 3.2.6 Pharmaceutical assistant

**Title: PHARMACEUTICAL ASSISTANT**

**Description:** A pharmaceutical assistant dispenses and prepares medicaments, lotions and mixtures under the guidance and direction of a pharmacist in pharmacies, hospitals and dispensaries.

**Alternative and Related Titles: PHARMACY AID**

**What does a pharmaceutical assistant do?**

- Prepares medicaments and other mixtures under the guidance of a pharmacist.
- Cleans and maintains equipment and containers used to prepare and dispense medicines and pharmaceutical compounds.
- Under the direction of a pharmacist, dispenses medicines and drugs.
- Under the direction of a pharmacist, gives oral and written instructions on the use of medicines and drugs.

**What are the working conditions for pharmaceutical assistant?**

A pharmaceutical assistant may be employed in the private sector or in government. In government, the salary and benefits relate to technician levels. The entry level to Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the private sector salary and benefits are dependent on the level of skill and experience. The hours of work are normally regular.

**What is the working environment like?**

A pharmaceutical assistant works in doors in a dispensary under the supervision of a pharmacist. The environment is characterized by drugs and medicines, with a strong emphasis on cleanliness, system, and order. Maintaining proper records of drugs and medicines dispensed is essential.

**What knowledge and skills do I need to be a pharmaceutical assistant?**

- Good communication and interpersonal skills.
- Knowledge of different types of drugs and medicines.
- Knowledge of record keeping procedures and requirements.



- Ability to read and follow instructions.
- Record keeping skills, including computer skills.

**What personal qualities/attributes do I need to be a pharmaceutical assistant?**

- An interest in drugs and medicines.
- An interest in helping people.
- High levels of accuracy.
- Responsibility.
- Integrity.

**What are the education requirements to become a pharmaceutical assistant?**

A career as a pharmaceutical assistant can involve the completion of formal studies in pharmacy after the completion of secondary schooling. It is also possible to acquire the required knowledge and skills through on the job training under the supervision of a qualified pharmacist.

**Can I study in Bhutan to become a pharmaceutical assistant?**

Yes, you can study under the supervision of a pharmacist through on the job training.

**What are the employment prospects for a pharmaceutical assistant in Bhutan?**

Employment opportunities exist in the Royal Civil Service and in the private sector.

### 3.2.7 Physiotherapist

**Title: PHYSIOTHERAPIST**

**Description:** A physiotherapist treats disorders of bones and muscles and parts of the circulatory system through manipulative methods, ultra sound, heating, laser or other techniques to enable people cope with day-to-day living. A physiotherapist is not a medical doctor.

**Alternative and Related Titles: CHIROPRACTOR/PODIATRIST**

**What does a physiotherapist do?**

- Advises healthy individuals and groups on correct body posture

for work and other activities to avoid injuries and strain, and to strengthen muscles.

- Advise healthy people on the correct use of the body to prevent injury.
- Examines individuals to diagnose disorders of bones, muscles and parts of the circulatory system.
- Decides on treatment based on diagnosis and treats disorders by using manipulative and other techniques.
- Massages clients to improve circulation or soothe or stimulate nerves, or stretch contracted tendons.
- Examines body deformities and disorders to determine and specify artificial limbs and other appliances, helps for them and explains their use.
- Prepares technical papers and reports.

### **What are the working conditions for a physiotherapist?**

A physiotherapist is employed by the government as a member of a medical team who assists in the alleviation of pain and restoration of good health through massage and other forms of manipulation. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work for a physiotherapist are regular.

### **What is the working environment like?**

A physiotherapist works in doors in a surgery or treatment room characterized by cleanliness, treatment tables for massage and manipulative work, and mechanical and electrical equipment. A physiotherapist spends many hours standing and doing manual manipulative work. This can be tiring and requires a good level of physical fitness.

### **What knowledge and skills do I need to be a physiotherapist?**

- Good communication and interpersonal skills.
- Knowledge of massage and manipulation techniques.
- Knowledge of the use of equipment for massage and manipulation.
- Massage skills.

**What personal qualities/attributes do I need to be a physiotherapist?**

- An interest in the functions and operations of the human body.
- An interest in serving people.
- Responsible and caring manner.
- Physical fitness to enable long periods of manipulative work to be undertaken.
- Responsibility.
- Patience.

**What are the education requirements to become a physiotherapist?**

A career as a physiotherapist normally requires a Bachelor of Science (Physiotherapy) or Bachelor of Physiotherapy Degree. These degrees normally take 3-4 years after the completion of secondary schooling.

**Can I study in Bhutan to become a physiotherapist?**

No. You will need to study overseas after the completion of Class 12.

**What are the employment prospects for a physiotherapist in Bhutan?**

A physiotherapist is an important member of a medical team and employment opportunities exist in the Ministry of Health. In future there may be opportunities for self-employment in this field.

### 3.2.8 Radiographer

**Title: RADIOGRAPHER**

**Description:** A radiographer uses technical equipment including X-rays and ultrasound to assist in the identification of diseases. (A radiographer is not a medical doctor and is not responsible for the analysis and is not responsible for the analysis and interpretation of X-ray photographs.)

**What does a radiographer do?**

- Takes X-ray photographs of patients' internal structures and organs.
- Places the patient in different positions and records photographs internal conditions in each position.
- Uses equipment that uses sound waves to record images of soft tissue.
- Assist in the treatment of diseases, mostly cancer, through the

use of X-rays and other radiation treatment.

### **What are the working conditions for a radiographer?**

A radiographer is an important member of the medical team and is normally employed as a technical level within the Royal Civil Service. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The working hours for a radiographer involve are irregular involving work at weekends and when emergencies occur.

### **What is the working environment like?**

A radiographer works indoors in an environment characterized by expensive and complex equipment. Some patients may be in pain during the X-ray process thereby requiring that the radiographer take special care when handling patients. The radiographer requires a degree of physical strength to help patients get in the correct position to enable X-rays to be taken. This can be physically tiring. A radiographer can spend long periods in a standing position and this, too can cause tiredness and fatigue.

### **What knowledge and skills do I need to be a radiographer?**

- Good communication and interpersonal skills.
- Knowledge of the safe use of sophisticated equipment.
- Good eyesight.
- Ability to give clear instructions.
- Ability to work systematically.

### **What personal qualities/attributes do I need to be a radiographer?**

- An interest in helping people.
- Physical fitness.
- Calmness in an emergency situation.
- Responsibility and reliability.

### **What are the education requirements to become radiographer?**

A career as a radiographer normally required a diploma or degree in radiography of 2 or 3 year's duration after Class 12.

**Can I study in Bhutan to become a radiographer?**

No. There are no specialized courses for radiographers in Bhutan. Study abroad is required.

**What are the employment prospects for a radiographer in Bhutan?**

A radiographer, although not a medical doctor, is an important member of a medical team. Increased reliance on X-rays and scans means more opportunities for radiographers, but on the clear understanding that the number of radiographers is limited by the availability of radiography equipment. The only opportunities in this career at present are in the Royal Civil Service. There are no opportunities for self-employment.

### 3.2.9 Traditional medicine practitioner

**Title: TRADITIONAL MEDICINE PRACTITIONER**

**Description:** A traditional medicine practitioner treats human mental and physical sickness by using herbs, medicinal plants and other techniques that assist and stimulate nature, traditionally used in the community. The treatment of patients does not rely on modern drugs.

**Alternative and related titles: HERBAL HEALER/NATUROPATH/VILLAGE HEALER**

**What does a traditional medical practitioner do?**

- Treats sickness and injuries using herbs, medicinal plants, insects, and other traditional techniques believed to cure and heal.
- Encourages good health through the use of techniques that assist and stimulate nature.
- Advises individuals and communities on proper diet and behavior to preserve and improve health and well-being.

**What are the working conditions for a traditional medicine practitioner?**

A traditional medical practitioner in Bhutan is a medical doctor and recognized as such. A traditional medical practitioner is employed by the Royal Civil Service as a professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular except in cases of emergencies.

**What is the working environment like?**

A traditional medical practitioner works indoors in a clinic treating patients and dispensing traditional remedies and medicines..

**What knowledge and skills do I need to be a traditional medicine practitioner?**

- Good communication and interpersonal skills.
- Knowledge of traditional medicine procedures and practice.
- Knowledge of herbs and medicinal plants.
- Diagnostic skills.

**What personal qualities/attributes do I need to be a traditional medicine practitioner?**

- An interest in serving the community and helping people.
- An interest in the application of traditional medicine for the treatment of illness and diseases.
- High levels of responsibility.
- Confidentiality.
- High ethical and moral standards.

**What are the education requirements to become a traditional medicine practitioner?**

A traditional medicine practitioner is required to undertake formal study after the completion of secondary schooling.

**Can I study in Bhutan to become a traditional medicine practitioner?**

Yes, you can study traditional medicine at the National institute of Traditional Medicine in Thimphu. The degree level course is for 5 year's duration after Class 12, and the diploma course is three years after higher secondary school. The number of places in these courses is limited to five persons each year.

**What are the employment prospects for a traditional medicine practitioner in Bhutan?**

Traditional medicine is highly respected in Bhutan and employment opportunities are expected to continue, although the number will always be small.

### 3.2.10 Veterinary assistant

**Title: VETERINARY ASSISTANT**

**Description:** A veterinarian assistant carried out basic diagnostic. Preventive and curative tasks under the supervision of a veterinarian and assists a veterinarian by taking care of instruments, preparing materials and getting animals ready for examination and treatment.

**Alternative and Related Titles: VETERINARIAN NURSE/VETERINARIAN AID/VETERINARIAN VACCINATOR**

**What does a veterinarian assistant do?**

- Advises individuals and communities on the treatment of animals and their diseases and injuries.
- Conducts examinations of animals and refers difficult cases to a veterinarian.
- Treats animals for common and simple diseases, illnesses and injuries.
- Prepares and maintains instruments and materials used in the treatment of animals.
- Assists a veterinarian with technical tasks concerning the artificial dissemination of animals.
- Prepares animals for examination and treatment.
- Holds and comforts animals, as necessary, during treatment.
- Keeps records of animal patients, their diseases and treatment.
- Takes X-rays of injure parts of animals.

**What are the working conditions for a veterinary assistant?**

A veterinary assistant is employed as a government servant under the supervision of a veterinarian. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular although considerable time can be spent in traveling or handling emergency situations.

**What is the working environment like?**

A veterinary assistant normally works outdoors and sometimes in remote locations. In door work tends to concentrate on operations on animals

where the assistant prepares the necessary surgical instruments, ensures the operation room is ready, and that the animal patient is properly prepared. This is an environment in which cleanliness and hygiene are very important.

### **What knowledge and skills do I need to be a veterinary assistant?**

- Good observation skills.
- Knowledge of veterinary procedures and techniques.
- Good communication skills.
- Computer skills.
- Driving skills together with the necessary license.

### **What personal qualities/attributes do I need to be a veterinary assistant?**

- An interest in helping animals. Sympathy and patience with animals.
- Cool and calm in emergencies.
- Willingness to work as a member of a small team.

### **What are the education requirements to become a veterinary assistant?**

A career as a veterinary assistant normally requires the completion of a two-year Diploma in Veterinary Nursing, after the completion of secondary schooling including mathematics, science, and biology. It is possible, however, to acquire the necessary knowledge and skills through on the job training under the supervision of a qualified veterinarian.

### **Can I study in Bhutan to become a veterinary assistant?**

Yes, it is possible to be trained on the job, preferably after the completion Class 12.

### **What are the employment prospects for a veterinary assistant in Bhutan?**

Veterinary assistants are employed in the Ministry of Agriculture with the employment opportunities related to the development of Bhutan's animal husbandry industry.

## **3.3. Business and administration associate professionals**

### **3.3.1 Accountants**

**Title:** ACCOUNTANT

**Description:** Accountant collect, check and analyze financial information.



## **Alternative and Related Titles: FINANCE OFFICER / ACCOUNTS OFFICER / ACCOUNTING TECHNICIANS**

### **What does an Accountant do?**

Accountants are responsible for collecting, checking and analyzing financial information. The jobs vary according to the size and type of organizations that employ them, but their responsibilities may include some of the following:

- maintaining and checking financial records
- receiving and settling invoices from suppliers
- monitoring company expenses
- completing and submitting company tax returns
- managing the staff payroll
- recording receipts and payments
- auditing (verifying an organisation's accounts)
- controlling budgets
- Writing reports.

### **What are the working conditions for Accountant?**

An accountant is employed both in government and private enterprises. For the government, the entry level to the Royal Civil Service and the actual salary and benefits payable for each; positions are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular although considerable time can be spent in traveling or handling emergency situations.

Accountants use computers for most of their work. They work with spreadsheets, databases and word processing software. Increasingly, accounting technicians are also responsible for identifying how a company can improve its profits and reduce costs.

### **What is the working environment like?**

Accountants usually work normal office hours, Monday to Friday. They may have to work longer during busy times or to meet deadlines. There are opportunities for part-time work and job sharing. Many organizations offer flexible working hours.

### **What knowledge and skills do I need to be Accountant?**

- be good with figures

- be confident using computers
- have good communication skills, both spoken and written
- be able to research and analyze information
- have good organizational skills
- be capable of working under pressure and meeting deadlines
- be trustworthy, have tact and be discreet when handling confidential information
- work well on their own and as part of a team
- be accurate and attentive to detail
- Be good at solving problems.

#### **What personal qualities/attributes do I need to be Accountant?**

- have an interest in finance
- Enjoy detailed, methodical work.

#### **Can I study in Bhutan to become Accountant?**

Yes, you could study for a Bachelor of Commerce degree / Economic / BBA after completion of Class 12 or under go Diploma Course at Royal Institute of Management.

This would provide with a good foundation for a career as Accountant. This, however, is not essential in that the required knowledge and skills can be acquired through on the job training under the supervision of experienced Accounts.

#### **What are the employment prospects for Accountant in Bhutan?**

There are employment opportunities for accountants in all sectors.

### 3.3.2 Administrative Officer

#### **Title: ADMINISTRATIVE OFFICER**

**Description:** An administrative officer is responsible for providing administrative support for an office or department.

#### **Alternative and Related Titles: ADMINISTRATOR**

#### **What does Administrative officer do?**

Administrative officer are responsible for providing administration support

for an office or department. The work varies depending on the sector they work in, the size of the organization they work for and their levels of responsibility. Administrative officer often work in general roles, carrying out a wide range of administrative tasks to support office environments in their particular function. Administrators may work in more specialized roles, taking on more responsibilities relating to finance, human resources (HR) and marketing.

The role of administrative officer may be combined, depending on the size of the organization and responsibilities. An administrative assistant/administrator's tasks may involve:

- dealing with internal and external correspondence
- word processing documents, such as letters, presentations and reports
- monitoring stationery supplies and reordering when necessary
- using office equipment, such as printers, scanners and photocopiers
- answering the telephone and directing calls
- using a variety of software packages
- setting up and maintaining filing systems
- updating information on computer databases
- arranging meetings and taking minutes
- Reception duties, such as greeting and looking after visitors.

### **What are the working conditions for Administrative Officer?**

An Administrative Officer is employed in both government and private enterprises. In the government the entry level to the Royal Civil Service and the actual salary and benefits payable for each; position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular although considerable time can be spent in traveling or handling emergency situations.

### **What is the working environment like?**

Administrative officer normally work a standard working week.

There may be part-time and job share opportunities. Temping jobs are common and often lead to permanent employment. Depending on the nature of the work, it may be possible to work from home.

The role is office based, and administrators spend a considerable amount of time sitting at workstations, using a computer.

**What knowledge and skills do I need to be administrative officer?**

- have good interpersonal and communication skills
- be able to work on their own initiative
- be able to work to tight deadlines
- be able to prioritize their workload
- work well with staff from all levels
- work well in a team
- be flexible and adaptable
- be able to pay attention to detail
- Have numeracy and IT skills.

**What personal qualities/attributes do I need to be administrative officer?**

- have an interest in business and commerce
- Enjoy working with people.

**Can I study in Bhutan to become administrative officer?**

Yes, you could study for a Bachelors degree after completion of Class 12. This would provide with a good foundation for a career as administrative officer.

**What are the employment prospects for administrative officer in Bhutan?**

There are employment opportunities for administrative officer in both government and private enterprises.

### 3.3.3 Auctioneer

**Title: AUCTIONER**

**Description:** An auctioneer sells property and goods by auction through a process where items are sold to the highest bidder.

**Alternative and Related Titles: VALUER** (Auctioneers frequently undertake work as valuers, and valuers are often auctioneers).

**What does an auctioneer do?**

- Advises clients on the approximate value of items submitted for sale at auctions.

- Advises clients on a reserve price for sale by auction. (A reserve price is a price below which a sale cannot be made during the auction process).
- Advertises the date, time and place of items to be sold by auction.
- Conducts the auction process by calling for bids or offers from prospective buyers.
- Finalizes the sale by accepting the highest bid above the reserve price.

**What are the working conditions for an auctioneer?**

An auctioneer works in the private sector either as an employee or as a self-employed person. As an employee the salary and benefits for an auctioneer depend on the level of skill and experience of the individual. As a self-employed person the earnings of an auctioneer are related to the amount and value of work performed, which is closely related to the individual auctioneer’s reputation. The hour of work for an auctioneer is irregular, sometimes involving work in the evenings and often involving weekend work.

**What is the working environment like?**

An auctioneer work both indoors and outdoors. The indoor work involves planning and preparing for auctions, advising clients on reserve prices, and arranging for payments for and delivery of goods bought and sold. The outdoor work involves conducting auctions on site of the house or property being sold.

**What knowledge and skills do I need to be an auctioneer?**

- High level communication and interpersonal skills.
- Knowledge of auctioning procedures and processes.
- Knowledge of laws and regulations concerning commercial contracts.
- Good observation skills.
- Ability to talk for sustained periods.

**What personal qualities/attributes do I need to be an auctioneer?**

- An interest in buying and selling.
- An interest in serving people (particularly) those persons selling goods or property).

- Strong voice.
- Capacity to work under pressure if many bids are being made at the same time.
- Integrity.

In many countries a career as an auctioneer requires a special qualification, without which a person cannot receive a license to operate as an auctioneer. At present this requirement does not exist in Bhutan. There are no formal education requirements to become an auctioneer other than a good general education and the ability to read and write.

### **Can I study in Bhutan to become an auctioneer?**

Yes, you could study for a Bachelor of Commerce degree at Sherubtse College for three years after completion of Class 12. This would provide with a good foundation for a career as an auctioneer. This, however, is not essential in that the required knowledge and skills can be acquired through on the job training under the supervision of an experienced auctioneer.

### **What are the employment prospects for an auctioneer in Bhutan?**

There are limited employment opportunities for auctioneers at present but more opportunities will become available as Bhutan's property market grows and develops.

## 3.3.4 Auditor

### **Title: AUDITOR**

**Description:** Auditors inspect and verify the accounts of companies and other organizations to see how well they are controlling their finances.

### **What does an Auditor do?**

They may be employed by a company or group as an internal auditor, or they may produce independent reviews of an organization's accounts as an external auditor.

An external auditor produces an independent, professional review of a company's annual accounts to make sure the information is accurate and provides a fair view of the financial position. They may also audit other public service organisations, such as housing associations, charities, colleges and

universities, to make sure public money is well spent and to see if any savings can be made. Annual audits are required by law for most organizations.

Typical tasks include:

- examining interim and end-of-year accounts
- collecting and reviewing specific financial data and transactions
- conducting departmental reviews and interviewing key personnel about working practices
- assessing financial risk controls
- ensuring value for money is delivered
- identifying and recommending ways in which clients can improve their working practices
- Preparing and submitting audit reports.

### **What are the working conditions for Auditor?**

An auditor is a government official with entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In contrast, internal auditors usually have a wider responsibility, reviewing and evaluating how risks are controlled across all parts of an organization, not just its finances. They are more concerned with identifying weaknesses in the organization's control systems, and work with managers to make improvements.

### **What is the working environment like?**

Auditors usually work standard offices hours, though external auditors may need to be more flexible, to meet clients' demands. Part-time work and job sharing is possible.

Although mainly office based, external auditors do visit clients. Assignments can involve frequent travel, visiting main offices and regional sites, and possibly nights away from home.

Internal auditors tend to travel between different company sites and the head office.

### **What knowledge and skills do I need to be auditor?**

- excellent interpersonal and communication skills

- a good understanding of the organization or sector they are working in
- the ability to interpret and analyze complex figures
- an understanding of audit principles
- a planned, well-organized approach to work
- good project management skills
- an objective, logical and enquiring mind
- strong IT skills
- tact and the ability to give constructive feedback
- A confident and professional manner.

#### **What personal qualities/attributes do I need to be auditor?**

- enjoy working with figures
- Be interested in how businesses or organizations work.

#### **What are the education requirements to become auditor?**

You need a minimum Bachelor's Degree with economics or commerce as majors. Such a degree is typically of three year's duration, with entry at Class 12.

#### **Can I study to become auditor in Bhutan?**

You can study for a Bachelor of Commerce or a Bachelor of Arts (Economics) after Class 12. These courses do not provide the formal training required to be a auditor but provide a foundation for further training that can be done on the job.

#### **What are the employment prospects for auditor in Bhutan?**

There are good prospects for the employment of Auditor, although the numbers required are not large.

### 3.3.5 Building Inspectors

#### **Title: BUILDING INSPECTOR**

**Description:** A building inspector is a government official who inspects buildings under construction such as houses, hotels, and office buildings, to ensure compliance with approved plans, zoning laws, and standards.



**What does a building inspector do?**

- Advises persons and organizations erecting buildings and other structures on the laws and regulations concerning the safety standards of buildings.
- Checks and reports on buildings and structures during and after construction to ensure they comply with approved plans and building, grading, zoning and safety laws, specifications and standards.
- Checks and reports on existing buildings and structures to determine whether lack of maintenance, or hazardous conditions exist.
- Supervises the work of subordinate staff.

**What are the working conditions for a building inspector?**

A building inspector is a government official, with salary and benefits that apply to technician level staff. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances.

**What is the working environment like?**

A building inspector works both indoors and outdoors. The indoor work focuses on the preparation of reports and handling enquiries. The outdoor work involves travelling to buildings and building sites, conducting inspections, and discussing the outcome of the visit with building site managers, and owners. The building inspector may face periods of stress particularly when managers or owners disagree with the remedial action that has to be taken as a result of the inspector's visit.

**What knowledge and skills do I need to be a building inspector?**

- Good communication and interpersonal skills.
- Knowledge of building rules and regulations.
- Observation skills.
- Attention to details.

**What personal qualities/attributes do I need to be a building inspector?**

- An interest in building and structures.
- An interest in serving the community.

- Responsibility and reliability.
- Integrity.

### **What are the education requirements to become a building inspector?**

A building inspector may have a diploma in building construction or in civil engineering. It is not necessary to have degree level studies. Some building inspectors enter this career after some years of experience in the building industry, possibly as a carpenter or mason.

### **Can I study in Bhutan to become a building inspector?**

Yes, you can learn to be a building inspector in Bhutan either by undertaking a course in Civil Engineering at and then learning the specific aspects of inspection in an on the job situation under the supervision of an experienced inspector. Alternatively, you may gain a certificate course from the TTIs after Class 10, work for several years in a particular trade, and then commence a career as an inspector by learning on the job.

### **What are the employment prospects for a building inspector in Bhutan?**

Many building are being constructed in Bhutan and this trend is expected to continue in the future. Accordingly, there are good prospects for the employment of inspectors, although the numbers required are not large. There are no opportunities for self-employment as a building inspector.

## 3.3.6 Company Secretary

### **Title: COMPANY SECRETARY**

**Description:** Company secretaries play a crucial role, often at the heart of the organization they represent. They are responsible for keeping essential records and making sure the company meets its legal obligations. There may also be a much broader role, covering legal and financial tasks as well as administration.

### **Alternative and Related Titles:**

### **What does a company secretary do?**

Company secretaries play a crucial role in the administration of an organization. By taking charge of key legal, financial and governance issues, they allow the directors to focus on running the business.

Traditionally the company secretary is responsible for keeping essential records, and ensuring the company complies with legal requirements. In many companies, however, the job is now a much more pivotal one, working across the organization.

### **What are the working conditions for a company secretary?**

There are complex laws governing business, and company secretaries must ensure their organization complies. For instance, they must ensure that the company name and number appears prominently on all its documents and website, and that key documents are filed with Companies House, where companies are registered.

Some company secretaries combine the role with heading the firm's legal department. Others may be board directors. In smaller organisations the company secretary may take on additional duties, such as:

- overseeing the payroll and employee pensions
- arranging insurance
- Managing the company's premises and facilities.

### **What is the working environment like?**

Company secretaries generally work standard office hours. However, the senior nature of the job may mean that longer hours are sometimes required. There may be some travel to branch offices or to attend meetings.

### **What knowledge and skills do I need to be company secretary?**

- extremely well organized
- scrupulous about detail
- honest and trustworthy
- an excellent communicator, in person and in writing
- good at building relationships with all kinds of people
- able to meet strict deadlines and prioritize work
- able to absorb and digest technical knowledge
- highly skilled in numeracy and literacy
- adept at thinking on their feet and solving problems
- confident and have the ability to work well under pressure
- tactful and aware of the importance of confidentiality
- Flexible.

### **What personal qualities/attributes do I need to be company secretary?**

- have an interest in corporate law
- be fascinated by business and commerce
- Enjoy working with people.

### **What are the education requirements to become company secretary?**

You need a minimum Bachelor's Degree. Such a degree is typically of three year's duration, with entry at Class 12.

### **Can I study to become company secretary in Bhutan?**

You can study for a Bachelors degree after Class 12. These courses do not provide the formal training required to be company secretary but provide a foundation for further training that can be done on the job.

### **What are the employment prospects for company secretary in Bhutan?**

There are good prospects for the employment of company secretary, although the numbers required are not large.

## 3.3.7 Consultant

### **Title: CONSULTANT**

**Description:** A consultant provides technical advisory services to a client normally on a fixed term contractual basis to address a particular issue or problem as identified by the client. The client may be a government Ministry, a business enterprise, an international agency, or an NGO.

### **Alternative and Related Titles: MANAGEMENT CONSULTANT**

#### **What does a consultant do?**

- Prepare detailed bidding proposals in response to advertisements or terms of reference prepared by a client.
- Undertakes studies and prepares reports in response to terms of reference.
- Analyzes problems and proposes alternative solutions.
- Prepares action strategies to address identified problems.
- Conducts workshops and consultative meetings to assist in problem identification and to discuss action strategies.
- Plans and conducts training activities.

**What are the working conditions for a consultant?**

Some consultants work on a retainer basis in which they receive a fixed fee from a client to provide advice on an on-going basis. Other consultants receive a negotiated fee based on the amount of work to be done (usually measured in person-days). The earnings of a consultant vary according to skills, experience, reputation, and negotiating abilities. The hours of work for a consultant can be irregular. Once the consultant receives a contract to provide a particular service, the consultant works long hours to ensure the work is finished on time and to the required standard. Some consultants are required to travel extensively.

**What is the working environment like?**

A consultant may work in the client's office, sometimes in the consultant's own office, and sometimes doing field work. This will depend on the particular nature of the assignment. Most consultants work in an environment characterized by computers, reference materials, and modern communications. A consultant can experience stress and anxiety when an assignment does not go according to plan or when time schedules are not kept.

**What knowledge and skills do I need to be a consultant?**

- High level communication and interpersonal skills.
- Detailed technical knowledge in a particular field.
- Analytical skills.
- Research skills.
- Research skills.
- Report preparation skills.
- Training skills.
- Time management skills.
- The ability to lead and motivate a small team.

**What personal qualities do I need to be a consultant?**

- A real interest in serving clients.
- An interest in business.
- Honesty and integrity.
- Responsibility and reliability.

**What are the education requirements to become a consultant?**

In most cases a consultant has high level qualifications in a particular field

(such as engineering, medical services, management, finance, education) as well as many years of practical experience in that same field. Without education qualifications and experience the consultant's integrity and reputation will be diminished.

### **Can I study to become a consultant in Bhutan?**

Yes. You can undertake degree studies in Bhutan and then acquire the necessary practical experience through by working for government, the corporate or private sectors. International work experience as well as study in an overseas university or college will improve your prospects for a consultant.

### **What are the employment prospects for a consultant in Bhutan?**

There are very few private consultants in Bhutan. There are, however, many opportunities for consultants to work for international agencies, NGO's government Ministries, and the corporate and private sectors. Most of this consulting work is done by international consultants at present but in future years more opportunities will arise for national consultants provided they have the necessary qualifications and experience.

#### 3.3.8 Currency Officer

##### **Title: CURRENCY OFFICER**

**Description:** A currency officer works at the central bank and manages and looks after the national currency. A currency officer is the custodian of the government treasury.

**Alternative and Related Titles:** **CURRENCY MANAGER** (A currency officer may also be called a currency manager holding the position of general manager and heading the currency management and issue division.)

##### **What does a currency officer do?**

- Determines fresh notes and coins requirements.
- Submits proposal for printing currency notes and coins.
- Maintains stock balance of fresh currency notes and coins
- Controls and issues fresh notes and coins to commercial banks.
- Submits proposals for major systems changes to the board.
- Submits monthly reports and statements.
- Manages currency.

**What are the working conditions for a currency officer?**

A currency officer's job is very challenging and involves a lot of risk. It is for this reason that currency officer is paid extremely well. A currency officer earns Nu. 21,000 a month.

**What is the working environment like?**

A currency officer mostly works indoors. The work involves a lot of mental activities including analyzing, writing, planning and decision-making.

**What knowledge and skills do I need to be a currency officer?**

- Mathematics and statistics skills.
- Good command over English.
- Knowledge of banking.
- Knowledge of national economy.
- Able to understand the role and use of banknotes.
- Able to understand functioning and intricacies of a financial system.

**What personal qualities/attributes do I need to be a currency officer?**

- Honesty.
- Dynamism.
- Interest in economy and development.

**What are the education requirements to become a currency officer?**

You need a minimum Bachelor's Degree with economics or commerce as majors. Such a degree is typically of three year's duration, with entry at Class 12.

**Can I study to become a currency officer in Bhutan?**

You can study for a Bachelor of Commerce or a Bachelor of Arts (Economics) at Sherubtse College for three years after Class 12. These courses do not provide the formal training required to be a currency officer but provide a foundation for further training that can be done on the job.

**What are the employment prospects for currency officers in Bhutan?**

A currency officer's responsibilities are job-specific, with an officer being employed by the central bank of Bhutan. The central bank has a requirement for only one currency officer thereby indicating that employment opportunities

are limited. Opportunities for self-employment with this specific knowledge and qualification are very limited.

### 3.3.9 Custom Officer

**Title: CUSTOM OFFICER**

**Description:** A custom officer examines taxation returns and other documents to determine the type and amount of taxes to be paid by individuals and business.

**Alternative and Related Titles: EXCISE OFFICER/TAX ASSESSOR/TAX OFFICER**

**What does a custom officer do?**

- Advises organizations, enterprises, and the general public on the content and meaning of laws and regulations concerning the assessment and payment of taxes.
- Informs organizations, enterprises and the general public on their rights and obligation concerning the payment of taxes.
- Examines taxation returns and other documents to ensure that taxes of the correct amount are paid and on time.
- Initiates legal proceedings against organizations, enterprises and individuals not complying with taxation laws and regulations.

**What are the working conditions for a custom officer?**

A custom officer is a government official working at the level of a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. There are no employment opportunities for custom officers in the corporate or private sectors. A custom official, particularly one involved in the collection of taxes on goods produced within a country, may be required to work overtime hours from time to time.

**What is the working environment like?**

A custom officer works mostly indoors checking taxation returns of individuals and companies (income tax) or checking production records (for excise tax). The environment is characterized by documents and paper but increasingly



information is being stored on computers.

**What knowledge and skills do I need to be a custom officer?**

- Good communication skills.
- A thorough knowledge of taxation rules and regulations.
- Knowledge of tax collection procedures.
- Good calculating skills.
- Analytical abilities to detect problem areas quickly.
- Ability to work quickly and accurately.

**What personal qualities/attributes do I need to be a custom officer?**

- An interest in serving the community.
- An interest in figures and calculations.
- Objectivity and fairness.
- Responsibility and reliability.
- Integrity.

**What are the education requirements to become a custom officer?**

There are no formal education requirements to be a custom officer than a good general education and the ability to read and write. Promotion to higher levels of custom officer may require you to have a degree in a relevant field.

**Can I study in Bhutan to become a custom officer?**

Yes, you can study to be a custom officer through in-service training and undertaking the course in Tax Administration course at Royal Institute of Management at Semtokha.

**What are the employment prospects for a custom officer in Bhutan?**

Bhutan's future development will partly depend on the efficient collection of taxes from those persons and companies required by law to pay. This will provide additional employment opportunities for tax officers.

3.3.10 Government Licensing Officer

**Title: GOVERNMENT LICENSING OFFICER**

**Description:** A government licensing officer examines applications for licenses to import and export goods, to set up a business, construct a house, obtain a passport, drive a vehicle, recruit labour, and other circumstances

where a license is required by law.

## **Alternative and Related Titles: LICENSING OFFICER/LICENSING INSPECTOR**

### **What does a licensing officer do?**

- Advises individuals and organizations on the content and meaning of laws concerning the types of licenses required and on the conditions attached to issuing such licenses.
- Advises individuals and organizations on the public's rights and obligations under various licensing arrangements.
- Examines applications for licenses, determines whether a license can be granted, assess license fees payable, and determines the conditions attached to each license.
- Examines applications for passports and approves their issues.
- Examines and approves or rejects applications for the renewal of licenses.
- Supervises subordinate staff.

### **What are the working conditions for a licensing officer?**

A licensing officer is a government official working at the level of a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A licensing officer works regular hours with few requirements for overtime.

### **What is the working environment like?**

A licensing officer works indoors in an office environment in which the officer supervises the work of clerk and a cashier. The environment is characterized by people, paper and money payments. Where many license applications are received at the same time it is necessary for the licensing officer to ensure that the environment is orderly and systematic. Licensing officers and support staff now make increasing use of computers. A licensing officer can experience some stress if an application is refused and the applicant disagrees with this decision.

### **What knowledge and skills do I need to be a licensing officer?**

- Good communication skills.

- Detailed knowledge of licensing laws and regulations.
- Knowledge of licensing application procedures.
- Calculation skills.
- Ability to motivate and supervise subordinate staff.

**What personal qualities/attributes do I need to be a licensing officer?**

- An interest in serving the community.
- Responsibility and reliability.
- Integrity.

**What are the education requirements to become a licensing officer?**

There are no formal education requirements for a career as a licensing officer other than a good general education and the ability to read and write. Promotion to higher levels as a licensing officer may require higher degree studies.

**Can I study in Bhutan to become a licensing officer?**

Yes, you can study to be licensing officer by undertaking in-service training and studying the Tax Administration course at Royal Institute of Management. This course is of two year’s duration with an entry level of Class 12.

**What are the employment prospects for a licensing officer in Bhutan?**

The issuing and renewal of licenses is an important regulatory mechanism in a market economy and will provide employment opportunities for self-employment in this field.

3.3.11 Fire Inspector

**Title: FIRE INSPECTOR**

**Description:** A fire inspector is a government official who inspects fire-prevention systems and investigates fire site to determine the causes of fires.

**Alternative and Related Titles: FIRE PREVENTION OFFICER/ FIREFIGHTER**

**What does a fire inspector do?**

- Inspects and reports on factories, hotels, shopping complexes and other buildings to detect fire hazards.

- Advises on how fire hazards detected during inspection visits can be removed.
- Advises on the installation of fire detectors and sprinkler systems, and the use of appropriate construction materials to reduce the risk of fire.
- Advises on the means of transportation of materials to reduce the risk of fire in transit, and the likely of damage should fire occur.
- Investigates fire sites to determine causes of fires and prepares reports on the outcome of such investigations.

### **What are the working conditions for a fire inspector?**

A fire inspector is a government official employed at the level of a technical. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are regular except when required to investigate at short notice fire sites to determine the cause of a fire.

### **What is the working environment like?**

A fire inspector works both indoors and outdoors. The indoor work is focused on report preparation and providing advice on fire prevention. The outdoor work concentrates on the inspection of building to provide advice on how fires might be prevented, and the inspection of the building site after a fire has occurred. Inspecting a site after a fire involves working in dirty and sometimes unsafe conditions. The dangers in this aspect of a fire inspector's work can be minimized by following proper safety procedures.

### **What knowledge and skills do I need to be a fire instructor?**

- Good communication and interpersonal skills.
- Knowledge of fire prevention procedures.
- Good observations skills.
- Analytical skills.
- Report writing skills.

### **What personal qualities/attributes do I need to be a fire inspector?**

- An interest in serving the community.
- An interest in fire prevention.

- Good eyesight.
- Responsibility and reliability

**What are the education requirements to become a fire inspector?**

There are no special education requirements to be a fire inspector other than reading and writing skills. The knowledge and skills required can be learned on the job under the supervision of an experienced inspector. Some inspectors start their working lives as firefighters and become an inspector after a number of years of experience. Some fires require specific technical knowledge (such as fires involving chemicals) and specialized training in such fields is an advantage.

**Can I study in Bhutan to become a fire inspector?**

Yes. You can commence your career in the building industry or as a firefighter and then become a fire inspector at a later stage by learning through practical experience gained on the job.

**What are the employment prospects for a fire inspector in Bhutan?**

The number of fire inspectors required in Bhutan is relatively few and thus employment opportunities are limited.

3.3.12 Health and food Inspector

**Title: HEALTH AND FOOD INSPECTOR**

**Description:** A health and food inspector is a government official who inspects food production facilities, sales, outlets, restaurants, kitchens and other food establishments, to ensure their facilities and procedures meet the standards required by health laws and regulations.

**Alternative and Related Titles: SANITARY INSPECTOR/ENVIRONMENT INSPECTOR/SAFETY AND HEALTH INSPECTOR**

**What does a health and food inspector do?**

- Advises enterprises and the general public on government rules and regulations concerning hygiene, sanitation, and food storage and preparation in restaurants, hotel, and other public places.
- Conducts inspections of all establishments concerned with the preparation and distribution of food products to the public.

- Advises on government rules and regulations concerning the disposal of dangerous waste products.
- Advises on government rules and regulations concerning water, air, and noise pollution to protect the health of the community and prevent the spread of diseases.
- Issues warning notices to persons and establishments that fail to comply with government rules and regulations.

### **What are the working conditions for a health inspector?**

A health inspector is a government official employed at the level of a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A health inspector is normally empowered to undertake inspections at any reasonable time and this can involve after hours and weekend work. A health inspector normally carries special identification to enable access to buildings and places where inspection is required.

### **What is the working environment like?**

A health inspector works both indoors and outdoors. Indoor work focuses on preparing reports and giving advice on government rules and regulations, and what people need to do to comply with legal requirements. Outdoor work is concerned with undertaking inspection visits to shops, restaurants, hotels, enterprises producing food products, and public places to check on compliance with rules and regulations.

### **What knowledge and skills do I need to be a health inspector?**

- Good communication and interpersonal skills.
- Detailed knowledge of rules and regulations concerning health, sanitation and the environment.
- Knowledge of inspection procedures.
- Observation skills.
- Report writing skills.

### **What personal qualities/attributes do I need to be a health inspector?**

- An interest in serving the community.
- An interest in environmental protection and public health.
- Responsibility and reliability.'

- Integrity.

### **What are the education requirements to become a health inspector?**

A health inspector is not a medical doctor but it is normal for a health inspector to have a diploma or degree usually of three year's duration after Class 12. Much of the knowledge and skills required can be acquired through on the job training.

### **Can I study in Bhutan to become health inspector?**

Yes, you could study for a bachelors degree or diploma after Class 12. Such study would provide a general foundation for work as a health inspector, with the special knowledge and skills being acquired through on the job training under the supervision of an experienced health inspector.

### **What are the employment prospects for a health inspector in Bhutan?**

More industrial development and increased tourism will require an increased emphasis on environmental and public health issues. This will require greater attention to health inspection thereby creating further employment opportunities in this field.

## 3.3.13 Immigration Officer

### **Title: CUSTOMS/IMMIGRATION OFFICER**

**Description:** A customs officer checks person, vehicles, and goods crossing national borders to ensure that relevant laws and regulations are applied and enforced.

### **Alternative and Related Titles: CUSTOMS INSPECTOR, BORDER INSPECTOR, IMMIGRATION OFFICER**

(An immigration officer is more concerned with the movement of people across national borders, involving the checking of passports and visas, immigration officers and customs officers usually work together).

### **What does a customs officer do?**

- Patrols national borders to prevent persons illegally entering or leaving the country, or illegally importing or exporting goods and currency.
- Checking travel documents of persons crossing nation borders to

- check on authorizations and certificates.
- Inspects luggage and possessions of persons crossing borders to ensure that there is no breach of laws or regulations.
- Checks transport documents and freight of vehicles crossing borders to ensure conformity with laws and checks that all required fees and taxes have been paid.
- Conducts random checks of workplaces to ensure that foreigners conform to the requirements of their work permits.
- Supervises the work of subordinate staff.

### **What are the working conditions for a customs officer?**

A customs officer is employed in the Royal Civil Service at a technician level. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. Customs officers have to be present at all hours when border posts are open which means they are required to undertake shift work. A customs officer is required to wear a uniform. There are no customs or immigration officers in the private or corporate sectors and no prospects for self-employment in this career.

### **What is the working environment like?**

A customs officer works at a border post in both indoor and outdoor situations. The indoor work is primarily concerned with checking documents and passports or other means of identification. The outdoor work is concerned with checking vehicles, containers and luggage to ensure that no illegal goods are entering or leaving the country and that all required taxes and duties have been paid. Customs officers may sometimes be offered payments to allow goods that are liable to tax to pass without being checked. This is illegal and should result in the dismissal of any officers involved as well as criminal charges being brought against them.

### **What knowledge and skills do I need to be a customs officer?**

- Good communication skills.
- Detailed knowledge of customs and immigration rules and regulations.
- Detailed knowledge of custom inspection procedures.
- Computer skills.
- Good observation skills.



**What personal qualities/attributes do I need to be a customs officer?**

- An interest in community service.
- Objectivity and fairness.
- Neat appearance and good grooming.
- Integrity.

**What are the education requirements to become a customs officer?**

There are no formal education requirements to become a customs officer other than a good education and the ability to read and write. Ideally a customs officer has completed Class 12 or at least Class 10. Promotion to higher levels within the ranks of a customs officer normally requires a degree.

**Can I study in Bhutan to become a customs officer?**

Yes, you can study to be a customs officer through in-service in which the required knowledge and skills are acquired on the job under the supervision of a senior officer.

**What are the employment prospects for a customs officer in Bhutan?**

As more and more tourists and commodities are imported into Bhutan there will be a greater need for customs services and thus increased employment opportunities for customs officers.

3.3.14 Insurance Representative

**Title: INSURANCE REPRESENTATIVE**

**Description:** An insurance representative advises on customers' requirements for the protection of their property and life, and sells insurance products relating to life, accidents, properly, vehicles and other assets.

**Alternative and Related Titles: INSURANCE BROKER, INSURANCE AGENT**

**What does an insurance representative do?**

- Obtains and assesses information concerning customers' circumstances to determine their insurance needs.
- Explains to customers different types of insurance products available for purchase and encourages customers to buy products related to their needs.

- Negotiates with customers to determine type and degree of risk for which insurance is required, the extent of coverage, and terms of payment.
- Arranges re-insurance contracts.
- Advises on and arranges insurance contracts for large and special projects, and particular risks.
- Supervises subordinate staff.

### **What are the working conditions for an insurance representative?**

An insurance representative works in the private sector and receives a salary and benefits related to the skills, experience and reputation of the individual. Some insurance representatives are paid on a commission basis and thus receive a higher income if they sell more insurance products. The working hours can be irregular involving after hours and weekend work, consistent with the availability and needs of customers. An insurance representative must be prepared to travel to meet and provide services to clients. Some insurance representatives work for a single company and thus 'represent' that company. Others are self-employed and sell the products of many different insurance companies.

### **What is the working environment like?**

An insurance representative normally works indoors in an environment of buying and selling. The insurance representative has products to sell and encourages buyers to purchase such products by providing information and through persuasion. The insurance representative makes extensive use of the telephone as the main means of communication. The environment can be stressful when the representative has difficulties in selling insurance products and no income is generated.

### **What knowledge and skills do I need to be an insurance representative?**

- Good communication and interpersonal skills.
- Knowledge of the insurance products available for sale.
- Knowledge of selling techniques.
- Knowledge of laws and regulations concerning insurance.
- Computer skills.
- Calculating skills.
- Driving skills, together with a driver's license.

**What personal qualities/attributes do I need to be an insurance representative?**

- An interest in serving people.
- An interest in business.
- Responsibility and reliability.
- Integrity.

**What are the education requirements to become an insurance representative?**

There are no formal education requirements to become an insurance representative, other than a good general education and the ability to read and write. Some insurance representatives have a degree or diploma but this is not essential.

**Can I study in Bhutan to become an insurance representative?**

Yes. A degree in commerce from Sherubtse College would provide a strong foundation for a career as an insurance representative. This, however, is not essential as the knowledge and skills required can be acquired through in-service training under the supervision of an experienced insurance representative.

**What are the employment prospects for an insurance representative in Bhutan?**

The insurance industry in Bhutan is still in its early stages of development. As this industry develops further more employment opportunities for insurance representatives will be generated.

### 3.3.15 Labour Officer

**Title: LABOUR OFFICER**

**Description:** A labour officer is a government official who inspects all places of work where there are employees to check on compliance with laws and regulations concerning working conditions including wages, hours of work, rest periods, leave and other related conditions. In some cases, a labour inspector is also responsible for safety and health inspection.

**Alternative and Related Titles: SAFETY INSPECTOR, FACTORY INSPECTOR, WAGE INSPECTOR, WORKING CONDITIONS INSPECTOR**

### **What does a labour officer do?**

- Informs employers, managers, workers and their representatives on the content of laws and regulations concerning working conditions in all cases where an employer-employee relation exists, as defined by law.
- Advises employers, managers, workers and their representative on how to comply with laws and regulations concerning working conditions.
- Inspects workplaces through observation, checking records, and interviews with works and managers to determine compliance with laws and regulations concerning working conditions on such matters as wages, hours of work, leave and holidays, benefits, safety, and other matters.
- Identifies deficiencies in and defects in the law and regulations and advises higher authorities on changes required to improve working conditions in enterprises.
- Conducts prosecutions against offenders in breach of working conditions laws, or advises and informs government prosecutors on breaches of the law.
- Prepares reports on inspection visits.
- Designs and conducts training activities in the field of working conditions.
- Prepares scientific papers and reports.
- Supervises the work of subordinate staff.

### **What are the working conditions for a labour officer?**

A labour officer is a government official working at the level of a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A labour officer normally has the power undertake inspection visits to workplaces at any reasonable time and this can involve working at night and weekends.

### **What is the working environment like?**

A labour officer works both indoors and outdoors. The indoor work involves the preparation of reports and providing information and advice to people on the content and meaning of labour laws concerning working conditions. The outdoor work involves undertaking inspection visits to enterprises to check

on compliance with labour laws.

**What knowledge and skills do I need to be a labour officer?**

- Good communication and interpersonal skills.
- Detailed knowledge of rules and regulations concerning working conditions.
- Knowledge of inspection procedures.
- Observation skills.
- Report writing skills.

**What personal qualities/attributes do I need to be a labour officer?**

- An interest in serving the community.
- An interest in improving working conditions.
- Responsibility and reliability.
- Integrity.

**What are the education requirements to become a labour officer?**

A good general education is required but is not necessary to have a degree or diploma. A degree or diploma in the engineering field or in the social sciences provides a good foundation for a career as a labour officer, but is not essential.

**Can I study in Bhutan to become a labour officer?**

Yes, you could study bachelors degree in any field and then receive further training on the job to acquire specific knowledge and skills.

**What are the employment prospects for a labour officer in Bhutan?**

Labour officer will be required to ensure compliance with the law and the number of employment opportunities for labour officer will increase as Bhutan's industry develops further.

3.3.16 Personal Secretary

**Title: PERSONAL SECRETARY**

**Description:** A secretary supports the internal administrative arrangements within an organization and assists the director/head and staff to ensure that operations are efficient and meet the performance standards of the organization.

## **Alternative and Related Titles: PERSONAL ASSISTANT/ADMINISTRATIVE ASSISTANT**

### **What does a secretary do?**

- Drafts administrative correspondence and takes minutes of meetings.
- Makes file notes based on telephone and face-to-face communications.
- Screens requests for appointments, and arranges and organizes meetings.
- Makes travel arrangements for the director and other members of staff.
- Prepares high quality reports and documents, based on drafts submitted, making maximum use of computer technology.
- Assists in organizing hospitality functions for visitors or members of staff.
- Supervises the work of junior office staff.

### **What are the working conditions for a secretary?**

A secretary may be employed in the Royal Civil Service to assist persons in senior management positions. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. Secretaries also work in the corporate and private sectors with salary and benefits related to their level of skill and experience. The working hours for a secretary are regular although overtime work may be required from time to time.

### **What is the working environment like?**

A secretary works indoors in an office environment usually in close proximity to the office of the senior officer or manager. The environment is characterized by equipment including computer, printer, scanner, photocopier, fax machine, and other equipment as well as documents and files. Secretaries may sometimes feel stress and anxiety if there is poor communication with superiors, or visitors make unreasonable demands. As a secretary gains more experience stressful situations are generally handled more easily.

**What knowledge and skills do I need to be a secretary?**

- Good communication and interpersonal skills.
- Knowledge of office procedures and rules.
- Shorthand skills.
- Computer skills.
- Ability to operate all types of office equipment.
- Ability to follow instructions.
- Ability to lead and motivate junior staff.

**What personal qualities/attributes do I need to be a secretary?**

- An interest in meeting people.
- Confidentiality to ensure that information is distributed only in accordance with the manager's instructions.
- Responsibility and reliability.
- Punctuality.
- Neat and well groomed appearance.

**What are the education requirements to become a secretary?**

A secretary normally requires a diploma or certificate in secretarial studies or similar field, including computer skills and office procedures. In some countries secretaries hold degrees in addition to secretarial qualifications.

**Can I study in Bhutan to become a secretary?**

Yes, you can study to be a secretary at Royal Institute of Management by undertaking a course in Office Management after higher secondary school. In addition, many of the private computer and secretarial institute offer courses for office secretaries.

**What are the employment prospects for a secretary in Bhutan?**

Although many managers now use computers and do much work previously undertaken by secretaries, there are always employment opportunities for secretaries in all sectors, particularly those secretaries who are multiple skilled, and who are prepared to take on new tasks.

**3.3.17 Procurement Officer**

**Title:** Procurement Officer

**Description:** A Procurement Officer purchases goods and services on

behalf of industrial, commercial or other enterprises.

### **Alternative and Related Titles: Buyer**

#### **What does a Procurement Officer do?**

- Obtains information on the availability of suppliers of required products, raw materials, and supplies.
- Obtains information about quantity, quality, and availability of supplies, and prices and lead times required by sellers.
- Negotiates, contracts with sellers for goods to be supplied including quantities, quality, delivery time, and price.
- Visits suppliers' factories to assess quality standards working conditions and the working environment.

#### **What are the working conditions for a Procurement Officer?**

A Procurement Officer is employed in the private and corporate sectors and receives salary and benefits related to the level of skill and experience. A skilled Procurement Officer can save an enterprise considerable amounts of money by careful and skilled purchasing and thus is a valuable member of the management team of an organization. A Procurement Officer normally works regular hours.

#### **What is the working environment like?**

A Procurement Officer normally works indoors arranging for purchases of the company's raw materials and service requirements by telephone, electronic communications, and face-to-face contacts. The environment is characterized by information and negotiation – a successful Procurement Officer needs up-to-date information on the prices and availability of goods and services and must then negotiate the best possible prices for the enterprise. A Procurement Officer may suffer some stress and anxiety when negotiating important contract by this can be overcome through training and experience.

#### **What knowledge and skills do I need to be a Procurement Officer?**

- High level communication and interpersonal skills.
- Knowledge of supply sources and terms and conditions of supply.
- Knowledge of laws and regulations relating to commercial contracts.



- Negotiating skills.
- Computer skills.

**What personal qualities/attributes do I need to be a Procurement Officer?**

- A commitment to securing the best possible results or the enterprise.
- An interest in business.
- Ability to make quick decisions to take advantage of favorable purchasing conditions.
- Reliability.
- Integrity.

**What are the education requirements to become a Procurement Officer?**

A Procurement Officer normally requires a diploma or certificate in secretarial studies or similar field, including computer skills and office procedures. Some Procurement Officer has a Bachelors degree.

**Can I study in Bhutan to become a Procurement Officer?**

Yes, you could study for a Bachelor of Commerce degree after completing Class 12. This would provide a good foundation for a career as a Procurement Officer. This, however, is not essential as the knowledge and skills required to be a competent Procurement Officer can be acquired through on the job training under the supervision of an experienced buyer.

**What are the employment prospects for a Procurement Officer in Bhutan?**

Specialist Procurement Officer is usually found in large companies. In smaller enterprises the general manager is likely to assume responsibility for buying the raw materials and services required. Employment opportunities for Procurement Officer are relatively limited at present but can be expected to grow as the nation’s industrial and services sectors expand.

3.3.18 Program Officer

**Title: PROGRAM OFFICER**

**Description:** A program officer provides administrative support and logistics assistance to technical specialists concerning the design, implementation and evaluation of projects and programs.

## **Alternative and Related Titles: PROJECT OFFICER/PROGRAM ASSISTANT**

### **What does a program officer do?**

- Prepares terms of reference to guide the work of consultants and technical specialists
- Coordinates the preparation of program and project documents.
- Provides administrative support to external specialists and consultants.
- Monitors the implementation of programs and projects with regard to outputs produced in relation to inputs used, and activities required to produce project and program outputs.
- Participates in the evaluation and review of projects and program.
- Prepares progress reports.
- Participates in workshop and seminars related to program and project activities.

### **What are the working conditions for a program officer?**

A program officer works for international agencies and NGO's and enjoys terms and conditions of employment applicable to national staff employed by international agencies in Bhutan. Program officers are well paid but are expected to work long hours and to travel extensively within the country.

### **What is working environment like?**

A program officer works mostly indoors but is sometimes required to undertake field trips to assess the progress on projects. The indoor work is a combination of administrative activities, planning, document preparation and reporting. The time pressures placed on a program officer can be considerable and this sometimes leads to anxiety and stress.

### **What knowledge and skills do I need to be a program officer?**

- Multiple language skills.
- High level communication and interpersonal skills.
- Excellent writing skills, particularly in English language.
- Computer skills.
- Knowledge of national programs and projects.
- Knowledge of project and program formats.
- Knowledge of the work of UN and/or NGO agencies in Bhutan.

- Analytical abilities.

**What personal qualities/attributes do I need to be a program officer?**

- A genuine interest in national development activities.
- Patience and perseverance (some projects and programs take time to prepare and gain technical and financial approval).
- Creativity and innovation.
- Responsibility and dedication.

**What are the education requirements to become a program officer?**

A career as a program officer normally requires a Bachelor’s Degree, often in one of the fields of social science.

**Can I study In Bhutan to become a program officer?**

Yes, you can study for a degree in Arts or Commerce. This takes three years after the completion of Class 12. Some programs officers have a Master’s Degree and this requires overseas study.

**What are the employment prospects for a program officer in Bhutan?**

The employment prospects for program officers are largely confined to international agencies and NGO’s. The opportunities are limited but offer a very interesting and rewarding career.

3.3.19 Sales representatives

**Title: SALES REPRESENTATIVE**

**Description:** A sales representative sells goods, equipment and technical products on a wholesale basis and provides specialist information concerning such items to customers.

**Alternative and Related Titles:**

**What does a sales representative do?**

- Promotes products with prospective clients and encourages buyers to place orders.
- Sells products to retail, industrial, wholesale and other establishments.
- Provides prospective customers with general information

- concerning the characteristics and functions of products on offer.
- Demonstrates the use of products and equipment being sold.
- Reports customers' reactions and requirements to manufactures.
- Informs potential customers on the nature and availability of after-sales-service.

### **What are the working conditions for a sales representative?**

A sales representative is employed in the private sector to ensure that the company's products are sold as widely as possible. The salary and benefits of a sales representative depend on the skills, experience and reputation of the representative. A representative may work in wholesale or retail trade, or sometimes in both. Sometimes the earnings of a sales representative are paid on a commission basis. The hours of work for a sales representative are irregular and considerable travel is involved in this type of work.

### **What is the working environment like?**

A sales representative works both indoors and outdoors. Indoor work is concerned with making appointments with prospective customer, preparing contracts, and writing reports. The indoor work is concerned with meeting customers, providing information, and negotiating sales contracts. Sales representatives usually work in a competitive environment.

### **What knowledge and skills do I need to be a sales representative?**

- Good communication and interpersonal skills.
- Knowledge of the products being sold.
- Knowledge of rules and regulations concerning the sale and use of particular products.
- Negotiating skills.
- Driving skills, together with a driver's license.

### **What personal qualities/attributes do I need to be a sales representative?**

- An interest in serving people.
- An interest in business.
- Enthusiasm and energy.
- Neat appearance.
- Integrity.

**What are the education requirements to become a sales representative?**

A career as a sales representative does not require any formal education qualifications other than a good general education and good reading and writing abilities. The nature of the work enables the knowledge and skills required to be acquired on the job.

**Can I study in Bhutan to become a sales representative?**

Yes, you can study as a trainee salesperson under the supervision of an experienced sales representative. Depending on the actual products being sold (e.g. chemicals, machinery) a sales representative may be required to undertake specialized training in a particular field.

**What are the employment prospects for a sales representative in Bhutan?**

Employment opportunities for sales representative in Bhutan will depend on the nature of Bhutan's future industrial development. As more products and services are produced within Bhutan more opportunities will arise for sales representatives.

### 3.3.20 Securities Dealer

**Title: SECURITIES DEALER**

**Description:** A securities dealer buys and sells securities and other financial instruments and conducts other financial transactions on behalf of clients.

**Alternative and Related Titles: STOCKBROKER, FOREIGN EXCHANGE BROKER****What does a securities dealer do?**

- Obtains information about the financial circumstances and objectives of individual customers.
- Conducts research on companies and securities in which investments are possible.
- Analyzes market trends for securities and other instruments and foreign exchange rates.
- Informs and advises existing and prospective clients on existing and expected market conditions.
- Assists in organizing and negotiating the placement of securities in financial markets to raise capital for clients.

- Records and executes buy and sell orders for securities and foreign exchange on behalf of clients.
- Supervises the work of subordinate staff.

### **What are the working conditions for a securities dealer?**

A securities dealer normally works for the private sector and receives a salary and benefits related to the skill, experience and reputation of the individual. The hours of work are regular.

### **What is the working environment like?**

The environment for the buying and selling of securities can be very busy and hectic, depending on the day-to-day market conditions. Communication technology involving the use of telephones and electronic mail is an essential part of the environment, and is an essential component of modern securities dealing. A securities dealer can face some stress and anxiety if buying and selling orders are not executed in a timely manner, resulting in financial losses for clients.

### **What knowledge and skills do I need to be a securities dealer?**

- Good communication skills.
- Knowledge of macroeconomic conditions and financial markets.
- Knowledge of buying and selling regulations and procedures.
- Ability to use computer technology.
- Ability to work quickly and accurately.
- High level calculating skills.

### **What personal qualities/attributes do I need to be a securities dealer?**

- An interest in the operation of financial markets.
- An interest in business.
- Ability to work under pressure.
- Responsibility and reliability.
- Integrity.

### **What are the education requirements to become a securities dealer?**

A career as a securities dealer normally commences with the completion of secondary schooling followed by a degree in commerce or economics. Some dealers however have no post-secondary education qualifications but are very successful because of their personal qualities and attributes.

### **Can I study in Bhutan to become a securities dealer?**

Yes, you can study for a Bachelor of Commerce or Bachelor of Arts (Economics) after Class 12. Opportunities for learning securities trading on the job are limited in Bhutan because of the undeveloped nature of the country's financial markets. Overseas training on the practical elements of securities trading would be highly beneficial.

### **What are the employment prospects for a securities dealer in Bhutan?**

Bhutan's financial markets and stock exchange remain underdeveloped thereby limiting the employment opportunities for securities dealers. This situation is expected to change as the country's financial markets grow and develop. There are opportunities for securities dealers in other countries provided you have necessary skills and personal attributes for working in the hectic environment of international finance.

#### 3.3.21 Work safety and health inspector

##### **Title: WORK SAFETY AND HEALTH INSPECTOR**

**Description:** A work safety and health inspector is a government official who inspects all places of work to check on the safety and health of the working environment to ensure compliance with work safety and occupational health laws and regulations.

**Alternative and Related Titles: FACTORY INSPECTOR, LABOUR INSPECTOR, OCCUPATIONAL SAFETY AND HEALTH INSPECTOR**

##### **What does a work safety and health inspector do?**

- Informs employers, managers, workers and their representatives on the content of laws and regulations concerning occupational safety and health in all workplaces, as defined by law.
- Advises employers, managers, workers and their representatives on how to comply with laws and regulations concerning work safety and health.
- Inspects workplaces through observation, checking records, and interviews with workers and managers to determine compliance with work safety and health laws and regulations.
- Identifies deficiencies in and defects in the law and regulations and advises higher authorities on changes required to improve

work safety and health in enterprises.

- Examines building plans to check on safety issues before construction commences.
- Conducts prosecutions against offenders in breach of work safety and health laws, or advises and informs government prosecutors on breaches of the law.
- Prepares reports on inspection visits.
- Designs and conducts training activities in the field of work safety and health.
- Prepares scientific papers and reports.
- Supervises the work of subordinate staff.

### **What are the working conditions for work safety and health inspector?**

A safety and health inspector is a government official working at the level of a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A safety and health inspector normally has the power undertake inspection visits to workplaces at any reasonable time and this can involve working at night and weekends.

### **What is the working environment like?**

A safety and health inspector works both indoors and outdoors. The indoor work involves the preparation of reports and providing information and advice to people on the content and meaning of safety and health rules and regulations. The outdoor work involves undertaking inspection visits to enterprises to check on compliance with safety and health laws.

### **What knowledge and skills do I need to be a work safety and health inspector?**

- Good communication and interpersonal skills.
- Detailed knowledge of rules and regulations concerning work safety and health.
- Knowledge of inspection procedures.
- Observation skills.
- Report writing skills.



**What personal qualities/attributes do I need to be a work safety and health inspector?**

- An interest in serving the community.
- An interest in accident prevention and hazard elimination and control.
- Responsibility and reliability.
- Integrity.

**What are the education requirements to become a work safety and health inspector?**

A safety and health inspector may have an engineering qualification, or be trained in the area of occupational hygiene. Some safety and health inspectors do not have a degree or diploma but acquire the required knowledge and skills through on the job training under the supervision of an experienced supervisor.

**Can I study in Bhutan to become a work safety and health inspector?**

Yes, you can study for an engineering qualification. Further specialized training on occupational hygiene or work safety is not available in Bhutan at present, and will have to be undertaken overseas.

**What are the employment prospects for a work safety and health inspector in Bhutan?**

At present there are no safety and health inspectors in Bhutan. Once a labour law is introduced, safety and health inspectors will be required to ensure compliance with the law. The number of employment opportunities for safety and health inspectors will be limited initially but will increase as Bhutan's industry develops further

3.3.22 Curriculum Officer

**Title: CURRICULUM OFFICER**

**Description:** A curriculum officer conducts studies and research to assess and develop curricula, teaching methods and teaching media, and advises on changes and improvements.

**Alternative and Related Titles:** CURRICULUM DEVELOPMENT OFFICER, CURRICULUM SPECIALIST

### **What does a curriculum officer do?**

- Researches current developments in curricula, teaching methods and media and advises on changes and improvements.
- Advises on the content of courses and methods of examination.
- Researches into audio-visual, computer assisted learning and teaching aids and advises on their introduction into schools.
- Prepares technical papers and reports.
- Supervises the work of subordinate staff.

### **What are the working conditions for a curriculum officer?**

A curriculum officer in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. There are no curriculum development officers in the private sector. All are engaged in the Ministry of Education and have started their careers as primary or secondary teachers. The hours of work for a curriculum development officer are regular.

### **What is the working environment like?**

A curriculum officer spends most time indoors engaged in planning and discussing curriculum content, learning materials and teaching methodologies. Considerable time is spent in consultations with head teachers, education monitoring officers and teachers to discuss new developments in education theory and practice.

### **What knowledge and skills do I need to be a curriculum officer?**

- Good communication and interpersonal skills.
- Good writing skills.
- Sound knowledge of education theory.
- Knowledge of teaching methodologies and practical teaching skills.
- Knowledge of computer technology.
- Ability to formulate learning objectives.
- Ability to motivate others.

### **What personal qualities/attributes do I need to be a curriculum officer?**

- An interest in innovative approaches to learning

- Creativity and imagination.
- Responsibility and reliability.

**What are the education requirements to become a curriculum officer?**

Curriculum officers invariably commence their professional careers as primary or secondary teachers, and then undertake additional study in the field of curriculum development.

**Can I study in Bhutan to become a curriculum officer?**

Yes. You can study to be a primary or secondary teacher and then undertake in-service courses to provide you with the knowledge and skills to become a curriculum officer. Alternatively, you can undertake post-graduate studies in education in another country.

**What are the employment prospects for a curriculum officer in Bhutan?**

There will always be a need for curriculum officers to ensure that Bhutan’s education system responds to the needs of society and keeps abreast with modern development in education theory and practice. Of particular interest is the use of computer technology in education, which will require some curriculum officers to specialize in this field.

3.3.23 Education Monitoring Officer

**Title: EDUCATION MONITORING OFFICER**

**Description:** An education monitoring officer reviews and assesses teachers’ work and the results achieved in applying a particular curriculum program, and suggest changes and improvements in curricula and teacher performance, as appropriate.

**Alternative and Related Titles: SCHOOL INSPECTOR**

**What does an education monitoring officer do?**

- Visits schools periodically to confer with administrative and teaching staff on questions relating a curricula, teaching methods, equipment and other matters related to the performance of a school.
- Visits classrooms to observe teaching technique, evaluate teachers’ performance and the results obtained.

- Prepares reports and makes recommendations to education authorities concerning possible changes in curricula and teaching methods.

### **What are the working conditions for an education monitoring officer?**

An education monitoring officer in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. An education monitoring officer is required to undertake visits to schools and this may make the hour of work irregular.

### **What is the working environment like?**

An education monitoring officer spends a lot of time travelling and visiting schools. Time is also spent discussing performance and improvements with teachers and headmasters. When not visiting schools, an education monitoring officer spends time in an office preparing reports.

### **What knowledge and skills do I need to be an education monitoring officer?**

- High level communication and interpersonal skills.
- Knowledge of Bhutan's education and school system.
- Knowledge of teaching methodologies.
- Ability to identify and analyze problems.
- Report writing skills.
- Ability to lead and motivate others.

### **What personal qualities/attributes do I need to be an education monitoring officer?**

- An interest in improving the performance of schools and teachers.
- Responsibility and reliability
- Integrity.

### **What are the education requirements to become an education monitoring officer?**

The normal starting point for an education monitoring officer is to study to become a primary or secondary teacher, followed by several years of teaching experience. An education monitoring officer is then required to undertake further in-service training or, alternatively, post graduate studies overseas.

### **Can I study in Bhutan to become an education monitoring officer?**

Yes. You can study to become a primary or secondary teacher and then undertake in-service training to acquire the knowledge and skills required to become an education monitoring officer.

Education monitoring officers play a crucial role in maintaining and improving the country's education standards. Employment opportunities will continue to expand as the nation's education system expands and grows.

## **3.4. Legal, social, cultural and associate professionals**

### **3.4.1 Actor**

#### **Title: ACTOR**

**Description:** An actor is generally understood to mean a person who portrays roles in feature films. An actor, however, may also perform on radio and TV or in a theatre production.

**Alternative and Related Titles:** THEATRE ACTOR/STAGE ACTOR (Theatre or stage actors perform to a live audience whereas film actors perform to a camera.)

#### **What does an actor do?**

- Studies the script, learns a part and interprets the role through speech, gesture and various other performance techniques.
- Rehearses parts by memorizing lines, cues and movements.
- Portrays a role according to the director's instructions and guidance.
- Attends auditions for parts in a production.
- Undertakes research for certain roles.
- Sings and dances when required.
- Writes scripts, composes songs or helps with some aspect of production to supplement income.

#### **What are the working conditions for an actor?**

There are no professional actors in Bhutan. The ones who are into acting are amateurs with "regular" jobs that are totally unrelated to acting. A handful of actors are however aspiring to take up acting as a full-time profession. Payment for actors taking up lead roles ranges from Nu. 15,000 per film for

newcomers to 80,000 for the more popular and established ones.

### **What is the working environment like?**

Actors work indoors or on a wide range of natural and improvised movie sets which may either be indoors or outdoors. Actors are often required to work in far-flung locations and adverse weather conditions. They need a great deal of patience and commitment.

### **What knowledge and skills do I need to be an actor?**

- Demonstrated ability, based on audition or previous experience, to act.
- Able to show all kinds of emotions with facial expressions.
- Good memory, hearing and voice.
- Fitness and stamina to perform at peak level for extended periods.
- A wide range of artistic skills and talents.
- Able to cope with changing situations.
- Able to work under pressure.

### **What personal qualities/attributes do I need to be an actor?**

- Self-confidence.
- Determination and perseverance.
- Well-groomed with good physical attributes.

### **What are the education requirements to become an actor?**

There is no absolute requirement for education as long as you can read, memorize and understand scripts. But being educated certainly has other indirect advantages.

### **Can I study to become an actor in Bhutan?**

No. You will have to go abroad for studies for actors in Bhutan. However the knowledge and skills needed can be acquired through the roles of supporting actors.

### **What are the employment prospects for actors in Bhutan?**

You can not make a living solely out of acting. You must have other reliable sources of income or multiple talents such a ability to sing, compose music, write scripts or even direct yourself in films to earn enough money to sustain

you. The local film industry however appears to be growing fast and talented actors should some day be able to make a good living.

### 3.4.2 Cartoonist

**Title:** CARTOONIST

**Description:** A cartoonist conveys an insight, often humorous, into a person, incident or event through a drawing, or combination of drawing and words.

**Alternative and Related Titles:** GRAPHIC DESIGNER / COMMERCIAL ARTIST / ILLUSTRATOR / COMMERCIAL ARTIST (The distinguishing characteristic of a cartoonist is that things are drawn from imagination, often with distorted pictures to create a character, whereas illustrators draw things from real life).

**What does a cartoonist do?**

- Prepares drawings, using pen and ink or computer programs, to communicate information about topical events and personalities.
- Writes captions to support the ideas they wish to convey to readers.
- Observes, listens, and reads to gain inspiration for drawings and captions.

**What are the working conditions for a cartoonist?**

Most cartoonists are self-employed, with their income and benefits closely related to their reputation and abilities. During the early stages of a cartoonist's career earnings are likely to be small and other part-time work may be required. The working hours for a cartoonist are irregular and may involve work at weekends and after normal hours. In many respects, a cartoonist 'is always working' as the search for inspiration through radio, television, books, magazines and everyday life is constant.

**What is the working environment like?**

A cartoonist spends most time indoors working at a drawing board or, increasingly, with a computer. When using a drawing board a cartoonist requires good light, and must be prepared to accept the smell of ink and paints. Sitting for long periods at a drawing board or computer can sometimes lead

to posture problems. A cartoonist may sometimes be required to meet tight deadlines and this can sometimes create stress.

### **What knowledge and skills do I need to be a cartoonist?**

- Good drawing and lettering skills.
- Computer skills, particularly concerning the use of graphic art software.
- A good knowledge of current events and personalities.

### **What personal qualities/attributes do I need to be a cartoonist?**

- A good sense of humor.
- Responsible work habits to ensure that deadlines are met.
- An interest in all aspects of life.
- Patience, in that it may take some time for cartoons to be accepted for publication.
- High motivation to succeed.

### **What are the education requirements to become a cartoonist?**

There are no special education requirements to become a cartoonist. Most cartoonists teach themselves and start by copying other cartoonists, and using this as a basis for developing an individual style. The best way to learn to be a cartoonist is to practice drawing and writing cartoons for months and years until a unique style is created

### **Can I study in Bhutan to become a cartoonist?**

No, Very few cartoonists go to University or other educational institutes and thus it is possible to learn to be a cartoonist in any environment where there is an opportunity to copy from others and practice, practice, practice. This can be done in Bhutan. Access to cartoons through information computer technology makes it possible to learn to be a cartoonist almost anywhere.

### **What are the employment prospects for a cartoonist in Bhutan?**

Bhutan has few newspapers and magazines and few if any cartoon characters. More opportunities for cartoonists are expected to arise in future but these will be few. The best prospects are for self-employed cartoonists working on a free-lance basis.



### 3.4.3 Coach

**Title:** COACH

**Description:** A sports coach teaches individuals and teams how to improve their play, game or performance by analyzing their performances, instructing in relevant skills, and enhancing players' performances.

**Alternative and Related Titles:** SPROTS DIRECTOR/PHYSICAL EDUCATION TEACHER (Sports directors and physical education teachers are mostly employed by academic institutions and schools. They instruct students in sports, recreational activities and healthy lifestyle issues to encourage and develop their physical fitness, self-esteem and interpersonal skills).

**What does a coach do?**

- Participates in sporting events.
- Engages in sports training to improve performance in sporting events.
- Assists and encourages interested persons to participate in sporting events.
- Promotes sporting activities in general and specific sports in particular.

**What are the working conditions for a sportsperson?**

A sportsperson who participates in sport for a living may be either an employee or self-employed. In some countries sportsperson are employed on a contract and receive a salary and benefits related to their level of skill, experience and reputation. This is particularly the case with team sports such as football, basketball. Some sportspersons are self-employed (e.g. athletes) with their wages depending on their performance. Sport in Bhutan has not developed to the stage where people earn their living from playing sport.

**What is the working environment like?**

A sportsperson is required to spend many hours at training to practice and develop their skills as far as possible. Much of this training is routine and repetitive in nature. Outdoor sportspersons may have to endure hot, cold or wet conditions depending on seasonal factors and the actual location of the sports venue. Sportspersons may suffer stress and anxiety when they fail to

perform to the expected standards.

### **What knowledge and skills do I need to be a sportsperson?**

- Good eye hand coordination and good physical coordination.
- Knowledge of rules and regulations for each particular sport.
- Knowledge of training routines.
- Knowledge of good dietary practices.

### **What personal qualities/attributes do I need to be a sportsperson?**

- An interest in sport and physical fitness.
- High levels of dedication.
- Willingness to devote many hours to training and practice.
- Willingness to travel, including international travel.

### **What are the education requirements to become a sportsperson?**

There are no formal education requirements to become a sportsperson. This requires an aptitude for a particular sport, an interest in completing, and willingness to train and practice for many hours every day or week.

### **Can I study in Bhutan to become a sportsperson?**

Yes, you can learn to be a sportsperson in Bhutan although the opportunities are limited by the relatively small number of sports in Bhutan, and by the availability of coaches.

### **What are the employment prospects for a sportsperson in Bhutan?**

There are few employment opportunities for sportspeople in Bhutan at present. Most sport is undertaken on a part-time basis as a hobby or means of recreation, rather than as a day of earning a living.

#### 3.4.4 Dancer

##### **Title: DANCER**

**Description:** A dancer performs different types of dances in accordance with tradition, religious occasions, cultural expression or choreographed routines, usually accompanied by singing, music or both. There are many

different types of dancing including folk dancing, mask dancing, ballet dancing, and various forms of modern and ballroom dancing.

**Alternatives and Related Titles: CHOREOGRAPHER / SINGER / MUSICIAN / ACTOR/DANCE TEACHER**

**What does a dancer do?**

- Performs dances in accordance with a customary or religious procedure or a choreographed routine.
- Performs in harmony and step with other dancers.
- Dresses in costumes that assist in communicating the message of a particular dance.
- Performs as in harmony with music and stage or natural scenery.
- Practices regularly to develop skills and confidence.
- Entertains audiences by singing and acting, as a complement to dancing.

**What are the working conditions for a dancer?**

A dancer may be employed as a member of a government dance team or company or employed in the private sector either as an employee of a company, or as a self-employed person. Some dancers are employed on a part-time basis and are paid on hourly rate for their work. Dancers work irregular hours with most dance performances scheduled in the evening and at weekends.

**What is the working environment like?**

Dancers perform both indoors and outdoors depending on the type of dance being performed. The environment is normally characterized by groups of dancers, music, costumes, and settings all designed to communicate meanings and feelings from the dancers to the audience. Dancing can be physically tiring and requires good levels of physical fitness and health. Many hours have to be spent in practice each week.

**What knowledge and skills do I need to be a dancer?**

- Dancing skills and the physical ability to communicate through dance.
- Knowledge of cultural and traditional dance movements and choreographed routines.

- Knowledge of music and tempo.
- Ability to relate body movements to musical accompaniments.
- Ability to work as a team member.

#### **What personal qualities/attributes do I need to be a dancer?**

- An interest in communicating to others through dancing.
- An interest in entertaining others.
- Physical attributes that enable dancers to be performed with beauty, energy and suppleness, as appropriate, to each type of dance.
- Discipline and perseverance.

#### **What are the education requirements to become a dancer?**

Most dancers undergo some form of formal training to develop their skills, usually provided through a dance school, academy, or school of performing arts. The entry to such courses is often based more on talent than academic ability.

#### **Can I study in Bhutan to be a dancer?**

Yes, you can study for a Folk Dancing Diploma and Mask Dancing Diploma at the Royal Academy of Performing Arts and private training providers. For other forms of dance you will have to study abroad or alternatively learn through practice and performance under the supervision of a dance teacher.

#### **What are the employment prospects for a dancer in Bhutan?**

There are some employment opportunities for folk dancers and mask dancers for cultural and festival occasions, but limited opportunities for non-traditional dancers. Opportunities are limited at present and mostly available on a part-time basis.

### 3.4.5 Gymnasium Instructor

#### **Title: GYMNASIUM INSTRUCTOR**

**Description:** A gymnasium instructor advises clients as individuals and in groups on physical exercise programs, plans individual fitness programs and supervises their implementation.

#### **Alternative and Related titles: GYM ATTENDANT**

### **What does a gymnasium instructor do?**

- Advises clients on general fitness and exercise activities.
- Prepares individual exercise programs directed to strengthening particular parts of the body.
- Conducts exercise classes for groups.
- Supervises the implementation of individual exercise programs ensuring proper use of equipment, and maintains records of progress.
- Ensures gymnasium equipment functions properly and safely.
- Adjusts equipment and weights related to the circumstances of individual clients.
- Undertakes basic maintenance of gymnasium equipment.
- Supervises the work of subordinate staff.

### **What are the working conditions for a gymnasium instructor?**

A gymnasium worker is employed in the private sector in a gymnasium or fitness center attached to a hotel, or in a gymnasium operated as a small business. The wages and conditions vary according to the skill, experience and reputation of the particular gymnasium attendant. A gymnasium worker is normally required to wear a uniform supplied by the employer. Gymnasium usage is normally highest in the evenings and weekends and thus it is necessary for a gymnasium attendant to work irregular hours.

### **What is the working environment like?**

The working environment is characterized by people and mechanical and electronic equipment. A gymnasium worker must take care in advising clients on the use of equipment to ensure that they do not over exert themselves and cause muscle or ligament damage. The environment is normally pleasant and usually designed to make customers feel comfortable and wanting to return again and again.

### **What knowledge and skills do I need to be a gymnasium instructor?**

- Good communication and interpersonal skills.
- Knowledge of the operation of electronic and mechanical gym equipment.
- Knowledge of exercise programs.
- The ability to give instructions on the proper use of equipment.
- Ability to undertake basic maintenance of equipment.

- Knowledge of the safe use of equipment.
- Knowledge of first aid.

**What personal qualities/attributes do I need to be a gymnasium instructor?**

- An interest in helping people with their fitness and health.
- Responsible and caring manner.
- An interest in good health and fitness.
- A good level of physical fitness.

**What are the education requirements to become a gymnasium instructor?**

No formal education is required to become a gymnasium attendant. The knowledge and skills required can be learned on the job under the supervision of an experienced gymnasium attendant. Reasonable reading and writing skills are required.

**Can I study in Bhutan to become a gymnasium instructor?**

Yes. You can learn on the job by gaining practical experience under an experienced supervisor.

**What are the employment prospects for a gymnasium instructor in Bhutan?**

The numbers of gymnasium and fitness centers in Bhutan is relatively small but is expected to grow as the number of tourists and hotels increase. More Bhutanese are expected to go to gymnasiums as their income levels rise and they have more to spend on leisure activities.

3.4.6 Musician

**Title: MUSICIAN**

**Description:** A musician writes and sings songs, plays musical instruments, composes film soundtrack and music for audio albums and performs at public concerts.

**Alternative and Related Titles:** ZHABDRA TSAM-MI / NYENCHA TROGMI / KEY THENMI (A musician in Bhutan performs a number of tasks that would be an entirely different area of specialization elsewhere. A musician may actually be a lyrics writer, composer, instrumentalist and singer all rolled into one.)

**What does a musician do?**

- Creates soundtrack and musical compositions for films, music video, television, concerts and audio albums.
- Writes lyrics to accompany the music.
- Plays one or more instruments and signs.
- Practices regularly to hone skills and style.
- Maintains and prepares musical instruments and other devices.
- Listens to all kinds of music to learn and to build up repertoire.
- Adapts or rearranges original musical score.
- Teaches others interested in learning musical skills.

**What are the working conditions for a musician?**

There is a vibrant music industry with a growing demand for rigsar or pop music. A musician with multiple talents can earn good money.

**What is the working environment like?**

Musicians work indoors in music studios or at performance venues such as auditoriums and outdoor stages. Musicians work irregular hours and spend long periods practicing and rehearsing.

**What knowledge and skills do I need to be a musician?**

- Able to conduct, compose or arrange music.
- Able to handle electronic recording and performing devices.
- Able to compose tunes and to write and sing songs.
- Able to play traditional as well as western musical instruments.
- Computer knowledge.
- Able to concentrate for long periods.
- Able to perform at peak level for extended periods.

**What personal qualities/attributes do I need to be a musician?**

- Interest in music.
- Self-motivation and dedication.
- Flair for entertainment.

**What are the education requirements to become a musician?**

A diploma in music or completion of a program at a music academy or school would be ideal. However musical talent and aptitude should be enough to get you started.

### **Can I study to become a musician in Bhutan?**

You can study traditional music at the Royal academy of Performing Arts and undertake courses in private training providers. You can also learn modern music and training in using and handling electronic or digital music equipment and devices.

### **What are the employment prospects for musicians in Bhutan?**

Musicians have better prospects than actors. There is a booming and lucrative music industry. The increasing number of video feature film productions also requires the services of musicians. You can be lucratively self-employed as a musician but, at the same time, competition is getting harder by the day.

#### 3.4.7 Physical Instructor

##### **Title: PHYSICAL INSTRUCTOR**

**Description:** A sports teaches individuals and teams how to improve their play, game or performance by analyzing their performances, instructing in relevant skills, and enhancing players' performances.

**Alternative and Related Titles: SPORTS DIRECTOR/PHYSICAL EDUCATION TEACHER** (Sports directors and physical education teachers are mostly employed by academic institutions and schools. They instruct students in sports, recreational activities and healthy lifestyle issues to encourage and develop their physical fitness, self-esteem and interpersonal skills).

##### **What does a Physical Instructor do?**

- Observes sportsperson in action, analyses performance and identifies individual or team weaknesses.
- Demonstrates techniques and prescribes physical training routine to improve or maintain fitness.
- Instructs sportspersons and advises team leaders on game strategy.
- Conducts after-game analysis to evaluate performance.
- Recruits or selects players and other coaching staff.
- Escorts players or teams to competitions and provides moral support.
- Undertakes related administrative tasks.



**What are the working conditions for a Physical Instructor?**

Coaches enjoy a lot of respect and they derive great satisfaction in being able to mould sportspersons and enhance sporting excellence. Salaries for sports coaches range from about Nu. 6,000 to 12,000 a month. The hours of work are irregular to accommodate training for sports and playing matches takes place in the evening and at weekends most.

**What is the working environment like?**

Coaches work indoors or outdoors in venues appropriate for the specific sport and group being coached. There may be required to travel, including travel often outside the country accompanying their teams to regional and international sports contests. Coaches may feel stress and disappointment if their teams do not perform up to expectations.

**What knowledge and skills do I need to be a Physical Instructor?**

- Thorough understanding of your sport.
- Knowledge of coaching and training techniques.
- Good communication and instruction skills.
- Good planning and organizational skills.
- Good evaluation and assessment skills.
- Able to work long hours.
- Good at general physical and recreational activity.

**What personal qualities/attributes do I need to be a Physical Instructor?**

- Physically fit and enjoy working with young people.
- Enthusiastic, disciplined and dedicated.
- Patient and tactful.

**What are the education requirements to become a Physical Instructor?**

You need a minimum secondary education and a coaching certificate issued by the BOC. A degree in physical education may be required if you wish to become a physical education teacher in a school.

**Can I study to become a Physical Instructor in Bhutan?**

The BOC organizes ad-hoc coaching courses but you will have to go abroad for specialized training.

### **What are the employment prospects for Physical Instructor in Bhutan?**

The BOC is the only organization that employs a fairly substantial number of sports coaches. Schools and academic institutions often prefer to train a teacher with aptitude for sports to become their coaches, or they may have a physical education teacher provided by the Ministry. You cannot be self-employed as a sports coach in Bhutan.

#### 3.4.8 Singer

**Title:** SINGER

**Description:** A singer performs in public places such as hotels, clubs, restaurants and theatres to provide entertainment for others.

**Alternative and Related Titles:** ENTERTAINER/FOLK SINGER/JAZZ SINGER/BLUES SINGER

#### **What does a singer do?**

- Sings as a soloist or member of a vocal group in public places such as clubs, bottles and restaurants.
- Practices singing alone or with a group, or accompanied by musicians.
- Memorizes the words and tempo of songs.
- Interprets the words of a song to give them meaning and emotion.
- Harmonizes with other singers in group situations.
- Records songs in recording studios.
- Entertains audiences by dancing and acting, as a complement to singing.

#### **What are the working conditions for a singer?**

A singer normally works in the private sector either as an employee or as a self-employed person. Many singers work on a part-time basis and are paid an hourly rate for their work. Singers work irregular hours and normally are required in the evenings and at weekends.

#### **What is the working environment like?**

Singers mostly work indoors in clubs, restaurants and hotels in an environment that may be crowded and noisy and sometimes smoky if smoking is permitted. Well known singers may sing at concerts where there are many

people. A singer normally uses a microphone and amplification equipment. Some singers experience nerves when singing before a large audience but this usually overcomes with experience and confidence.

### **What knowledge and skills do I need to be a singer?**

- A good singing voice.
- Knowledge of music, tempo and rhythm.
- Knowledge of microphones and amplifiers.
- Ability to work as a member of a small team.

### **What personal qualities/attributes do I need to be a singer?**

- An interest in music.
- An interest in entertaining others.
- An interest in business.
- Stamina and discipline to spend a lot of time practicing.
- Reliability and punctuality.

### **What are the education requirements to become a singer?**

There are no formal education requirements to become a singer other than a general education and the ability to read, write and sing. Some singers have formal training for several years, particularly classical and opera singers. Other singers rely on natural talent and develop their skills through practice and performances.

### **Can I study in Bhutan to become a singer?**

You can study to be folk singer or folk musician in Bhutan by undertaking the Diploma in Folk Song or Diploma in Folk Music at the Royal Academy of Performing Arts in Thimphu. These courses are of 4 year's duration with an entry level of Class 8. Other types of singing need to be studied outside Bhutan or learned by practice and performance under the direction of an experienced and talented singer.

### **What are the employment prospects for a singer in Bhutan?**

There are the employment opportunities for folk singers for cultural and festival occasions, but limited opportunities for non-traditional singers. Opportunities are limited at present and mostly available on a part-time basis.

### 3.4.9 Tsip (Astrologer)

**Title: TSIP**

**Description:** A tsip makes astrological predictions and offers advice on the action and offers advice on the action and conduct of all kinds and manners of human affairs. A tsip's predictions are based on the study of the stars and the five principal elements that influence events in people's lives. An ASTROLOGER should not be confused with an ASTRONOMER. An astronomer is sometimes described as a scientist 'who uses the universe as a laboratory.

**Alternative and Related Titles: ASTROLOGER (The western equivalent of tsips are astrologers).**

**What does a tsip do?**

- Acts as an adviser and consultant for everyone who requires his/her services for whatever reasons.
- Makes predictions about future events.
- Writes keytsi (a document predicting the momentous events of a lifetime) upon the birth of a child.
- Conducts lo-mo or prediction of the annual sequence of events in a person's life.
- Performs rimdos or rituals to allay or prevent misfortunes.
- Lays jamdo or foundation stone during the construction of new houses, mostly in rural Bhutan.
- Gives advice on when, where and how to cremate or dispose of dead bodies.

**What are the working conditions for a tsip?**

Tsips have traditionally enjoyed tremendous respect and regard in the Bhutanese society. Everyone follows their advice to the letter. In the past they were paid generously in kind – such as food grains, textiles and even horses and cattle. Today tsips in the capital earn good incomes up to Nu. 10,000 a month. The hours of work for a tsip can be expected to be irregular.

**What is the working environment like?**

Tsips work indoors and lead a relatively comfortable and hassle-free life. The environment is one of seriousness and concentration.

**What knowledge and skills do I need to be a tsip?**

- Sound and thorough knowledge of tsizhung chhenmo or the study of astrological prediction.
- Sound and thorough knowledge of the studies of zhung (philosophy) and rigney (grammar).
- Able to perform rimdos or rituals.
- Good drawing skills.
- Good communication skills.

**What personal qualities/attributes do I need to be a tsip?**

- Spiritually inclined mind and disposition.
- Interest in other's welfare.
- Interest in scholarly pursuits.

**What are the education requirements to become a tsip?**

You have to be able to read, write, understand and interpret Dzongkha and chhoekey scriptures and texts to study to become a tsip.

**Can I study to become a tsip in Bhutan?**

Yes. The astrological institute of the central monastic body at Pangrizampa teaches tsi or astrology to monks. If you are not a monk and wish to study tsi you can do so at the institute for Language and Culture Studies at Simtokha. You can also study tsi under established and renowned master tsips.

**What are the employment prospects for tsips in Bhutan?**

Almost all tsips in Bhutan are self-employed and there is plenty of work for all of them. Be it in deciding the right date for a trip aboard, or devising ways to defeat one's opponents in an archery contest, or in finding ways to appease a wrathful deity plaguing your life – you need a tsip's service at all times. Indeed the Bhutanese need and consult tsips from birth till death for a million reasons and purposes.

### 3.4.10 Fortune Teller

**Title: FORTUNE TELLER**

**Description:** A fortune teller recounts past experiences for individuals and forecasts future events based on the use of playing cards or special cards for this purpose, through the examination and analysis of individual's

palms, faces, eyes, or objects of personal property (e.g. jewelry), through the examination of tea leaves in a cup, or through calculations based on birth dates and other information in numerical form.

### **Alternative and Related titles: NUMEROLOGIST/PALMIST**

#### **What does a fortune teller do?**

- Examines physical characteristics of individuals (e.g. palms, hands, eyes) to recount past experiences and forecast future events.
- Uses a variety of non-human aids including cards, the formation of tea leaves, coffee remnants in cups, shapes and patterns of bones of dead animals, to forecast future events.
- Provides warning and advice on possible courses of action.
- Responds to clients' questions.

#### **What are the working conditions for a fortune teller?**

A fortune teller is usually self-employed, with the income earned dependent on the each individuals' reputation and skills. Clients may visit a fortune teller at various times during the day, evening and weekends thereby making the working hours irregular. A fortune teller normally charges a set fee for each hour spent with a client.

#### **What is the working environment like?**

A fortune teller normally works indoors in an environment that is quiet, and where both the fortune teller and the client can concentrate and speak without interruption. The client and the fortune teller usually sit at a table with the fortune teller sometimes using cards, tea leaves, a piece of the client's jewelry or other item to assist in telling about the past and forecasting future events.

#### **What knowledge and skills do I need to be a fortune teller?**

- Good communication and interpersonal skills.
- Knowledge of card reading and interpretation.
- Ability to concentrate and listen.
- Ability to analyze past events.
- Good observation skills.

**What personal qualities/attributes do I need to be a fortune teller?**

- An interest in meeting and helping people.
- Empathy and understanding.
- Integrity and sincerity.
- A special 'feel' and understanding of physical powers.

**What are the education requirements to become a fortune teller?**

There are no formal education requirements to become a fortune teller. It is sometimes said that you cannot learn to be a fortune teller (apart from some particular communication techniques) but rather it is based on some innate characteristics that give a fortune teller some psychic powers.

**Can I study in Bhutan to become a fortune teller?**

There is no need to study to become a fortune teller if you accept that the knowledge and skills of the fortune teller are inborn.

**What are the employment prospects for a fortune teller in Bhutan?**

There are always people interested in the interpretation of past events and the prediction of what might happen in the future. Some people are interested in this for fun, others take it very seriously but whatever the motive fortune tellers are always likely to have clients willing to pay for this service.

**3.5. Information and Communication Technology Technicians and associate professionals****3.5.1 Animator****Title: ANIMATOR**

**Description:** Animation is the art of making images that, when recorded in sequence, appear to come to life on screen. Animators use a range of techniques to create the illusion of movement, using drawings, models, puppets or, increasingly, specialized computer software.

**Alternative and Related Titles:****What does an animator do?**

Animators usually follow a brief from a director, animation director or key animator, or direct from a client. They often work with established characters and layouts and have to produce work in a particular style. This ensures that

the whole animation looks as if it has been created by one artist.

### **What are the working conditions for an animator?**

Animation has a wide range of uses. In addition to narrative storytelling, eg in children's programmes, shorts and feature films, animation is used in advertising, computer games, websites, music promos, film titles and television idents, and architectural visualisation.

### **What is the working environment like?**

Animators usually work in offices or studios. Conditions depend on the type of animation: stop frame animation may involve standing for long periods under hot studio lights, adjusting models; other types of animation may involve sitting at a drawing board or computer.

### **What knowledge and skills do I need to be an animator?**

Depending on the type of animation, animators need:

- creativity and imagination
- a feel for movement and timing
- life drawing or modeling skills
- computer literacy, including knowledge of relevant 3D graphics, animation and compositing software
- patience, concentration and attention to detail
- observational skills
- to be able to work well independently and as part of a team
- the ability to take direction and act on feedback
- to work well under pressure and to strict deadlines
- to be well organized and able to follow studio and production procedures
- Knowledge of the relevant health and safety procedures.

### **What personal qualities/attributes do I need to be an animator?**

- the principles of animation
- art and design
- film and television
- Computer and other technology.
- patience, concentration and attention to detail
- To be able to work well independently and as part of a team.
- creativity and imagination



**What are the education requirements to become an animator?**

A carrier as an animator requires a Diploma/ Bachelors Degree in animation. Animators usually learn new techniques and skills on the job, working with experienced colleagues. It is essential for animators to keep up to date with new developments in the industry, particularly the technology and software relevant to their specialism. There are also many short courses available.

**Can I study in Bhutan to become an animator?**

Yes, you could take short courses from private institutes and then receive further training on the job to acquire specific knowledge and skills.

**What are the employment prospects for an animator in Bhutan?**

There are good employment prospects in this field in filming industries. As Bhutan continues to embrace computer technology at all levels there is a need for the design of systems within government and industry that operate efficiently and respond to the needs of users.

There is some scope for animator to work as self-employed consultants, offering their services to government and industry on a fee-for-service basis. These opportunities are expected to increase as the private and corporate sectors grow and computer culture becomes the norm.

### 3.5.2 Film Director

**Title: FILM DIRECTOR**

**Description:** Film Directors have overall creative responsibility for a film or television production. They take the decisions which turn the written script into what we see on the screen.

**Alternative and Related Titles:****What does a Film Director do?**

- commission a scriptwriter or, in some cases, actually write the script
- find a suitable location
- select the cast and crew
- direct the various technical crews - camera, sound and lighting
- direct the cast

- Keep everything to schedule and within budget.

Television directors work on a range of programmes, from soap operas to live broadcasts. Film directors may make feature films, 'shorts', commercials or one-off documentaries.

### **What are the working conditions for a Film Director?**

Directors work long, irregular hours and may work shifts, especially in television. There can be a great deal of travel, perhaps abroad. Work may be studio based, or on location, often in a wide range of weather conditions.

Most directors are freelance and employed on short or fixed-term contracts. They negotiate a fee for each contract and rates can vary widely, depending on experience, the type of production, and the budget available. Directors may have long periods of unemployment between contracts.

### **What is the working environment like?**

Film Director work indoors or outdoors, depending on the location of their subject, interest, and assignments.

### **What skills do I need to be a director?**

Directors should be:

- creative and artistic
- decisive and assertive
- mentally and physically energetic
- able to think on the spot
- able to work to deadlines
- Knowledgeable about all aspects of the film and television industry.

### **What personal qualities/attributes do I need to be a Film Director?**

- Interest in art and creative work.
- Interest in contemporary styles and trends.
- Self-motivation.
- Responsibility and reliability.

### **What are the education requirements to become a Film Director?**

There is no set route to becoming a director. Talent and substantial practical

experience are more important than qualifications, and entry to this demanding role is extremely competitive. There are courses in media studies and film and television production that can offer useful practical experience and background knowledge. There are also specialist courses in direction.

Directors need extensive experience and knowledge of production and post-production, and they usually work their way up over many years. They may start off as a runner on a film set or in a production office, or start their careers as researchers or script editors in television.

Some directors move on to training, production or management posts. Others may set up their own independent production companies. There may be opportunities to work abroad.

### **Can I study in Bhutan to become a Film Director?**

You will be given basic on the job training if you are recruited by a Film Industry or media organization, such as Bhutan Broadcasting Services. For advanced or specialized study in Film Direction you will need to study or secure an internship abroad.

### **What are the employment prospects for photographers in Bhutan?**

There is scope for employment as a Film Director and employment prospects in a creative field like Direction really depend on how creative and imaginative you can be.

## 3.5.3 Cinematographer

### **Title: CINEMATOGRAPHER**

**Description:** A photographer takes pictures with still cameras of people, events, scenes, places, things or any other subjects of interest.

**Alternative and Related Titles:** PAR TABMI (Par in Dzongkha means a picture, and par tabmi is 'a person who takes pictures'.)

### **What does a photographer do?**

- Operates a range of cameras, lights and other accessories.
- Works out camera angles, light positions, exposure and composition.

- Selects locations, props, and models or subjects.
- Mixes chemicals, processes film and makes prints.
- Restores old and damaged photographs.
- Uses scanners to transfer photographic images to computers.
- Uses computers for image alteration or manipulation.
- Produces visual images in print or digital form.
- Sells photographs.

### **What are the working conditions for a photographer?**

Photography not only provides artistic satisfaction but is also a way and means of earning a living. A photographer works irregular hours including evening and weekend work.

### **What is the working environment like?**

Photographers work indoors or outdoors, depending on the location of their subject, interest, and assignments. A kuensel photographer assigned to cover celebrations in Changlimithang may spend the entire day at the national stadium taking pictures. Photographers may also work in a darkroom when developing film.

### **What knowledge and skills do I need to be a photographer?**

- Creative and artistic flair and talent.
- Knowledge of the technical aspects of photography.
- Specialized training in photography, or extensive practical experience.
- Knowledge of digital photography.
- Computer and multi media skills.
- Business, communication and promotional skills.

### **What personal qualities/attributes do I need to be a photographer?**

- Interest in art and creative work.
- Interest in contemporary styles and trends.
- Self-motivation.
- Responsibility and reliability.

### **What are the education requirements to become a photographer?**

It is possible to become a photographer without any formal education. Many photographers, however, consider the completion of secondary education

as the minimum requirement for understanding the technical concepts photography requires.

### **Can I study in Bhutan to become a photographer?**

You will be given basic on the job training if you are recruited by a photo studio or a media organization, such as Kuensel. For advanced or specialized study in photography you will need to study or secure an internship abroad.

### **What are the employment prospects for photographers in Bhutan?**

There is limited scope for regular salaried employment as a photographer. Kuensel does not need many photographers. Neither do the photo studios in town. But employment prospects in a creative field like photography really depend on how creative and imaginative you can be.

## 3.5.4 Computer Programmer

### **Title: COMPUTER PROGRAMMER**

**Description:** A computer programmer writes, tests, and maintains computer programs to enable computers to do what users want them to do. The programmer is the interface between the user and the computer.

**Alternative and Related Titles: INFORMATION PROGRAMMER / COMMUNICATIONS PROGRAMMER**

### **What does a computer programmer do?**

- Studies the output requirements of users, and the nature and sources of input data.
- Prepares logical workflow charts and diagrams to establish the sequence of steps for data input and computer processing operations.
- Writes and provides detailed documentation of computer programs using a variety of computer languages, or based on specifications provided by a computer systems designer.
- Works in close cooperation with computer systems designers and computer systems users.

### **What are the working conditions for a computer programmer?**

In the Royal Civil Service, a computer programmer is normally employed as

a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission and vary in accordance with changing circumstances. In the corporate and private sector a computer programmer is employed as a professional, with salary and benefits similar to those for other professionals. The hours of work are regular with a relatively low need for evening and weekend work.

### **What is the working environment like?**

A computer programmer normally works in an office situation, with constant use of computers and software programs. The working environment is usually pleasant and hazard free.

### **What knowledge and skills do I need to be a computer programmer?**

- Mathematical ability.
- Analytical and problem solving skills.
- Ability to concentrate for long periods.
- Skills in a range of computer languages.

### **What personal qualities do I need to be a computer programmer?**

- Perseverance and patience – some programs take a long time to prepare.
- An interest in working as a team member.

### **What are the education requirements to become a computer programmer?**

The normal requirement for a career in computer programming is a Bachelors Degree in Computer Science or Information Technology, usually of 3-4 year's duration. This might be followed by post-graduate studies or short courses for specific applications.

### **Can I study to become a computer programmer in Bhutan?**

Yes, it is possible to study for a Degree in Computer Science at Sherubtse College/ Royal Thimphu College. Entry to the degree course requires passes in Class 12. Post-graduate study in computer systems is not currently available and must be done abroad.

### **What are the employment prospects for a computer programmer in Bhutan?**

There are good employment prospects in this field in government, as well as

the corporate and private sectors. As Bhutan continues to embrace computer technology at all levels there is a need for computer programs within government and industry that operate efficiently and respond to the needs of users.

There is some scope for computer programmers to work as self-employed consultants, offering their services to government and industry on a fee-for-service basis. These opportunities are expected to increase as the private and corporate sectors grow and computer culture becomes the norm.

### 3.5.5 Graphic Designer

**Title:** GRAPHIC DESIGNER

**Description:** A graphic designer applies artistic and creative techniques to products design, the design of annual reports, magazines, product packaging, labels, posters and books, and other aspects of sales promotion and marketing.

**Alternative and Related Titles:** GRAPHIC ARTIST/COMMERCIAL ARTIST

**What does a graphic designer do?**

- Designs commercial advertising images to assist in the promotion of and sale of products.
- Designs promotional material including leaflets, pamphlets, brochures, posters, logos, and for the design of packaging materials.
- Conveys messages to a wider audience through the use of visual communication techniques.
- Applies computer technology to the design of promoting materials.
- Works in close cooperation with production, marketing and sales personnel in the organization.

**What are the working conditions for a graphic designer?**

A graphic designer normally works in the private sector and receives salary and benefits related to the level of skill, experience and reputation of the individual. Some graphic designers are self-employed with their earnings related to their reputation and creativity. The hours of work for a graphic

designer can be irregular as it is necessary to adjust to the needs of the client.

### **What is the working environment like?**

Graphic designers work indoors in a studio in an environment characterized by sketches, drawings, designs and colors. Increasingly, graphic designers rely on computers to assist them with their work. The environment is one of activity and creativity. Graphic designers can experience some stress related to their need to meet deadlines set by clients.

### **What knowledge and skills do I need to be a graphic designer?**

- High level communication skills relying on design, illustration and color as well as verbal skills.
- Knowledge of drawing and graphic techniques.
- Drawings skills.
- Computer skills.
- Ability to transform concepts and ideas into real terms.

### **What personal qualities/attributes do I need to be a graphic designer?**

- An interest in artistic communication.
- An interest in marketing.
- Creativity and imagination.
- Ability to work under pressure.

### **What are the education requirements to become a graphic designer?**

There are no formal education requirements to become a graphic designer other than a good general education and the ability to read, write and draw. Increasingly, however, people interested in a career as a graphic artist undertake a degree in Fine Arts. This normally takes three years after the completion of secondary schooling.

### **Can I study in Bhutan to become a graphic designer?**

There are no special sources for graphic designer in Bhutan and study abroad is normally required. Alternatively, you could acquire the required knowledge and skills by building on natural talents under the supervision of an experienced designer.

### **What are the employment prospects for a graphic designer in Bhutan?**

Career in graphic design are closely related to the professional marketing of



goods and services. As the marketing industry remains undeveloped in Bhutan employment opportunities in this field are limited

### 3.5.6 Cable Technician

**Title:** CABLE TECHNICIAN

**Description:** A Cable technician repairs and maintains overhead lines and cables carrying electricity, telephone, or television services to domestic, commercial and industrial users.

**Alternative and Related Titles:** Line MAN / LINEPERSON / ELECTRICAL LINE INSTALLERS / CABLE JOINTERS (In Bhutan, electrical line installers string electricity lines, and overhead television cables).

**What does a cable technician do?**

- Provides new connections according to assigned standards.
- Provides information on cabinets, distribution points, joint boxes and cable pairs for proper updating.
- Patrols lines and inspects poles and towers.
- Make sure that conductors are correctly connected between the mains and customers' premises when performing installations or repairs.
- Prepares low – and high-voltage cable joints and cable terminations, while connecting and installing electrical equipment and overhead lines.
- Tests and locates cable faults, and maintains and repairs cables.
- Encases cables in protective covers.
- Works with other staff in installing or replacing cables.

**What are the working environments like?**

Cable Technicians mostly do outdoor and physical work. As they often work with high and low voltages at considerable heights, they are given extensive training in safety procedures. They may be called out during emergencies at any time of the day or night and in all weathers conditions.

**What knowledge and skills do I need to be a cable technician?**

- Manual dexterity and ability to use hand tools.
- Able to plan lay-out and installation of lines or cables

independently.

- Able to solve problems quickly.
- Good communication skills.
- Knowledge of power lines and power systems.
- Able to work at heights.
- Good color vision.
- Innovative.

### **What personal qualities/attributes do I need to be a cable technician?**

- Good health and physical fitness.
- Enjoy outdoor work.
- Safety-conscious.
- Innovative and responsible.

### **What are the education requirements to become a cable technician?**

You should successfully complete lower secondary education. No training is required before employment.

### **Can I study to become a cable technician in Bhutan?**

Yes. The Ministry of labour and Human Resources provides vocational training in this field. Special in-house training for six months, including theory as well as practice, is provided before a cable technician take up his permanent assignment. In Bhutan Telecom the educational qualification of a high school certificate is taken into consideration without which candidates are not accepted.

### **What are the employment prospects for cable technician in Bhutan?**

Cable technician can find employment in many corporations such as Bhutan Telecom, Bhutan Power Corporation, Chukha Hydro Power Corporation, and Kurichhu Power Project Authority. When the Tala Mega Project is completed there will be many openings for linespersons, or electrical line installers. Private Cable operators also employ linespersons, or cable jointers. But specific training is required in each of these organizations. At present there are no opportunities for self-employment in this field.

### 3.5.7 Photography

**Title:** PHOTOGRAPHER

**Description:** A photographer takes pictures with still cameras of people, events, scenes, places, things or any other subjects of interest.

**Alternative and Related Titles:** PAR TABMI (Par in Dzongkha means a picture, and par tabmi is 'a person who takes pictures'.)

#### **What does a photographer do?**

- Operates a range of cameras, lights and other accessories.
- Works out camera angles, light positions, exposure and composition.
- Selects locations, props, and models or subjects.
- Mixes chemicals, processes film and makes prints.
- Restores old and damaged photographs.
- Uses scanners to transfer photographic images to computers.
- Uses computers for image alteration or manipulation.
- Produces visual images in print or digital form.
- Sells photographs.

#### **What are the working conditions for a photographer?**

Photography not only provides artistic satisfaction but is also a way and means of earning a living. Self-employed photographers with their own studio set-up can earn in excess of Nu. 10,000 a month. Those employed by larger photo studios are paid Nu.5-7,000 a month. Photographers employed by Kuensel get a monthly salary ranging from Nu. 6,000 to 10,000. A photographer works irregular hours including evening and weekend work.

#### **What is the working environment like?**

Photographers work indoors or outdoors, depending on the location of their subject, interest, and assignments. A kuensel photographer assigned to cover celebrations in Changlimithang may spend the entire day at the national stadium taking pictures. Photographers may also work in a darkroom when developing film.

#### **What knowledge and skills do I need to be a photographer?**

- Creative and artistic flair and talent.

- Knowledge of the technical aspects of photography.
- Specialized training in photography, or extensive practical experience.
- Knowledge of digital photography.
- Computer and multi media skills.
- Business, communication and promotional skills.

### **What personal qualities/attributes do I need to be a photographer?**

- Interest in art and creative work.
- Interest in contemporary styles and trends.
- Self-motivation.
- Responsibility and reliability.

### **What are the education requirements to become a photographer?**

It is possible to become a photographer without any formal education. Many photographers, however, consider the completion of secondary education as the minimum requirement for understanding the technical concepts photography requires.

### **Can I study in Bhutan to become a photographer?**

You will be given basic on the job training if you are recruited by a photo studio or a media organization. For advanced or specialized study in photography you will need to study or secure an internship abroad.

### **What are the employment prospects for photographers in Bhutan?**

There is limited scope for regular salaried employment as a photographer. Kuensel does not need many photographers. Neither do the photo studios in town. But employment prospects in a creative field like photography really depend on how creative and imaginative you can be.

## 3.5.8 Radio Jockey

### **Title: RADIO JOCKEY**

**Description:** Radio Jockey (RJs) selects and play pre-recorded music for many different audiences.

### **Alternative and Related Titles:**

**What does a RJ do?**

Most professional RJs do much more than just playing music. They are also responsible for mixing tunes, forming beats and creating the right ambience for the audience with their music choice, whether playing in a club, at a private function or on the radio.

RJs can use various formats, including vinyl, CD or digitally stored music, and a range of equipment, such as turntables, mixers, microphones and amplifiers.

**What are the working conditions for a RJ?**

RJs usually work irregular hours, including evenings and weekends. RJs work mainly in small studios. RJs may sometimes work overseas.

**What is the working environment like?**

This is a highly competitive and popular career area, where talent and luck are all-important. Most RJs are self-employed, except those working for large broadcasting organizations. Many jobs are not advertised, so networking is essential.

**What knowledge and skills do I need to be a RJ?**

A RJ should have:

- wide knowledge of different music genres or an in-depth knowledge of a specialist interest
- the ability to multitask and plan ahead, whilst operating technical equipment
- An interest in music technology and sound engineering.

**What personal qualities/attributes do I need to be a RJ?**

- an outgoing personality, with the confidence to ad lib
- a good sense of rhythm and timing

**What are the education requirements to become a RJ?**

Most RJs learn and develop their skills through practice and performance at venues, which may eventually lead to more prestigious bookings. Some may develop their skills in sound and music technology or specific digital audio packages by taking short private or college courses.

### **Can I study in Bhutan to become a RJ?**

No. There are no special sources for Radio Jockeying in Bhutan and study abroad is normally required. Alternatively, you could acquire the required knowledge and skills by building on natural talents under the supervision of experienced RJs.

### **What are the employment prospects for a RJ in Bhutan?**

With the increasing number of Radio broadcasting there is a growing demand for RJ's although not as large as the situation abroad is.

#### 3.5.9 Radio or television announcer

##### **Title: RADIO/TELEVISION ANNOUNCER**

**Description:** An announcer presents radio and TV programs such as news, sports, current affairs, weather or entertainment. An announcer may also present pre-recorded programs such as documentary, music and chat programs, or interviews.

**Alternative and Related Titles: ANCHOR / REPORTER / EDITOR / PRODUCER / DIRECTOR** (In Bhutan one person is sometimes all of these, and more).

##### **What does an announcer do?**

- Presents news bulletins, commercials, public service announcements. Weather reports, music and entertainment programmes.
- Presents material prepared by him/her or by others.
- Conducts interviews and hosts talkback programs.
- Gives live commentary on sporting events or public celebrations.
- Interviews personalities at special events or in studios for live or taped broadcasts.
- Selects and introduces music, videos and other entertainment material.

##### **What are the working conditions for an announcer?**

In parts of the world where the broadcast media is highly developed announcers are celebrities in their own right. The same cannot be said for announcers here but their work is no less exciting and fulfilling. Salaries for

announcers in BBSC range from Nu. 6,700 to 10,000. The hours of work relate to programming requirements but after hours and weekend work is normal.

**What is the working environment like?**

Announcers mostly work indoors in TV or radio studios. They may occasionally work in outdoor broadcasting venues such as sports, news, scenes, or at other major events. The work is sometimes stressful because of broadcasting deadlines.

**What knowledge and skills do I need to be an announcer?**

- Lear speaking voice.
- Good command for English or Dzongkha or both.
- Research, reporting, technical and planning skills.
- Broad general knowledge.
- Able to work under pressure.
- Good hearing and vision.
- Computer knowledge.

**What personal qualities/attributes do I need to be an announcer?**

- Well groomed.
- Interest in current affairs.
- Fresh, alert and self-confident.

**What are the education requirements to become an announcer?**

You should have a college degree. Talent and ability, as demonstrated during an audition, are important first steps.

**Can I study to become an announcer in Bhutan?**

Yes, you can train on the job. For specialized studies you will have to go abroad.

**What are the employment prospects for announcers in Bhutan?**

With the increasing number of Radio and television broadcasting there is a growing demand of announcers in the country and positions for announcers there are mostly filled up unless you possess exceptional qualification, skills and talent.

### 3.5.10 Software Technicians

**Title: SOFTWARE TECHNICIANS**

**Description:** Software technicians are responsible for designing, developing, testing and implementing software for their clients to improve business efficiency and productivity. They may also develop and improve existing programmes by analyzing and identifying areas that may need to be changed.

**Alternative and Related Titles: SOFTWARE DEVELOPERS AND PROGRAMMERS**

**What does a software technician do?**

Software developers and programmers are responsible for designing, developing, testing and implementing software for their clients to improve business efficiency and productivity. They may also develop and improve existing programmes by analyzing and identifying areas that need modifying. After initial briefing from a client, a software developer will work closely with analysts, designers and commercial staff to discuss the problems and requirements. These will then be translated into detailed technical specifications for presentation to the client.

**What are the working conditions for software technician?**

A software technician normally works in the private sector and receives salary and benefits related to the level of skill, experience and reputation of the individual. Some software technicians are self-employed with their earnings related to their reputation and creativity. The hours of work for software technicians can be irregular as it is necessary to adjust to the needs of the client.

**What is the working environment like?**

Software developers and programmers usually work normal office hours, but may work extra hours, including weekends and evenings, to meet deadlines. They usually work in an open plan office and will spend most of their time at a computer. Some travelling may be required.

**What knowledge and skills do I need to be software technicians?**

- have excellent IT skills
- be adaptable and able to pick up new IT packages and techniques



quickly

- have good communication skills
- be able to work on their own or in a team
- be able to work to tight deadlines
- be thorough and precise in their work
- Have a logical and enquiring mind.

**What personal qualities do I need to be software technicians?**

- problem solving
- New developments in IT.

**What are the education requirements to become software technician?**

The normal requirements to become a software technician are a Diploma or Degree in Computer Science after the completion of Class 12.

**Can I study in Bhutan to become a software technician?**

Yes, you can study for a Bachelor of Science in Computer Science after class 12.

**What are the employment prospects for a software technician in Bhutan?**

Computer applications are now found in a wide variety of government and business services, thereby providing very good employment opportunities for a software technician.

3.5.11 Telephone servicer

**Title: TELEPHONE SERVICER**

**Description:** A telephone servicer installs services and repairs telephone equipment in central sites or individual locations.

**Alternative and Related Titles: TELEPHONE SERVICER / TELECOMMUNICATIONS MECHANIC**

**What does a telephone servicer do?**

- Installs telephones in individual homes, offices and business and checks they are operating.
- Responds to calls from customers whose telephones are not operating properly.

- Carries out repairs on telephones and at a centralized exchange.
- Records entries of service calls and repairs in a log book.

### **What are the working conditions for a telephone servicer?**

There are no private telephone service providers in Bhutan and thus persons in this occupation work in the corporate sector for Bhutan Telecom. They receive reasonable wages and benefits and may be required to work overtime when services break down or are disrupted for various reasons.

### **What is the working environment like?**

A telephone servicer mostly works indoors in offices, private homes or a centralized telephone exchange. The environment generally pleasant and hazard free although telephone service workers may have to put up with customer complaints when services are disrupted. This can lead to anxiety and stress.

### **What knowledge and skills do I need to be a telephone servicer?**

- Good communication and interpersonal skills.
- Ability to diagnose problems.
- Ability to use simple hand tools.
- Knowledge of telephones and the way they operate.
- Knowledge of the telephone system in the area.
- Ability to read and follow instructions.
- Ability to drive, together with a driving license.

### **What personal qualities do I need to be a telephone servicer?**

- An interest in serving and helping people.
- An interest in telecommunications.
- An interest in details.
- Precision and accuracy.
- Responsibility and reliability.

### **What are the education requirements to become a telephone servicer?**

Telephone service workers normally require Class 10 to enter an on the job training scheme provided by the employer. The necessary knowledge and skills can be acquired through on the job training and practical experience.

### **Can I study in Bhutan to become a telephone servicer?**

Yes, you can learn on the job under the direction of an experienced supervisor.

### **What are the employment prospects for a telephone servicer in Bhutan?**

As Bhutan's telecommunication services grow and expand there will be more opportunities for telephone service workers. There are no opportunities for self-employment in this field.

## **3.6. Teaching Associate**

### **3.6.1 Child Care Giver**

#### **Title: CHILD-CARE GIVER**

**Description:** A child-care worker takes care of children and organizes their daily activities, under the supervision of an employer.

#### **Alternative and Related Titles: NANNY/GOVERNESS**

#### **What does a child-care giver do?**

- Assists children to wash, dress and feed themselves.
- Takes children to and from school and outdoors for play activities.
- Plays games with children and entertains them by reading and story telling.
- Maintains tidiness and order in children's bedrooms and playrooms.

#### **What are the working conditions for a child-care giver?**

Child care workers normally work in the private sector and receive a wage and benefits related to their level of skill and experience. A child care worker may receive a relatively low wage, but one who lives on the premises normally receives free accommodation and meals. The working hours involved in looking after children may be long involving work in the early hours of the day, in the evening, and at weekends.

#### **What is the working environment like?**

A child-care worker mostly works indoors tending to the needs of children. Some time may be spent outdoors when playing with children or taking them for walks. The work is normally undertaken in a private home where the working environment is usually pleasant and hazard free. The long hours of

work involving many hours standing and waling can be very tiring. As the child care worker is responsible for the needs of young children stress and anxiety can be experienced when children are ill or have a minor accident.

### **What knowledge and skills do I need to be a child-care giver?**

- Communication skills, particularly the ability.
- Ability to read and write to a reasonable standard.
- Knowledge of games and play activities.
- Knowledge of children's requirements and behavior.
- Knowledge of safety factors in a private home.
- Knowledge of basic first aid.

### **What personal qualities/attributes do I need to be a child-care giver?**

- High level of responsibility.
- A caring manner and a fondness for children.
- Patience.
- High standards of personal hygiene.
- Willingness to spend long hours in the company of children.

### **What are the education requirements to become a child-care giver?**

There are no special education requirements. The knowledge and skills can be acquired through practical experience gained on the job.

### **Can I study in Bhutan to become a child-care giver?**

Yes. As there are no special courses to be undertaken to be a child-care worker the work can be learned through on the job experience and actually working with and caring for children.

### **What are the employment prospects for child-care giver in Bhutan?**

Most child care workers are employed by higher income families. In many cases a family may employ a domestic worker to do many jobs including cooking, clearing and caring for children. In such cases the prospects for the employment of a specialist child care worker are limited. It is expected, however, that as the income of Bhutanese family's increase, particularly for those in urban areas where both parents receive a regular income, the need for child care workers will increase.

### 3.6.2 Early Child Care Teacher

**Title: EARLY CHILD CARE TEEACHER**

**Description:** An early child care teacher organizes group and individual play and educational activities to support and promote the physical, mental and social development of children below primary school age (normally 6 years and below.)

**Alternative and Related Titles: PRE-PRIMARY TEACHER**

**What does an early child care teacher do?**

- Plans and organizes activities designed to facilitate the physical and social development of the child.
- Encourages language development through story telling, role plays, songs and conversation.
- Observes children in order to evaluate and discuss progress and possible problems with parents.
- Supervise children's activities to ensure safety and to resolve conflicts.

**What are the working conditions for an early child care teacher?**

An early child care teacher in the Royal Civil Service is normally employed as a middle level professional. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A early child care teacher can also be also be employed at a private nursery on terms and conditions negotiated between the employer and the individual teacher. The hours of work for a early child care teacher are considerably longer than the hours actually spent at school. Additional hours are spent in preparing activities.

**What is the working environment like?**

An early child care teacher spends most time indoors conducting and supervising activities for children but time is also spent outdoors in conducting and supervising games and other activities. The working environment is largely hazard free, although some early child care teachers suffer anxiety and stress, particularly when they are inexperienced.

### **What skill do I need to be a early child care teacher?**

- Good communication skills.
- High-level interactive skills with young children.
- Ability to motivate and encourage young children to participate in social activities.
- Ability to convey to pupils core values such as respect, honesty and responsibility.

### **What personal qualities/attributes do I need to be a early child care teacher?**

- An interest in assisting young children to learn and grow.
- Integrity and responsibility.
- Creativity and imagination.
- Patience.

### **What are the education requirements to become an early child care teacher?**

The standard qualification for a career as early child care teacher is the same as for a primary teacher, namely a degree in education, usually of three-year's duration. Entry to a degree course requires the completion of Class 12. In Bhutan the normal qualification for a primary teacher is a Bachelor of Education (Primary) Degree of 3 year's duration, with Class 12 as the entry requirement. Some private nursery and early child care teacher do not have formal education qualification but are successful teachers because of their personal qualities and attributes.

### **Can I study in Bhutan to become an early child care teacher?**

Yes. You can study the same course as a primary teacher. The Paro College of Education (Paro) and Samtse College of Education (Samtse) both offer a Bachelor of Education (Primary) Degree after the completion of Class 12. A person who wants to follow a career as primary teacher can also have a degree other than education (e.g. Arts, Commerce) and then undertake a 9-month course leading to a Post Graduate Certificate in Education at the Paro/ Samtse College of Education.

### **What are the employment prospects for a early child care teacher in Bhutan?**

Bhutan's primary education system is still expanding and employment opportunities for pre-primary teachers will continue to grow. More private nursery schools are expected to be established in Bhutan and these, too, will provide employment opportunities for early child care teachers.

### 3.6.3 NFE Instructor

**Title: Non Formal Education (NFE), INSTRUCTOR**

**Description:** Provide basic education to the target groups such as communities far away from schools, out of school youth and those who did not have chance for schooling. Further, NFE Instructor aimed at making people more skillful, more aware and knowledgeable on developmental activities leading to more economic enhancement.

**Alternative and Related Titles:**

**What does a NFE Instructotr do?**

- To provide functional and skill-based literacy training in Zhungkha, to both men and women, who have been unable to receive such training through the formal education system;
- Teach trainees on read and understand newspaper, notices, advertisement and simple letters;
- Teach trainees how to write simple letters maintain simple daily accounts and diary;
- Teach trainees on read sign boards and certain other labels;
- Make trainees understand and express clearly the concept of life skills such as health and hygiene, population education, agriculture, forestry, livestock, and conservation of environment;
- Teach trainees express the importance of preserving traditional culture and its values;
- Supervise trainees activities to ensure gain more knowledge and skill, and become more aware of developmental activities leading to more economic

**What are the working conditions for a NFE Instructor?**

NFE Instructor normally works in the gewog and village levels aimed at making people more skillful, more aware and knowledgeable on developmental activities leading to more economic enhancement. The working hours involved may be long involving work in the evening.

**What is the working environment like?**

A NFE Instructor spends most time indoors conducting and supervising activities for trainees but time is also spent outdoors in conducting and

supervising games and other activities. The working environment is largely hazard free.

**What knowledge and skills do I need to be a NFE Instructor?**

- Good attention to detail.
- Good communication skills.
- High-level interactive skills with people.
- Ability to motivate and encourage people to participate in social activities.
- Ability to convey to pupils core values such as respect, honesty and responsibility.

**What personal qualities do I need to be a NFE Instructor?**

- An interest in assisting people to learn and grow.
- Integrity and responsibility.
- Creativity and imagination.
- Patience.

**What are the education requirements to become a NFE Instructor?**

It is necessary to have a higher secondary school certificate with recommendation from Ministry of Education of capable/ possible candidate as NFE Instructor. The completion of higher secondary school with good marks in Dzongkha and English is sufficient to be a NFE Instructor.

**Can I study in Bhutan to become a NFE Instructor?**

Yes, you can study in any school.

**What are the employment prospects for a NFE Instructor in Bhutan?**

With the ever growing need and demand to expand and strengthen the NFE programme in the country, the opportunities for NFE Instructor will continue to grow.



METO



*Meto (Flower) is one of the Eight Auspicious Symbols and one of the most poignant representations of Buddhist teaching. The roots of a lotus are in the mud, the stem grows up through the water, and the heavily scented flower lies pristinely above the water, basking in the sunlight. This pattern of growth signifies the progress of the soul from the primeval mud of materialism, through the waters of experience, and into the bright sunshine of enlightenment.*

# Clerical Support Workers

- 4. **Clerical support workers**
  - 4.1. **General and keyboard clerks**
    - 4.1.1 Bench Clerk

**Title: BENCH CLERK**

**Description:** A bench clerk works in a court of law assisting a judge with a wide range of administrative matters concerning the smooth and orderly operation of the court of the court.

**Alternative and Related Titles: COURT CLERK/JUDGE’S CLERK**

**What does a bench clerk do?**

- Assists in the issue of subpoenas and warrants.
- Calls witnesses to the court room and obtains assurances and affirmations that they will tell the truth.
- Assists the judge in organizing the scheduling of court cases.
- Assists in the organization of court proceedings, including ensuring that court proceedings are accurately recorded.
- Drafts routine correspondence for the judge’s signature.
- Undertakes other duties as required by the judge.

**What are the working conditions for a bench clerk?**

A bench clerk is employed by the Royal Civil Service. There are no bench clerks in the private or corporate sectors. A bench clerk is employed at middle to lower level in the Civil Service. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A bench clerk works regular hours with few demands for work at weekends.

**What is the working environment like?**

A bench clerk works indoors in a court room or office situation. This is an environment characterized by people and paper, with court cases frequently generating an atmosphere of anxiety and stress. The court room and office environment are normally hazard free.

**What knowledge and skills do I need to be a bench clerk?**

- Good communication skills.

- Computer skills.
- Knowledge of court room procedures.
- Knowledge of legal forms and documents.
- Good attention to detail.

**What personal qualities do I need to be a bench clerk?**

- High responsibility and integrity.
- Respect for authority and the law.
- Punctuality.
- Neat appearance and good grooming.
- High standards of personal behavior.

**What are the education requirements to become a bench clerk?**

It is not necessary to have a University degree to become a bench clerk. The completion of Class 12 is sufficient to enter training as a bench clerk.

**Can I study in Bhutan to become a bench clerk?**

Yes, it is possible to study to become a bench clerk at the Royal Institute of management. A Bench Clerks 'Diploma Course takes 2 years to complete and requires an entry level of Class 12.

**What are the employment prospects for a bench clerk in Bhutan?**

Bhutan is introducing new laws and regulations on a regular basis and this raises the possibility of more and more people breaking the law and thus having to appear in Court. Every court requires at least one clerk and the employment opportunities are expected to increase as Bhutan's legal framework becomes more complex. There are no self-employment opportunities for a bench clerk.

4.1.2 Dispatcher

**Title: DISPATCHER**

**Description:** A Dispatcher maintains records of goods produced and raw materials received, counted, weighted, issued and held in stock.

**Alternative and Related Titles:** DISPATCH CLERK/RECEIVING CLERK/STORES CLERK

### **What does a dispatcher do?**

- Arranges and controls receipt and dispatch of goods, and keeps relevant records
- Maintains stock records and verifies issue of goods from stocks.
- Estimates needs for materials to be drawn from stock and makes requisitions for materials to be issued.
- Receives, stores and issues tools and spare parts, and maintains relevant records.
- Compiles inventories of furniture and other assets.
- Supervises the work of other clerks.

### **What are the working conditions for a dispatcher?**

Stock clerks in the Royal Civil Service are normally employed as support staff. The entry level to the Royal Civil Service, and the actual salary and benefits payable for each position, are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A stock clerk in the corporate sector will receive salary and benefits similar to those in government. A stock clerk in the private sector may receive a salary similar to government and corporate sector stock clerks, but benefits that are lower. The hours of work are standard, with few requirements for after hours or weekend work.

### **What is the working environment like?**

A stock clerk mostly works in doors in an office situation, but sometimes works outdoors when receiving supplies and dispatching goods. The environment is characterized by forms to be completed, reports, paper files, and computer records. The environment is normally hazard free, although there may be some stress when work volumes are high. The environment can be boring where the clerical work is of a routine and repetitive nature,

### **What knowledge and skills do I need to be a dispatcher?**

- Good communication skills
- Good calculation skills.
- Ability to work neatly and accurately.
- Ability to operate an electronic calculator.
- Basic computer skills.
- Ability to use weighing equipment.
- Knowledge of stock-taking procedures.

**What personal qualities/attributes do I need to be a dispatcher?**

- Willingness to work with others as member of a small team.
- Willingness to engage in repetitive and sometimes monotonous work.
- An interest in figures and statistics.

**What are the education requirements to become a dispatcher?**

A career as a stock clerk does not require any special education qualifications. The required knowledge and skills can be learned on the job under the supervision of an experienced stock clerk or supervisor. Further progression as a stock clerk normally requires a certificate or diploma in stores and supply management or similar field. Entry to such courses usually requires Class 10 as a minimum.

**Can I study in Bhutan to become a dispatcher?**

Yes. You can learn to be a stock clerk on the job, under the supervision of a senior and experienced clerk or supervisor. A basic qualification such as a certificate or diploma in stores and supply management will increase your prospects for employment as a finance clerk.

**What are the employment prospects for a dispatcher in Bhutan?**

There are good employment opportunities for stock clerks in all sectors, particularly if you have computer skills in addition to a basic knowledge of financial processes and accounting processes. Stock control is a vital component of all business and service operations and as Bhutan's economy grows employment opportunities for stock clerks are expected to grow.

#### 4.1.3 Keyboard Operator

**Title: KEYBOARD OPERATOR**

**Description:** A Keyboard operator types, edits and prints documents and letter using word processing equipment and sends and receives messages through electronic mail systems.

**Alternative and Related Titles:** COMPUTER OPERATOR/WORD PROCESSING CLERK/SECRETARY

### **What does a word processor operator do?**

- Operates a keyboard to prepare correspondence, business, forms, and other documents using a variety of computer programs.
- Plans and executes the layout of documents that are not standard form or preset.
- Edits, re-arranges and corrects typed text.
- Operates printers connected to a PC or computer system.
- Sends and receives and files as appropriate messages using e-mail systems.
- Maintains a computer based filing system of records and documents, including e-mail messages.
- Undertakes basic maintenance (e.g. cleaning, dusting) of computer equipment and peripherals.

### **What are the working conditions for a Keyboard operator?**

Word processor operators in the Royal Civil Service are normally employed as support staff. The entry level to the Royal Civil Service, and the actual salary and benefits payable for each position, are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the private and corporate sectors, the salary for a word processor operator is about the same but benefits are less. The hours of work are regular and there are few requirements for after hours or weekend work.

### **What is the working environment like?**

A word processor operator works indoors with a computer and printer in an office situation, or sometimes in a word processing pool along side other operators. The working environment is normally pleasant and hazard free although long periods of exposure to a computer screen can have an impact on an operator's health. Some operators suffer back strain because of poor posture or a poorly designed work-station.

### **What knowledge and skills do I need to be a Keyboard operator?**

- Good keyboard and computer skills.
- Good eye-hand coordination.
- Ability to work with speed and accuracy.
- Good language skills, including spelling, grammar, punctuation and vocabulary.

**What personal qualities/attributes do I need to be a Keyboard operator?**

- Willing to work independently with limited supervision.
- Willing to work as member of a team.
- Capacity to concentrate for long periods.

**What are the education requirements to become a Keyboard operator?**

A career as a word processor operator requires a basic certificate in computer operation, with entry at Class 8 or above. No particular subjects are required.

**Can I study in Bhutan to become a Keyboard operator?**

Yes. There are many private computer training schools throughout the country that offer basic courses in word processing skills. Once the basic skills have been acquired, it is possible to undertake further studies to learn higher-level skills. Courses in private training institutions require the payment of a fee, the level of which depends on the type and duration of course undertaken.

**What are the employment prospects for a Keyboard operator in Bhutan?**

There are good employment prospects for word processor operators in Bhutan in both the Royal Civil Service and particularly in the corporate and private sectors. Increasingly, any person employed in an office situation (whether as a clerk, bookkeeper, secretary, or office assistant) is expected to have basic computer skills. As supervisors and managers undertake more and more basic word processing functions (e.g. drafting correspondence, drafting documents) it is important that word processor operators are able to undertake more complicated and detailed work (e.g. spreadsheets, page layout) to improve their prospects for employment.

4.1.4 Office Assistant

**Title: OFFICE ASSISTANT**

**Description:** An office assistant works in an office and performs multiple menial jobs. Messengers are able and willing to adapt to many different situations and undertake a wide variety of tasks as directed by their supervisors.

**Alternative and Related Titles: PEON/OFFICE ORDERLY/MESSANGER**

(A messenger is more commonly called a peon in Bhutan but this word is considered derogatory and the more preferred term now is messenger).

### **What does an office assistant do?**

- Acts as the general office help.
- Picks up and drops correspondence and documents within or between offices.
- Keeps accurate records of inward and outward correspondence/ documents.
- Answers telephone calls.
- Cleans and arranges the office.
- Attends to and performs other duties as assigned by the supervisor.

### **What are the working conditions for an office assistant?**

Although office assistant are at the bottom of the office hierarchy, they are treated well by everyone because their services are essential to the functioning of offices. Office assistant in the Civil Service are employed as elementary service personnel and receive pay and benefit as determined by the Royal Civil Service from time to time. Messengers are also employed in the corporate sector on conditions similar to those in the Royal Civil Service. In the private sector office assistant receive about the same pay as those in the Civil Service, but other benefits are likely to be less.

### **What is the working environment like?**

An office assistant mostly works indoors but occasionally may also work outdoors. A office assistant may be required to walk from office to office, and sometimes help store keepers/ officers load and unload stationeries, furniture, and perform related duties.

### **What knowledge and skills do I need to be a office assistant?**

- Able to perform more than one task at the same time.
- Basic knowledge of office management such as filing, record keeping, dispatching and receiving correspondence, photo copying, and faxing.
- Able to operate telephones.
- Basic computer skills.
- Able to follow directions.
- Able to work with and under many office colleagues.



**What personal qualities/attributes do I need to be an office assistant?**

- Sincere.
- Adaptable
- Honest and reliable
- Hardworking.

**What are the education requirements to become an office assistant?**

The Royal Civil Service Commission has set a minimum qualification of Grade Eight for the office assistant's post. In the private sector, a messenger may be recruited at nay education level provided the individual has the necessary personal attributes and basic skills required by the employer.

**Can I study to become an office assistant in Bhutan?**

You do not need to study or train to be an office assistant. You can gain the necessary knowledge and skills through on-the-job activities.

**What are the employment prospects for office assistants in Bhutan?**

Office assistants are mostly employed by government offices. Only large private businesses and companies employ office assistants who also work as office assistants. There is no scope for self-employment as a office assistant.

4.1.5 Personal Assistant

**Title: PERSONAL ASSISTANT**

**Description:** A personal assistant uses computer and word processing equipment to produce letters and reports, handles incoming and out-going correspondence, and handles routine matters of office administration.

**Alternative and Related Titles: OFFICE SECRETARY/WORD PROCESSOR OPERATOR**

**What does a personal assistant do?**

- Transcribes correspondence, minutes of meetings and reports from hand or type written drafts, using work processing equipment (or occasionally typewriter).
- Processes, records and distributes incoming mail and maintains records of out going mail.
- Screens requests for meetings and appointments, and helps to

- organize meetings.
- Organizes and supervises manual filing systems.
- Drafts responses to routine correspondence.
- Supervises the work of junior office staff.

### **What are the working conditions for a personal assistant?**

A personal assistant in the Royal Civil Service is normally employed as support staff. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the private and corporate sectors, the salary for a secretary is about the same as for the Royal Civil Service but benefits are less. The hours of work are regular and there are few requirements for after hours or weekend work.

### **What is the working environment like?**

A personal assistant works in doors with a computer and printer and other peripherals in an office situation. The working environment is normally pleasant and hazards free. A personal assistant has more variety of work than a word processor operator and thus is not exposed to problems relating to long periods of exposure to a computer screen. Some personal assistants suffer back strain because of poor posture or a poorly designed work-station. A personal assistant may suffer stress and anxiety when having to deal with difficult and aggressive visitors and customers, or a supervisor that is uncaring and too demanding.

### **What knowledge and skills do I need to be a personal assistant?**

- Good communication skills.
- High-level interpersonal skills to deal with visitors and customers.
- Good computer skills.
- Knowledge of office procedures.

### **What personal qualities do I need to be a personal assistant?**

- A high level of integrity and trust.
- Confidentiality to ensure that important information is not communicated to others.
- Initiative, including the ability to make decision without constant reference to superiors.

- Well-groomed personal appearance.

**What are the education requirements to become a personal assistant?**

A career as a personal assistant normally required a Certificate or Diploma in Secretarial Studies or similar course, with entry requirements depending on the level of course undertaken. It is possible to learn to be a personal assistant through on the job experience provided you have some initial computer skills and an appropriate personality. (A personal assistant is at a lower level than a secretary, who sometimes has a degree in addition to the necessary secretarial and computer skills).

**Can I study in Bhutan to become a personal assistant?**

Yes. Private training institutions offer courses in computer skills and office management that provide a good starting point for a career as a personal assistant.

**What are the employment prospects for a personal assistant in Bhutan?**

There are good employment prospects for personal assistant in Bhutan in all sectors. In the private and corporate sectors employers seek personal assistants that have multiple skills, including secretarial, clerical, computer and bookkeeping and even public relations skills.

4.1.6 Receptionist

**Title: RECEPTIONIST**

**Description:** A receptionist receives customers or clients in business, hotels, hospitals, government departments, and other organizations, responds to their queries and provides information.

**Alternative and Related Titles: INFORMATION CLERK**

**What does a receptionist do?**

- Receives customers and clients and provides information in response to their inquiries.
- Directs clients to the correct location or person.
- Makes appointments for clients and keeps appropriate records of appointments made.
- Receives telephone inquires and provides information and

makes appointments as required.

- Keeps records of inquiries and made and information provided.
- Provides clients with pamphlets, brochures and forms, as appropriate.

### **What are the working conditions for a receptionist?**

A receptionist in the Royal Civil Service is normally employed at a relatively low level. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the private and corporate sectors, the salary for a receptionist is about the same as for the Royal Civil Service but benefits are less. The hours of work are regular and there are few requirements for after hours or weekend work.

### **What is the working environment like?**

A receptionist works indoors, usually at the entry point to a building or office complex, in larger offices and hotels the environment can be busy with several people waiting at any one time. The working environment is generally pleasant and hazard free.

### **What knowledge and skills do I need to be a receptionist?**

- Good communication and inter-personal skills.
- Computer skills.
- Knowledge of the organization, its departments and divisions, and the names and titles of persons served by the reception area.

### **What personal qualities do I need to be a receptionist?**

- Friendly and out-going personality.
- An interest in helping people.
- Polite and courteous.
- Neat and well groomed appearance.
- Patience.

### **What are the education requirements to become a receptionist?**

There are no special education requirements to become a receptionist, other than the need to have basic literacy and numeracy skills. The knowledge and skills required to become a receptionist can be acquired on the job through practical experience and on the job training. A receptionist with computer

skills will have opportunities to advance to higher level positions.

### **Can I study in Bhutan to become a receptionist?**

Yes. You can learn on the job under the supervision of an experienced receptionist. You can also study for a Certificate in office management at private training institutes.

### **What are the employment prospects for a receptionist in Bhutan?**

The importance of a receptionist in an office, hotel, or business is often under-rated. A receptionist has a very important role to play in the overall efficiency of the organization and as this role becomes more widely accepted employment opportunities for receptionists, particularly in the private sector, are expected to increase.

## **4.2. Customer Service Clerk**

### **4.2.1 Cashier**

**Title:** CASHIER

**Description:** A cashier receives payments for goods and services directly from customers in shops, ticket offices, cinemas and places of entertainment.

**Alternative and Related Titles:** TICKET CLERK

#### **What does a cashier do?**

- Receives and verifies cash, cheque, and credit card payments from customers in stores, hotels, ticket offices and places of entertainment.
- Give change to customers and issues receipts.
- Issues tickets in return for payment.
- Keeps records of amounts received and reconciles these with cash balances.
- Receives incoming cash and checks this against sales slips.
- Prepares cash for depositing in a bank.
- Operates a cash register.
- Supervises the work of junior cashiers.

#### **What are the working conditions for a cashier?**

In the Royal Civil Service a cashier is employed as support personnel. The

entry level to the Royal Civil Service, and the actual salary and benefits payable for each position, are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A cashier in the Royal Civil Service is engaged in collecting fees for licenses, registration fees, taxes, and other payments due to government. Cashiers employed in the corporate sector receive salary and benefits similar to those employed by government employees. Cashiers in the private sector receive salaries similar to government and corporate sector employees but other benefits are usually less. A cashier works standard working hours with limited demands for after hours or weekend work.

### **What is the working environment like?**

A cashier works indoors, usually in a sitting position receiving money, issuing receipts and giving change. A cashier may use a computerized cash register or, alternatively, operate a manual system. A cashier must ensure the safety of cash on hand and thus register a safe environment is essential, usually involving the use of locked drawers and cash registers. The working environment is largely hazard free although a cashier can face some anxiety when cash received and receipts issued fail to balance.

### **What knowledge and skills do I need to be a cashier?**

- Good communication skills.
- Good arithmetic skills.
- Ability to work quickly and accurately.
- Basic computer skills (for larger organizations).
- Ability to concentrate for long periods.
- Good attention to detail.
- Knowledge of safe procedures for handling cash.

### **What personal qualities/attributes do I need to be a cashier?**

- Willingness to engage in repetitive and sometimes monotonous work.
- An interest in serving people.
- Honesty and responsibility.

### **What are the education requirements to become a cashier?**

There are no special education requirements to become a cashier. The knowledge and skills required can be acquired on the job under the supervision

of an experienced cashier. In future, cashiers in Bhutan will require knowledge of credit card transactions but hit, too, can be acquired on the job.

### **Can I study in Bhutan to become a cashier?**

Yes. You can learn about this career through on the job training and work experience.

### **What are the employment prospects for a cashier in Bhutan?**

There are employment prospects for cashiers in government, corporate and private sectors. Computerization may change the way in which cashiers operate but there will always be a need for their services. In the smaller retail stores and restaurants a cashiers work may focus more on relatively simple cash transactions, but in the corporate and government sectors cashiers will be expected to work with computers and information technology.

## 4.2.2 Meter reader

### **Title: METER READER**

**Description:** A meter reader goes from house to house or place to place reading electricity meters, recording consumption and collecting data. In other countries meter reader may read gas, water, or steam consumption meters, and record volume used by residential or commercial customers.

**Alternative and Related Titles: BILL COLLECTOR** (Like a meter reader, a bill collector also moves from place to place often between offices – but for a different purpose, namely, to notify customers of pending bills or to collect payment).

### **What does a meter reader do?**

- Travels from place to place or from house to house to read meters.
- Enters in the meter sheet the consumption figures shown on the meters at the time of reading.
- Checks meter for damages or tampering.
- Returns the meter book, at the end of the day, to a supervisor.
- Makes correct compilation statements at the end of the month on all the meters read.
- Submits compilation statements to the supervisor for billing.

### **What are the working conditions for a meter reader?**

A meter reader works for a large corporation or government body and thus receives a regular wage. A meter reader works regular hours except in cases where there is suspicion of meter tampering in which case some after hours work may be required.

### **What is the working environment like?**

A meter reader works both indoors and outdoors, visiting numerous residential dwellings or office premises. It involves some physical activity to access meters, but this is not strenuous work. A meter reader may be required to walk from place to place where meters are located, involving a degree of physical exertion. The outdoor activities of a meter reader may involve exposure to heat, cold, and rain, according to seasonal conditions. Irrespective of the conditions, meters are required to be read on fixed dates.

### **What knowledge and skills do I need to be meter reader?**

- Ability with numbers sufficient to carry out simple addition and subtraction.
- Reading and neat writing skills.
- Ability to concentrate and take correct readings.
- Good communication skills.
- Ability to explain meter readings to disgruntled clients.

### **What personal qualities/attributes do I need to be a meter reader?**

- Pleasant personality.
- Enjoy meeting people.
- Friendly but firm manner.
- Responsibility and fairness.
- Reasonable physical fitness (particularly where meter readers are required to walk for considerable time periods).

### **What are the education requirements to become ammeter reader?**

You need a minimum qualification of Class 8. Basic training on meter reading is required before a meter reader can work without supervision.

### **Can I study to become a meter reader in Bhutan?**

There is no institute that provides specialized training for meter readers. In-house training is conducted by employers or recruiting agencies.



### **What are the employment prospects for meter readers in Bhutan?**

With the growth in utility services, more meter readers will be required in future. Utility service providers such as Bhutan Power Corporation and City Corporation and service industries, including cable operators, are the potential employers of meter readers.

#### 4.2.3 Note and Coin Examiner

**Title: NOTE AND COIN EXAMINER**

**Description:** A note and coin examiner sorts out old or soiled currency/ notes and packages them from eventual destruction to enable new notes to be issued for distribution to banks, and for mass circulation.

**Alternative and Related Titles: TELLER** (A note and coin examiner is sometimes called a teller because the actual work functions have some similarity).

**What does a note and coin examiner do?**

- Counts notes by packets and records details in the exam daybook (\*EDB) with signature.
- Checks authenticity of the currency notes.
- Breaks each packet and sorts into re-issuable and non-issuable notes.
- Fixes label and stamps seals on each packet.
- Stitches currency packets with the help of a stitching operator.
- Gives accurate details of cancelled notes.
- Hands over sorted currency notes to the supervisor after all procedures.

**What are the working conditions for a note and coin examiner?**

Note and coin examiners are employed by the Royal Monetary Authority of Bhutan and by Bhutan's Banks. The salary for note and coin-examiners is reasonable and may be as high as Nu. 7,000. The working hours are standard with few requirements for after hours or weekend work.

**What is the working environment like?**

Note and coin examiners work indoors all the time. The work requires long periods of sitting, high levels of concentration and close attention to details.

The working environment is generally pleasant and hazard free although handling dirty and soiled banknotes required attention to personal cleanliness after handling is finished.

**What knowledge and skills do I need to be a note and coin examiner?**

- Basic mathematics and counting skills.
- Knowledge of currency.
- Able to handle note punching and stitching tools.
- Able to count notes fast and correctly.
- Able to recognize or detect fake notes and coins.
- Eye for detail.
- Knowledge of Royal Monetary Authority and Bank procedures.

**What personal qualities/attributes do I need to be a note and coin examiner?**

- Honesty and responsibility.
- Careful.
- Patience and willingness to undertake repetitive and sometimes monotonous work.

**What are the education requirements to become a note and coin examiner?**

You should have a minimum qualification of Class 10 to commence a career as a note and coin examiner. You can learn to be a note and coin examiner by acquiring the required knowledge and skills through in-service and on the job training.

**Can I study to become a note and coin examiner in Bhutan?**

Yes. You can receive in-service training organized by the Royal Monetary Authority of Bhutan.

**What are the employment prospects for note and coin examiners in Bhutan?**

Apart from the Royal Monetary Authority/Central Bank, financial institutions like BNB, BoB, BDBL, RICB, Druk PNB, Tashi Bank and NPPF may employ note and coin examiners. The Royal Monetary Authority, however, is the largest employer and sometimes recruits temporary note and coin examiners when workload increases. There is absolutely no scope for self-employment in this career. In future, the need for note and coin examiner may decline as people rely more and more on credit cards and electronic cash transfers thereby reducing the need for currency and coins.

## 4.2.4 Tally Checker

**Title: TALLY CHECKER**

**Description:** A tally checker performs semi-clerical duties in mines, laboratories and stores. A tally checker also maintains files and book of records for auditing purposes.

**Alternative and Related Titles: WEIGHBRIDGE CLERK** (Tally checkers are also called weighbridge clerk. As weighbridge clerks, they are primarily responsible for keeping routine records of materials weighed).

**What does a tally checker do?**

- Weighs materials on the weighbridge.
- Checks and investigates materials.
- Assists in the loading and unloading of materials.
- Maintains records of the weighed materials.
- Records attendance of workers being supervised.
- Maintains records of any items issued.

**What are the working conditions for a tally checker?**

A tally checker is normally required to work irregular hours to meet the schedules of vehicles and drivers. This involves after hours and weekend work.

**What is the working environment like?**

A tally checker mostly works indoors in an office situation, but at the weighbridge is involved in outdoor work when checking the weights of vehicles and loads. The environment is normally hazard free, but there may be some exposure to vehicle fumes at weighbridges.

**What knowledge and skills do I need to be a tally checker?**

- Communication skills.
- Inter-personal relationship skills.
- Coordination skills.
- Problem-solving skills.
- Good mathematical skills.
- Good memory power.
- Basic computer skills.

- Knowledge of different types of vehicles.
- Able to perform occasional manual work.

**What personal qualities/attributes do I need to be a tally checker?**

- Hard working.
- Honest.
- Cautious.

**What are the education requirements to become a tally checker?**

No formal education requirements are necessary to become a tally checker. You can gain the necessary knowledge and skills through on the job training and experience. You can become a trainee tally checker but this usually requires the completion of Class 8 to be accepted.

**Can I study to become a tally checker in Bhutan?**

Yes. You can train as tally checker under the supervision of an experienced tally checker. After one-year as an in-plant trainee in any industrial establishment, you can qualify as a tally checker.

**What are the employment prospects for tally checkers in Bhutan?**

Tally checkers are mostly employed by industrial establishments that produce and transport physical goods. Employment opportunities will depend on the rate at which Bhutan’s corporate and private sectors expand and grow. There is no scope for self-employment as a tally checker.

4.2.5 Teller

**Title: TELLER**

**Description:** A teller deals directly with clients in a bank and receives their deposits, changes money and makes payment in accordance with their instructions.

**Alternative and Related titles: BANK TELLER/POSTAL CLERK**

**What does a teller do?**

- Receives money or cheques as deposits from clients, and credits amounts received to customers’ accounts.
- Pays out money to customers in accordance with their instructions

(and according to balances held in their accounts).

- Pays bills and makes money transfers on customers' behalf.
- Makes cash payments within limits against valid credit cards.
- Credits and debits customers' accounts according to each particular transaction.
- Changes money from one currency to another.
- Makes records of all transactions and reconciles them (usually daily) with cash balances held.

### **What are the working conditions for a teller?**

The salary and benefits for a teller are in accordance with the standards that apply to corporate enterprises. There are no tellers employed in the private sector. The hours of work for a bank teller are standard although they are longer than the actual opening hours of banks. Tellers must reconcile their cash balances with transactions on a daily basis and this takes additional time each day. Some bank tellers are provided with uniforms by their employer.

### **What is the working environment like?**

A bank teller works indoors usually at an enclosed counter from which payments are made and money received. Some time is spent sitting but long periods of standing in a small space may be required. The working environment is usually pleasant and hazard free, although some anxiety and stress can be experienced when cash balances cannot be reconciled with actual transactions. Increasingly, a bank teller's environment is dominated by computers for recording transactions and storing customers' balances.

### **What knowledge and skills do I need to be a teller?**

- Good communication skills.
- Good interpersonal skills.
- Ability to work quickly and accurately.
- Good arithmetic skills.
- Good eye for details.
- A good memory.
- Knowledge of bank procedures.

### **What personal qualities/attributes do I need to be a teller?**

- Tactful and courteous.
- Honest and responsible.

- Neat and well groomed in appearance.
- An interest in business.

### **What are the education requirements to become a teller?**

There are no advanced education requirements to commence a career as a teller. Training is organized within the banking system itself to enable trainees to learn on the job through observation and practice, under the supervision of an experienced teller. The completion of Class 10 is normally required to commence as a trainee. It is possible to progress from a teller to higher-level positions in a bank such as head teller, loan officer or branch manager. The completion of a Bachelor of Commerce or Bachelor of Business or related qualification is normally required for higher-level positions.

### **Can I study in Bhutan to become a teller?**

Yes. The banking system organized its own training for trainees who have completed Class 10. Higher level banking career positions can be pursued after the completion of a Bachelor of Commerce Degree with Class 12 as the entry requirement to that degree course.

### **What are the employment prospects for a teller in Bhutan?**

Bhutan's banking system will progressively expand both with regard to new branches for existing banks and, in time, by new banks and other financial institutions being established. This growth will provide good employment opportunities for tellers.

#### 4.2.6 Travel Clerk

##### **Title: TRAVEL CLERK**

**Description:** A travel clerk provides information on travel itineraries, arranges bookings, and assists in the issue of tickets and travel vouchers. (A travel clerk usually works under the supervision of a travel consultant).

##### **Alternative and Related Titles: TRAVEL AGENCY CLERK/TRAVEL CONSULTANT**

##### **What does a travel clerk do?**

- Provides information to clients from brochures, internet website and from information provided directly by airlines, tour

- operators, hotels, bus and rail companies.
- Prepares itineraries and makes reservations.
- Issues tickets, vouchers and other documents.
- Receives deposits and payments and issues receipts.
- Assists customers in obtaining entry visas.
- Supervises the work of junior clerks.

### **What are the working conditions for a travel clerk?**

Increasingly, travel clerks are not employees in the normal sense. They may not receive a regular wage but are paid according to their performance. A travel company may provide office space, communication and office equipment, and computers, but regard travel clerks as a self-employed person responsible for earning their own pay and benefits in relation to the amount of travel products/services they sell. Under these arrangements the income of a travel clerk can vary considerably, depending on individual abilities and motivation, seasonal factors, and the safety situation in world travel destinations. The hours of work for a travel clerk adjust to the needs of clients, and after hours and weekend work may be required.

### **What is the working environment like?**

The working environment for a travel clerk is characterized by computers, telephones, other communication equipment, and printed material received from airlines, hotels, tourist bureaus, resorts, and other travel agents. Increasingly, the work of travel clerks relies heavily on computers for on-line reservations and ticketing. A travel clerk normally works in a pleasant office environment but may experience some stress and anxiety when required to meet tight time deadlines.

### **What knowledge and skills do I need to be a travel clerk?**

- Good communication and interpersonal skills.
- Computer skills.
- Calculating skills.
- Knowledge of travel destinations and available tour packages.
- Knowledge of travel rules and regulations, including visa requirements.
- Ability to operate office equipment such as fax, photocopier and to access the internet.
- Knowledge of currency exchange rates.

### **What personal qualities/attributes do I need to be a travel clerk?**

- An interest in serving people.
- Friendly and helpful manner.
- Responsibility and integrity.
- An interest in business.

### **What are the education requirements to become a travel clerk?**

There are no formal education requirements to become a travel clerk. Reasonable literacy and numeracy abilities are required, but this does not require a degree or diploma. A Travel clerk can acquire the necessary and knowledge and skills through on the job training.

### **Can I study in Bhutan to become a travel clerk?**

Yes, you can learn to be a travel clerk under the supervision of an experienced supervisor or travel clerk.

### **What are the employment prospects for a travel clerk in Bhutan?**

The employment prospects for travel clerks are expected to increase as more foreign tourists visit Bhutan and more Bhutanese travel to other countries for business and pleasure. Most opportunities for travel clerks are expected to come from self-employment or arrangements where the clerk works for an employer on a commission basis.

## **4.3. Numerical and material recording clerks**

### **4.3.1 Book keeper**

#### **Title: BOOKKEEPER**

**Description:** A bookkeeper, under the supervision of an accountant, maintains records of financial transactions and organization or business, prepares financial statements, and verifies the accuracy of such records and statements.

**Alternative and Related Titles:** ACCOUNTS CLERK, ASSISTANT ACCOUNTANT (A bookkeeper may be a qualified accountant but this is not normally the case. An accountant is more highly qualified than a bookkeeper).

### **What does a bookkeeper do?**

- Maintains records of receipts and payments of an organization in



- accordance with accepted bookkeeping principles.
- Prepares supporting documents (e.g. receipts, cheques, deposit slips) relating to the receipts and payments, and other financial transactions.
  - Prepares financial statements and reports including trial balances, statements of profit and loss, and balance sheets for endorsement by an accountant.
  - Applies knowledge of bookkeeping principles and practice to identify financial problems and propose solutions.
  - Supervises the work of junior staff.

### **What are the working conditions for a bookkeeper?**

A bookkeeper is normally employed in the private or corporate sectors with the salary and benefits related to the level of skill and experience for each individual. Some bookkeepers hold a formal accounting qualification and receive higher pay because of this. The hours of work for a bookkeeper are regular although some overtime work may be required at peak times.

### **What is the working environment like?**

A bookkeeper works indoors normally under the supervision of an accountant in an environment characterized by invoices, receipts, journals, bank statements, and other records. Increasingly, bookkeepers do much of their work with computers. Bookkeepers can suffer some stress and anxiety when they have difficulties in 'balancing their books' and they face time deadlines. Bookkeepers are sometimes responsible for handling cash and face considerable stress if the cash cannot be fully accounted for.

### **What knowledge and skills do I need to be a bookkeeper?**

- Good communication skills.
- Knowledge of bookkeeping procedures and practice.
- Knowledge of the financial rules and regulations of the organization.
- Knowledge of banking procedures.
- Good calculating skills.
- Computer skills.
- Ability to work quickly and accurately.

### **What personal qualities/attributes do I need to be a bookkeeper?**

- An interest in figures and calculations.
- An interest in systems and keeping things in order.
- An interest in details.
- Accuracy and precision.
- Reliability.
- Integrity.

### **What are the education requirements to become a bookkeeper?**

There are no formal education requirements to be a bookkeeper (as distinct from an accountant to other than a good general education and the ability to read and write. Many bookkeepers, however, have certificates or diploma in accounting and this improves their chances of employment.

### **Can I study in Bhutan to become a bookkeeper?**

Yes, you can study bookkeeping at a private institute or college in preparation for work in the corporate or private sectors, or learn on the job under the supervision of an experienced bookkeeper or an accountant.

### **What are the employment prospects for a bookkeeper in Bhutan?**

There are good employment opportunities for bookkeepers, particularly those who have computer skills and have done some formal study in bookkeeping. Some bookkeepers undertake formal studies to enable them to become qualified as an accountant.

#### 4.3.2 Debt Collector

##### **Title: DEBT COLLECTOR**

**Description:** A debt collector collects money from persons who have failed to pay amounts due, on time, to their creditors.

##### **Alternative and Related Titles:**

##### **What does a debt collector do?**

- Contacts debtors by telephone or by letter informing them of overdue payment.
- Traces customers to addresses and makes visits to collect debts.
- Explains to debtors the possible consequences of failing to pay

amounts owed to creditors.

- Keeps records of amounts collected and advises superiors accordingly.
- Passes on amounts collected to creditors.
- Receives payments from creditors for amounts collected from debtors.
- Recommends legal action against customers who refuse or unable to pay amounts due.

### **What are the working conditions for a debt collector?**

A debt collector normally works for a private company as a member of its staff, or may be self-employed. The level of wages and benefits is sometimes related to actual amount of debts collected. The hours of work may be irregular, involving after hours and weekend work, because these are the times when it is mostly likely that a debt collector will find people in their homes.

### **What is the working environment like?**

A debt collector works both indoors and outdoors. The indoor work involves prepared correspondence, tracing debtors' addresses and making telephone contact. The outdoor work involves visiting private homes or offices to meet people and collect money due to the creditor. A debt collector often works in a hostile environment in which people refuse to pay money they owe and become angry with the debt collector for insisting that payments be made. This sometimes creates a stressful environment.

### **What knowledge and skills do I need to be a debt collector?**

- Good communication and interpersonal skills.
- Knowledge of debt recovery laws and procedures.
- Knowledge of the circumstances of each individual case including amounts owed, and interest payable.
- Ability to drive, together with an appropriate driving license.
- Background knowledge on each individual debtor.
- Knowledge of the cultural situation concerning debts.

### **What personal qualities/attributes do I need to be a debt collector?**

- Responsibility and loyalty to the creditor/ employer.
- Persistence and patience.
- Capacity to remain calm under stressful situations.

- Honesty.

**What are the education requirements to become a debt collector?**

There are no special education requirements to become a debt collector. The required knowledge and skills can be learned on the job under the guidance of an experienced supervisor or, alternatively, by trial and error in the actual work situation. The necessary personal qualities are more important than formal education requirements.

**Can I study in Bhutan to become a debt collector?**

There are no formal courses in debt collection available in Bhutan. Such courses, however, are not required to become a debt collector as the required knowledge and skills can be acquired on the job.

**What are the employment prospects for a debt collector in Bhutan?**

Employment opportunities for debt collectors are limited at present but are expected to grow as the private sector expands and more and more transactions are completed on a credit rather than a cash basis. Credit transactions always result in some persons refusing or being unable to pay and thus bad debts arise. Most employment opportunities for debt collectors are expected to be through self-employment. The financial capital and education requirements are relatively low, making it relatively easy to become self-employed.

## GYELTSHEN



*The victory banner was adopted by early Buddhism as an emblem of the Buddha's enlightenment, heralding the triumph of knowledge over ignorance. It is said to have been placed on the summit of Mt. Meru by Buddha himself, symbolizing his victory over the entire universe. Again, Mount Meru here is believed to be the central axis supporting the world.*

# Service and Sales Workers

5. **Service and sales workers**  
5.1. **Personal Service Worker**  
5.1.1 Bartender

**Title:** BARTENDER

**Description:** A bartender is responsible for mixing and serving drinks to customers from a bar and for providing and preparing drink in response to orders provided by a waiter.

**Alternative and Related Titles:** WAITER/WINE STEWARD

**What does a bartender do?**

- Serves drinks in direct response to customer's orders.
- Serves drinks in response to orders place by a waiter for table service.
- Mixes special drinks according to receives, normally committed to memory.
- Receives payment for drinks and gives change.
- Maintains the bar in a clean and tidy state.
- Places orders for liquor supplies with a supervisor.
- Undertakes stock takes to ensure all supplies are fully accounted for.
- Washes glasses for customer use.
- Arranges bar displays to attract customers.

**What are the working conditions for a bartender?**

A bartender works in a hotel or restaurant in the private sector with salary and benefits paid according to skills and experience. A bartender may be required to wear a special uniform paid for by the employer or for which the bartender receives an allowance. Bartenders sometimes receive tips which may be shared with other workers in the hotel or restaurant. A bartender may be required to work irregular hours to meet the needs of customers. This normally requires evening and weekend work.

**What is the working environment like?**

A bartender works indoors, usually in a confined space. A bartender is required to stand for long period of time and this may cause tiredness and fatigue. Some bars are noisy and smoky (depending on whether smoking is

permitted or not) and constant exposure to cigarette smoke can be harmful to a bartender's health. A bartender may be required to deal with difficult customers and this can sometimes create anxiety and stress.

#### **What knowledge and skills do I need to be a bartender?**

- Good communication and interpersonal skills.
- Ability to calculate.
- Knowledge of different liquors and wines.
- Knowledge of cocktail recipes.
- Ability to use simple equipment (e.g. glass washing machine, corkscrew).

#### **What personal qualities/quantities do I need to be a bartender?**

- Physical fitness to enable long periods of standing.
- Good memory.
- Neat appearance and grooming.
- Capacity to lift heavy boxes and crates.
- Honesty.

#### **What are the education requirements to become a bartender?**

There are no formal education requirements to become a bartender, apart from a reasonable standard of literacy and numeracy. The required knowledge and skills can be quickly acquired on the job under the supervision of an experienced bartender.

#### **Can I study in Bhutan to become a bar tender?**

Yes, it is possible to learn by practical training in a restaurant or hotel bar. No formal course is required.

#### **What are the employment prospects for a bartender in Bhutan?**

Employment opportunities for bartenders are expected to increase as Bhutan's tourist and hospitality sector develops. This is expected to result in the opening of more restaurants and hotels and thus more employment opportunities for bartenders.

### 5.1.2 Beautician /Makeup artist

**Title: BEAUTICIAN**

**Description:** A beautician gives beauty and skin care treatment, applies cosmetics and make up, and gives other kinds of treatment to improve customers' appearance.

**Alternative Related Titles: HAIRDRESSER/MANICURIST/SPA ATTENDANT**

**What does a beautician do?**

- Applies cleansing creams and lotions and related products to face and body.
- Gives facial and body massages to clients.
- Applies make up to clients.
- Cleans shapes and polishes finger and toe nails.
- Advises on beauty products and treatments related to individual needs.
- Supervises the work of junior staff.

**What are the working conditions for a beautician?**

A beautician is normally self-employed or employed in a small business under the supervision of the owner or manager. The wages and benefits paid to a beautician depend on the experience and reputation of each beautician. Those beauticians in high demand because of their particular skills can earn a good income. The working hours for a beautician can be long depending on the needs of customers, and evening and weekend work is common. The salary and benefits paid to a young and junior beautician are low but increase as more skills and experience are acquired.

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**What is the working environment like?**

A beautician works indoors in salon and usually spends many hours standing in order to attend to clients. This can be tiring and cause fatigue. A beautician works with special skin treatment products and must take necessary precautions to ensure that the correct treatment is provided for each customer, particularly for customers who have sensitive skin or suffer from allergies. The environment for a beautician is usually pleasant. Some clients who are not satisfied with the service provided may cause the beautician some stress and anxiety.

**What knowledge and skills do I need to be a beautician?**

- Good communication and interpersonal skills.
- Knowledge of skin care products.
- Skills in applying skin products.
- Knowledge of make up products and skills to apply them.

**What personal qualities/attributes do I need to be a beautician?**

- An interest in helping and serving people.
- An interest in business.
- Creativity and imagination.
- A good sense of colors.
- Neat appearance and good grooming.

**What are the education requirements to become a beautician?**

There are no formal education requirements to become a beautician. The required knowledge and skills can be learned on the job under the supervision of an experienced beautician. Basic reading and writing skills are sufficient.

**Can I study in Bhutan to become a beautician?**

Yes. You can learn on the job and by gaining practical experience from experienced.

**What are the employment prospects for a beautician in Bhutan?**

The employment prospects for beauticians are good. As incomes of people in urban areas increase there will an increase in the demand for services of beauticians. Beautician sometimes work close cooperation with hairdressers, possibly as partners. Some beauticians also have hairdressing skills. There are good self-employment prospects for beauticians once they have sufficient

experience. The finance required establishing a business is relatively small, and there is good scope for a reasonable income.

### 5.1.3 Courier

**Title: COURIER**

**Description:** Couriers transport items that require urgent, safe or discreet delivery. These items may include valuable bankers' drafts, legal and business documents, mail order items, films and tapes, fragile items and medical supplies.

**Alternative and Related Titles:**

**What does courier do?**

The courier usually carries the items by van, scooter, motorcycle or bicycle. For longer distances and international courier work, items may be transported by rail or air.

**What are the working conditions for a courier?**

Courier duties involve receiving pick-up instructions from the depot, collecting and signing for items, planning delivery routes and delivering them to addressees. They have to obtain signatures for delivered items and record document delivery times. The exact nature of the work tends to vary considerably from day to day.

**What is the working environment like?**

Courier companies require early starts or operate a 24-hour service, so shift and part-time work is common. The work can be physically tiring. Couriers work in all weathers. Motorcycle and bicycle couriers, particularly in urban areas, may be particularly exposed to traffic fumes and the risk of accident. Uniforms may be provided.

**What knowledge and skills do I need to be a Courier?**

- a good level of fitness and stamina
- to be able to read maps and find directions
- a responsible attitude to safety
- to be trustworthy and discreet
- good customer service skills

- An interest in driving and basic vehicle maintenance.

**What personal qualities/attributes do I need to be a Courier?**

- to be methodical and organized
- good customer service skills
- to be self-reliant and able to use their initiative
- business awareness, particularly if self-employed
- Some ability in foreign languages for international work.

**What are the education requirements to become a Courier?**

There are no formal academic entry requirements for becoming a courier.

**Can I study in Bhutan to become a courier?**

There is no need to undertake specific study to be a courier. The necessary knowledge and skills can be acquired on the job, and by learning from the experience of others.

**What are the employment prospects for a courier in Bhutan?**

Courier can be expected to increase in Bhutan, particularly in urban areas and as consumers seek to have more and different goods and services to improve their living standards. Courier service will also have more opportunities as the commercial and services sectors expand in Bhutan.

5.1.4 Chef

**Title: CHEF**

**Description:** A chef is responsible for the planning, preparation and presentation of food in a restaurant or hotel, and the supervision of all kitchen operations directed to producing high quality food in accordance with health standards.

**Alternative and Related Titles:** **COOK** (In a small restaurant a cook and a chef may be one and the same. In a larger restaurant or hotel a chef supervises the work of various cooks and other kitchen staff and thus focuses more on supervision than actual cooking except, perhaps, the preparation of special dishes.) **CHEF DE CUISINE.**

### **What does a chef do?**

- Planning of menus in relation to available supplies of raw materials.
- Coordinates the work of all kitchen staff.
- Maintains strict control of kitchen supplies.
- Decides on the size of servings as a measure of cost control.
- Approves each meal before it leaves the kitchen.
- Prepares special dishes in response to special requirements of customers.
- Provides on-going training for all subordinates.
- Maintains high standards of hygiene in the kitchen, including ensuring the cleanliness of crockery, cutlery and cooking utensils.

### **What are the working conditions for a chef?**

A chef is normally employed by hotels and restaurants and receives a salary and benefits related to skills and reputation and thus the ability to attract customers. The working hours for a chef may be irregular involving a lot of evening and weekend work when customer numbers are greater. A chef is required to wear a uniform, normally provided by the employer. A chef's meals are usually provided free of charge during required working hours. In some large hotels, a chef may also be provided with free accommodation.

### **What is the working environment like?**

A chef works indoors in a kitchen environment characterized by raw food products, cooking apparatus, utensils, and staff. A chef may spend many hours standing and supervising the work of others, which can be tiring. The environment has many potential hazards including knives, cutting appliances, heating equipment, and open flames and care must be taken to avoid burns, cuts and other minor accidents. A chef may experience some stress and anxiety particularly concerning the non-availability of required supplies, and complaints from customers over the quality of food.

### **What knowledge and skills do I need to be a chef?**

- Good communication skills.
- High-level interpersonal skills.
- Ability to use hand tools.
- Ability to use kitchen equipment (e.g. micro wave ovens.)

- Knowledge of techniques for freezing pre-cooked food.
- Leadership and motivation skills.

**Can I study in Bhutan to become a chef?**

Yes. You can study to be a chef in Bhutan by learning on the job under the supervision of an experienced chef. It is also possible to learn to be chef at private Training Institute, where a 2-year Culinary Course for beginners is available with entry at Class 10. This can be followed by an Advanced Course for a further two years.

**What are the employment prospects for a chef in Bhutan?**

As Bhutan’s tourism and hotel sector continue to grow, there will be very good employment for chefs.

5.1.5 Cook

**Title: COOK**

**Description:** A cook plans, organizes, prepares and cooks foodstuffs in hotels, restaurants, clubs and private households. (In a large restaurant a cook or several cooks normally work under the supervision of a chef).

**Alternative and Related Titles:** CHEF (A chef has greater responsibilities than a cook and requires greater knowledge and skills).

**What does a cook do?**

- Plans meals and ensures necessary supplies and raw materials are available.
- Prepares and cooks food for individual and group orders.
- Plans and coordinates work in the kitchen.
- Supervises kitchen cleanliness and safe work practices.

**What are the working conditions for a cook?**

Most cooks work in the private and corporate sectors with their salary and benefits related to their skills, experience and reputation. A cook is required to wear a uniform supplied by the employer. A cook normally receives free meals when on duty. The hours of work are irregular and long, involving both after hours and weekend work.

### **What is the working environment like?**

A cook spends most time indoors working in a kitchen environment characterized by food, cooking utensils and appliances, and other kitchen workers. In a busy kitchen the environment is one of considerable activity. A cook is required to work with sharp tools and equipment which can be dangerous unless used strictly in accordance with safety procedures. A cook is sometimes required to work under considerable time pressure, particularly at peak times.

### **What knowledge and skills do I need to be a cook?**

- Good communication skills.
- Ability to use kitchen utensils and equipments.
- Knowledge of food and food combinations.
- Knowledge of safety procedures.
- Ability to work quickly and accurately.

### **What personal qualities/attributes do I need to be a cook?**

- An interest in food and cooking.
- An interest in serving others.
- Creativity and innovation.
- High standards of personal hygiene.

### **What are the education requirements to become a cook?**

There are no special education requirements to become a cook, apart from a reasonable level of literacy and numeracy. Some cooks undertake apprenticeship training involving both theoretical and practical training, under the supervision of an experienced cook or chef.

### **Can I study in Bhutan to become a cook?**

Yes. You can learn to be a cook through on the job training and practical experience. You can also undertake training at the private Training School, a private institution that offers training for cooks and waiters. A beginner's Culinary Course with entry at Class 8 followed by an advanced course.

### **What are the employment prospects for a cook in Bhutan?**

Employment prospects in Bhutan for cooks are expected to grow quite rapidly. AS the tourism and hospitality sector grows more hotels, guest houses and restaurants will commence business thereby providing more opportunities

for cooks. Once a cook has gained experience there are good prospects for self-employment, provided you have sufficient capital to open your own restaurant.

### 5.1.6 F & B Attendant

**Title:** F & B ATTENDANT

**Description:** A waiter serves food in restaurants, hotels, and clubs in response to customer requirements.

**Alternative and Related Titles:** BARTENDER/DINING ROOM ATTENDANT

**What does an F & B Attendant do?**

- Takes food and beverage orders from customers and writes them on an order slip.
- Explains different food and beverage items to customers.
- Ensures food orders are properly recorded and presented to a cook for preparation and cooking.
- Ensures beverage orders are served promptly and correctly.
- Clears tables and carries crockery, glasses and cutlery to a designated area for washing and drying.
- Sets tables with cutlery and crockery in readiness for customers.
- Ensures service areas are clean and tidy.
- Supervises the work of junior staff.

**What are the working conditions for an F & B Attendant?**

Waiters work in the private or corporate sector and receive wages and benefits according to skills and experience. They may also receive tips from customers either individually or on a shared basis between other waiters. When on duty a waiter normally receives free meals, and when required to wear a uniform this is provided by the employer, or an allowance paid to enable the waiter to purchase and maintain the uniform. A waiter is required to work irregular and long hours, and is required at weekends and in the evenings.

### **What is the working environment like?**

A waiter works indoors spending some time in a kitchen but most time in a dining room. The environment normally is pleasant and hazard free. A waiter is required to spend long hours standing and walking, which can cause tiredness and fatigue. A waiter can sometimes experience and anxiety particularly when customers make complaints or engage in noisy and rude behavior.

### **What knowledge and skills do I need to be an F& B Attendant?**

- Good communication and inter-personal skills.
- Knowledge of menus and particular dishes.
- Knowledge of table clearing and table setting requirements.
- Knowledge of carrying and serving techniques.
- Ability to calculate.
- Ability to work quickly and accurately.
- Knowledge of the correct way to serve wine.

### **What personal qualities/attributes do I need to be an F & B Attendant?**

- An interest in serving people.
- An interest in business.
- Willingness to work long hours.
- Honesty and integrity.
- Well groomed and neat appearance.

### **What are the education requirements to become an F & B Attendant?**

There are no special education requirements to become a waiter, apart from a reasonable level of literacy and numeracy. Some waiters undertake apprenticeship training involving both theoretical and practical training, under the supervision of an experienced waiter or supervisor.

### **Can I study in Bhutan to become an F & B Attendant?**

Yes. You can learn to be a waiter through on the job training and practical experience. You can also undertake training at the private Training School, a private institution that offers training for cooks and waiters. A waiters' training course takes with entry at Class 10.

### **What are the employment prospects for an F & B Attendant in Bhutan?**

Employment prospects in Bhutan for waiters are expected to grow quite



rapidly. As the tourism and hospitality sector grows more hotels, guest houses and restaurants will commence business thereby providing more opportunities for waiters. Once a waiter has gained experience there are prospects for promotion to head waiter and eventually restaurant supervisor.

### 5.1.7 Flight Attendant

**Title:** FLIGHT ATTENDANT

**Description:** A flight attendant provides services to air travelers to assist with their comfort and safety, including serving food and beverages.

**Alternative and Related Titles:** CABIN ATTENDANTS / STEWARD / HOSTESS / STEWARDESS

#### **What does a flight attendant do?**

- Meets passengers on entering aircraft and ensures they are properly seated and hand luggage is safely stored.
- Checks that safety equipment is in working order.
- Explains the use of safety equipment on aircraft.
- Distributes reading materials and entertainment items to passengers.
- Serves pre-prepared meals as well as beverages to passengers.
- Provides basic first aid to passengers in need.
- Ensures the cabin is clean and tidy and that toilet areas are clean and serviced.
- Responds to passengers' inquiries.
- Assists passengers as required when disembarking.
- Takes appropriate action in case of emergencies or accidents.

#### **What are the working conditions for a flight attendant?**

In Bhutan, all flight attendants are employed by Druk Air Corporation. They are well paid and receive additional allowances for uniforms and when required to stay overnight in other countries. The hours of work can be irregular as flights can be delayed due to poor weather conditions or when aircraft require repairs and maintenance. Flight attendants are required to work in shifts and this involves working outside normal working hours as well as weekend work. At present, female flight attendants in Bhutan cannot continue to work after the age of 37 years. Male flight attendants can work

longer. (Such discrimination has no justification, as it does not relate to the inherent nature of the work performed).

### **What is the working environment like?**

Flight attendants spend many hours in the confined space of an aircraft cabin, on their feet, attending to customer needs. This can cause tiredness and fatigue. Flight attendants are exposed to the risks normally associated with flying but these are minimal provided proper attention is given to safety rules and regulations. Sometimes flight attendants are required to deal with difficult passengers and this can create stress and anxiety.

### **What knowledge and skills do I need to be a flight attendant?**

- High-level communication skills in Dzongkha and English, and preferably a third language.
- Knowledge of aircraft safety procedures.
- Ability to serve food and drinks in a confined space.
- Knowledge of aircraft flight schedules.

### **What personal qualities/attributes do I need to be a flight attendant?**

- An interest in serving and helping people.
- An interest in flying.
- A willingness to work in confined spaces.
- High levels of responsibility.
- Some airlines impose minimum height and maximum weight standards, and minimum and maximum age requirements. (These may be discriminatory unless related to the inherent nature of the work to be performed).

### **What are the education requirements to become a flight attendant?**

The normal education requirement to become a flight attendant is the completion of secondary schooling (Class 12). Special training is provided through Druk Air Corporation, working in cooperation with partner airlines. This provides attendants with the necessary practical knowledge and skills to become a flight steward.

### **Can I study in Bhutan to become a flight attendant?**

No. It is not possible at present to learn to be a flight attendant in Bhutan itself. Overseas training is required. Various training courses for flight attendants

are offered by private training colleges in other countries on a fee for service basis, but these are not offered by airlines and do not guarantee jobs at the end of training.

### **What are the employment prospects for a flight attendant in Bhutan?**

The employment prospects for flight attendants in Bhutan are limited. The number of flight attendants is directly related to the number of aircraft operated by Druk Air and Tashi Airlines. As this number is expected to increase, the total number of flight attendants for the country is expected to be increased.

## 5.1.8 Hair Dresser

### **Title: HAIRDRESSER**

**Description:** A hairdresser cuts and styles hair in accordance with customer requirements.

### **Alternative and Related Titles: BARBER/BEAUTICIAN**

#### **What does a hairdresser do?**

- ⇒ Washes, cuts, tints and styles hair.
- ⇒ Advises on suitable hairstyles to enhance individual appearance.
- ⇒ Advises on hair and scalp care and gives scalp treatment.
- ⇒ Shaves and trims beards.
- ⇒ Advises on suitable hair treatment products to meet individual needs.
- ⇒ Supervises the work of subordinate staff.

#### **What are the working conditions for a hairdresser?**

A hairdresser is normally self-employed or employed in a small business under the supervision of the owner or manager. The wages and benefits paid to a hairdresser depend on the experience and reputation of each hairdresser. Those hairdressers in high demand because of their particular skills can earn a good income. The working hours for a hairdresser can be very long depending on the needs of customers, and evening and weekend work is common. The salary and benefits paid to a young and junior hairdresser are low but increase as more skills and experience are acquired.

#### **What is the working environment like?**

A hairdresser works indoors in a salon and usually spends many hours

standing in order to attend to clients. This can be tiring and cause fatigue. A hairdresser works with chemical products when treating and coloring hair and must take necessary precautions to ensure that the correct quantities are used. Failure to do so can have serious consequences for the client. The environment in a hairdressing salon is usually pleasant. Some clients who are not satisfied with the service provided may cause the hairdresser some stress and anxiety.

### **What knowledge and skills do I need to be a hairdresser?**

- Good communication and interpersonal skills.
- Reasonable reading writing skills.
- Ability to use basic tools and equipment including scissors and hand dryers.
- Knowledge of hair products, particularly those containing chemicals.
- Knowledge of basic safety procedures.

### **What persona qualities/attributes do I need to be a hairdresser?**

- An interest in serving and helping people.
- An interest in business.
- Creativity and innovation.
- Neat appearance and good grooming.

### **What are the education requirements to become a hairdresser?**

There are no special education requirements to become hairdresser. You can learn the necessary skills from an experienced hairdresser in an on the job situation. Basic reading and writing skills are required but Class 8 provides sufficient education to commence a career as a hairdresser.

### **Can I study in Bhutan to become a hairdresser?**

Yes, you can learn under the supervision of a skilled hairdresser. The most important skill is the ability to cut hair in accordance with the customer's requirements. This can take some time to learn to the required standard.

### **What are the employment prospects for a hairdresser in Bhutan?**

The employment prospects for hairdresser are good. As incomes of people in urban areas increase there will be an increase in the demand for services of hairdressers. Hairdressers sometimes work as beauticians or possibly in

partnership with a beautician. There are good self-employment prospects for hairdressers once they have sufficient experience. The funds required to establish a business is relatively small, and there is good scope for a reasonable income.

### 5.1.9 Spa Therapist

**Title:** SPA ATEENDANT

**Description:** A spa attendant provides services to clients with a view improving their health, appearance and general fitness.

**Alternative and Related Titles:** BEAUTICIAN

**What does a spa attendant do?**

- Attends to client's hot bath, steam bath, sauna and natural spa treatments.
- Advises on exercise and diet routines for clients.
- Gives facial, body and scalp massages.
- Applies natural products (e.g mud) in the form of body wraps for skin cleansing and general health applications.

**What are the working conditions for a spa attendant?**

A spa attendant works in the private sector and receives a wage and benefits in accordance with skill and experience levels for each attendant. Some spa attendants live on the premises and receive free meals while on duty. Spa attendants are usually, required to wear a uniform which is supplied by the employer. They may also receive a subsidy on their accommodation. The hours of work for a spa attendant are irregular depending on the needs of client's. Evening and weekend work is required.

**What is the working environment like?**

A spa attendant work in a healthy and clean environment that is generally free from hazards. Natural products are used in the treatment of client's and thus the risk of misusing chemicals does not exist. Care is required in the application of heat treatments and the use of sauna to ensure that clients do not suffer from excessive exposure to heat. A spa attendant is normally required to spend long hours standing which can cause tiredness and fatigue.

### **What knowledge and skills do I need to be a spa attendant?**

- Good communication interpersonal skills.
- Knowledge of massage techniques.
- Knowledge of natural skin care products.
- Knowledge of healthy diets.
- Knowledge of basic fitness and exercise programs.
- Ability to use sauna equipment safely.

### **What personal qualities/attributes do I need to be a spa attendant?**

- An interest in serving people.
- An interest in good health and diet.
- A good level of physical fitness.
- Strong hands for extended massage work.
- A caring and attentive manner.

### **What are the education requirements to become a spa attendant?**

There are no formal education requirements to become a spa attendant. The required knowledge and skills can be learned on the job under the supervision of an experienced supervisor.

### **Can I study in Bhutan to become a spa attendant?**

Yes. You can learn to become a spa attendant through practical experience gained in working at a spa resort.

### **What are the employment prospects for a spa attendant in Bhutan?**

At present the employment opportunities for a spa attendant are limited in Bhutan, but are expected to increase in future. Spa Resorts are expected to increase in Bhutan as the tourism industry grows, thereby providing increased opportunities for spa attendants. There are few opportunities for self-employment in this field unless it is possible to become the owner operator off a Spa Resort which requires a very large capital investment.

## 5.1.10 Tour Guide

### **Title: TOUR GUIDE**

**Description:** A tour guide accompanies individuals or groups on local sightseeing tours or through places of religious and cultural interest, such as dzongs and lhakhangs.

**Alternative or Related Titles:** **TOUR EXECUTIVE** (A tour executive is a senior tour guide who handles important clients and supervised new guides). **TREKKING GUIDE** (Trekking guides generally do the same jobs as tour guides but with a major difference they accompany tourists on long journeys on foot along mountain trails).

#### **What does a tour guide do?**

- Conducts and leads tours to tshechus, cultural centers, or any other destination chosen by the tourists.
- Gives commentary on tour sights and destinations and answers questions asked by tourists.
- Receives and sees off tourists at the airport.
- Arranges meals, hotel accommodation and signs bills of expenses incurred,
- Collects air tickets and checks visa validity on the clients' passports.
- Attends to all client needs, handles their complaints, and deals with emergencies such as vehicle break-down, sudden illness, or any other unforeseen problem that requires immediate solution.
- Submits tour reports and costing to the office at the end of the tour.

#### **What are the working conditions for a tour guide?**

A tour guide works as an employee in the private sector. Being a tour guide is often physically demanding but it is also educative and exciting. Tour guides meet people from all over the world and learn many new things. Permanent or regularly employed tour guides earn Nu. 5,500 per month as salary and are paid 200 per day while traveling with groups. Freelance tour guides are paid Nu. 500 per day. Guides also receive tips from their clients. The hours of work are irregular and include work after hours and at weekends.

#### **What is the working environment like?**

Tour guides very rarely work in offices. They are almost always travelling. Those who are employed regularly by tour operators help with office work when they are not on tours. During a tour, manual work such as loading or unloading baggage or other equipment may be required.

#### **What knowledge and skills do I need to be a tour guide?**

- Excellent general knowledge of Bhutan.

- Language and communication skills.
- Coordination and organization skills.
- Knowledge of tourism rules and regulations.
- Able to lead a diverse group of people.
- Able to maintain authority while exhibiting courtesy.
- Able to select the most important elements at tour sights and to explain them briefly and clearly.
- Able to find practical and quick solutions to unexpected problems.

**What personal qualities/attributes to I need to be a tour guide?**

- An interest in serving people.
- A pleasant personal disposition along with a good sense of humor.
- Patience and tact.
- A thorough sense of punctuality.

**What are the education requirements to become a tour guide?**

Tour guides are expected to have a minimum qualification of Class 10. They join as apprentice guides under the supervision of a senior tour guide and learn their skills through on the job training.

**Can I study in Bhutan to become a tour guide?**

The Department of Tourism regularly conducts a guide training course and issues licenses to tour guides. However, most tour guides are trained in-house by tour agencies and learn their trade on the job.

**What are the employment prospects for a tour guide in Bhutan?**

Tourism is one of the biggest foreign exchange earners for Bhutan. Currently there are over eighty registered tour operators or agencies that provide either part-time or fulltime employment to tour guides. Many tour guides work as freelancers and earn good money during the tourist season.

5.1.11 Waiter

**Title:** WAITER

**Description:** A waiter serves food in restaurants, hotels, and clubs in response to customer requirements.



## **Alternative and Related Titles: BARTENDER/WAITRESS/DINING ROOM ATTENDANT**

### **What does a waiter do?**

- Takes food and beverage orders from customers and writes them on an order slip.
- Explains different food and beverage items to customers.
- Ensures food orders are properly recorded and presented to a cook for preparation and cooking.
- Ensures beverage orders are served promptly and correctly.
- Clears tables and carries crockery, glasses and cutlery to a designated area for washing and drying.
- Sets tables with cutlery and crockery in readiness for customers.
- Ensures service areas are clean and tidy.
- Supervises the work of junior staff.

### **What are the working conditions for a waiter?**

Waiters work in the private or corporate sector and receive wages and benefits according to skills and experience. They may also receive tips from customers either individually or on a shared basis between other waiters. When on duty a waiter normally receives free meals, and when required to wear a uniform this is provided by the employer, or an allowance paid to enable the waiter to purchase and maintain the uniform. A waiter is required to work irregular and long hours, and is required at weekends and in the evenings.

### **What is the working environment like?**

A waiter works indoors spending some time in a kitchen but most time in a dining room. The environment normally is pleasant and hazard free. A waiter is required to spend long hours standing and walking, which can cause tiredness and fatigue. Waiters can sometimes experience and anxiety particularly when customers make complaints or engage in noisy and rude behavior.

### **What knowledge and skills do I need to be a waiter?**

- Good communication and inter-personal skills.
- Knowledge of menus and particular dishes.
- Knowledge of table clearing and table setting requirements.
- Knowledge of carrying and serving techniques.

- Ability to calculate.
- Ability to work quickly and accurately.
- Knowledge of the correct way to serve wine.

### **What personal qualities/attributes do I need to be a waiter?**

- An interest in serving people.
- An interest in business.
- Willingness to work long hours.
- Honesty and integrity.
- Well groomed and neat appearance.

### **What are the education requirements to become a waiter?**

There are no special education requirements to become a waiter, apart from a reasonable level of literacy and numeracy. Some waiters undertake apprenticeship training involving both theoretical and practical training, under the supervision of an experienced waiter or supervisor.

### **Can I study in Bhutan to become a waiter?**

Yes. You can learn to be a waiter through on the job training and practical experience. You can also undertake training at the Private Training Institutes which offers training for cooks and waiters. A waiters' training course takes 1 year with entry at Class 10.

### **What are the employment prospects for a waiter in Bhutan?**

Employment prospects in Bhutan for waiters are expected to grow quite rapidly. As the tourism and hospitality sector grows more hotels, guest houses and restaurants will commence business thereby providing more opportunities for waiters. Once a waiter has gained experience there are prospects for promotion to head waiter and eventually restaurant supervisor.

## **5.2. Sales Workers**

### **5.2.1 Shops sales person**

#### **Title: SHOPS SALESPERSON**

**Description:** A shop salesperson demonstrates and sells goods to customers in retail shops or wholesale outlets.

#### **Alternative and Related Titles: DEMONSTRATOR/SHOP ASSISTANT**

**What does a shop salesperson do?**

- Moves goods for sale from storage areas for display in sales areas.
- Obtains information from customers on the nature and quality of products they require.
- Assists customers in making choices, if required.
- Provides information to customers on prices, discounts, and credit arrangements.
- Packs goods purchased and arranges delivery if required.
- Writes sales invoices as required.
- Issues receipts for money collected.
- Gives demonstration of articles on sale to stimulated buyer interest.
- Maintains goods in display areas to ensure a neat and tidy appearance.

**What are the working conditions for a shop sales person?**

A shop sales person works in the private sector and receives a relatively low salary because of the relatively low level of training and skills required to do this type of work. Some shop sales persons are provided with a uniform, paid for by the employer. The hours of work for sales persons are long but regular. Shops normally remain open for a standard number of hours per week and thus there is no need for overtime work. Some people who own and operate their own retail or wholesale business also perform some of the functions of a sales person.

**What is the working environment like?**

A shop sales person works indoors in an environment characterized by people and goods for sale. The environment is normally hazard free but sales persons are usually required to stand for long periods of time, resulting in tiredness and fatigue. Sometimes sales persons are required to deal with difficult customers and this can cause them some stress and anxiety.

**What knowledge and skills do I need to be a shop sales person?**

- Good communication and interpersonal skills.
- Knowledge of the products/services for sale, including quality, price and any discounts that may apply.
- Ability to calculate total amounts payable and the change required.

- Basic reading and writing skills and the ability to follow instructions.
- Knowledge of how to encourage hesitant buyers to purchase goods and services.

**What personal qualities/attributes do I need to be a shop sales person?**

- An interest in serving and helping people.
- An interest in business,
- Patience.
- Reliable and trustworthy.

**What are the education requirements to become a sales person?**

There are no formal education requirements to become a shop sales person. The sales person must have knowledge of the products being sold and although these may sometimes be technical products (such as computers, motor cards, DVD players) the sales person does not require special qualifications in this fields. A sales person can acquire the necessary knowledge and skills through on the job training and practical experience, although special on the job training is require for persons involved in selling technical and specialized products.

**Can I study in Bhutan to become a shop sales person?**

Yes. You can learn to be a salesperson on the job under the supervision of an experienced sales supervisor.

**What are the employment prospects for a shop sales person in Bhutan?**

There are good employment prospects for shop sales persons in Bhutan. As shops grow in number and size and competition increases the need for more and better sales persons will become apparent, there by offering expanded employment opportunities in the field.

5.2.2 Cashier

**Title: CASHIER**

**Description:** A cashier receives payments for goods and services directly from customers in shops, ticket offices, cinemas and places of entertainment.

**Alternative and Related Titles: TICKET CLERK**

**What does a cashier do?**

- Receives and verifies cash, cheque, and credit card payments from customers in stores, hotels, ticket offices and places of entertainment.
- Give change to customers and issues receipts.
- Issues tickets in return for payment.
- Keeps records of amounts received and reconciles these with cash balances.
- Receives incoming cash and checks this against sales slips.
- Prepares cash for depositing in a bank.
- Operates a cash register.
- Supervises the work of junior cashiers.

**What are the working conditions for a cashier?**

In the Royal Civil Service a cashier is employed as support personnel. The entry level to the Royal Civil Service, and the actual salary and benefits payable for each position, are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A cashier in the Royal Civil Service is engaged in collecting fees for licenses, registration fees, taxes, and other payments due to government. Cashiers employed in the corporate sector receive salary and benefits similar to those employed by government employees. Cashiers in the private sector receive salaries similar to government and corporate sector employees but other benefits are usually less. A cashier works standard working hours with limited demands for after hours or weekend work.

**What is the working environment like?**

A cashier works indoors, usually in a sitting position receiving money, issuing receipts and giving change. A cashier may use a computerized cash register or, alternatively, operate a manual system. A cashier must ensure the safety of cash on hand and thus register a safe environment is essential, usually involving the use of locked drawers and cash registers. The working environment is largely hazard free although a cashier can face some anxiety when cash received and receipts issued fail to balance.

**What knowledge and skills do I need to be a cashier?**

- Good communication skills.
- Good arithmetic skills.

- Ability to work quickly and accurately.
- Basic computer skills (for larger organizations).
- Ability to concentrate for long periods.
- Good attention to detail.
- Knowledge of safe procedures for handling cash.

**What personal qualities/attributes do I need to be a cashier?**

- Willingness to engage in repetitive and sometimes monotonous work.
- An interest in serving people.
- Honesty and responsibility.

**What are the education requirements to become a cashier?**

There are no special education requirements to become a cashier. The knowledge and skills required can be acquired on the job under the supervision of an experienced cashier. In future, cashiers in Bhutan will require knowledge of credit card transactions but this, too, can be acquired on the job.

**Can I study in Bhutan to become a cashier?**

Yes. You can learn about this career through on the job training and work experience.

**What are the employment prospects for a cashier in Bhutan?**

There are employment prospects for cashiers in government, corporate and private sectors. Computerization may change the way in which cashiers operate but there will always be a need for their services. In the smaller retail stores and restaurants a cashier's work may focus more on relatively simple cash transactions, but in the corporate and government sectors cashiers will be expected to work with computers and information technology.

5.2.3 Clearing Agent

**Title: CLEARING AGENT**

**Description:** A clearing agent carries out customs clearing procedures on behalf of clients and ensures that all necessary documents including insurance and licenses are in order.

**Alternative and Related Titles: SHIPPING AGENT, FORWARDING**

## AGENT

### **What does a clearing agent do?**

- Arranges on behalf of clients for the clearance of goods for both export and import with government customs departments.
- Ensures that all necessary documentation for the clearance of goods to be exported or imported is in order.
- Ensures that export and import licenses and approvals are in order and that all required fees and taxes have been paid.
- Prepares invoices and issues, receipts.
- Provides information to clients on taxation rates.

### **What are the working conditions for a clearing agent?**

A clearing agent works in the private sector either as an employee or as a self-employed person. An employee receives a salary and benefits related to the level of skill and experience. The earnings of a self-employed clearing agent depend on the volume of work handled which, in turn, depends on the skills and reputation of the clearing agent. The hours of work for a clearing agent are normally regular but overtime work may be required in busy periods. (The clearing agent is not a representative of government and receives payment for services rendered from the importer or exporter).

### **What is the working environment like?**

A clearing agent mostly works indoors in an environment characterized by documents and, increasingly, computers. The office environment can be busy at peak times requiring that the customs agent work quickly but without sacrificing accuracy. The environment is one of serving the client, in this case the importer or exporter of goods.

### **What knowledge and skills do I need to be a clearing agent?**

- Good communication skills.
- Detailed knowledge of import and export rules and regulations, including tax rates.
- Detailed knowledge of customs procedures and operations.
- Ability to work quickly and accurately.
- Computer skills.
- Calculating skills.
- An interest in serving people.

- An interest in business
- Reliability.
- Integrity

### **What are the education requirements to become a clearing agent?**

There are no formal education requirements to be a clearing agent other than a good general education and reading and writing skills. Formal qualifications in commerce is an advantage but not essential

### **Can I study in Bhutan to become a clearing agent?**

Yes, you can learn to be a forwarding agent through on the job training under the supervision of an experienced agent.

### **What are the employment prospects for a clearing agent in Bhutan?**

Bhutan's involvement in regional and international trade is expected to increase in future years thereby generating more employment opportunities for clearing agents. This career is well suited to self-employment as the financial capital required to commence business is relatively small.

## 5.2.4 Employment Agent

### **Title: EMPLOYMENT AGENT**

**Description:** An employment agent finds suitable workers for employers, contracts workers on request for particular projects or assignments, and finds suitable jobs for job seekers on a commission basis.

**Alternative and Related Titles:** LABOUR CONTRACTOR, PRIVATE EMPLOYMENT AGENT, EMPLOYMENT OFFICER (An employment office is a government official providing registration and placement services for employers and workers, free of charge).

### **What does an employment agent do?**

- Maintains contact with employers, workers and keeps records of their requirements.
- Maintains contact with workers seeking jobs and keeps records of their requirements.
- Discusses with employers the quantity and quality of workers they require, and the duration and terms and conditions for their



employment.

- Finds suitable workers for job vacancies notified by employers, and receives payment from the employer.
- Ensures that employment contracts meet legal requirements.
- Arranges for the placement of temporary workers with enterprises to meet the short term needs of such enterprises.
- Provides information to government departments, as required by law.

### **What are the working conditions for an employment agent?**

An employment agent normally works in the private sector either as an employee or as a self-employed person. As an employee an employment agent receives a salary and benefits related to the level of skill and experience of the individual. The earning of a self-employed employment agent depends on the volume of work handled which depends to a large extent on the reputation of the individual agent. The hours of work for an employment agent are regular.

### **What is the working environment like?**

An employment agent normally works indoors communicating with employers on their requirements for workers and making contact with workers or sub agents to find suitable persons to fill the jobs notified by employers. The key element in this environment is information and this can be made available by telephone, through electronic communication, or by person-to-person contact.

### **What knowledge and skills do I need to be an employment agent?**

- Good communication and interpersonal skills.
- Knowledge of laws and regulations concerning labor contracts.
- Knowledge of local labor market conditions.
- Knowledge of sources of labor
- Negotiating skills
- Ability to find suitable workers quickly.
- Computer skills.

### **What personal qualities/attributes do I need to be an employment agent?**

- An interest in serving the needs of clients (which in this case is both the employer and workers).

- An interest in business.
- The ability to work quickly.
- Reliability
- High levels of integrity.

### **What are the education requirements to become an employment agent?**

There are no formal education requirements to become an employment agent other than a good general education and the ability to read and write. No degree or diploma is required although such qualifications may be beneficial.

### **Can I study in Bhutan to become an employment agent?**

Yes, you can learn to be an employment agent through practical experience and on the job training.

### **What are the employment prospects for an employment agent in Bhutan?**

Employment opportunities for employment agents will depend on the extent to which such activities are controlled by law. Opportunities for government employment officers will arise as the Ministry of Labour and Human Resources expands its services in the field of employment promotion.

## **5.3. Personal Care Worker**

### **5.3.1 Child care worker**

#### **Title: CHILD-CARE WORKER**

**Description:** A child-care worker takes care of children and organizes their daily activities, under the supervision of an employer.

#### **Alternative and Related Titles: NANNY/GOVERNESS**

#### **What does a child-care worker do?**

- Assists children to wash, dress and feed themselves.
- Takes children to and from school and outdoors for play activities.
- Plays games with children and entertains them by reading and story telling.
- Maintains tidiness and order in children's bedrooms and playrooms.

**What are the working conditions for a child-care worker?**

Child care workers normally work in the private sector and receive a wage and benefits related to their level of skill and experience. A child care worker may receive a relatively low wage, but one who lives on the premises normally receives free accommodation and meals. The working hours involved in looking after children may be long involving work in the early hours of the day, in the evening, and at weekends.

**What is the working environment like?**

A child-care worker mostly works indoors tending to the needs of children. Some time may be spent outdoors when playing with children or taking them for walks. The work is normally undertaken in a private home where the working environment is usually pleasant and hazard free. The long hours of work involving many hours standing and waling can be very tiring. As the child care worker is responsible for the needs of young children stress and anxiety can be experienced when children are ill or have a minor accident.

**What knowledge and skills do I need to be a child-care worker?**

- Communication skills, particularly the ability.
- Ability to read and write to a reasonable standard.
- Knowledge of games and play activities.
- Knowledge of children's requirements and behavior.
- Knowledge of safety factors in a private home.
- Knowledge of basic first aid.

**What personal qualities/attributes do I need to be a child-care worker?**

- High level of responsibility.
- A caring manner and a fondness for children.
- Patience.
- High standards of personal hygiene.
- Willingness to spend long hours in the company of children.

**What are the education requirements to become a child-care worker?**

There are no special education requirements. The knowledge and skills can be acquired through practical experience gained on the job.

**Can I study in Bhutan to become a child-care worker?**

Yes. As there are no special courses to be undertaken to be a child-care worker

the work can be learned through on the job experience and actually working with and caring for children.

**What are the employment prospects for child-care worker in Bhutan?**

Most child care workers are employed by higher income families. In many cases a family may employ a domestic worker to do many jobs including cooking, clearing and caring for children. In such cases the prospects for the employment of a specialist child care worker are limited. It is expected, however, that as the income of Bhutanese family's increase, particularly for those in urban areas where both parents receive a regular income, the need for child care workers will increase.

*SERNYA*



*In Buddhism, Sernya or the golden fish symbolize happiness, as they have complete freedom in water. They represent fertility and abundance as they multiply very rapidly. Fish often swim in pairs, and in China they represented conjugal unity and fidelity, where a pair of fishes would often be given as a wedding present.*

# **Skilled Agricultural, Forestry and Fishery Workers**

6. **Skilled Agricultural, Forestry and Fishery workers**
  - 6.1. **Market-oriented skilled agricultural workers**
    - 6.1.1 Crop and vegetable grower

**Title: CROP AND VEGETABLE GROWER**

**Description:** A crop and vegetable grower grows and harvests crops and/or vegetable for sale on a regular basis to wholesalers, or for direct sale through markets and stalls.

**Alternative and Related Titles: FARMER/MARKET GARDENER/HORTICULTURIST/FLORICULTURIST** (A crop and vegetables grower may specialize in the production of particular crops such as mushrooms or cut flowers).

**What does a crop and vegetable grower do?**

- Decides and plans the type and amount of crops and vegetables to be grown.
- Purchases seed, fertilizer and other supplies.
- Prepares land and sows and cultivates crops and vegetables.
- Receives advice from agricultural extension officers and other specialists as required.
- Harvests and stores crops and vegetables in preparation for sale.
- Maintains farming equipment and machinery.
- Arranges delivery of products to markets and wholesalers.

**What are the working conditions for a crop and vegetable grower?**

A crop and vegetable grower normally is self-employed. This requires access to land and basic equipment to enable land to be cultivated, crops to be sown and managed, and then harvested. The wages and benefits to the self-employed grower are very variable depending on seasonal factors, and the demands of final consumers. In a good season, a crop and vegetable grower can earn a high income, even higher than some professionals. A crop and vegetable grower can expect to work long hours, particularly in the planting and harvesting seasons when it is necessary to work for long hours every day.

**What is the working environment like?**

A crop and vegetable grower works outdoors in a variety of weather conditions including heat and cold, wind and rain. The working environment requires

the crop and vegetable grower to work with both manual and mechanical equipment (e.g. tractor), depending on individual circumstances. A crop and vegetable grower can suffer stress and anxiety due to crop failure as a result of adverse weather conditions, and to difficulties in selling due to crop failure as a result of adverse weather conditions, and to difficulties in selling final products, due to unfavorable market conditions. In good seasons, income levels can be high, in port seasons income levels can be quite low. A crop and vegetable grower can also be exposed to risks relating to the use of fertilizers and chemicals if these are not properly applied.

**What knowledge and skills do I need to be a crop and vegetable grower?**

- Ability to use hand and mechanical tools and equipment.
- Knowledge of soil and crops.
- Knowledge of crop diseases and how they should be treated.
- Knowledge of market conditions.

**What personal qualities/attributes do I need to be a crop and vegetable grower?**

- Physical fitness and capacity for hard work.
- An interest in business.
- Willingness to innovate by trying to grow new crops.
- A willingness to take risks.
- Willingness to take advice from technical experts.
- An interest in outdoor life and natural environment.

**What are the education requirements to become a crop and vegetable grower?**

There are no special education requirements to become a crop and vegetable grower in Bhutan. The knowledge and skills can be acquired by practical experience and learning from successes and failures in working the land and learning from more experienced growers.

**Can I study in Bhutan to become a crop and vegetable grower?**

Yes. You can learn about crop and vegetable growing through on the job activities and from the practical advice provided by technical experts, including agricultural extension officers, as well as advice and experience handed for one family member to another. You can also attend short courses in particular aspects of crop and vegetables (e.g. mushroom cultivation,

vegetable growing) through courses organized in Dzongkhags through the Natural Resources Training Institute. These courses normally require an entry level of Class 6 and above, and run from 2-6 weeks.

### **What are the employment prospects for a crop and vegetable grower in Bhutan?**

There will always be a need for crop and vegetable growers in Bhutan who are prepared to work hard, take risks, and earn good incomes. New crops and new industries (e.g. fresh flowers) also offer employment opportunities for persons interested in self-employment. Self-employment however, requires access to land, water, equipment and support services, including business advisory services such as marketing and training, as well as access to finance in some cases.

#### 6.1.2 Food and vegetable preserver

##### **Title: FRUIT AND VEGETABLE PRESERVER**

**Description:** A fruit and vegetable preserver processes and preserves fruit, vegetable and nuts by way of cooking, drying, salting, or by juice extraction.

##### **Alternative and Related Titles:**

##### **What does a fruit and vegetable preserver do?**

- Extracts juices from various fruits and vegetables.
- Extracts oil from oil-bearing seeds, nuts and fruit using simple pressing machinery.
- Cooks, salts, or dries fruit and vegetables in preparation for final consumption.
- Packages and bottles processed and preserved products ready for storage and sale.
- Supervises the work of other workers.

##### **What are the working conditions for a fruit and vegetable preserver?**

A fruit and vegetable preserver may be either an employee or a self-employed person. A fruit and vegetable preserver employed by an enterprise receives a wage and benefits similar to other skilled employees in the food industry. A self-employed person can earn considerably more but also runs the risk of business failure. A fruit and vegetable preserver may be required to wear



a uniform provided by the employer. The working hours are regular but involve after hours and weekend work. A self-employed fruit and vegetable preserver normally works very long hours.

**What is the working environment like?**

Fruits and vegetable may be preserved on a larger scale in a factory or on a smaller scale in a kitchen style environment with a sales outlet attached. In all environments, very high importance is attached to hygiene and cleanliness. A fruit and vegetable preserver can spend a lot of time standing which can cause tiredness and fatigue. The preparation of fruits and vegetable for preserving involves cutting and the use of knives thereby raising the possibility of accidents if knives are not used in accordance with safety procedures.

**What knowledge and skills do I need to be a fruit and vegetable preserver?**

- Good communication and interpersonal skills.
- Knowledge of fruits and vegetable and preserving and extraction methods.
- Ability to calculate prices and give change.
- Knowledge of health standards.

**What personal qualities/attributes do I need to be a fruit and vegetable preserver?**

- An interest in serving people.
- An interest in business.
- An interest in fruit and vegetable products
- An interest in business.
- An interest in fruit and vegetable products.
- High standards of personal hygiene.
- Reliability and a concern for consistent quality standards.

**What are the education requirements to become a fruit and vegetable preserver?**

There are no formal education requirements to become a fruit and vegetable preserver. The necessary knowledge and skills can be acquired through on the job experience.

**Can I study in Bhutan to be a fruit and vegetable preserver?**

There are no courses in Bhutan that enable you to learn to become a fruit and

vegetable preserver. You can, however, learn on the job under the supervision of an experienced person.

### **What are the employment prospects for a fruit and vegetable preserver in Bhutan?**

Bhutan experiences a wide range of climatic conditions and can produce a variety of fruits, vegetable and nuts. To date, however, little progress has been made in adding value to these products by processing and preserving. There is considerable potential for a food industry in Bhutan not only for local consumers but also for exports to neighboring countries. If this potential is developed, there will be good employment prospects for fruit and vegetable preservers for both small and larger scale production

#### 6.1.3 Poultry farmer

##### **Title: POULTRY FARMER**

**Description:** A poultry producer breeds and raises poultry for the regular sale and delivery of eggs, meat and feathers to wholesalers and markets.

##### **Alternative and Related Titles: POULTRY PRODUCER**

##### **What does a poultry farmer do?**

- Plans the type of poultry products to be produced.
- Breeds and/or purchases chicks and purchases food and other supplies.
- Obtains land and equipment.
- Constructs poultry sheds, fences and other buildings as required.
- Breeds, raises, and tends poultry and collects eggs.
- Kills dresses and packs poultry for sale or arranges transport of live birds to markets.
- Stores and carries out basic processing of poultry products.
- Maintains equipment, buildings and tools.
- Delivers and markets poultry produce.
- Accesses technical advice from agricultural extension offices and other specialists as required.
- Supervises the work of poultry workers.

**What are the working conditions for a poultry farmer?**

A poultry farmer normally is self-employed. This requires access to land and basic equipment to poultry to be raised and tended. The wages and benefits to the self-employed poultry farmer are very variable depending on seasonal factors, and the demands of final consumers. In a good season, a poultry farmer can earn a high income, even higher than some professionals. A poultry farmer can expect to work long hours, every day of the week.

**What is the working environment like?**

A poultry farmer works both indoors and outdoors, depending on whether poultry is raised in enclosed indoor pens or in outdoor areas, suitably fenced. The working environment requires the poultry farmer to work with basic tools for the construction and maintenance of sheds and fences. A poultry farmer can suffer stress and anxiety due to the death or sickness of chickens, and to difficulties in selling final products, due to unfavorable market conditions. In good years, income levels can be high, in poor years income levels can be quite low.

**What knowledge and skills do I need to be a poultry farmer?**

- Ability to use hand tools and basic equipment.
- Knowledge of chickens and breeding.
- Knowledge of poultry diseases and how they should be treated.
- Knowledge of market conditions.

**What personal qualities/attributes do I need to be a livestock farmer?**

- Physical fitness and capacity for hard work.
- An interest in business.
- An interest in and respect for poultry.
- A willingness to take advice from technical experts.
- An interest in outdoor life and the natural environment.

**What are the education requirements to become a poultry farmer?**

There are no special education requirements to become a poultry farmer in Bhutan. The knowledge and skills can be acquired by practical experience and learning from successes and failures in working on a poultry farm and learning from more experienced growers.

### **Can I study in Bhutan to become a poultry farmer?**

Yes. You can learn about poultry farming through on the job activities and from the practical advice provided by technical experts, including agricultural extension officers, as well as advice and experience handed for one family member to another. You can also attend short courses in particular aspects of poultry farming through courses organized in Dzongkhags through the National Resources Training Institute. These courses normally require an entry level of Class 6 and above, and run for about 8 weeks.

### **What are the employment prospects for a poultry farmer in Bhutan?**

There will always be a need for poultry farmers in Bhutan who are prepared to work hard, take risks, and earn good incomes. Self-employment, however, requires access to land, water, equipment and support services, including business advisory services such as marketing and training, as well as access to finance in some cases.

#### 6.1.4 Livestock farmer

##### **Title: LIVESTOCK FARMER**

**Description:** A livestock farmer breeds and raises animals for the regular sale to wholesalers or for direct sale through markets and stalls of meat, milk, hair, hides and other products.

**Alternative and Related Titles:** FARMER / DAIRY FARMER / PIG FARMER / ATTLE FARMER / BREEDER / LIVESTOCK PRODUCER

##### **What does a livestock farmer do?**

- Plans the type and amount of livestock and the purpose for which it will be bred and grown.
- Purchases animals, breeding stock and other supplies.
- Obtains grazing land and constructs buildings, pens and fences as required.
- Breeds, raises and tends to livestock including goats, cattle, sheep, pigs, and horses.
- Milks animals as required.
- Kills and skins animals in preparation for the sale of animal products.
- Stores and carries out basic and simple processing or animal

products.

- Delivers animal products to whole sellers or markets.
- Maintains buildings, equipment and fences.
- Accesses technical advice from agricultural extension officers and other specialists, as required.

### **What are the working conditions for a livestock farmer?**

A livestock farmer normally is self-employed. This requires access to land and basic equipment to enable animals to be raised and tended. The wages and benefits to the self-employed livestock farmer are very variable depending on seasonal factors, and the demands of final consumers. In a good season, a livestock farmer can earn a high income, even higher than some professionals. A livestock farmer can expect to work long hours, particularly when daily milking of animals is required.

### **What is the working environment like?**

A livestock farmer work outdoors in a variety of weather conditions including heat and cold, wind and rain. The working environment requires the livestock farmer to work with manual equipment and possibly mechanical equipment (e.g. tractor), depending on individual circumstances. A livestock farmer can suffer stress and anxiety due to the death or sickness of animals, and to difficulties in selling final products, due to unfavorable market conditions. In good years, income levels can be high, in poor years income levels can be quite low.

### **What knowledge and skills do I need to be a livestock farmer?**

- Ability to use hand and mechanical tools and equipment.
- Knowledge of animals and breeding.
- Knowledge of animal diseases and how they should be treated.
- Knowledge of market conditions.

### **What personal qualities/attributes to I need to be a livestock farmer?**

- Physical fitness and capacity for hard work.
- An interest in business.
- An interest in and respect for animals.
- A willingness to take risks.
- Willingness to take advice from technical experts.
- An interest in outdoor life and the natural environment.

### **What personal qualities do I need to be a livestock farmer?**

There are no special education requirements to become a livestock farmer in Bhutan. The knowledge and skills can be acquired by practical experience and learning from successes and failures in working the land and learning from more experienced farmers.

### **Can I study in Bhutan to become a livestock farmer?**

Yes. You can learn about livestock farming through on the job activities and from the practical advice provided by technical experts, including agricultural extension officers, as well as advice and experience handed from one family member to another. You can also attend short courses in particular aspects of livestock farming (e.g. dairy production, pig production) through courses organized in Dzongkhags through the Natural Resources Training Institute. These courses normally require an entry level of Class 6 and above, and run from 8-12 weeks.

### **What are the employment prospects for a livestock farmer in Bhutan?**

There will always be a need for livestock farmers in Bhutan who are prepared to work hard, take risks, and earn good incomes. Self employment, however, requires access to land, water, equipment and support services, including business, advisory services such as marketing and training, as well as access to finance in some cases.

#### 6.1.5 Beekeeper

##### **Title: BEEKEEPER**

**Description:** A beekeeper keeps or rears colonies of bees for commercial extraction of honey, or as a hobby that brings income through the production and sale of honey.

**Alternative and Related Titles: APIARIST** (An apiarist is a farmer who has knowledge of and is engaged in bee husbandry).

- Selects suitable sites for establishing bee colonies.
- Constructs beekeeping equipment.
- Inspects bee colonies for diseases.
- Produces queen bees and package bees for colony multiplication.
- Harvests or extracts honey.
- Looks after and repairs beekeeping and honey extracting

- equipment.
- Packages and sells honey.
- Keeps book of accounts and maintains other business record.

### **What are the working conditions for a beekeeper?**

Beekeeping is a business that pays well if managed properly. Earnings are dependent on market conditions and vary according to a combination of supply and demand factors. The hours of work for a beekeeper are irregular and long and include working at weekends.

### **What is the working environment like?**

Beekeepers spend much of their time out-of-doors. Many wear protective clothing such as overalls, gloves and hats with nets attached to protect themselves when working with aggressive colonies. Some people suffer severe reactions to bee stings, thereby highlighting the need to take appropriate safety precautions. Children can suffer more than adults from bee stings and every effort should be made to keep children away from bee colonies.

### **What skills do I need to be a beekeeper?**

- Good knowledge of bee behavior, habitat and nutrition.
- Ability to manage many bee colonies.
- Ability to repair and maintain beehives and other equipment.
- Good knowledge of commercial and hygienic honey production.
- Ability to keep accurate records.
- Business skills, including the ability to promote and sell honey.

### **What are the education requirements to become a beekeeper?**

No formal education is required to become a beekeeper. The required knowledge and skills can be learned on the job under the supervision of an experienced beekeeper.

### **Can I study to become a beekeeper in Bhutan?**

Yes, you can be trained in basic bee husbandry through an apprenticeship under the supervision of established beekeepers. For professional studies or training this area you have to go abroad. You can also learn about beekeeping through courses organized in Dzongkhags through the Natural Resources Training Institute. The courses normally require an entry level of Class 6 and above and can be completed within a week.

### **What are the employment prospects for beekeepers in Bhutan?**

There isn't any organization, either government or private, that offers employment in beekeeping. All beekeepers in Bhutan are self-employed. Beekeeping is a popular and lucrative business in central Bhutan, especially Bumthang. It provides people with the opportunity to be independent and self-reliant, provided they are willing to work hard and know how to manage and operate a small business.

#### 6.1.6 Dairy product maker

##### **Title: DAIRY-PRODUCTS MAKER**

**Description:** A dairy products maker produces a range of products including butter, cheeses, and cream using animal milk as the main ingredient.

##### **Alternative and Related Titles: BUTTER MAKER/CHEESE MAKER**

##### **What does a dairy products maker do?**

- ⇒ Separates cream from milk.
- ⇒ Churns cream into butter.
- ⇒ Curdles milk, heats curds until they reach the required firmness, drains curds and places cheese into moulds to press it into shape.
- ⇒ Displays dairy products for sale.
- ⇒ Advises customers on the content of dairy products.
- ⇒ Serves customers on the content of dairy products.
- ⇒ Supervises the work of subordinate staff.

##### **What are the working conditions for a dairy products worker?**

A dairy products worker may be either an employee or a self-employed person. A dairy products worker employed by an enterprise receives a wage and benefits similar to other skilled employees in the private sector. A self-employed person can earn considerably more but also runs the risk of business failure. A dairy products worker may be required to wear a uniform provided by the employer. The working hours are regular but involve after hours and weekend work. Although the hours are regular, dairy products are fresh for the day's sales. A self-employed dairy products worker normally works very long hours.



**What is the working environment like?**

Dairy products may be produced in a factory environment where large quantities are involved, or in a kitchen style environment with a shop attached where smaller quantities are produced for direct sale to the public. In both types of environments, great importance is attached to hygiene and cleanliness. A dairy products worker can spend a lot of time standing which can cause tiredness and fatigue. Dairy products are sold in a shop environment and this may be busy at times. The working environment is largely hazard free.

**What knowledge and skills do I need to be a dairy products worker?**

- Good communication and interpersonal skills.
- Knowledge of dairy products and production methods.
- Ability to calculate prices and give change.
- Knowledge of health standards.

**What personal qualities/attributes do I need to be a dairy products maker?**

- An interest in serving people.
- An interest in business.
- An interest in producing dairy products.
- High standards of personal hygiene.
- Reliability and a concern for consistent quality standards.

**What are the education requirements to become a dairy products maker?**

There are no formal education requirements to become a dairy products maker. The necessary knowledge and skills can be acquired through on the job experience.

**Can I study in Bhutan to be a baker?**

There are no courses in Bhutan that enable you to learn to become a dairy products maker. You can, however, learn on the job under the supervision of an experienced person

**What are the employment prospects for a dairy products maker in Bhutan?**

Many of Bhutan's dairy products are imported and its dairying industry is underdeveloped. Employment prospects for dairy product makers could improve if the country's dairying industry becomes larger and more commercial in outlook.

## 6.1.7 Florist

### **Title: FLORIST**

**Description:** A florist purchases flowers and plants from suppliers (floriculturists), sells flowers and plants to customers, designs, prepares and sells floral arrangements to meet the general or customized needs of customers.

### **Alternative and Related Titles: FLORAL ARRANGER/FLORICULTURIST**

#### **What does a florist do?**

- Arranges for the supply of cut flowers and plants from producers or wholesalers.
- Receives delivery of flowers and plants, and arranges for their proper care, storage and display.
- Designs and makes bouquets, garlands, sprays, and sheaves of flowers for general sale, or in response to specific order from customers.
- Advises customers on the correct way to handle and care for flowers and plants.
- Arranges for the timely delivery of flowers and plants in accordance with customer requirements.
- Arranges for the delivery of flowers in other cities and countries through national and international networking arrangements.
- Advises customers on the floral decorations for celebrations, parties and conferences.

#### **What are the working conditions for a florist?**

A florist is normally a self-employed person with their income related to their ability and reputation. A florist with a good reputation can earn a high income. A florist is required to work long hours, including receiving the delivery of flowers in the early morning to ensure flowers retain their freshness. The hours can be irregular depending on orders received. For special occasions a florist may have to work many extra hours to meet customer requirements.

#### **What is the working environment like?**

The working environment for a florist is pleasant with much of the time spent in locations surrounded by flowers and plants. The environment is largely

hazard-free, although a florist may experience tiredness and stress when many orders are received at the same time.

#### **What knowledge and skills do I need to be a florist?**

- Good communication and inter-personal skills.
- Ability to use simple tools (e.g. scissors, cutters).
- Good knowledge of different types of flowers and their individual qualities.
- Computer skills (particularly for the receipt if orders by e-mail).

#### **What personal qualities/attributes do I need to be a florist?**

- A strong interest in flowers and colors.
- Creativity and artistic aptitude.
- An interest in serving people.
- An interest in business.

#### **What are the education requirements to become a florist?**

There are no special education requirements for a career as a florist. The main requirements are an interest in flowers and an interest in business.

#### **Can I study in Bhutan to become a florist?**

Yes. You can learn on the job under the guidance of a person with experience as a florist, or learn through self-learning and personal experience. Many florists in other countries are self-taught and operate very successful business.

#### **What are the employment prospects for a florist in Bhutan?**

There are very few opportunities for employment as a florist who works for an employer and receives a regular monthly wage. There are good opportunities, however, for self-employment and profitable business provided you can find a suitable location for your business, can obtain a regular supply of flowers, and have sufficient capital to commence and operate your business.

### **6.2. Market-oriented skilled forestry, fishery and hunting workers**

#### **6.2.1 Fish farmer**

**Title:** FISH FARMER

**Description:** A fish farmer breeds and raises fish and other forms of aquatic

life for regular sale to wholesalers and markets.

## **Alternative and Related Titles: AQUATIC CULTIVATOR**

### **What does a fish farmer do?**

- ⇒ Constructs dams and secures river concessions for breeding and raising fish.
- ⇒ Purchases food and other supplies.
- ⇒ Breeds, raises, cultivate and harvests fish.
- ⇒ Kills, cleans and prepares and stores fish for transport.
- ⇒ Maintains tools and equipment.
- ⇒ Assesses technical advice from agricultural extension officers.
- ⇒ Delivers and markets fish products.

### **What are the working conditions for a fish farmer?**

A fish farmer normally is self-employed and does not receive a regular wage. The level of wages received depends on the quantity and quality of fish produced and sold. The working hours for a fish farmer are long, involving work at odd hours and weekends.

### **What is the working environment like?**

A fish farmer works outdoor tending either a fish pond or an enclosed part of a river. The environment may be hot, cold or wet, depending on seasonal conditions and geographic location. A fish farmer is in constant contact with water, with the main hazard being the possibility of drowning for those farmers who tend deep ponds and cannot swim.

### **What knowledge and skills do I need to be a fish farmer?**

- Ability to use simple hand tools.
- Knowledge of fish and fish breeding.
- Knowledge of suitable environment conditions for fish breeding and growth.
- Knowledge of different types of fish food.
- Knowledge of cleaning and preparing fish for sale.

### **What personal qualities/attributes do I need to be a fish farmer?**

- An interest in fish and fish products.
- An interest in business.

- Willingness to work outdoors.
- An interest in the natural environment.

**What are the education requirements to become a fish farmer?**

There are no formal education requirements to become a fish farmer. The knowledge and skills required can be acquired on the job through experience and under the supervision of an experienced fish farmer.

**Can I study in Bhutan to become a fish farmer?**

Yes, you can learn on the job. In addition, short training courses are provided through the national Resources Training Institute and are organized by Dzongkhags at various times of the year. Entry to such courses normally requires Class 6, with each course of about 4 weeks duration.

**What are the employment prospects for a fish farmer in Bhutan?**

There are good prospects for fish farmers in Bhutan. Imported fish products could be replaced progressively by fish produced from farms, thereby providing self-employed fish farmers the opportunity to earn a good income.

6.2.2 Logger

**Title: LOGGER**

**Description:** A logger undertakes a range of activities relating to the cultivation, conservation and exploitation of trees products for regular sale.

**Alternative and Related Titles: A FORESTRY LOGGER**

**What does a logger do?**

- Plants trees and maintains forest stands, under the direction of supervisors.
- Under supervision, estimates the volume of timber required and locates trees to be felled to meet this volume.
- Trims, tops and fells trees and saws them into logs using hand tools and mechanical equipment, including chain saws.
- Shapes rough wooden products from logs at the felling site.
- Stacks logs in preparation for loading.
- Keeps watch to detect forest fires and assists in fire fighting operations.

- Undertakes maintenance and sharpening of forestry equipment and tools.
- Supervises the work of less experienced forest loggers.

### **What are the working conditions for a forestry logger?**

A logger receives wages and benefits similar to other semi-skilled workers in government service. The hours of work may be irregular depending on the number of trees to be planted and felled in a given time period.

### **What is the working environment like?**

A logger works outdoors in an environment that may be hot, cold or wet, depending on seasonal conditions. A logger is sometimes required to work in remote locations in an environment that is harsh and challenging. Loggers are required to use some items of mechanical equipment, particularly chain saws. This equipment can cause accidents if not used properly and requires that loggers be aware of the risks involved in this type of work. Felling trees can also be dangerous, further highlighting the need for loggers to be fully aware of the importance of safety at all times in their working environment.

### **What skills do I need to be a logger?**

- Good communication skills.
- Ability to use hand tools and mechanical equipment, particularly chain saws.
- Knowledge of different types of trees and the environment in which they grow.
- Knowledge of safety procedures concerning the felling of trees, and the stacking and transportation of logs.

### **What personal qualities/attributes do I need to be a logger?**

- Willingness to work as a member of a small team.
- Physical fitness.
- Willingness to work in remote and sometimes harsh environments.
- An interest in trees and the natural environment.
- An interest in protecting the natural environment.

### **What are the education requirements to become a logger?**

There are no special requirements to become a forest logger. The knowledge

and skills can be acquired through practical work experience under the supervision of an experienced logger. (A logger is different from a forest ranger that normally has a Diploma in Forestry, requiring entry at Class 10).

### **Can I study in Bhutan to become a logger?**

Yes. You can learn to be a logger through on the job experience.

### **What are the employment prospects for a logger in Bhutan?**

The Kingdom of Bhutan is extremely conscious of the importance of protecting its natural environment and this means that the exploitation of forest resources will always be tightly and carefully controlled. Bhutan does not accept an 'open forest' approach and thus the need for loggers will be limited in relation to strictly controlled felling and re-planting policies.

## 6.2.3 Sawyer

### **Title: SAWYER**

**Description:** A sawyer saws trees for extraction of logs, timber or firewood. Most sawyers in Bhutan, even in the rural areas, now use chainsaws for their work.

**Alternative and Related Titles: TOGMI TIMBER PRODUCTS WORKER / FOREST PRODUCTS WORKER / SHING**

### **What does a sawyer do?**

- Selects and marks trees for sawing.
- Fells trees safely and efficiently.
- Saws logs into usable timber.
- Stacks and packs logs, timber and firewood and prepares them for transportation.
- Uses a range of sawing equipment such as chainsaws, handsaws, axes and wedges.
- Helps in the loading of sawn logs, timbers and firewood for transportation.

### **What are the working conditions for a sawyer?**

Sawyers work in deep-forested areas with at least one counterpart or as part of a larger team. Some sawyers take up sawing work on a contract basis

employing other sawyers under them. Some sawyers in the rural areas work in exchange for grains and other commodities. The working hours can be long and arduous.

### **What is the working environment like?**

Much of the work is done outdoors and sawyers are exposed to varying weather conditions and hard physical labour. A sawyer is exposed to the dangers associated with using chain saws and from falling trees and limbs. Dangers can be minimized if sawyers strictly follow safety procedures when using chain saws and when felling trees.

### **What knowledge and skills do I need to be a sawyer?**

- Knowledge of different types of trees and their characteristics.
- Knowledge of chain saws and their safe use.
- Agility to get out of dangers and accidents
- Good eye hand coordination.
- Some mechanical aptitude.
- Knowledge of safety procedures.
- Knowledge of first aid.

### **What personal qualities/attributes do I need to be a sawyer?**

- Interest in manual work.
- Able to do hard physical work for long periods.
- Alert and safety conscious.
- Willingness to live in remote locations under difficult conditions.

### **What are the education requirements to become a sawyer?**

A sawyer's job is purely manual and physical and no formal education is required. Many farmers in Bhutan work as sawyers when they are not involved in farm work. The necessary knowledge and skills can be acquired through practical experience.

### **Can I study to become a sawyer in Bhutan?**

There is no institute that teaches sawing. Most people become sawyers by training on the job. You can undertake a short course on the use of chain saws, organized by the Natural Resources Training Institute. These courses are of 2 weeks' duration and normally require an entry level of Class 6.



### **What are the employment prospects for sawyers in Bhutan?**

Sawyers in Bhutan are seasonal workers and the majority of them are self-employed. The Bhutan Board Products Limited in Tala, Forestry Development Corporation, private sawmills, and firewood contractors make use of the services of sawyers either as regular employees or as part-time hands.

#### 6.2.4 Forester

##### **Title: FORESTER**

**Description:** This position is to have skilled, dedicated and adequate support staff to manage designated Sub-Range jurisdiction for field implementation of forest activities

##### **Alternative and Related Titles: FOREST GUARD**

##### **What does a Forester do?**

- Marks and pass the timber and other forest produces:
- Marks trees/poles and passing of rural timber including stump
- Checking the movement of forest products including boulders, sand etc. Submission of regular reports to concerned Offices.
- Guards check post of illegal entry and exit of forest produce and maintains proper records of documents on transit materials;
- Guard the identified watershed as per Management Plans.
- Guards timber depot and maintains record etc.;
- Guards fire watchtower on a roster system to watch occurrence of forest fires and fight forest fires in the event of out break.
- Patrols and inspects forest areas to curb illegal activities such as fishing, poaching, illegal timber operations and construction site inspection
- Supervises the laborers of forest nurseries, plantation, forest operation, construction of forest road/bridge, building etc.
- Collects field data and compiles as per directives and submission thereof.
- Deliver techniques to maintains forest nurseries and plantation

##### **What are the working conditions for a forester?**

The job is moderately complicated, as it is required to deal with various rural people and public in the field during the course of work. It requires

tremendous strength in walking in difficult terrain.

**What is the working environment like?**

Exposed to harsh weather conditions since he will be stationed in the fields most of the time. Encountering with miscreants, poachers in the remote forest and adjoining International border areas is at times threat to ones life. Risk getting engulfed by fire during wild forest fire fighting in the difficult terrain.

**What knowledge and skills do I need to be a forester?**

Fluent in Dzongkha and English and should be able to communicate well in other regional/local dialects.

**What personal qualities/attributes do I need to be a forester?**

- Willingness to work and live in remote locations.
- An interest in the natural environment.
- Capacity for hard work.

**What are the education requirements to become a forester?**

Class X with certificate and training of Forest Guard with weapons handling, basic silvi-cultural selection methods, and marking trees in natural forest stands, Nursery Management etc.

**Can I study in Bhutan to become a forester?**

Yes.

**What are the employment prospects for a forester in Bhutan?**

It has the scope of supporting and assisting Range Officers in all forestry activities. Its absence would affect adversely their performance in the areas of patrolling, plantation and forest fire suppression. Should be aware of forest utilization by village mass and improve in due course.

- Improve forest strength in the designated area.
- Minimize illegal activities at the village blocks.

**6.3. Subsistence farmer, fishers, hunters and gatherers**

**6.3.1 Subsistence farmer**

**Title: SUBSISTENCE FARMER**

**Description:** Subsistence farmers grow and harvest tree and shrub crops,

grow fruit and vegetable, and gather wild fruits and medicinal products to provide food and shelter (and minimum cash income) for themselves and their households.

**Alternative and Related Titles: SUBSISTENCE AGRICULTURAL WORKER**

**What does a subsistence farmer do?**

- Prepares soil and sows, tends and harvests crops, vegetables and fruits.
- Gathers wild fruits and other medicinal plants.
- Fetches water and gathers firewood.
- Stores and carries out basic processing of crop and vegetable products.
- Builds shelters and uses and maintains simple tools.
- Transports and sells surplus products at local markets.

**What are the working conditions for a subsistence farmer?**

A subsistence farmer is self-employed making the best use of the basic resources available to produce sufficient food to survive and, possibly, create a small surplus for sale. A subsistence farmer is the ultimate risk taker, with the reward for work performed being dependent on a number of variables largely beyond the control of the farmer, such as drought, floods, and fire. The subsistence farmer has no control over the prices received for products sold and the small income earned can vary from season to season. The hours of work for a subsistence farmer are long and arduous with little time available for leisure activities.

**What is the working environment like?**

A subsistence farmer works outdoors either growing crops, tending to animals or gathering wild fruits, plants, and firewood. Work takes place in all seasons and thus the working environment may be hot, cold, or wet depending on seasonal factors and specific geographic locations. A subsistence farmer faces the hazards normally found in the natural environment and remote locations.

**What knowledge and skills do I need to be a subsistence farmer?**

- Ability to use simple hand tools.
- Knowledge of natural fruits and plants.

- Knowledge of animals and crops.

**What personal qualities/attributes do I need to be a subsistence farmer?**

- Willingness to work and live in remote locations.
- An interest in the natural environment.
- Capacity for hard work.

**What are the education requirements to become a subsistence farmer?**

No formal education is required to be a subsistence farmer. The knowledge and skills required can be acquired through practical experience handed from one family member to another.

**Can I study in Bhutan to become a subsistence farmer?**

Yes. You can learn about being a subsistence farmer through experience in any location where subsistence farming is practiced.

**What are the employment prospects for a subsistence farmer in Bhutan?**

In most countries the number of subsistence farmers is declining as they begin to rely on the production of crops for sale to earn an income to purchase the goods and services the subsistence farmer cannot provide. Thus, subsistence farmers increasingly combine subsistence and cash crop activities. Due to urbanization subsistence farming decreases.

*DHUG*



*Above the mountain is the dome of the sky. This is symbolized by the Gyeltshen (umbrella), whose important function is to cast a shadow, the shadow of protection.*

# **Craft and Related Trades Workers**

- 7. **Craft and related trade workers**
  - 7.1. **Building and related trade workers**
    - 7.1.1 Plumber

**Title: PLUMBER**

**Description:** A plumber assembles fits, installs and repairs plumbing fixtures, pipes and pipeline systems.

**Alternative and Related Titles: PIPEFITTER/DRAINER/PIPE LAYER**

**What does a plumber do?**

- ⇒ Cuts, threads, bends, joins, assembles, installs, maintains, and repairs pipes, fittings and fixtures for water supply, drainage, heating, and sewerage systems.
- ⇒ Assembles, installs, maintains and repairs pipeline systems in houses, office and public buildings, factories and aircraft.
- ⇒ Lays, clay, concrete, cast iron and PVC pipes in ditches and trenches to form sewer, drains or water mains.
- ⇒ Mends burst pipes and replaces washers in leaking faucets.
- ⇒ Undertakes alternation work (e.g. relocating a toilet) in houses and office buildings.

**What are the working conditions for a plumber?**

A plumber works in the private sector either as an employee or a self-employed employed person. As an employee, a plumber receives a wage similar to other skilled workers in the building industry. A self-employed plumber can earn considerably more than an employee, depending on the skill, experience and reputation of the individual. The hours of work for a plumber can be irregular and may involve after hours and weekend work, depending on the needs of the client. A plumber is sometimes called at any time of day or night to do emergency work to repair or replace a burst water pipe.

**What is the working environment like?**

A plumber works both indoors and outdoors. The work is sometimes dirty and smelly as, for example, when repairing sewers and drains.

**What knowledge and skills do I need to be a plumber?**

- Good communication skills.

- Ability to use hand and simple power tools.
- Ability to calculate quantities and areas.
- Good hand coordination.
- Knowledge of different types of pipes and their uses.
- Ability to read and interpret plans and drawings.
- Knowledge or regulations concerning plumbing standards and requirements.

**What personal qualities/attributes do I need to be a plumber?**

- Responsibility.
- Accuracy and precision.
- Pride in standards of craftwork.
- Ability to work quickly but without sacrificing quality.

**What are the education requirements to become a plumber?**

There are no special education requirements to become a plumber in Bhutan. A plumber can acquire the required knowledge and skills through on the job training under the supervision of an experienced plumber. A plumber can also undertake a formal apprentice training that combines practical training under the supervision of an experienced plumber, and theoretical training in the classroom.

**Can I study in Bhutan to become a plumber?**

Yes. You can learn to be a plumber at the TTIs. The course is for two-years and requires an entry level of Class 10.

**What are the employment prospects for a plumber in Bhutan?**

As Bhutan's building industry expands, employment opportunities for plumbers will increase. There are good prospects for self-employment and the initial capital required to start a plumbing business is relatively small.

7.1.2 Concrete Worker

**Title: CONCRETE WORKER**

**Description:** A concrete worker erects reinforced concrete frameworks and structures, makes forms for moulding concrete, cements openings in walls, and finishes and repairs cement surfaces, including terrazzo work.

## **Alternative and Related Titles: CEMENT FINISHER/TERRAZZO WORKER**

### **What does a concrete worker do?**

- Constructs and repairs reinforced concrete walls, floors, tanks, and other concrete structures.
- Makes pre-fabricated forms for moulding concrete.
- Cements openings in concrete walls.
- Finishes and smooths concrete floors, walls and other concrete surfaces,
- Applies a durable, smooth compound of cement, sand pigment and marble particles known as terrazzo finish to concrete surfaces, particularly floors.

### **What are the working conditions for a concrete worker?**

A concrete worker normally works in the private sector and receives a wage similar to other skilled workers in the building sector. The benefits for private sector workers are generally lower than for workers at a similar level in the government and private sectors. A concrete worker may be required to work after hours and at weekends, depending on the timetable for the completion of the particular project.

### **What is the working environment like?**

A concrete worker is required to work both indoors and outdoors. Outdoor work may be interrupted by rain by apart from this the working environment may be hot or cold depending on seasonal factor, and the local environment. When engaged in smoothing and finishing concrete or terrazzo floors, concrete workers may be required to spend hours on their hands and knees. When working indoors they may also be required to work in enclosed spaces.

### **What knowledge and skills do I need to be a concrete worker?**

- Ability to use hand tools.
- Knowledge of the characteristics of concrete.
- Knowledge of special compounds, such as terrazzo.
- Ability to work quickly, neatly and accurately.

### **What personal qualities/attributes to I need to be a concrete worker?**

- Physical fitness.
- A willingness to do manual work.



- An interest in construction.
- An interest in working as a team member.

### **What are the education requirements to become a concrete worker?**

No formal education is required to become a concrete worker. The required knowledge and skills can be acquired on the job under the supervision of an experienced concrete worker. Alternatively, it is possible to undertake formal apprentice training that combines theoretical training with practical experience.

### **Can I study in Bhutan to become a concrete worker?**

There is no actual training in concrete work available but a course in masonry provides the basic knowledge and skills required. A two-year course in masonry is available at the TTIs. This requires an entry level of Class 10.

### **What are the employment prospects for a concrete worker in Bhutan?**

There are good opportunities for concrete workers in Bhutan and these are expected to increase as the construction industry continues to expand. At present, many concrete workers are foreigners but in future years they could be replaced by Bhutanese workers.

## 7.1.3 Carpenter

### **Title: CARPENTER**

**Description:** A carpenter constructs, erects, installs, and finishes complete sets of wooden structures and fixtures on residential or commercial buildings. A zow also makes household furniture.

**Alternative and Related Titles:** ZOW / BUILDING CARPENTER / FURNITURE CARPENTER / JOINERCABINET MAKER (In Bhutan zows normally specialize as a building carpenter or as a furniture maker/joiner, but are able to work in either field. A furniture maker/joiner is engaged in work that requires more precision and detail).

### **What does a carpenter do?**

- Sets out an outline of the building using string and pegs to indicate where excavation is required.
- Reads building plans and specifications to determine the

materials required dimensions and installation processes.

- Erects wooden walls and structures.
- Saws timber.
- Makes and installs windows, sashes and doors.
- Makes furniture.
- Cuts materials with hand and power tools and cuts, shapes and assembles parts.
- Maintains and sharpens tools.

### **What are the working conditions for a carpenter?**

Traditionally zows are highly regarded in Bhutan. Some have earned great fame and fortune building impressive monuments such as dzongs and lhakhangs. Among skilled workers, carpenters are generally the most highly paid with a monthly income of about Nu. 6,000. Additional experience and the acquisition of higher skills, together with a higher reputation, enables a zow to earn a higher income. The hours of work may be irregular, sometimes involving weekend work in order to ensure the building is completed on time.

### **What is the working environment like?**

Zows mostly do physical work. They work both indoors and outdoors and often in a noisy atmosphere. The environment may be hot or cold, depending on seasonal factors and the local environment. They work as part of a construction or building team. Working on a building site exposes zows to a number of hazards including the risk of falling objects. Risks can be minimized by following safety procedures and ensuring that protective equipment and clothing is worn.

### **What knowledge and skills do I need to be a carpenter?**

- Able to design and prepare drawings.
- Able to read and interpret blueprints and drawings.
- Able to devise the most effective way to complete a structure.
- Knowledge of the characteristics and quality of different types of wood.
- Ability to measure, cut, assemble and join various wood materials.
- Ability to use a variety of hand and power tools safely and effectively.

### **What personal qualities/attributes do I need to be a carpenter?**

- Physical fitness.
- Interest in manual work.
- Patience.
- Enjoy making things that people can use.

### **What are the education requirements to become a carpenter?**

Traditionally zows did not have any formal education. Through a rigorous apprenticeship one could always become a good zow, if, however, you want to become a modern, professional zow using modern techniques and equipment, special training is essential. The entry to such training requires a secondary education.

### **Can I study to become a carpenter in Bhutan?**

Yes. The TTIs provide “building-related” carpentry course for students who have completed Class 10. You can train in furniture carpentry/joinery at the Wood Craft Centre, Thimphu. This is a three-year course requiring at least Class 8 for entry.

### **What are the employment prospects for carpenters in Bhutan?**

Carpenters are much sought after in Bhutan. They are employed by building contractors or furniture houses. Some carpenters are self-employed. Considering that the construction and wood based cottage industries in Bhutan are mostly filled with carpenters from India, employment prospects for Bhutanese zows are good.

#### 7.1.4 Belter

##### **Title: BELTER**

**Description:** A belter is a person who pushes and pulls a canvas belt or burlap strip back and forth across finished works of concrete to make a smooth surface and remove footprints or marks left by workers, tools and equipment.

**Alternative and Related Titles: MASON’S HELPER / BELDER / BAIDHAR / LABOURER** (Belters are known as “belders” in Bhutan, perhaps a case of misspelling that stuck and gradually became widely accepted. “Belder” seems to have been further corrupted and has become “baidhar” in everyday, common usage. The tasks performed by a “baidhar” are perhaps also different

from that of the original better).

### **What does a belter do?**

- Assists the mason.
- Tends or feeds machines or equipment used in construction such as concrete mixers, compressors and pumps.
- Helps in loading and unloading construction materials, and moving materials to work areas.
- Erects and dismantles concrete forms, scaffolding, ramps, and barricades required at construction sites.
- Assists in demolishing buildings using prying bars and other tools, and soft, cleans and piles salvaged materials.
- Removes rubble and other debris at construction sites using rakes, shovels, wheel-barrows and other equipment.
- Performs other activities at construction sites, as directed by the mason.

### **What are the working conditions for a belter?**

A belter's services are quite essential at all construction sites. The salary for a better ranges from Nu. 2,500 to 4,000. After hours and weekend work is required according to the need to meet construction deadlines.

### **What is the working environment like?**

Belters work both indoors and outdoors. They always work as part of a construction team. The nature of the working environment requires that a belter be provided with suitable protective clothing and equipment including boots, gloves and hard-hats. The working environment can be hot, cold, dusty, or wet depending on location and seasonal conditions.

### **What knowledge and skills do I need to be a belter?**

- Able to carry out work directed by masons or other supervisors.
- Able to work with hand and power tools.
- Able to work at heights.
- Good hand coordination.
- Able to work in a team.
- Able to work in all work conditions and environments.

**What personal qualities/attributes do I need to be a belter?**

- Physically fit.
- Enjoy team work.
- Enjoy manual work.

**What are the education requirements to become a belter?**

You do not need any education other than some experience as a general construction labourer.

**Can I study to become a belter in Bhutan?**

You do not need to study to be a belter. You can become one by training on the job.

**What are the employment prospects for beltlers in Bhutan?**

Belters are employed by contractors, construction companies and trade and labour contractors. Belters are very much in demand. Every year contractors and construction firms make vacancy announcements for thousands of beltlers.

### 7.1.5 Building Painter

**Title: BUILDING PAINTER**

**Description:** A building painter applies paint, varnish and other coatings to protect, maintain and decorate the interior and exterior surface of domestic, commercial and industrial buildings and other structures.

**Alternative and Related Titles:** VARNISHER / BUILDING DECORATION / LHADRIP (While the concept of artistic painting and building painting is different elsewhere, in Bhutan lhadrips also work as building painters).

**What does a building painter do?**

- Works out the quantity of materials required for any job by measuring surfaces or reviewing previous work orders.
- Removes old paint coating by stripping it with solvents, heat, sanding, brushing, or with water.
- Prepares surface for covering with paint by cleaning them, filling nail holes and cracks, and sanding rough spots.
- Erects scaffolding, cradles and ladders and places drop-sheets to protect areas from dripping paint.

- Selects and prepares paints and creates special colors by the addition of tints.
- Washes equipment and cleans work areas.

### **What are the working conditions for a building painter?**

Building painters may work alone or as members of a team. Their income depends on the nature and level of sophistication of their work. A lhadrip who paints a traditional house will earn a substantial amount, even if the job takes months to complete. A building painter may be an employee or self-employed. A self-employed painter earns more than an employee but also takes the risk of possible failure of the business. The hours of work for a building painter may be irregular, depending on the requirements of the client.

### **What is the working environment like?**

A building painter works long hours, both indoors and outdoors. Painters often work from ladders and scaffolding and do a lot of bending and stretching. The risk of injury from falls is always present but this can be minimized if safety procedures are strictly followed.

### **What knowledge and skills do I need to be a building painter?**

- Manual dexterity.
- Good knowledge of colors.
- Knowledge of different paints required for different surfaces.
- Able to use brushes and rollers of spray-guns to apply paint coatings to surfaces of wood, brick, concrete, plasters, or stone.
- Able to climb and work at heights.

### **What personal qualities/attributes do I need to be a building painter?**

- Enjoy work requiring precision and thoroughness.
- Physically fit.
- Neatness and tidiness.
- Interest in practical work.

### **What are the education requirements to become a building painter?**

If you are a lhadrip you automatically qualify as a building painter. In fact building painting is considered a relatively easier job than lhadri painting. You can acquire the knowledge and skills to be a building painter through on the job experience.

### **Can I study to become a building painter in Bhutan?**

There are no institutes in the country that offer studies or training to become a building painter. You can learn through practical experience under the supervision of an experienced painter.

### **What are the employment prospects for building painter in Bhutan?**

Building painters are employed by the government, private individuals, organizations or business. Some are self-employed and this is an attractive arrangement because the capital required to start a painting business is relatively small. Contractors involved in new construction, repair or renovation work hire building painters. As Bhutan's building industry expands employment opportunities for building painters are expected to increase.

#### 7.1.6 Rigger

**Title: RIGGER**

**Description:** A rigger erects tackle, including ropes, wires and pulleys, for lifting objects and hauling loads. A rigger also has knowledge concerning scaffolds, platforms, tripods and derricks.

**Alternative and Related Titles:** **CABLE SPLICER** (A cable splicer installs and maintains cables, ropes and wires on construction and drilling sites).

#### **What does a rigger do?**

- Sets up (but does not do the actual design work) various types of cages, moving platforms, lifting tackle, and other hoisting equipment for moving workers, materials, machinery and other heavy objects on building and construction sites, civil projects and in workshops.
- Moves heavy machinery from one place to another.
- Sets up funicular railway and aerial cable for moving passengers in mountainous areas.
- Joins, repairs and fits attachments to wires, hemp ropes and cables.
- Undertakes basic maintenance (e.g. lubrication) of lifting equipment.
- Installs and repairs ropes, wires and cables on aircraft and ships.

- Works as a member of a drilling crew (e.g. for water, oil, gas) installing cables, and hoisting and drilling equipment.
- Works as a member of a cable crew team fitting and installing wire cable in the construction of suspension bridges.

### **What are the working conditions for a rigger?**

A rigger works in the private sector either as an employee or self employed person. An employee earns less than a self-employed rigger, but a self employed person undertakes greater risks. The wages and benefits for a rigger are similar to those for other skilled workers in the building industry (although the work of riggers is not confined to building). A rigger may work irregular hours and may work for long periods when working on specific projects (e.g. when moving heavy machinery, or lifting railway carriages after an accident).

### **What is the working environment like?**

Riggers work outdoors and required to work in conditions that are hot, cold, wet and dusty, depending on seasonal factors and the actual location of the work site. Moving heavy objects requires close attention to safety factors to reduce the risk of accidents. A rigger's work is generally regarded as dangerous. Riggers may sometimes be required to work in remote locations as for example when helping to clean up after a major accident.

### **What knowledge and skills do I need to be a rigger?**

- Good communication skills.
- The ability to calculate weights.
- Knowledge of the best way to lift, secure and move heavy objects.
- Knowledge of safety procedures.
- Ability to lead and motivate a team of workers.

### **What personal qualities/attributes do I need to be a rigger?**

- An interest in working outdoors.
- Good physical fitness, strength and endurance.
- High levels of responsibility.
- Ability to work quickly and accurately.
- Not afraid of heights.
- High concern for safety factors.



**What are the education requirements to become a rigger?**

There are no formal education requirements to become a rigger in Bhutan although the ability to read and calculate essential. The knowledge and skills to become a rigger can be acquired on the job.

**Can I study in Bhutan to become a rigger?**

There is no course in Bhutan where you can study to be a rigger. You can learn through practical on the job training under the supervision of an experienced rigger.

**What are the employment prospects for a rigger in Bhutan?**

Where ever heady loads are to be lifted or hauled there is a need for the services of a rigger. There are good employment prospects for riggers in Bhutan, particularly in self-employment. A rigger can become self-employed with relatively little capital to establish a business.

### 7.1.7 Tile layer

**Title: TILE LAYER**

**Description:** A Tile layer installs, maintains and repairs various types of tile surfaces including parquet, mosaic tiles and other finishes onto a base of concrete.

**Alternative and Related Titles:****What does a tile layer do?**

- Prepares and smoothes surface areas prior to covering with mosaic finishes.
- Assembles parquetry and mosaic pieces into patterns before laying.
- Undertakes repairs of all types of tiling.
- Advises on the good care and maintenance of tile surfaces.

**What are the working conditions for a tile layer?**

A tile layer works in the private sector either as an employee or a self-employed employed person. As an employee, a tile layer receives a wage similar to other skilled workers in the building industry. A self-employed tile layer can earn considerably more than an employee, depending on the skill,

experience and reputation of the individual. The hours of work for a tile layer can be irregular and may involve after hours and weekend work, depending on the needs of the client.

### **What is the working environment like?**

A tile layer works indoors, sometimes in large space but often in small and confined areas. The work frequently involves kneeling for long periods, which can cause back and muscle pain and tiredness. Where tile laying involves the use of glue, a tile layer can be exposed to fumes that are harmful to health if exposure is prolonged.

### **What knowledge and skills do I need to be a tile layer?**

- Good communication skills.
- Ability to use hand and simple power tools.
- Ability to calculate quantities and areas.
- Ability to follow designs and patterns.
- Knowledge of different types of flooring materials and their characteristics.
- Ability to read and interpret plans and drawings.

### **What personal qualities/attributes do I need to be a tile layer?**

- Responsibility
- Accuracy and precision.
- Pride in standards of craftwork.
- Physical fitness and willingness to work on hands and knees.

### **What are the education requirements to become a tile layer?**

There are no special education requirements to become a tile layer in Bhutan. A tile layer can acquire the required knowledge and skills through an apprenticeship program normally involving a combination of theoretical training, conducted in a training center, and practical training conducted on the job. In Bhutan at present the work of a tile layer normally is done by a mason.

### **Can I study in Bhutan to become a tile layer?**

Yes. You can learn to be a carpenter at the TTIs, and part of this course covers aspects of tile laying. There are no special courses for tile layers, but carpenters with a little experience are able to do this work. The course in carpentry is for

two-years and requires an entry level of Class 10.

**What are the employment prospects for a tile layer in Bhutan?**

As Bhutan's building industry expands, employment opportunities for tile layers will increase. At present tile layer is done by carpenters but in future it is possible that this work will be done by specially trained tile layers.

7.1.8 Welder

**Title: WELDER**

**Description:** A welder welds and cuts metal parts using gas flame or an electric arc and other sources of heat to melt and cut metal, or melt and fuse metal.

**Alternative and Related Titles: FLAMECUTTER/BRAZIER**

**What does a welder do?**

- Welds metal parts using gas flame or an electric arc.
- Operates welding machines.
- Uses a blow torch to make and repair lead linings, pipes, and other lead fixtures.
- Brazes metal parts together.
- Cuts metal parts using welding equipment.
- Joins metal parts by hand soldering.

**What are the working conditions for a welder?**

A welder works in the private sector either as an employee or a self-employed employed person. As an employee, a welder receives a wage similar to other skilled workers in the building industry. A self employed welder can earn considerably more than an employee, depending on the skill, experience and reputation of the individual. The hours of work for a welder can be irregular and may involve after hours and weekend work, depending on the needs of the client.

**What is the working environment like?**

A welder works both indoors they usually operate from a workshop and outdoors on construction sites where steel frameworks are used. The nature of welding work required that welders protect their eyes by wearing

protective goggles or masks and wear gloves and protective clothing to protect themselves against burns. In order to protect themselves from the dangers associated with welding, welders must strictly follow safety procedures at all times.

### **What knowledge and skills do I need to be a welder?**

- Good communication skills.
- Good eye hand coordination.
- Ability to use hand tools and equipment.
- Ability to read and interpret engineering drawings.
- Ability to recognize and correct welding defects.
- Knowledge of different types of metal and the welding techniques to be used on each.

### **What personal qualities/attributes do I need to be a welder?**

- An interest in neatness and accuracy.
- An interest in metals and their properties.
- Good eye sight.
- Good physical fitness.
- Ability to concentrate for long periods.

### **What are the education requirements to become a welder?**

There are no special education requirements to become a welder in Bhutan. A welder can acquire the required knowledge and skills through on the job training under the supervision of an experienced welder. A welder can also undertake formal apprentice training that combines practical training under the supervision of an experienced welder, and theoretical training in the classroom.

### **Can I study in Bhutan to become a welder?**

Yes. You can learn to be a welder at TTIs. The course requires an entry level of Class 10.

### **What are the employment prospects for a welder in Bhutan?**

Employment opportunities for welders are expected to increase particularly in the construction industry as more emphasis is placed on steel frame construction instead of reinforced concrete structures.

## 7.1.9 Mason

**Title:** MASON

**Description:** A mason is a skilled worker who builds in or works with stone, brick, concrete, and other materials to construct buildings or structures.

**Alternative and Related Titles:** BRICKLAYER/BLOCKMASON/CEMENT MASON/STONE MASON (Masonry is a highly skilled trade. In countries where the construction industry is highly developed, there are different types of masons who specialize in different areas of masonry).

**What does a mason do?**

- Performs all concrete-related work.
- Cuts, shapes and lays stones, granite, and marble.
- Constructs stone walls with or without cement.
- Lays brick walls with cement.
- Carries out plastering, tiling and mosaic work on floors and walls.
- Spreads layers of mortar to serve as a base and binder, removes excess mortar, and checks vertical and horizontal alignment.
- Uses various masonry tools and machines.

**What are the working conditions for a mason?**

A mason's work has come to be much valued since Bhutan adopted modern construction means and techniques. The hours of work are regular but masons may be required to work overtime hours to complete a building or project on time.

**What is the working environment like?**

Masons work both indoors and outdoors. They may sometimes work at heights on scaffoldings, along roads, or even in tunnels and shafts. They may work alone or as part of a team. A mason often works in an environment that is dusty and in hot and cold conditions depending on seasonal factors. A mason often has to work at heights well above ground level, thereby creating the risk of falling.

**What knowledge and skills do I need to be a mason?**

- Able to work with hand and power tools.

- Able to work at heights.
- Aptitude for technical drawing and good eye-hand coordination.
- Able to read and interpret drawings and blueprints.
- Knowledge of the properties of various mortars and other bonding materials.
- Knowledge of construction methods using stones and bricks.
- Able to experiment with various materials and methods to solve construction problems.

**What personal qualities/attributes do I need to be a mason?**

- Physically fit and healthy.
- Enjoy being outdoors.
- Enjoy manual work.

**What are the education requirements to become a mason?**

You can become a mason without any education by taking an apprenticeship with a master mason. A secondary level education, however, is required for formal, specialized training in masonry.

**Can I study to become a mason in Bhutan?**

Yes. The TTIs in the country provides masonry course for students who have completed Class 10.

**What are the employment prospects for masons in Bhutan?**

Masons generally work in the building and construction industry. Some masons work as employees of contractors and other are self-employed. Masons have a good future in the vibrant construction industry in Bhutan. At present most masons in Bhutan are hired from India. Construction firms, building developers and construction contractors are always looking for good masons.

7.1.10 Electrician

**Title: ELECTRICIAN**

**Description:** An electrician installs, maintains and repairs electrical wiring systems in houses, offices, public buildings, factories and schools.

**Alternative and Related Titles: BUILDING ELECTRICIAN/ELECTRICAL**

## **FITTER**

### **What does an electrician do?**

- Plans and advises on the installation of electrical systems and equipment.
- Ensures that electrical installations are compatible with other services in the concerned building.
- Installs, maintains and repairs electrical wiring systems and switchboards in various buildings including houses, schools, public buildings and factories.
- Installs, maintains and repairs electrical equipment in theatres, radio and TV stations.
- Calculated electrical load requirements to ensure to ensure accurate selection of cables and conductors.
- Ensures that all electrical installations conform to government regulations and safety standards.

### **What are the working conditions for an electrician?**

An electrician works in the private sector either as an employee or a self-employed employed person. As an employee, an electrician receives a wage similar to other skilled workers in the building industry. A self-employed electrician can earn considerably more than an employee, depending on the skill, experience and reputation of the individual. The hours of work for an electrician can be irregular and may involve after hours and weekend work, depending on the needs of the client. An electrician is sometimes called at any time of day or night to do emergency work.

### **What is the working environment like?**

An electrician works both indoors and outdoors. Electricians face dangers from possible electric shocks if they fail to take the necessary safety precautions. In order to protect themselves and others from the dangers created by electricity they must strictly follow safety procedures and ensure that proper protective clothing and footwear is worn.

### **What knowledge and skills do I need to be an electrician?**

- Good communication skills.
- Ability to use hand tools.
- Ability to read and interpret wiring plans.

- Basic ability in mathematics.
- Knowledge of electrical installations, and safe use of electricity.

### **What personal qualities/attributes to I need to be an electrician?**

- Adaptability because of the need to work on large and small projects, as well as indoors and outdoors.
- Good physical health.
- Responsibility, particularly concerning safety matters.
- Good eyesight.
- Must not be color – blind.

### **What are the education requirements to become an electrician?**

There are no special education requirements to become an electrician in Bhutan. An electrician can acquire the required knowledge and skills through on the job training under the supervision of an experienced electrician. An electrician can also undertake formal apprentice training that combines practical training under the supervision of an experienced electrician, and theoretical training in the classroom.

### **Can I study in Bhutan to become an electrician?**

Yes. You can learn to be an electrician at the TTIs. The courses required an entry level of Class 10.

### **What are the employment prospects for an electrician in Bhutan?**

The growth of Bhutan’s construction industry provides good employment opportunities for electricians. A qualified electrician with several years experience can become self-employed and eventually employ other electricians and apprentices. An electrician does not require a large quantity of tools and equipment and thus it is possible to become self-employed with a relatively small amount of capital.

## **7.2. Metal, machinery and related trade worker**

### **7.2.1 Sheet metal worker**

#### **Title: SHEET METAL WORKER**

**Description:** A sheet metal worker makes installs and repairs articles made of sheet metal, such as sheet steel, copper, tin, brass, aluminum, zinc or galvanized iron.



## **Alternative and Related Titles:**

### **What does a sheet metal worker do?**

- Marks metal sheets for cutting and shaping in accordance with a pattern or design.
- Solders or welds metal pieces together.
- Makes and repairs household utensils and other items on tin, copper or light alloys.
- Makes ornamental articles in tin copper or light alloys.
- Makes and repairs boilers, tanks, vats and other containers.
- Installs and repairs sheet metal parts of vehicle and aircraft.

### **What are the working conditions for a sheet metal worker?**

A sheet metal worker normally works for the private sector either as an employee or a self employed person. A self employed sheet metal worker earns more than an employee but also takes the risk of business failure. The hours of work are regular although overtime work may be required from time to time.

### **What is the working environment like?**

A sheet worker works mostly indoors and occasionally outdoors. Indoor work usually takes place in a workshop producing smaller household and decorative items. Outdoor work involves larger items such as the repairs of tanks and vats. Working with sheet metal involves the risk of cuts to the fingers and hands and requires that sheet metal workers operate in accordance with safety procedures and use appropriate protective equipment and clothing.

### **What knowledge and skills do I need to be a sheet metal worker?**

- Good eye hand coordination.
- Ability to trace patterns on to sheet metal or create special designs as required.
- Knowledge of different types of sheet metal and their unique properties.
- Knowledge of safe working procedures.
- Ability to use hand tools.
- Ability to read and interpret drawings and patterns.

### **What personal qualities/attributes do I need to be a sheet metal worker?**

- An interest in creativity and precision.
- Neatness and accuracy.
- An interest in metal and metal products.
- An interest in self-employment (for self-employed persons).
- Good eyesight.
- Ability to concentrate for long periods.

### **What are the education requirements to become a sheet metal worker?**

There are no formal education requirements to become a sheet metal worker in Bhutan. The knowledge and skills required can be acquired through on the job training.

### **Can I study in Bhutan to become a sheet metal worker painter?**

There are no training courses in sheet metal working in Bhutan but you can learn on the job under the supervision of an experienced sheet metal worker.

### **What are the employment prospects for a sheet metal worker in Bhutan?**

The best employment opportunities are likely to come from self-employment. The initial costs for establishing a sheet business are reasonable and this adds to the attraction of self-employment in this field.

## 7.2.2 Structural metal worker

### **Title: STRUCTURAL METAL WORKER**

**Description:** A structural metal worker shapes, assembles and erects heavy metal girders and plates to form structures and frameworks.

### **Alternative and Related Titles: RIVER/STEEL ERECTOR**

### **What does a structural metal worker do?**

- Marks metal girders and members prior to further work being performed on them.
- Drills, cuts and shapes metal girders/members for use in building structures.
- Erects steel members and girders for buildings, bridges and other structures.
- Rivets structural metal members by hand machine, or pneumatic

drill.

**What are the working conditions for a structural metal worker?**

A structural metal worker normally works as an employee of a construction company and receives wages and benefits similar to other skilled workers in the building industry. The hours of work are irregular depending on the project under construction and weekend work can be expected.

**What is the working environment like?**

The working environment is characterized by steel girders and beams, lifting equipment, and people. Lifting heavy girders is dangerous and requires strict observance of safety regulations. A structural metal worker is required to work at heights to enable steel frameworks to be completed. A structural metal worker works outdoors in cold, hot, wet and dusty conditions depending on seasonal factors and the actual location of the work site.

**What knowledge and skills do I need to be a structural metal worker?**

- Good communication skills.
- Ability to work as a member of a team.
- Knowledge of steel riveting and bolting methods.
- Ability to read and interpret plans and drawings.
- Ability to use hand tools.
- Calculating and measuring skills.
- Knowledge of safety procedures and regulations concerning steel frame construction.

**What personal qualities/attributes do I need to be a structural metal worker?**

- An interest in constructing things.
- An interest in precision and accuracy.
- Good physical fitness.
- Willingness to work at heights.
- High levels of responsibility.

**What are the education requirements to become a structural metal worker?**

There are no formal education requirements to become a structural metal worker in Bhutan. Basic literacy and numeracy skills are required but the knowledge and skills for structural work can be acquired on the job.

### **Can I study in Bhutan to become a structural metal worker?**

Yes, you can learn to be a structural metal worker through practical experience under the supervision of an experienced structural worker. It is possible to study for a Light Gauge Steel Fabrication Course at the TTIs. This course, however, focuses on light gauge work which is different from the construction of steel structures using heavy girders and beams.

### **What are the employment prospects for a structural metal worker in Bhutan?**

Most construction work in Bhutan at present uses reinforced concrete and thus there are few opportunities for structural steel workers. Some steel structure buildings are now being built and this can be expected to increase in future. This will create more employment opportunities for structural metal workers.

#### 7.2.3 Metal Molder

##### **Title: METAL MOULDER**

**Description:** A metal moulder prepares sand by using patterns and models to form moulds, casts molten metal into these moulds, and removes and finishes the castings that are moulded.

##### **Alternative and Related Titles:**

##### **What does a metal moulder do?**

- Prepares moulds in treated by hand or by using auxiliary machines.
- Checks the quality of the mould to ensure it is of the required standard, and can withstand the heat and pressure of the moulding process.
- Pours molten metal into moulds to make castings.
- Removes castings from moulds and finishes them to the required standard.

##### **What are the working conditions for a metal moulder?**

A metal moulder is normally employed in the private sector by a company producing metal castings and receives a wage and benefits similar to their skilled workers. The hours of work are regular although some overtime may be required from time to time.

**What is the working environment like?**

A metal moulder work indoors in an environment that is hot and involves the dangers associated with using molten metal. These dangers can be minimized if workers operate in accordance with safety requirements and wear the required protective equipment and clothing.

**What knowledge and skills do I need to be a metal moulder?**

- A general knowledge of geometry and shapes.
- Ability to work with accuracy and precision.
- Knowledge of moulding processes.
- Ability to work with mechanical equipment.

**What personal qualities/attributes do I need to be a metal moulder?**

- A practical aptitude.
- Physical fitness as the work is physically demanding.
- Patience.

**What are the education requirements to become a metal moulder?**

There are no formal education requirements to become a metal moulder in Bhutan. The required knowledge and skills can be acquired through on the job training.

**Can I study in Bhutan to become a metal moulder?**

Yes. There are no training courses in metal moulding in Bhutan at present but it is possible to learn through practical experience under the supervision of an experienced moulder.

**What are the employment prospects for a metal moulder in Bhutan?**

Bhutan produces few casting products and thus the employment opportunities for metal moulders at present are limited.

#### 7.2.4 Tool maker

**Title: TOOLMAKER**

**Description:** A toolmaker makes and repairs tools, sporting gun, locks, patterns and other metal articles, and makes precision components by hand or by the use of machinery.

## **Alternative and Related Titles: GUNSMITH/LOCKSMITH/DIEMAKER/ JIG MAKER**

### **What does a toolmaker do?**

- Makes, maintains and repairs dies, jigs, gauges and fixtures using hand and machine tools.
- Makes precision machinery components and parts.
- Repairs and modifies sports guns and other small arms.
- Makes, fits, assembles, repairs and installs lock parts and locks.
- Makes and repairs metal patterns for the preparation of foundry moulds.
- Sets out lines and patterns on metal to guide other workers who cut, turn, grind and otherwise shape metal.

### **What are the working conditions for a toolmaker?**

A toolmaker is normally employed in the private sector and receives wages and benefits related to the level of experience and skill. The wage is similar to that received by other skilled workers. The hours of work are regular although some overtime may be required from time to time.

### **What is the working environment like?**

A tool maker works in an environment characterized by machines and equipment. A toolmaker normally spends long periods of time standing and this can cause fatigue and tiredness. Any environment in which machinery and tools are used creates some hazards but these can be minimized through proper attention to safety regulations and procedures.

### **What knowledge and skills do I need to be a toolmaker?**

- Good eye hand coordination.
- Manual dexterity.
- Ability to interpret sketches and diagrams.
- Knowledge of specifications for various types of tools.
- Calculating skills.
- Good communication skills.

### **What personal qualities/attributes to I need to be a tool maker?**

- Ann interest in precision and accuracy.
- Ability to concentrate for long periods.

- An aptitude for mechanical things.
- A mathematical aptitude.

**What are the education requirements to become a toolmaker?**

There are no formal education requirements to become a toolmaker other than acceptable literacy and numeracy levels. Mathematical abilities to ensure precise calculations are important. The actual knowledge and skills of tool making can be acquired on the job under the supervision of an experienced toolmaker.

**Can I study in Bhutan to become toolmaker?**

There are no formal training courses for toolmakers in Bhutan but you can learn on the job through practical experience.

**What are the employment prospects for a toolmaker in Bhutan?**

Most of Bhutan’s tools making requirements are provided by neighboring countries. There are few opportunities for toolmakers at present but this situation will change as Bhutan’s industry develops and diversifies.

7.2.5 Motor vehicle mechanic

**Title: MOTOR VEHICLE MECHANIC**

**Description:** A motor vehicle mechanic inspects, diagnoses repairs and services mechanical systems and components in motor vehicle mechanic is like a doctor for automobiles.

**Alternative and Related Titles:** AUTO SERVICE TECHNICAINS/MOTOR MECHANIC/VEHICLE MECHANIC (These titles are generally referred to as ‘mechanic’ in Bhutan).

**What does a motor vehicle mechanic do?**

- Discusses problems with car drivers or owners to discover faults.
- Discusses problems with co-workers or supervisors.
- Inspects motors in operation, road tests vehicles, and tests automotive systems and components to diagnose problems and isolate faults.
- Adjusts, repairs or replaces malfunctioning parts and components.

- Performs maintenance services such as oil changes, lubrications and tune-ups.
- Performs major repairs and replacement of mechanical units on newly assembled motor vehicles.
- Advises customers on work performed, general vehicle condition and future repair requirements.

### **What are the working conditions for a motor vehicle mechanic?**

A motor mechanic works in the private sector and may be either an employee or self-employed. A mechanic who is an employee receives wages and benefits related to the level of skill and experience. A motor mechanics with a good reputation may attract a higher wage. A motor mechanic may progress to a supervisory and management position after some years of service. The working hours for a mechanic are regular although some overtime work is required from time to time.

### **What is the working environment like?**

Most mechanics work outdoors and are exposed to noise, vibration, liquids, grease, fumes and odours. Where a mechanic works indoors the general environment is the same although protection is provided from the elements. Motor mechanics can expect dirty conditions and grease and all on their hands and clothes is considered normal. Motor mechanic may wear protective clothing but the nature of the work requires that the hands remain exposed.

### **What knowledge and skills do I need to be a motor vehicle mechanic?**

- Able to diagnose problems and find solutions.
- Able to stand, crouch, kneel, bend and lift heavy machinery or equipment.
- Knowledge of different types of vehicles, including those with computer operated components.
- Knowledge of factors likely to affect the same operation of vehicles.
- Physical stamina to work continuously for eight hours a day.
- Strong mechanical and technical aptitude.
- Able to work in dirty, greasy, cold or hot environment.
- Able to work with hands tools.
- Ability to drive a vehicle, including possession of the necessary license.



**What personal qualities/attributes do I need to be a motor vehicle mechanic?**

- Interest in practical and manual work.
- Enjoy working with hands using a variety of hand and power tools.
- Enjoy keeping up with advances in technology.
- An interest in vehicles.
- An interest in business (for those mechanics planning self-employment).

**What are the education requirements to become a motor vehicle mechanic?**

You must at least complete higher secondary school with good scores in Mathematics and Science, and then undergo specialized training.

**Can I study to become a motor vehicle mechanic in Bhutan?**

Yes. You can study Diploma in motor vehicle mechanics at the Jigme Namgyal Polytechnic, or take up a three year mechanical engineering course after Class 10 at TTIs.

**What are the employment properties for motor vehicle mechanics in Bhutan?**

Motor vehicle mechanics are in high demand. There are very few Bhutanese mechanics. Most plying their skills currently are migrant workers from India. Employment prospects for skilled Bhutanese mechanics are very good. In the future, mechanics are expected to specialize in specific areas of automobile maintenance and repair including engine and fuel systems, suspension systems, or diagnostic services. There is scope for a motor vehicle mechanic to become self employed after some years of experience.

### 7.2.6 Electronic Mechanic

**Title: ELECTRONICS MECHANIC**

**Description:** An electronics mechanic repairs and services radio and television equipment, tape recorders, VCD players, DVD players, video cameras and other types of audio visual equipment.

**Alternative and Related Titles: ELECTRONICS SERVICER**

### **What does an electronics mechanic do?**

- Examines all types of electronic equipment (except computers which are usually handled by a specialist) and diagnoses problems.
- Gives quotations to customers for the repair of electronic equipment.
- Replaces defective parts in electronic equipment, makes adjustments and repairs.
- Advises on the effective operation and care of electronic equipment.

### **What are the working conditions for an electronics mechanic?**

An electronics mechanic works in the private sector and may be either an employee or self-employed. An electronics mechanic who is an employee receives wages and benefits related to the level of skill and experience. An electronic mechanic with a good reputation may attract a higher wage. The working hours for an electronic mechanic are regular although some overtime work is required from time to time. An electronic normally is not required to travel as customers usually bring their electronic goods to a repair workshop.

### **What is the working environment like?**

Electronic mechanics work indoors in a workshop environment characterized by electronic appliances, repair tools and spare parts. The environment is normally pleasant and hazard free. An electronics mechanic may have to deal with customer complaints concerning the quality of services and this can cause stress and anxiety.

### **What knowledge and skills do I need to be an electronics mechanic?**

- Able to diagnose problems and find solutions.
- Good communication skills.
- Knowledge of different types of electronic appliances.
- Able to work with hand tools.
- Ability to read and interpret plans and diagrams.
- Ability to drive a vehicle, including possession of the necessary license.

### **What personal qualities/attributes do I need to be an electronics mechanic?**

- Interest in practical and manual work.

- Enjoy working with hands using a variety of hand tools.
- An interest in electronics.
- Enjoy keeping up with advances in technology.
- An interest in business (for those mechanics planning self-employment).

### **What are the education requirements to become an electronics mechanic?**

You must at least complete higher secondary school with good scores in mathematics and Science, and then undergo specialized training.

### **Can I study to become an electronics mechanic in Bhutan?**

You can start a career as an electronics mechanic by studying to be an auto electrician at the Jigme Namgyal Polytechnic, or take up a electrical engineering diploma course after Class 10 at the TTIs. These courses do not provide comprehensive training in electronics and after completion further study abroad may be required. Alternatively, after general training the knowledge and skills required to be an electronic mechanic can be acquired through on the job training under the supervision of an experienced electronic mechanic.

### **What are the employment prospects for electronic mechanics in Bhutan?**

As Bhutan's standard of living improves, more people will own electronic appliances thereby providing very good employment prospects for electronics mechanics. There are very good opportunities for self-employment through owner operated workshops that may eventually grow into small business where the owner employs one or two electronic mechanics.

## 7.2.7 Spray Painter

### **Title: SPRAY PAINTER**

**Description:** A spray painter applies protective coats of enamel or varnish on articles on metal, (particularly vehicles) wood, and other manufactured articles, normally using hand-spraying equipment.

### **Alternative and Related Titles: AUTOMOBILE PAINTER/VARNISHER**

### **What does a spray painter do?**

- Prepares surfaces to painted or sprayed by washing, sanding, or

by the use of solvents, to ensure that all surfaces are clean and free from dirt and grease.

- Mixes paints to the exact color and shade required.
- Paints all types of vehicles by applying successive coats (up to 4 or 5).
- Applies varnish and other protective coatings to vehicles and equipment.
- Applies protective coatings of enamel and varnish to metal, wood and other surfaces.

### **What are the working conditions for a spray painter?**

A spray painter works in the private sector either as an employee or a self-employed person. As an employee, a spray painter receives a wage similar to other skilled workers. A self-employed spray painter can earn considerably more than an employee, depending on the skill, experience and reputation of the individual. The hours of work for a spray painter are regular although some overtime work may be required from time to time.

### **What is the working environment like?**

A spray painter normally works indoors and when high quality and precision work is required works in both that is free from dust particles and wind, and has good lighting conditions. Spray painters must take care against the inhalation of spray as this is damaging to health. It is essential that protective masks be worn at all times.

### **What knowledge and skills do I need to be a spray painter?**

- Good communication skills.
- Good eye hand coordination.
- Ability to use spray guns and other hand tools (e.g. electric polisher).
- Knowledge of different paints required for different surfaces.
- Knowledge of colors.

### **What personal qualities/attributes do I need to be a spray painter?**

- An interest in work that requires precision and thoroughness.
- Ability to work quickly and accurately.
- Neatness and tidiness.
- An interest in practical work.

**What are the education requirements to become a spray painter?**

There are no formal education requirements to become a spray painter in Bhutan. You can acquire the necessary knowledge and skills by learning on the job.

**Can I study in Bhutan to become a spray painter?**

Yes. You can learn through practical experience under the supervision of an experienced spray painter.

**What are the employment prospects for a spray painter in Bhutan?**

Most spray painting work in Bhutan is concerned with vehicle repairs. With more vehicles and more vehicle accidents, the needs for vehicle repairs and re-spraying will increase and thus the employment opportunities for spray painters are expected to grow.

**7.3. Handicraft (Zorig chusum) and printing workers****7.3.1 Upholsterer**

**Title:** UPHOLSTERER

**Description:** An upholsterer makes mattresses, padding and cushioning for furniture and seats, and makes and installs interior decorations of textile, leather and other materials.

**Alternative and Related Titles:** MATTRESS MAKER/VEHICLE UPHOLSTERER

**What does an upholsterer do?**

- Installs, arranges, and secures springs, padding and covering materials to furniture frames.
- Fitting and installing covers and cushioning for seats and other furnishings on vehicles such as motor cars, aircraft and railway coaches.
- Makes mattresses.
- Fits and installs soft furnishings and interior decorations of textile, leather and other materials.

**What are the working conditions for an upholsterer?**

An upholsterer works in the private sector either as an employee or self-employed. The wages and benefits for an employed depend on the level

of skills and experience. The earnings for a self-employed person can be considerably higher but the risks of business failure also exist. The hours of work for an employee are regular although overtime may be required when rush orders are received. A self-employed upholsterer normally works long hours including evening and weekend work.

### **What is the working environment like?**

An upholsterer normally works in a workshop in an environment characterized by furniture, hand tools, fabric, padding and packing materials, glue, and stapling equipment. In some cases, an upholsterer may be required to work inside a vehicle. The environment requires good light and ventilation. The use of cutting tools and glue requires that proper attention is given to safety procedures and regulations in the workplace.

### **What knowledge and skills do I need to be an upholsterer?**

- Good eye hand coordination.
- Knowledge of fabrics.
- Knowledge of upholstering techniques.
- Ability to use hand tools.
- Ability to read and follow instructions.
- Good measuring and calculating skills.

### **What personal qualities/attributes do I need to be an upholsterer?**

- Neatness, accuracy and precision.
- An interest in different types of fabrics.
- An interest in serving people.
- Creativity and innovation.
- An interest in business (for persons interested in self-employment).
- Responsibility and reliability.

### **What are the education requirements to become an upholsterer?**

There are no formal education requirements to become an upholsterer, except for the need to be able to read, write and calculate. The required knowledge and skills can be acquired on the job.

### **Can I study in Bhutan to become an upholsterer?**

There are no training courses in upholstery in Bhutan, but you can learn to

be an upholsterer through on the job training under the supervision of an experienced person in this field. Few such persons, however, are available in Bhutan at present.

### **What are the employment prospects for an upholsterer in Bhutan?**

Most products produced by an upholsterer in Bhutan are imported. There are good prospects for more upholsterers to be employed in relation to furniture production as this industry expands.

### 7.3.2 Tshoglam Maker

#### **Title: THOGLHAM MAKER**

**Description:** A tshoglam maker makes traditional Bhutanese boots called tshoghlams using hand and machine tools.

**Alternative and Related Titles: SHOEMAKER/SHOE REPAIRER/COBBLER** (There are no shoemakers in Bhutan besides tshoglam makers. There are shoe repairers who are mostly from India and are commonly called cobblers).

#### **What does a thoglam maker do?**

- Selects suitable types and grades of material such as leather, silk cloth and rubber.
- Takes measurement of wearer's feet for custom-made orders.
- Designs and cuts models of wearers' feet.
- Cuts pieces of material to form parts of a tshoglam.
- Joins pieces together.
- Prepares the upper and lower parts of thoghlams separately.
- Attaches uppers to soles and heels by stitching, nailing, tackling, or gluing.

#### **What are the working conditions for a tshoglam maker?**

The government has revived tshoglam making which was nearly non-existent a few years back. Tshoglam making is now looked at as a respectable occupation. There is only one private tshoglam making unit cum shop in the entire country and it earns about Nu. 10,000 to 15,000 in a moth. The shop employs five tshoglam makers and their salaries range from Nu. 2,500 to 4,000

### **What is the working environment like?**

Tshogllham makers work indoors and although the work is manual it does not require strenuous physical involvement.

### **What knowledge and skills do I need to be a tshogllham maker?**

- Able to create and innovate.
- Able to perform precise and detailed work.
- Tailoring skills.
- Business and sales skills.
- Good hand-eye coordination.
- Able to work accurately.
- Able to work accurately.
- Able to convince customers.
- Good color sense.

### **What personal qualities/attributes do I need to be a tshogllham maker?**

- Patience.
- Interest in practical and manual work.
- Artistic flair.

### **What are the education requirements to become a tshogllham maker?**

There is no education requirement as such but you are expected to be literate – able to read, write and do basic arithmetic.

### **Can I study to become a tshogllham maker in Bhutan?**

Yes. The Zorig Chusum school in Thimphu and Trashiyangtse offer a tshogllham making course.

### **What are the employment prospects for tshogllham makers in Bhutan.**

Since tshogllhams are generally ceremonial boots demand is not very high. There may not be jobs by the hundreds. But tshogllham making should certainly provide meaningful employment to a handful of highly skilled and dedicated practitioners of the craft in certain parts of the country.

#### 7.3.3 Tshemdru

**Title:** TSHEMDRU

**Description:** An tshemdru thumi carries out ornamental needle work



and sews colorful and decorative patterns and stitches on garments or other fabrics, exclusively by hand (at least in Bhutan). In other countries much embroidery is one by machine.

**Alternative and Related Titles:** EMBROIDERER/ TSHEMDRU THUMI/ APPLIQUE WORKEERS/SEWER (A tshemdru thumi or embroiderer would also do appliqué work and vice versa).

**What does an embroiderer do?**

- Uses pins, needles and a variety of other sewing equipment items.
- Buys or arranges appropriate fabric, thread, and other required materials.
- Works from a pattern outlined on the material or from a chart.
- Sews stylized religious images and symbols through intricate needle work.
- Embroiders wall-hanging and other items of decorative soft furnishings.
- Embroiders rachus, ku-thangs and thangkas.
- Gives a proper finishing to embroidered pieces and tailors them into a variety of shapes, sizes and styles.
- Sells finished pieces of embroidery.

**What are the working conditions for an embroiderer?**

Embroiderers are creative artistic people who derive great satisfaction from their work, a good embroiderer can earn a reasonable living with a salary sometimes exceeding Nu. 5,000 a month. Self-employed embroiderers with good business skills can earn more than this. The hours of work for an embroiderer are regular although overtime work may be required if orders are placed at short notice.

**What is the working environment like?**

An embroiderer works indoors. The work is not physically strenuous but it is often tedious. Embroiderers need a lot of concentration and endurance. The working environment requires good lighting to enable work to be done with precision and accuracy.

### **What knowledge and skills do I need to be an embroiderer?**

- Artistic and creative skills.
- Good color sense.
- Good eyesight, normal color vision, and good hand-eye coordination.
- Able to do neat, detailed work.
- Tailoring skills.
- Business and promotional skills.

### **What personal qualities/attributes do I need to be an embroiderer?**

- Patience.
- Interest in artistic work.
- Clean and hygienic

### **What are the education requirement to become an embroiderer?**

To enroll for a formal course in embroidery you need a minimum education of Class 8 or completion of secondary education.

### **Can I study to become an embroiderer in Bhutan?**

Yes. You can study embroidery or appliqué work for four years at the Zorig Chusum school in Thimphu or Trashiyangtse.

### **What are the employment prospects for embroiderer in Bhutan?**

There is not much scope for employment in government organizations. Most embroiderers are self-employed. A few work for wealthy families and individuals. Embroiderers have to exploit their talents to the fullest and vigorously promote their products.

#### 7.3.4 Textile printer

##### **Title: TEXTILE PRINTER**

**Description:** A textile printer cuts stencils for silk-screen printing and prints on paper, metal, textiles and other materials using blocks of rubber, wood or other materials, and prints from engraved rollers. The textile printer focuses on the actual printing process and normally uses designs made by others. In a smaller workshop the printer may also undertake some of the design work.

## **Alternative and Related Titles: SILK SCREEN PRINTER/BLOCK PRINTER**

### **What does a textile printer do?**

- Cuts stencils in preparation for silk-screen printing.
- Prints on paper, metal textiles and other materials using silk-screen processes.
- Prints design and patterns on wallpaper and cloth with engraved blocks.
- Operates machinery with engraved rollers for printing on cloth or wallpaper.
- Undertakes basic cleaning and maintenance of machinery.

### **What are the working conditions for a textile printer?**

A textile printer usually works as an employee in the private sector although there is also considerable scope for self-employment in this occupation. The wages and benefits depend to a large extent on the skills, experience and reputation of the individual. The hours of work are standard although some overtime may be required from time to time.

### **What is the working environment like?**

A textile printer works in a print workshop where most of the work is done by machineries. The environment is sometimes noisy. The printer normally spends many hours standing and this can cause tiredness and fatigue. The operation of machinery can be repetitive and monotonous. Working with machinery is potentially hazardous and this requires that the textile printer follow operating and safety procedures at all times.

### **What knowledge and skills do I need to be a textile printer?**

- Good observation skills.
- Ability to read, interpret drawings and follow instructions.
- Manual dexterity.
- Knowledge of textile printing processes.
- Knowledge of textile printing machinery.

### **What personal qualities/attributes do I need to be a textile printer?**

- Willing to undertake work that is repetitive and monotonous.
- Responsibility and reliability.
- Willing to undertake work that is repetitive.

- Good eyesight.
- Ability to work quickly and accurately.

### **What are the education requirements to become a textile printer?**

There are no formal education requirements to become a textile printer, apart from the need to have basic literacy and numeracy abilities. The required knowledge and skills can be acquired through on the job experience.

### **Can I study in Bhutan to become a textile printer?**

There are no formal courses for textile printers in Bhutan. It is possible to learn under the supervision of an experienced textile printer.

### **What are the employment prospects for a textile printer in Bhutan?**

There are employment opportunities for silkscreen printers producing for the tourist market but opportunities in larger-scale, modern printing workshops are limited.

## 7.3.5 Pattern maker

### **Title: PATTERN MAKER**

**Description:** A pattern maker draws and cuts out patterns on paper, marks them on textiles, leather and other materials, and then cuts the cloth or other materials for the manufacture of garments, gloves and other products.

**Alternative and Related Titles:** TEXTILE PATTERN MAKER/GARMENT CUTTER

### **What does a pattern maker do?**

- Draws and cuts out patterns for making different types of products including suits, dresses, shirts, blouses, coats, gloves, hats and caps.
- Makes outlines of patterns on cloth, leather or other materials.
- Cuts material according to the pattern outline on the cloth or materials.
- Makes patterns, traces them on fabric and cuts according to the pattern outline to manufacture other things such as soft furnishings, canvas goods and umbrellas.

**What are the working conditions for a pattern maker?**

A pattern maker works in the private sector either for a small tailoring shop, or a textile company producing garments on a large scale. The wages and benefits for a pattern maker depend on the level of skill and experience. The working hours are regular although overtime work may be required when rush orders are received.

**What is the working environment like?**

A pattern maker works in a workshop or factory environment, depending on the overall size of the enterprise. The pattern maker uses either hand cutting scissors or in mass production enterprises power driven cutting tools that enable many layers of cloth to be cut at the same time. (This means that the pattern maker can cut hundreds of garments at one time). The use of power cutters requires that the pattern maker use steel mesh gloves to protect the hands. When cutting, a pattern maker needs good light in the working environment.

**What knowledge and skills do I need to be a pattern maker?**

- Good eye hand coordination.
- Ability to draw and trace patterns.
- Knowledge of design techniques.
- Knowledge of cutting techniques.
- Knowledge of different types of fabric and materials.
- Ability to read and follow instructions.
- Good calculating skills.
- Ability to work quickly and accurately.

**What personal qualities/attributes do I need to be a pattern maker?**

- An interest in fabrics and clothes.
- High level of precision and accuracy.
- Good eyesight.
- Awareness of safety procedures when cutting.
- Responsibility and reliability.

**What are the education requirements to become a pattern maker?**

Traditionally, there were no formal education requirements to become a pattern maker. The knowledge and skills required were acquired on the job under the supervision of an experienced pattern maker. Increasingly, pattern

makers undergo formal training.

### **Can I study in Bhutan to become a pattern maker?**

Yes. The Zorig Chusum school in Thimphu and Trashiyangtse offer a basic tailoring course as a complement to their embroidery and tshoglam making courses. The tailoring course includes aspects of pattern making and cutting. You can also learn to be a pattern maker under the direction of an experienced tailor/pattern maker in one of Thimphu's tailoring shops.

### **What are the employment prospects for a pattern maker in Bhutan?**

As with tailoring, there are good employment prospects for pattern makers/pattern cutters in Bhutan. Some people specialize as pattern makers, others as cutters. But in Bhutan's small scale tailoring industry it is an advantage to be able to design, cut, as well as sew a range of different types of garments.

## 7.3.6 Book binder

### **Title: BOOKBINDER**

**Description:** A bookbinder binds covers to books using either manual or mechanical means and performs book-finishing operators. Increasingly, bookbinding is done by machine by a bookbinding machine operator who required considerably less skill than of traditional bookbinder.

### **Alternative and Related Titles: EMBOSSER**

#### **What does a bookbinder do?**

- Binds books and periodicals by hand using simple equipment.
- Sets and sometimes operates book binding machines.
- Embosses designs or titles on books by hand or machine.
- Repairs old books.
- Makes a single copy of a rare book.

#### **What are the working conditions for a bookbinder?**

A bookbinder work in private enterprises either as an employee or as a self-employed person. As an employee the wages and benefits depend on the level of skill and experience. A self-employed bookbinder earns considerably more than an employee but also takes the risk of the possible failure of the business. A bookbinder works standard hours although overtime may be

required from time to time.

### **What is the working environment like?**

A bookbinder works in a workshop that uses a variety of machinery for folding, gathering, gluing, stitching and forming. The environment can be noisy and where glue is used, the atmosphere can be unpleasant unless a good ventilation system is in place. A bookbinding shop requires good lighting to ensure that high standards of accuracy are maintained.

### **What knowledge and skills do I need to be a book binder?**

- Good observation skills.
- Ability to work accurately for long periods.
- Knowledge of book binding processes.
- Knowledge of the operations of various types of bookbinding machinery.
- Ability to operate bookbinding machinery.
- Numeracy and literacy skills and the ability to follow instructions.

### **What personal qualities/attributes do I need to be a bookbinder?**

- An interest in books and their appearance.
- High levels of concentration.
- Responsibility and reliability.
- An interest in business (for those interested in self-employment).

### **What are the education requirements to become a bookbinder?**

Traditionally bookbinders acquired their knowledge and skills on the job, under the supervision of an experienced bookbinder. Bookbinding now relies on mechanical processes and this requires that bookbinders receive formal training in machine operations.

### **Can I study in Bhutan to become a bookbinder?**

There are no formal training courses for bookbinders in Bhutan. Overseas study is required. It is possible, however, to study to be a bookbinder under the supervision of an experienced person provided such persons can be found in Bhutan.

### **What are the employment prospects for a bookbinder in Bhutan?**

There are few employment prospects for bookbinders in Bhutan at present.

Bookbinding can be done more cheaply in other countries and this is likely to limit the employment prospects in Bhutan.

### 7.3.7 Tsharzo

**Title:** TSHARZO

**Description:** a Tsharzop makes a wide variety of items or articles from bamboo and cane such as bangchus, tsezems, and lakchus for functional or ceremonial use.

Alternative and Related Titles: **BASKET WEAVER / BANGCHU ZOMI / TSHARLA BEYMI / TSHARZOP / CANE WORKER** (Basket weavers in Bhutan are more commonly known as bangchu maker or tsharzop).

**What does a tsharzop do?**

- Harvests or collects bamboo and cane from natural or man-made habitat.
- Cuts bamboo and cane into required lengths, slices them and peels off the outer covering.
- Gathers and prepares dye and coloring materials.
- Applies dye and color on slices of bamboo.
- Weaves a rich diversity of cane and bamboo items having practical, ceremonial as well as artistic utilities.
- Makes colorful covers or wrappers for many household items like bottles, palangs, quivers, etc.

**What are the working conditions for a tsharzop?**

Basket weaving allows one to work in harmony with nature while also providing a living. Basket weaving is the chief occupation of many communities in the kheng region who make a living by making bamboo and cane products. Basket weaving is a traditional craft in which the vast majority of persons engaged are self-employed.

**What is the working environment like?**

A basket weaver works both indoors and outdoors. Although the work is not particularly strenuous it can get pretty tiring. When working all day long, hands, arms and shoulders burn and new weavers often get cramps.



**What knowledge and skills do I need to be a tsharzop?**

- Fast and nimble finger movement.
- Creative and artistic skills.
- Knowledge of dye and color.
- Adept at using tools.
- Able to work independently.
- Marketing and promotional skills.

**What personal qualities/attributes do I need to be a tsharzop?**

- Love for nature.
- Interest in manual work.
- Patience.

**What are the education requirements to become a tsharzop?**

A basket weaver does not need any formal education. Weaving skills are almost always handed down from parents or from someone who knows the craft.

**Can I study to become a tsharzop in Bhutan?**

Yes, through apprenticeships or by observing practitioners at work and then practicing on one's own as many tend to do. Basket weaving is not taught as a formal specialized course by any institute.

**What are the employment prospects for tsharzop in Bhutan?**

Unlike pottery, tsharzo or cane and bamboo weaving still serves some practical purposes. Many people pack their picnic meals in bangchus and carry arra in palangs wrapped with colorful cane and bamboo coverings. The good thing about cane and bamboo weaving is that it doesn't need to be utilitarian in today's context. In many countries around the world this art form has taken exciting new directions. The materials, forms and structure now have no constraints and people who weave or fashion them are true artists able to explore their limitless artistic talents and expression.

### 7.3.8 Doo zo

**Title: DOO ZO**

**Description:** a Doo zop carves tones or slates to create a desired shape or figure such as the image of Zhabdrung Rinpoche or a chhorten.

**Alternative and Related Titles:** STONE CARVER / STONE SPLITTER / STONE CUTTER / DONAG KOMI / DOPAR KOMI (Stone carvers are generally known as dopar komi. Those who carve slates are called donag komi).

**What does a Doo zop do?**

- Looks for or identifies suitable slates or slabs of stone for carving.
- Prepares designs and traces them onto stones or slates.
- Carves subjects and symbols such as trashi tagye, mani letters, kupars, dragons, and other religious signs and symbols.
- Uses a variety of hand tools.
- Maintains and repairs tools and keeps them free from rust.
- Occasionally paints the carved items and articles.
- Restores and copies carved stone or slate items.

**What are the working conditions for a Doozop?**

Stone carving is not as widespread a craft as wood-carving, but a stone carver’s skills are equally valued and a reasonable living can be earned. Most stone carvers are self-employed and their income level depends on their skills and reputation. An experienced and established stone carver may earn in excess of Nu.6000 per month.

**What is the working environment like?**

A stone carver works indoors as well as outdoors. A stone carver sits in one position for many hours and chips and chisels a slab of slate or stone with precision and concentration. Sitting in one position for long periods may cause muscle cramps and tiredness.

**What knowledge and skills do I need to be a Doo zop?**

- Aptitude for working with stones and slates.
- Able to draw.
- Able to make designs for carving.
- Knowledge of the properties of slate and stone.
- Knowledge of the subject the carving represents.
- Tool handling skills.
- Good eye-hand coordination.
- Able to work accurately and neatly.
- Able to paint.

- Business and promotional skills.

**What personal qualities/attributes do I need to be a Doozop?**

- Enjoyment of manual work.
- Interest in artistic work.
- An interest in stone and slate as an artistic medium.
- Patience.

**What are the education requirements to become a Doozop?**

Formal education is not a prerequisite if you want to become a stone carver by taking up apprenticeship with a master carver. You will need secondary education to Class 8 if you want to pursue a formal stone-carving course.

**Can I study to become a Doozop in Bhutan?**

Yes. The Zorig Chusum school in Thimphu and Trashiyangtse offer a four year stone carving course. Admission to these courses is increasingly competitive with more high school leavers competing for the limited number of places. The current minimum entry standard to this course is Class 8.

**What are the employment prospects for Doozop in Bhutan?**

There are not many employment opportunities for stone carvers in government service except when new construction of lhakhangs and dzongs and big renovation projects of old monuments are undertaken. Stone carvers are generally self-employed. You will have to rely on aggressive promotion to market your skills as a stone carver.

7.3.9 Lhazo

**Title:** LHAZO

**Description:** A lhadrip is a traditional artist. A lhadrip draws as well as paints. Lhadrips mostly draw or paint religious pictures, subjects and symbols.

**Alternative and Related Titles:** ARTIST/*PAINTER* (Artists normally only draw but they can and often do paint pictures. A painter almost always only paints pictures drawn by artists.)

**What does a *lhadrip* do?**

- Paints lhakhangs, dzongs, and other religious structures and monuments.
- Paints residential and commercial buildings.
- Paints chhoeshams.
- Paints kus or statues and other items for use in chhoeshams, lhakhangs and dzongs.
- Paints murals, thangkas and portraits.
- Conceives and develops ideas for painting.
- Makes preliminary sketches for painting.
- Makes and uses brushes and various other painting tools and equipment.
- Teaches lhadrip or painting to students or apprentices.

**What are the working conditions for a *lhadrip*?**

Lhadrips are admired and respected for the skills and work. It is believed that lhadrips earn spiritual merit for their work. They also earn comparatively better money among the practitioners of the zorig chusum arts and crafts.

**What is the working environment like?**

Lhadrips work both indoors and outdoors. When painting the exteriors of dzongs, lhakhangs or a building they work at heights from scaffoldings.

**What skills do I need to be a *lhadrip*?**

- Artistic and creative.
- Imaginative and innovative.
- Knowledge of colour and dyes.
- Good hand coordination.
- Able to work at heights.
- Able to concentrate on one job with precision for a long period.
- Some promotional and business skills.

**What personal qualities/attributes do I need to be a *lhadrip*?**

- Interest in the arts.
- Patience.
- Self-discipline.

**What are the education requirements to become a *lhadrip*?**

A minimum education is desirable. You have to train long and hard in lhazo to become a lhadrip.

**Can I study to become a *lhadrip* in Bhutan?**

Yes. The Zorig Chusum schools in Thimphu and Trashiyangtse provides a six year lhazo course. Those below 14 years with some modern education are given preference during admission.

**What are the employment prospects for lhadrips in Bhutan?**

The government employs lhadrips to paint new lhakhangs and dzongs under renovation. Many lhadrips work as freelancers painting chhoeshams, religious items, private lhakhangs, houses and buildings. Some lhadrips work independently at home and sell their work such as painted crafts and souvenirs to handicraft shops.

### 7.3.10 Shazo

**Title: SHAZO**

**Description:** A shazop cuts, chisels, carves and shapes a block of wood attached to a manual or motor-powered lathe to produce traditional Bhutanese wooden kitchenware and home-ware.

**Alternative and Related Titles:** *DAPPA ZOMI* (One of the most popular and widely used items produced by shazops is the dappa, or wooden dish/plate. So shazops are called dappa makers by some people).

**What does a shazop do?**

- Makes dappa, gophu (small multi-use bowl), lhapchu (bowls for monks) tsiku (an hour-glass shaped container for making chili paste), japhop (tea cup) and a variety of other custom-made articles such as dinner sets, spoons and gift packs.
- Collects the primary raw material – rhododendron wood or hard wood belonging to acer species – from the forest.
- Prepares raw material for actual production by cutting logs into smaller rough blocks, soaking them in water, drying them over fire, sunning them and then boiling them in water.
- Attaches prepared blocks to a manual or powered lathe and cuts,

chisels or carves them into fine shapes and sizes.

- Smoothens carved items with the leaves of se-shiong or trema poitora that serves as natural sandpaper.
- Lacquers the finished products and sells them.

### **What are the working conditions for a shazop?**

Products made by shazops are very popular and serve a wide range of utilitarian purposes. Shazops therefore make a good living. Shazops are self-employed and work according to the hours they set for themselves.

### **What is the working environment like?**

Shazops work both indoors and outdoors. A shazop sometimes walks for days in the forest or wilderness in search of good hardwood. When working indoors a shazop needs good light.

### **What knowledge and skills do I need to be a shazop?**

- Able to use electric motors and other hand and power tools.
- Able to create innovative designs.
- Able to make new products having everyday utility.
- Knowledge of different types of timber and their characteristics.
- Good eye hand coordination.
- Knowledge of wood carving and lacquering techniques.

### **What personal qualities/attributes do I need to be a shazop?**

- Enjoy physical and manual work.
- Interest in making wooden products.
- Patience.
- An interest in business.
- Accuracy and neatness.
- Good eyesight.

### **What are the education requirements to become a shazop?**

You should have a minimum education background to enroll for a formal course. It is possible to become a shazop through apprenticeships even if you have limited education.

### **Can I study to become a shazop in Bhutan?**

Although shazo has traditionally been a hereditary profession, the Zorig

Chusum schools in Thimphu and Trashiyangtse now teaches it as a formal course.

### **What are the employment prospects for shazops in Bhutan?**

Almost all the shazops in the country, most of who are based in Trashiyangtse, are self-employed. Some of them have prospered. Shazo products have benefited from high demand among urban consumers. They are also one of the favorite souvenir terms for tourists.

#### 7.3.11 Troezo

##### **Title: TROELZOP**

**Description:** A troelzop fabricates repairs or adjusts bronze, silver and gold ornaments, religious artifacts, and jewelry and household items. A troezop may weld, cast, beat, construct and manipulate materials to create or suit a design.

**Alternative and Related Titles: JEWELER / PRECIOUS METAL WORKDER / JANGWAMP** (In the past troelzops were also called jangwamps or jangwangpas because most troelzops came from Jangwang village in Paro).

##### **What does a troelzop do?**

- Creates design drawings and specifications.
- Shapes metal and other materials by cutting, filling, hammering, turning, spinning, bending, casting, folding and linking using mainly hand and sometimes power tools.
- Assembles articles by soldering, screwing, riveting or otherwise joining components.
- Finishes articles using files, emery paper, or other appropriate tools and equipment.
- Secures gemstones in zuki settings, komas, dopchus and other articles.
- Repairs gold and silver jewelry by soldering replacing or repairing worn or broken parts.
- Remodels old bronze, silver and gold ware.

##### **What are the working conditions for a troelzop?**

Among tradespersons and craftsmen troelzops have always been regarded

highly for their skills.

### **What is the working environment like?**

Troelzops mostly work indoors. They sit or stand in one position for long hours and their work requires a great deal of precision and concentration. Patience should be a hallmark of any troelzop. The working environment involves the use of heat and soldering irons and burns are possible unless equipment is used with safety and care. The detailed nature of the work requires and environment with good lighting.

### **What knowledge and skills do I need to be a troelzop?**

- Able to design.
- Knowledge of traditional jewelry.
- Knowledge of precious metals and their properties.
- Carving and engraving skills.
- Able to draw.
- Good hand-eye coordination.
- Able to work with precision and accuracy.

### **What personal qualities/attributes do I need to be a troelzop?**

- An interest in jewelry and things of beauty.
- Patience and perseverance.
- Enjoy making ornamental things and jewelry.
- Honesty and integrity.
- Creativity and artistry.
- An interest in precision and accuracy.
- Good eyesight.

### **What are the education requirements to become a troelzop?**

Education was not necessary in the past, but now you need a minimum of secondary education to study or train in troelzo.

### **Can I study to become a troelzop in Bhutan?**

Yes. You can study troelzo at the Zorig Chusum schools in Thimphu and Trashiyangtse.

### **What are the employment prospects for troelzops in Bhutan?**

You can either be self-employed or work for private as well as government



troelzo units most of which are based in Thimphu.

### 7.3.12 Jimzo

**Title:** JIMZO

**Description:** Jim in chhoekey means mud and zo is art. A *jimzop*, therefore, is a “mud artist”. A *jimzop* sculpts or makes religious images and figures – actually out of a mixture of clay and other materials and not of ordinary mud. A *jimzop* may make tiny portable Buddhas for private chhoeshams or gigantic multi-storied replications for large lhakhangs and dzongs.

**Alternative and Related Titles:** SCULPTOR/KU ZHENGMI (Ku in Dzongkha means a statue and *jimzops* are also called ku zhengmi or statue makers).

**What does a *jimzop* do?**

- Prepares clay mixture to make *kus*.
- Moulds clay to the desired form by hand or using mainly hand tools.
- Decides on materials such as bark of *daphne* plant and silk threads or yarn to be used with clay.
- Decides on suitable proportions.
- Makes clay figures of all Buddhist saints, teachers, masters and famous personalities.
- Paints *kus* and restores damaged *kus*.
- Makes or creates other three-dimensional clay artwork.
- Teaches *jimzo* to students or apprentices.

**What are the working conditions for *jimzop*?**

Most people consider it a blessing to be a *jimzop*. Jimpos are highly respected and even revered. Many believe that their work will earn spiritual merit that will help them in the after life. *Jimzops* employed by the government are paid at par with lhadrips.

**What is the working environment like?**

*Jimzops* mostly work indoors in their own home studios or at worksites such as lhakhangs and dzongs. They may sometimes work long or unusual hours as determined by astrological predictions, or to complete a deadline-oriented

work.

**What knowledge and skills do I need to be a *jimzop*?**

- Artistic and creative aptitude.
- Good sense of proportion and hand-eye coordination.
- Able to work for long periods with unwavering concentration, either sitting or standing in one position.
- Able to do neat, detailed and elaborate work.
- Able to sketch, draw and paint.
- Knowledge of dye and good color sense.

**What personal qualities/attributes do I need to be a *jimzop*?**

- Spiritually inclined.
- Self-disciplined and dedicated to work.
- Patient and calm disposition.

**What are the education requirements to become a *jimzop*?**

You have to complete secondary education or at least Grade eight.

**Can I study to become a *jimzop* in Bhutan?**

Yes. The *Zorig Chusum* schools in Thimphu and Trashiyangtse offers *jimzo* course.

**What are the employment prospects for *jimzops* in Bhutan?**

The government employs *jimzops* to make or to restore kus in lhakhangs and dzongs. Many *jimzops* are self-employed. A highly-skilled *jimzop* will be sought after by everyone.

7.3.13 Dheyzo

**Title: DHEYZO**

**Description:** A Dheyzop makes paper out of a plant called daphne (scientific name *dapkinie papyrifera sieb*) using mostly hand tools and very few machines.

**Alternative and Related Titles:** TRADITIONAL PAPER MAKER / DESHO ZOMI (Desho is the local name for traditional handmade paper. People who make this paper are called desho zomi or maker).

**What does a desho maker do?**

- Harvests or buys principal raw material – bark fibre from daphne plants.
- Boils the fibre bark.
- Cleans and washes the fibre bark.
- Grinds and mixes the material.
- Makes different varieties of desho paper without using any chemicals in the main process.
- Makes stationery, souvenir and gift items such as note pads, files, folders, photo albums and postcards.
- Sells desho paper and its products within the country and exports it abroad.

**What are the working conditions for a dheyzop?**

Although desho making was a domestic household activity in the past, it has now taken the form of a commercial industry and one person cannot do the job in its entirety as was the tradition in the past. You have to specialize in one of the numerous areas of desho making such as processing, dyeing, designing or marketing. Trainee workers in the two desho making units in the country are paid Nu.1,800. Salaries for permanent workers range from Nu. 2,200 to 8,500.

**What is the working environment like?**

People who are involved in desho making work both indoors and outdoors, depending on their area of specialization.

**What knowledge and skills do I need to be a desho maker?**

- Able to do manual and physical work.
- Knowledge of any aspect of desho processing and making.
- Able to learn fast.
- Drawing and designing skills.
- Creative and innovative skills.
- Mechanical aptitude.
- Marketing and promotional skills.
- Management and coordination skills.

**What personal qualities/attributes do I need to be a desho maker?**

- Hard working.

- Inquisitive.
- Interest in learning new skills.

### **What are the education requirements to become a dheyzop?**

You need a minimum education background.

### **Can I study to become a dheyzop in Bhutan?**

You can train in either of the two desho making units, both based in the capital, in a particular area of desho making. The training, however, is conditional – you have to work for the units after the training.

### **What are the employment prospects for dheyzop in Bhutan?**

The government does not employ dheyzop. All positions in the two desho making units are currently filled up. You may perhaps choose to train outside the country and set up Bhutan’s third desho making unit.

#### 7.3.14 Patra

#### **Title: PATRA**

**Description:** A wood carver may carve, engrave or sculpt wood to produce items such as babs or traditional Bhutanese masks, decorative wall items, and picture frames using mainly hand tools.

#### **Alternative and Related Titles:**

**HANDICRAFTS-WOOD WORKDER/PAP/WOOD CARVER** (Pap is a general title for anyone engaged in carving. A stone carver may also be a called a pap, Pata komi is a little that is specific to wood carving).

#### **What does a wood carver do?**

- Selects, marks out and prepares suitable blocks of wood for carving.
- Prepares detailed drawings of designs and traces them on to wood using templates and other copying devices.
- Carves items such as masks, statues, chodroms, and chhoeshams using gouges, paring knives, chisels and mallets.
- Maintains and repairs tools and keeps them free from rust.
- Uses special paints, dyes and wood stain to highlight carvings.

- Paints the carved items and articles.
- Restores and copies carved antique ornaments or artifacts.

**What are the working conditions for a wood carver?**

Wood carvers can earn a respectable living by making efficient use of his/her skills. Most wood carvers are self employed although it is possible for an owner-carver to run a business and employ other wood carvers. Occasionally a wood carver, with good promotional skills, may be given an assignment for a major piece of work that pays very well.

**What is the working environment like?**

A wood carver works both indoors and outdoors. The work is manual and involves the use of a variety of sharp tools that can be dangerous if not used properly and carefully. A wood carver needs good light in the working environment to ensure that attention is given to the details required for good quality carving.

**What knowledge and skills do I need to be a wood carver?**

- Aptitude for working with wood.
- Ability to draw.
- Ability to make designs for carving.
- Tool handling skills
- Knowledge of different types of wood and their characteristics.
- Knowledge of different types of paint and their suitability for wood surfaces.
- Good eye hand coordination.
- Ability to paint.

**What personal qualities/attributes do I need to be a wood carver?**

- Enjoy practical work.
- Interest in the arts.
- Patience.
- Good eyesight.
- Accuracy and precision.
- An interest in business.

**What are the education requirements to become a wood carver?**

A secondary education is considered ideal although it is possible to become a

wood carver through long apprenticeship with very limited formal education.

### **Can I study to become a wood carver in Bhutan?**

Yes. You can study wood carving at the National Institute of Zorig Chusum in Thimphu or in Trashiyangtse.

### **What are the employment prospects for wood carvers in Bhutan?**

Many wood carvers are self-employed. Some are employed by private organizations, individuals and families who may commission them to do a certain piece or kind of work. The government may also employ wood carvers during construction of new lhakhangs and dzongs, or during renovation and restoration of old monuments.

#### 7.3.15 Zazo

### **Title: ZAZO**

**Description:** A potter moulds and makes clay into functional items such as pots, bowls and other home-ware and kitchenware.

### **Alternative and Related Titles: POTTER**

### **What does a potter do?**

- Collects clay and other raw materials such as firewood.
- Builds, operates and maintains a furnace or kiln.
- Puts finished pottery or other clay products in kilns for firing and baking.
- Makes jaza (tea pot), kithap (water boiling pot), maza (rice pot) khaza (wine pot).
- Operates hand tools to produce a mould for reproduction of pottery.
- May make decorative and artistic pottery.

### **What are the working conditions for a potter?**

With modernization potters were among the first craftsmen and trade-workers to lose their place of pride in the community. Today even in remote corners of the country people use rice cookers, curry cookers and boilers rendering potters and their skills redundant. The government is trying to revive the craft but there aren't many people showing interest in it and none making a

living from it.

### **What is the working environment like?**

A potter usually works indoors but may sometimes work outdoors – for instance to collect clay or other materials. Work areas may be dusty and messy when working with clay.

### **What knowledge and skills do I need to be a potter?**

- Exceptional hand-coordination skills.
- Knowledge of clay and pottery.
- Problem-solving skills.
- Eye for fine details.
- Ability to modify pots or other clay articles to suite people's needs.

### **What personal qualities/attributes do I need to be a potter?**

- Patience.
- Precision and accuracy.
- High levels of concentration.
- Interest in manual work.
- Innovative.

### **What are the education requirements to become a potter?**

Traditionally, no formal education was required to be a potter in that pottery skills were handed down from one generation of practitioners to the next. Today, however, you need basic literacy or some education to study pottery as a formal cause.

### **Can I study to become a potter in Bhutan?**

Yes. The Zorig Chusum schools in Thimphu and Trashiyangtse offers a pottery making course.

### **What are the employment prospects for potters in Bhutan?**

Because of diminishing utility of clay items and articles, pottery is now confined to just one or two practitioners in the entire country. Traditional style pottery may not provide gainful employment today, but decorative or artistic pottery offers some opportunities for employment. For this you may even consider pursuing a fine arts diploma or degree outside the country.

### 7.3.16 Thazo

**Title:** THAZO

**Description:** A thathagmi weaves textile pieces or clothing fabrics on traditional looms.

**Alternative and Related Titles:** WEAVER / HANDICRAFTS-TEXTILE WORKER / THAGM /THATHAGMI / THRUEL-THATHAGMI / PANG-THA THAGMI (In Bhutan weavers can be categorized into two board groups depending on the looms they use – pang-tha thagmi and thruel-tha thagmi).

**What does a weaver do?**

- Sets up and operates looms.
- Makes decisions about fabric color, pattern, and yarn composition.
- Reproduces copies and creates original warp and weft patterns.
- Designs and weaves fabrics for home-ware such as sofa, chodroms, chairs, tables and beds.
- Uses spinning wheels and other tools to process yarn or thread.
- Stitches hand-woven fabrics into ghos, kiras and toegos with the help of tailors.
- Sells textile pieces or ghos, kiras and toegos.

**What are the working conditions for a weaver?**

Weaving is very much a living, thriving and lucrative vocation. Those who weave silk ghos and kiras can earn even more than other weavers.

**What is the working environment like?**

Weavers mostly work indoors. They sit in one place and weave for hours and days. In rural Bhutan weavers often set up their looms in the open in a long row and they chat and sing as they weave.

**What knowledge and skills do I need to be a weaver?**

- Able to handle weaving devices and tools.
- Able to weave.
- Able to dye threads and prepare other materials for weaving.
- Good patterning and designing sense.
- Good hand coordination and visualization skills.
- Able to translate ideas into products.



- Business and promotional skills.

**What personal qualities/attributes do I need to be a weaver?**

- Enjoy manual work.
- Interest in textiles.
- Patience.

**What are the education requirements to become a weaver?**

Most Bhutanese weavers do not have any formal education. They learn the skills from their mothers, sisters or relatives. However, in the institutes where weaving is taught as a formal course, you are expected to have a minimum education background.

**Can I study to become a weaver in Bhutan?**

Yes. The Zorig Chusum schools, the institute for Language and Culture Studies, and the National Handloom Development Centre teach weaving as a formal course.

**What are the employment prospects for weavers in Bhutan?**

Of all the thirteen zorig arts and crafts weaving or tha-zo offers the best scope for employment. Ghos and kiras are used as daily wear and there is a constant demand for it. Although cheap machine-made fabrics and clothing materials have flooded the market, the Bhutanese still prefer and take pride in wearing traditional hand-woven ghos and kiras. You can either be an independent home-based weaver or fine work as a salaried weaver for private weaving houses, handicrafts shops, individuals, and families.

7.3.17 Shingzo

**Title: SHINGZO**

**Description:** A zow or carpenter constructs, erects, installs, and finishes complete sets of wooden structures and fixtures on residential or commercial buildings. A zow also makes household furniture.

**Alternative and Related Titles:** CARPENTER / BUILDING CARPENTER / FURNITURE CARPENTER / JOINER/CABINET MAKER (In Bhutan zows normally specialize as a building carpenter or as a furniture maker/joiner, but are able to work in either field. A furniture maker/joiner is engaged in work

that requires more precision and detail).

### **What does a zow do?**

- Sets out an outline of the building using string and pegs to indicate where excavation is required.
- Reads building plans and specifications to determine the materials required dimensions and installation processes.
- Erects wooden walls and structures.
- Saws timber.
- Makes and installs windows, sashes and doors.
- Makes furniture.
- Cuts materials with hand and power tools and cuts, shapes and assembles parts.
- Maintains and sharpens tools.

### **What are the working conditions for a zow?**

Traditionally zows are highly regarded in Bhutan. Some have earned great fame and fortune building impressive monuments such as dzongs and lhakhangs. Among skilled workers, carpenters are generally the most highly paid. Additional experience and the acquisition of higher skills, together with a higher reputation, enables a zow to earn a higher income. The hours of work may be irregular, sometimes involving weekend work in order to ensure the building is completed on time.

### **What is the working environment like?**

Zows mostly do physical work. They work both indoors and outdoors and often in a noisy atmosphere. The environment may be hot or cold, depending on seasonal factors and the local environment. They work as part of a construction or building team. Working on a building site exposes zows to a number of hazards including the risk of falling objects. Risks can be minimized by following safety procedures and ensuring that protective equipment and clothing is worn.

### **What knowledge and skills do I need to be a zow?**

- Able to design and prepare drawings.
- Able to read and interpret blueprints and drawings.
- Able to devise the most effective way to complete a structure.
- Knowledge of the characteristics and quality of different types

of wood.

- Ability to measure, cut, assemble and join various wood materials.
- Ability to use a variety of hand and power tools safely and effectively.

#### **What personal qualities/attributes do I need to be a zow?**

- Physical fitness.
- Interest in manual work.
- Patience.
- Enjoy making things that people can use.

#### **What are the education requirements to become a zow?**

Traditionally zows did not have any formal education. Through a rigorous apprenticeship one could always become a good zow, if, however, you want to become a modern, professional zow using modern techniques and equipment, special training is essential. The entry to such training requires a secondary education.

#### **Can I study to become a zow in Bhutan?**

Yes. The TTIs provides “building-related” carpentry course for students who have completed Class 10. You can train in furniture carpentry/joinery at the Wood Craft Centre, Thimphu.

#### **What are the employment prospects for zow in Bhutan?**

Zow are much sought after in Bhutan. They are employed by building contractors or furniture houses. Some carpenters are self-employed. Considering that the construction and wood based cottage industries in Bhutan are mostly filled with carpenters from India, employment prospects for Bhutanese zows are good

### 7.3.18 Tshemzo

#### **Title: TSHEMZO**

**Description:** A tshempoen stitches or makes ghos, kiras, toegos, wonjus, shirts, coats, uniforms and other articles of clothing or garments using machine or hand tools.

**Alternative and Related Titles:** TAILOR / DRESSMAKER / TSEMPOEN / TSEM CHABMI (Besides clothes and garments tsem chabmis also make soft furnishing items like window curtains, wall-hangings, thankas, etc).

### **What does a tailor do?**

- Discusses with customers the type of material to be used and the design of garments or soft furnishing.
- Measures customers and records their sizes.
- Cuts the fabric according to the measurement.
- Operates sewing machine and guides material under needles, following edges, seams or markings.
- Examines sections of finished articles of clothing for defects and cuts off excess material and threads.
- Presses the completed garment to mould and shape it.
- Carries out basic maintenance of hand tools and machines.

### **What are the working conditions for a tailor?**

Tailors now make extensive use of machines in their work. They are able to do more work and earn more money. The salary for tailors employed by tailoring shops depends on their experience, skills and reputation.

### **What is the working environment like?**

Tailors work indoors and are not subject to hard physical exertion. They do however sit in front of their sewing machines for extended periods peering into garments and pedaling with their feet. The future will see more tailors using electric sewing machines. Tailors require good light in their working to enable them to work with the required degree of precision.

### **What knowledge and skills do I need to be a tailor?**

- Able to work patiently and systematically.
- Knowledge of different types of cloth.
- Knowledge of patterns and designs.
- Able to meet production deadlines.
- Able to do neat, detailed work.
- Good eyesight and hand-eye coordination.
- Good color and design sense.
- Some business skills.
- Creative flair and some drawing talent.

### **What personal qualities/attributes to I need to be a tailor?**

- A pleasant nature.
- Interest in clothes.
- Interest in manual work.

### **Can I study to become a tailor in Bhutan?**

Yes. The Zorig Chusum schools in Thimphu and Trashiyangtse offer a basic tailoring course as a complement to their embroidery and tshoglam making courses. All the major tailoring shops in the capital offer apprenticeship cum training courses of six to eight months for anyone interested to become a tailor.

#### 7.3.19 Gaw

##### **Title: GAW**

**Description:** A blacksmith, or gaw as known in Bhutan, produces and repairs metal articles in the forge using hand or power tools.

##### **Alternative and Related Titles: BLACKSMITH / FORGE PRESS WORKER**

(Blacksmiths are also sometimes called forge press worker. Some blacksmiths specialize in forge-smithing, hammer-smithing or tool-smithing).

##### **What does a blacksmith do?**

- Makes charcoal for the forge by burning hardwood.
- Adjusts metal and heat to the correct temperature in the forge.
- Hammers, punches or cuts metal to size and shape on an anvil or other surface.
- Hardens the finished article by heating and cooling in water or by cooking gradually in air.
- Makes and repairs kitchen items such as ladles and thongs and farm equipment such as hoes and spades.
- Forges patags and gichus.
- Makes ornaments like bracelets, brooches, and rings.
- Produces other metalwork such as railings, gates, grilles, and furniture.

##### **What are the working conditions for a blacksmith?**

Traditional Bhutanese blacksmithing is very labour-intensive and involves a lot of menial work. As a result blacksmiths have often been looked down as

socially inferior. But blacksmithing is a unique trade that rewards skill and experience, as well as creativity. There are many blacksmiths in the country who make a respectable living. Most blacksmiths are self-employed and work long hours.

### **What is the working environment like?**

Blacksmiths work indoors by the side of their forge. They have to constantly endure physical exertion and the clang of metals. Most blacksmiths work alone but they sometimes have apprentices to help them and learn from them. The working environment is hot and noisy and the blacksmith is required to stand for long periods. Blacksmiths are also required to lift heavy objects requiring a degree of physical strength.

### **What knowledge and skills do I need to be a blacksmith?**

- Knowledge of metals and forge operations.
- Knowledge and expertise in metal pre-cutting and forging techniques.
- Good hand-eye coordination.
- Adept with tools, equipment and machinery.

### **What personal qualities/attributes do I need to be a blacksmith?**

- Creativity and innovation.
- Not have skin or breathing allergies.
- Interest in technical activities.
- Physical strength to lift heavy objects and use heavy tools.
- Be safety conscious.

### **What are the education requirements to become a blacksmith?**

Traditionally gaws have not had any education. But for those willing to take up blacksmithing as a modern profession, a secondary education with strong science credits will be a definite advantage.

### **Can I study to become a blacksmith in Bhutan?**

There is no institute or school that offers organized and structured studies or training in blacksmithing in Bhutan. But there are many experienced blacksmiths with whom you can take up an apprenticeship and thus acquire the necessary knowledge and skills through practical experience gained through in the job training.

### **What are the employment prospects for blacksmiths in Bhutan?**

A blacksmith has many options in the choice of work to be done. Blacksmiths in many parts of the world are finding their unique and artistic abilities put to profitable use. Ornamental or artistic blacksmiths are often self-employed. An enterprising high school graduate can easily set up a modern forge using modern equipment and know-how and produce komas, zukis, sechus, and patags on a mass scale.

#### **7.4. Food processing, wood working, garment and other related trade workers**

##### **7.4.1 Cabinet maker**

#### **Title: CABINET MAKER**

**Description:** A cabinet maker makes, decorates and repairs wooden furniture, wooden parts of vehicles, wooden fittings, patterns, models and other wooden items including pipes and sporting equipment.

#### **Alternative and Related Titles: JOINER/CARPENTER/CARTWRIGHT**

#### **What does a cabinet maker do?**

- Makes and repairs wooden articles such as cabinets and other furniture, using hand tools and woodworking machinery.
- Makes and repairs wooden vehicles, wheels or other wooden parts of vehicles.
- Makes and repairs wooden articles such as casks, tobacco pipes, or sporting equipment (although this is now largely replaced by metal and fibre glass materials).
- Decorates furniture by inlaying wood, applying veneer, and carving designs.
- Applies different types of finishes to surfaces of wooden articles and furniture.

#### **What are the working conditions for a cabinet maker?**

A cabinet maker works in the private sector either as an employee or a self-employed person. A cabinet maker as an employee receives wages and benefits similar to those enjoyed by other skilled trade workers, dependent on skill and experience levels. A self-employed cabinet maker earns considerably more than an employee but also runs the risk of business failure. The working hours for a cabinet maker are regular but some overtime work may be required

from time to time.

### **What is the working environment like?**

A cabinet maker works in a workshop environment characterized by timber, hand tools, power tools, and sometimes used furniture under repair. The environment may have high levels of dust depending on the particular nature of the work being undertaken, thereby highlighting the need for good ventilation. Ventilation is also required when using varnishes and paints. A cabinet maker requires good light to enable detailed work to be undertaken, and must take care in the use of sharp tools to minimize the possibility of accidents.

### **What knowledge and skills do I need to be a cabinet maker?**

- Good communication skills.
- Knowledge of different types of wood.
- Knowledge of restoration techniques for old furniture.
- Ability to use hand and power tools.
- Ability to calculate.
- Ability to read and follow instructions.
- Good eye-hand coordination.
- Manual dexterity.

### **What personal qualities/attributes do I need to be a cabinet maker?**

- An interest in furniture, particularly old furniture items.
- Good eyesight.
- Precision and accuracy.
- Responsibility and reliability.
- An interest in business.

### **What are the education requirements to become a cabinet maker?**

Traditionally, cabinet makers required no formal education requirements and acquired the necessary knowledge and skills under the guidance and supervision of an experienced cabinet maker. Increasingly, cabinet makers undertake formal training involving a combination of theoretical and practical components and this requires an acceptable level of literacy and numeracy.

### **Can I study in Bhutan to become a cabinet maker?**

Although it is not possible to undertake a specialized course in cabinet making,



the certificate course in carpentry at the TTIs provides a good introduction to cabinet making. Entry to this course requires Class 10.

### **What are the employment prospects for a cabinet maker in Bhutan?**

There are good employment prospects for cabinet makers in Bhutan concerning both the production of new furniture and the repair and restoration of old furniture.

#### 7.4.2 Musical instrument maker

##### **Title: MUSICAL INSTRUMENT MAKER**

**Description:** a musical instrument maker makes repairs and restores musical instruments and adjusts or alters them to suit owners for performer's needs and preferences.

**Alternative and Related Titles:** DHUNG MAKER/JALI MAKER/DRAMNYEN MAKER (A musical instrument maker may specialize in either religious musical instruments such as dhung or jali, or artistic musical instruments like the damnyen).

##### **What does a musical instrument maker do?**

- Designs and makes musical instruments either in whole or in parts.
- Talks to and takes instructions from musicians or owners.
- Assembles and puts parts together.
- Attaches strings as necessary and tunes instruments.
- Maintains instruments to keep them in working order.
- Identifies and repairs damaged or faulty parts.
- Plays instruments to test and to find faults.
- Advises customers about maintenance and playing.

##### **What are the working conditions for a musical instrument maker?**

Very few people take up artistic musical instrument making as a profession. There are many who make religious musical instruments like the dhung and the jali for a living. A musical instrument maker can be an employee or a self-employed person.

### **What is the working environment like?**

Musical instrument makers mostly work indoors. They require a great deal of patience to sit in one place for a long time and concentrate on what they are doing. The environment is one characterized by instruments, instrument parts, and hand tools. The environment is normally pleasant and hard free. A musical instrument maker required good lighting to do detailed work.

### **What skills do I need to be a musical instrument maker?**

- Blacksmithing skills.
- Precious metal smithing skills.
- Carpentry and wood carving skills.
- Knowledge of religious and artistic instruments.
- Able to concentrate on one piece or job for long periods.
- High concentration skills.
- Able to play instruments made and repaired.

### **What personal qualities/attributes do I need to be a musical instrument maker?**

- Enthusiasm and appreciation for music and musical instruments.
- Attention to precision and detail.
- Motivation and dedication to work.
- Interest in artistic work.
- Patience in that one instrument can take weeks and months to make.

### **What are the education requirements to become a musical instrument maker?**

There is no education requirement but you basically need troelzo, blacksmithing, carpentry, and wood carving skills to become musical instrument maker.

### **Can I study to become a musical instrument maker in Bhutan?**

There is no institute that teaches musical instrument making separately, but you can learn related skills at the Zorig Chusum school. You can also take up apprenticeship under experienced and skilled musical instrument makers.

## **What are the employment prospects for musical instrument makers in Bhutan?**

As a musical instrument maker you will most likely have to be self-employed. You can make a good living and even prosper by becoming a dhung and jail maker, but it is unlikely that you can earn a livelihood solely by becoming a dramnyen or a lingbu maker

### 7.4.3 Butcher/fishmonger

#### **Title: BUTCHER/FISHMONGER**

**Description:** a butcher slaughters animals, and cleans, cuts and dresses meat in preparation for sale to customer. (A fishmonger performs similar tasks with fish).

#### **Alternative and Related Titles:**

#### **What does a butcher/fishmonger do?**

- Slaughters animals or kills fish.
- Flays and trims animal carcasses and cleans fish.
- Cuts and dresses meat and fish for immediate sale or further processing.
- Prepares meat products including mince and sausages using simple chopping, mixing and shaping machinery.
- Cures meat, fish and other foods.
- Operates smokehouses or ovens to smoke meat and fish.
- Supervises the work of subordinate staff.

#### **What are the working conditions for a butcher/fishmonger?**

A butcher may be either an employee or a self-employed person. A butcher employed by an enterprise receives a wage and benefits similar to other skilled employees in the private sector. A self-employed person can earn considerably more but also runs the risk of business failure. Butchers typically wear a uniform provided by the employer. The working hours are regular but involve after hours and weekend work.

#### **What is the working environment like?**

A butcher/fishmonger operates in a shop environment characterized by meat, poultry, fish and customers. At certain times this can be a hectic

environment with many customers in the shop at any one time. Butchers work continuously with sharp knives with the potential to cause accidents, particularly concerning cuts to fingers and hands. These can be minimized if butchers work in accordance with safe cutting techniques. A butcher spends a lot of time standing which can cause tiredness and fatigue.

**What knowledge and skills do I need to be a butcher/fishmonger?**

- Good communication and interpersonal skills.
- Knowledge of different cuts of meat, poultry and fish.
- Knowledge on the safe use of knives and other cutting equipment.
- Ability to weigh and calculate.
- Ability to calculate prices and give change.

**What personal qualities/attributes do I need to be a butcher/fishmonger?**

- An interest in serving people.
- An interest in business.
- High standards of personal hygiene.
- Ability to work quickly and with precision.

**What are the education requirements to become a butcher/fishmonger?**

There are no formal education requirements to become a butcher/ fishmonger, apart from basic literacy and numeracy skills. The necessary knowledge and skills can be acquired through on the job experience.

**Can I study in Bhutan to be a butcher/fishmonger?**

There are no training courses for butcher/ fishmonger but you can learn under the supervision of an experienced butcher.

**What are the employment prospects for a butcher/fishmonger in Bhutan?**

There are good employment prospects for butchers in Bhutan, including opportunities for self employment after gaining sufficient experience and having access to sufficient finance to open a shop.

7.4.4 Baker

**Title: BAKER**

**Description:** A baker makes bread in various forms such as loaves and rolls using flour as the main ingredient. (A pastry cook makes cakes and

pastries also using flour as the main ingredient).

### **Alternative and Related Titles: CONFECTIONER/COOK**

#### **What does a baker do?**

- Makes bread and bread products using either manual means or mechanical equipment.
- Makes cakes, biscuits, pastries and pies.
- Displays bread and pastry products for sale.
- Makes confectionery from mixtures of sugar, chocolate and other ingredients.
- Advises customers on the contents of various products for sale.
- Serves customers and receives payment.
- Supervises the work of subordinate staff.

#### **What are the working conditions for a baker?**

A baker may be either an employee or a self-employed person. A baker employed by an enterprise receives a wage and benefits similar to other skilled employees in the private sector. A self-employed person can earn considerably more but also runs the risk of business failure. Bakers typically wear a uniform provided by the employer. The hours are regular; bakers are required to work during the night to ensure their products are fresh for the next day's sales. A self-employed baker normally works very long hours.

#### **What is the working environment like?**

A baker operates in an environment that is partly backing house and partly shop, characterized by loaves, cakes, pastries, biscuits and other food products (sometimes including confectionery). At certain times this can be a hectic environment with many customers in the shop at any one time. The baking house environment includes ovens for cooking and can be very hot. A baker spends a lot of time standing which can cause tiredness and fatigue. Some bakers after working in the backing house then serve customers in the shop. The environment requires high standards of cleanliness.

#### **What knowledge and skills do I need to be a baker?**

- Good communication and interpersonal skills.
- Ability to make dough and shape it into loaves and other products.

- Knowledge of bread and pastry making.
- Ability to calculate prices and give change.
- Knowledge of ovens and cooking techniques.
- Knowledge of health standards.

**What personal qualities/attributes do I need to be a baker?**

- An interest in serving people.
- An interest in business.
- An interest in baking and bread and pastry products.
- High standards of personal hygiene.
- Reliability and a concern for consistent quality standards.

**What are the education requirements to become a baker?**

There are no formal education requirements to become a baker. The necessary knowledge and skills can be acquired through on the job experience.

**Can I study in Bhutan to be a baker?**

Private training providers offer courses in Bhutan that enable you to learn to become a baker or pastry cook. You can also learn on the job under the supervision of an experienced baker.

**What are the employment prospects for baker in Bhutan?**

There are good employment prospects for bakers and pastry cooks in Bhutan. More and different bread and pastry products are being produced to meet the demands of consumers and further demands will be generated by a larger tourist industry

*DUNGKAR*



*Dungkar (white conch) which coils to the right symbolises the deep, far-reaching and melodious sound of the Dharma teachings, which being appropriate to different natures, predispositions and aspirations of disciples, awakens them from the deep slumber of ignorance and urges them to accomplish their own and others' welfare.*

# **Plant and Machine Operators and Assemblers**

- 8. **Plant and machine operators and assemblers**
  - 8.1. **Stationary plants and machine operators**
    - 8.1.1 Textile treatment mechanical operator

**Title:** TEXTILE TREATMENT MACHINE OPERATOR

**Description:** A textile treatment machine operator operates and monitors machines that dye, bleach, wash and otherwise fibres, yarn or cloth, or that dry cleans textile, leather and fur articles.

**Alternative and Related Titles:** LAUNDERER / BLEACHING MACHINE OPERATOR / CLEANING MACHINE OPERATOR / DYEING MACHINE OPERATOR

**What does a textile treatment machine operator do?**

- Operates and monitors machines that treat textile products to make them lighter in color.
- Operates and monitors machines to give textile products specific colors.
- Operates and monitors machines that wash or dry clean textile, fur and leather products to remove dirt, impurities, excess chemicals, or natural gum.
- Operates and monitors machines that shrink cloth or strengthen cloth by interlocking fibres.
- Operates and monitors machines that impregnate textiles with chemicals to make them water proof or stain resistant.
- Operates and monitors machines that treat fabrics to give them body and weight, textiles.
- Observes carefully to ensure that textile treatment machines produce products of the required quality.
- Reports problems with machine operations to supervisors.
- Undertakes basic maintenance and cleaning of machines.

**What are the working conditions for a textile treatment machine operator?**

A textile treatment machine operator normally works in the private sector for a company that produces cloth for use in the garment and textile products industry. Textile treatment machine operators, unlike people dyeing cloth by traditional means, do not require high levels of skill and thus do not command high wages. The hours of work are regular but overtime work is



often required to meet rush orders or in periods of high demand.

**What is the working environment like?**

A textile treatment machine operator works indoors in a factory environment that often involves exposure to chemical fumes. The work is repetitive and monotonous. A textile treatment machine operator must be aware of the dangers associated with using machinery and equipment and should be trained in its safe use. The work may involve standing for long periods, leading to tiredness and fatigue. The exposure to chemical fumes can be harmful to health after long periods of exposure, thereby requiring that every effort be made to minimize the danger and ensure that workers wear protective masks.

**What knowledge and skills do I need to be a textile treatment machine operator?**

- Good eye hand coordination.
- Good observation skills.
- Knowledge of machine operations.
- Knowledge of safety procedures.
- Basic reading skills and the ability to follow instructions.

**What personal qualities/attributes do I need to be a textile treatment machine operator?**

- Responsibility and reliability, to ensure proper machine operation.
- Good eyesight.
- Willing to undertake repetitive and monotonous work.
- Ability to concentrate for long periods.
- Physical fitness to enable standing for long periods.

**What are the education requirements to become a textile treatment machine operator?**

No formal education is required to become a textile treatment machine operator. The necessary knowledge and skills can be acquired on the job.

**Can I study in Bhutan to be a textile treatment machine operator?**

Yes, you can learn to be a textile treatment machine operator through practical training on the job, under the supervision of an experienced operator.

## **What are the employment prospects for a textile treatment machine operator in Bhutan?**

The special treatment of textiles is usually associated with large scale textile factories and the mass production of garments. Bhutan does not have mass production of textiles and thus there are no opportunities for textile treatment machine operators in textile factories. There are opportunities, however, for special types of treatment to textile such as dry cleaning, stain resistance and waterproofing being undertaken in small business, in which case a machine operator would be required.

### 8.1.2 Stoker operator

#### **Title: STOKER OPERATOR**

**Description:** A stoker operator operates a vehicle called a stoker, which is equipped with a hydraulic system, to push a charged and mixed material towards the electrode.

**Alternative and Related Titles:** DRIVER (A drivers can become a stoker operator and conversely a stoker operator can become a driver).

#### **What does a stoker operator do?**

- Drives the stoker.
- Charges mixed material in the furnace.
- Dresses the charge in the furnace and pushes it towards the electrode.
- Takes out the crust built in the furnace.
- Maintains and carries out minor repairs of the stoker.

#### **What are the working conditions for a stoker operator?**

There are no opportunities for the employment of stokers in the Royal Civil Service. A stoker operator in the corporate and private sector will receive a wage related to the level of experience. The hours of work are regular, although some overtime work may be required.

#### **What is the working environment like?**

A stoker operator mostly works indoors. The working environment is hot, dirty and noisy and generally unpleasant. Like a tapper, a stoker operator also wears protective gear like safety helmet, nose mask, suitable footwear

and goggles.

**What skills do I need to be a stoker operator?**

- Driving skills with valid driving license.
- Able to use and handle furnace equipment.
- Knowledge of electrode position.
- Able to maintain and carry out minor repairs of tools and vehicle or vehicle parts.
- Able to read and understand written instructions.
- Able to work independently.
- Practical problem-solving skills.

**What personal qualities/attributes do I need to be a stoker operator?**

- Physically fit.
- Hardworking.
- Well-behaved and disciplined

**What are the education requirements to become a stoker operator?**

You should at least have a primary level education or be a qualified motor vehicle driver. A stoker operator's work requires special on-the-job training for about six months.

**Can I study to become a stoker operator in Bhutan?**

Yes, recruiting agencies will train you on the job. You can learn under the supervision of an experienced stoker operator.

**What are the employment prospects for stoker operators in Bhutan?**

Stoker operators are employed by ferro-silicon and calcium carbide plants. As the number of such plants is limited in Bhutan, employment opportunities for a stoker are limited. Stoker operators are primarily drivers, and it should also be possible for them to find work as drivers in either private or government organizations.

8.1.3 Agriculture and forestry machine operator

**Title: AGRICULTURE & FORESTRY MACHINE OPERATOR**

**Description:** An agricultural and forestry machine operator drives, operates and monitors different types of motorized, mobile machinery or

equipment used in farming for forestry operations.

**Alternative and Related Titles: TARCTOR DRIVER/HAVESTER OPERATOR/SAWYER**

**What does an agriculture and forestry machine operator do?**

- Drives and operates tractors
- Drives and operates tractor propelled equipment for ploughing, planting, harvesting and bailing.
- Drives and operates self-propelled equipment for ploughing, planting, harvesting and bailing.
- Drives and operates tractor propelled forestry equipment for clearing, planting, harvesting and carrying timber.
- Drives self-propelled forestry machinery for clearing, planting, harvesting and carrying timber.
- Operates chain saws.
- Undertakes basic maintenance and cleaning of machinery.

**What are the working conditions for an agriculture and forestry machine operator?**

Some machine operators are self-employed and the wages and benefits they receive are related to their abilities and skills to operate a successful business. Such operators working for the Royal Civil Service would normally be employed as support personnel with salary and benefits related to the level of skill required. The hours of work for a self-employed farmer are often long, depending on the season. Hours of work for operators engaged as employees are standard.

**What is the working environment like?**

Agriculture and forestry machine operators work outdoors, often spending long hours in a sitting position as they drive and operate the equipment. The environment can be hot, cold, wet and dusty depending on the actual workplace. The environment can also be noisy (e.g. chain saw) and requires that protective equipment be worn by operators. Agriculture and forestry machinery, including tractors, is potentially dangerous and accidents can occur if operators do not carefully follow safe operating procedures.

### **What knowledge and skills do I need to be an agriculture and forestry machine operator?**

- Good observation skills
- Good eyesight
- Knowledge of machinery and basic maintenance
- Ability to work with precision and accuracy.
- Ability to drive a motorized vehicle and possession of the necessary license

### **What personal qualities /attributes do I need to be an agricultures and forestry machine operator?**

- Ability to concentrate for long periods
  - Willingness to engage in work that is sometimes repetitive and monotonous.
  - Responsibility
  - A high awareness of the importance of safety in the operation of machinery.

### **What are the education requirements to become agriculture and forestry machine operator?**

No formal education requirements apply to a career as an agriculture and forestry machine operator. The main requirement is an appropriate driver's license if the equipment is motorized. The skills required for the operation of a particular piece of equipment can be obtained on the job under the supervision of an experienced operator.

### **Can I study in Bhutan to become an agriculture and forestry machine operator?**

Yes, you can obtain the required driving license from agriculture machine centre, paro and then learn to operate individual items of equipment through on the job training. Such courses are organized through Dzongkhags and are available through the country.

### **What are the employment prospects for an agriculture and forestry machine operator in Bhutan?**

Bhutan's agricultural and forestry operations are becoming increasingly mechanized and it is expected this will continue. More and more use will be made of mechanized equipment in an effort to improve operational efficiency.

This will require that more self-employed as well as employment persons are able to become machine operators.

#### 8.1.4 Image or sound recording operator

**Title: IMAGE/SOUND RECORDING OPERATOR**

**Description:** An image recording operator is commonly called a cameraman in Bhutan. An image-recording operator operates video and TV picture cameras and other equipment to record news, events, films, or TV programmes, and to edit images and sounds.

**Alternative and Related Titles: CAMERAMAN / SOUND RECORDING OPERATOR / SOUNDMAN**

(Sound recording operators or soundmen operate equipment to record, mix, amplify or reproduce sound.)

**What does an image recording operator do?**

- Selects and tests cameras and associated equipment.
- Sets up equipment in studios or on location, including lights.
- Discusses with director lenses to be used and camera angles.
- Views scenes through view finders and records scenes.
- Moves cameras and adjust controls to follow the action.
- Consults with light or sound technicians to obtain required results.
- Applies the knowledge of principles and practice of image and sound recording and editing to identify and solve problems that arise in the course of image nad sound recording work.
- Supervises assistants during the production phase.

**What are the working conditions for an image recording operator?**

An image recording operator is employed in the corporate or private sector. Good image recording operators are much in demand today, especially in the emerging private audio visual industry.

**What is the working environment like?**

Image recording operators work indoors as well as outdoors. They work as part of a team and are often required to work long, irregular hours, including nights and weekends. They may need to travel to remote locations, sometimes

carrying equipment.

**What knowledge and skills do I need to be an image recording operator?**

- Aptitude for using electronic equipment.
- Physical ability and good eyesight.
- Creative and technical skills.
- Knowledge of the operation of modern recording equipment.
- Able to accept and efficiently execute direction.
- Able to work under pressure.
- Good problem-solving skills.
- Able to work as part of a team.

**What personal qualities/attributes do I need to be an image recording operator?**

- Interest in visual imagery.
- Interest in electronics.
- Patience and dedication.
- Responsibility and reliability.

**What are the education requirements to become an image recording operator?**

You should have completed higher secondary school. Completion of a technical program in broadcasting or audio-visual technology is an ideal entry to a career as an image recording operator.

**Can I study to become an image recording operator in Bhutan?**

Recruiting agencies like the BBSC and private training provider provides basic in-house training. For professional training or studies you will have to go outside the country.

**What are the employment prospects for image recording operators in Bhutan?**

Image recording operators are employed by the BBSC, audio-visual units in government ministries and departments, and private production houses and film companies. After gaining the necessary experience you can be self-employed as an image recording operator.

## 8.1.5 Broadcasting equipment operator

### **Title: BROADCASTING EQUIPMENT OPERATOR**

**Description:** A broadcasting and telecommunications equipment technician controls the technical functioning of equipment for transmitting radio and television broadcasts of pre-recorded as well as live images and sounds.

**Alternative and Related Titles: RADIO OPERATOR/TRANSMITTING EQUIPMENT OPERATOR/TELECOMMUNICATIONS EQUIPMENT OPERATOR**

### **What does a broadcasting equipment operator do?**

- Controls and operates transmitting and broadcasting systems and satellite systems for radio and TV programs.
- Controls and operates radio communication systems, satellite services and multiplex systems on land, sea and in aircraft.
- Controls and operates cinema projection equipment.
- Applies knowledge of principles and practice of broadcasting, telecommunication terminals, and transmission systems to identify and solve problems arising in the course of work.
- Undertakes basic maintenance of equipment.
- Keeps written records and log books of operations.
- Supervises the work of subordinate staff.

### **What are the working conditions for a broadcasting equipment operator?**

A broadcasting equipment operator works for the corporate sector as a technician and receives a salary and benefits similar to other technicians in the corporate sector and in the Royal Civil Service. The hours of work can be irregular including evening and weekend work.

### **What is the working environment like?**

A broadcasting equipment operator works both indoors and outdoors. Outdoor work may involve travel to remote locations.

### **What knowledge and skills do I need to be a broadcasting equipment operator?**

- Able to work as part of a team.



- Knowledge of the operations of modern broadcasting equipment.
- Good problem solving skills.
- Ability to use hand tools.

**What personal qualities/attributes do I need to be a broadcasting equipment operator?**

- An interest in broadcasting.
- Dedication.
- Reliability and responsibility.
- Punctuality.

**What are the education requirements to become a broadcasting equipment operator?**

There are no formal education requirements to become a broadcasting equipment operator but increasingly persons interested in this career undertake special training after Class 12.

**Can I study in Bhutan to become a broadcasting equipment operator?**

Yes, you can learn on the job in an in-service training program provided by BBSC and private training providers.

**What are the employment prospects for a broadcasting equipment operator in Bhutan?**

Employment opportunities in broadcasting equipment operation are largely confined to BBSC and audio visual production houses.

8.1.6 Medical equipment operator

**Title: MEDICAL EQUIPMENT OPERATOR**

**Description:** A medical equipment operator controls and operates technical equipment used to diagnose or treat illnesses and medical disorders.

**Alternative and Related Titles: MEDICAL TECHNICIAN**

**What does a medical equipment operator do?**

- Controls and operates technical equipment to diagnose illnesses and disorders of the nervous system and organs.
- Controls and operates technical equipment used in radiography

or anaesthetics.

- Applies knowledge of technical equipment and some principles and practice of medicine to identify and solve problems.
- Undertake basic maintenance of equipment.
- Supervise the work of subordinate staff.

### **What are the working conditions for a medical equipment operator?**

A medical equipment operator in the Royal Civil Service normally will be employed as a technician. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. The hours of work are irregular and are required to respond to the needs of patients.

### **What is the working environment like?**

A hospital working environment is characterized by cleanliness and organization and a medical equipment operator must be able to become part of this environment. A medical equipment operator works indoors, assisting doctors and nurses with various items of medical equipment and its proper operation. The operator does not have direct contact with patients but may feel the anxiety and stress often experienced in an environment where people are sick and need care and attention.

### **What knowledge and skills do I need to be a medical equipment operator?**

- Good communication skills.
- Good eye hand coordination.
- Good observation skills.
- Knowledge of the operating procedures for each item of medical equipment.
- Ability to follow instructions.

### **What personal qualities/attributes do I need to be a medical equipment operator?**

- An interest in machinery and instruments.
- Reliability and responsibility.
- Good eyesight.
- Accuracy and precision.

**What are the education requirements to become a medical equipment operator?**

A career as a medical equipment operator normally requires a person to have a certificate or diploma for medical technicians and equipment operators. A reasonable level of reading and writing ability is required.

**Can I study in Bhutan to become a medical equipment operator?**

Yes, you can learn the basic aspects of medical equipment operation at the Royal Institute of Health and Science, under the responsibility of the Ministry of Health. You would need to complete the two-year Technicians' Certificate Course. Higher level studies would have to be undertaken overseas.

**What are the employment prospects for a medical equipment operator in Bhutan?**

In the medical world more and more use is being made of mechanical equipment and instruments and thus there will be an increasing need for medical equipment operators. The only opportunities in this career at present are with the Royal Civil Service and there are no prospects for self-employment.

8.1.7 Mining machinery operator

**Title: MINING MACHINERY OPERATOR**

**Description:** A mining machine operator operates and monitors machinery and equipment that cuts channels in a mine or quarry workface or drills holes for blasting.

**Alternative and Related Titles: MINER/QUARRIER/SHOT FIRER/MINERAL ORE WORKER** (A mineral ore worker operates and monitors equipment that crushes and breaks lumps or minerals and stones to a required size, that washes mineral ores to remove waste material).

**What does a mining machine operator do?**

- Operates machinery for cutting channels in a mine or quarry workface.
- Drills blasting holes in a mine or quarry.
- Operates and monitors the operation of conveyor belt machinery.

### **What are the working conditions for a mining machine operator?**

A mining machine operator receives a wage and benefits that relate to the relatively unskilled nature of the work involved. The hours of work may be irregular depending on production requirements.

### **What is the working environment like?**

A mining machine operator may work either indoors or outdoors, with the operator standing for long periods at a time. This can produce muscle strain and tiredness. The environment may be hot, cold or wet depending on the actual work site and seasonal conditions. Mining machine operators almost always work in an environment that is noisy and dusty which can affect a worker's health after long periods of exposure. It is necessary that operators be provided with appropriate protective clothing and dangerous and the risk of accidents must be considered.

### **What knowledge and skills do I need to be a mining machine operator?**

- Good observation skills.
- Accuracy and precision.
- Knowledge and machinery operations.
- Knowledge of basic safety procedures.

### **What personal qualities/attributes do I need to be a mining machine operator?**

- Responsible attitude to work.
- Physical fitness.
- Willingness to work in a demanding and sometimes unhealthy working environment.
- Willingness to undertake work that is repetitive and monotonous.
- An awareness of the importance of safety in all aspects of machine operation.

### **What are the education requirements to become a mining machine operator?**

There are no formal education requirements for employment as a mining machine operator. The skills required can be acquired through on the job training and practical experience.

### **Can I study in Bhutan to be a mining machine operator?**

Yes. You can learn to be a mining machine operator through on the job

training.

### **What are the employment prospects for a mining machine operator in Bhutan?**

Bhutan's mining industry remains undeveloped and most employment opportunities for mining machine operators are expected to come from the quarrying sector. Increasingly, quarries will mechanize their activities in order to improve overall efficiency, and the progressive replacement of manual with mechanized processes will increase the employment opportunities for mining machine operators.

#### 8.1.8 Wood processing machine operator

##### **Title: WOOD-PROCESSING MACHINE OPERATOR**

**Description:** a wood processing machine operator operates and monitors machinery and equipment for sawing wood, cutting veneer and making plywood, and otherwise preparing wood for further use.

**Alternative and Related Titles:** SAWYER / PLYWOOD PRESS OPERATOR / WOOD PRODUCTS MACHINE WORKER

##### **What does a wood processing machine operator do?**

- Operates and monitors feed-in-equipment for breaking down logs into planks.
- Operates and monitors various types of saws for cutting logs and removing rough edges from sawn timber.
- Operates and monitors machines that cut veneer.
- Operates and monitors plywood laying and pressing machines.
- Operates and monitors machines to shape, bore, plane, turn and carve wood.
- Supervises the work of other wood machine workers.

##### **What are the working conditions for a wood processing machine operation?**

Wood processing machine operators receive wages according to their level of experience. As the work is mainly unskilled the wages paid are relatively low. The hours of work are regular although overtime work may be required if there is an increase in demand for wood products.

**What is the working environment like?**

The working environment for a wood processing machine operator is noisy and with high dust levels that can cause irritations to the throat and lungs. Operators should wear protective clothing and equipment to minimize the risk of hazards related to noise and dust. Sawing and cutting machinery is dangerous if not operated in strict accordance with safety procedures. Every precaution should be taken to ensure that safety guards are in place and that operators are trained on how to operate machines safely.

**What knowledge and skills do I need to be a wood processing machine operator?**

- Good eye hand coordination.
- Good observation skills.
- Knowledge of machine operations.
- Knowledge of safety procedures.

**What personal qualities/attributes do I need to be a wood processing machine operator?**

- High responsibility.
- Physical fitness, particularly for saw milling work.
- Good eyesight.
- An interest in timber and wood products.
- Accuracy and precision.

**What are the education requirements to become a wood processing machine operator?**

No formal education requirements are necessary to become a wood processing machine operator. The necessary knowledge and skills can be acquired through on the job training and practical experience. It is possible, however, to undertake a certificate course in wood processing machine operations that requires a minimum entry level of higher secondary school.

**Can I study in Bhutan to be a wood processing machine operator?**

Yes. You can study for a certificate in Furniture Making and Machine operation at the Wood Craft Centre in Thimphu.

### **What are the employment prospects for a wood processing machine operator in Bhutan?**

Bhutan's timber products industry can be expected to grow, consistent with over-riding objective of ensuring that the nation's natural timber resources are properly protected. An increase in the demand for wooden furniture manufactured in Bhutan will see an increase in employment opportunities for wood processing machinery operators.

#### 8.1.9 Wood working machine setter

##### **Title: WOODWORKING MACHINE SETTER**

**Description:** A wood working machine setter sets machines to enable them to produce products of a standard nature to precise standards including machines concerned with sawing, shaping, planing, boring, turning and woodcarving. The aim is to produce quality products of a uniform standard. In some cases, a machine setter may also operate particular woodworking machines.

##### **Alternative and Related Titles: WOOD TURNER / WOODWORKING MACHINE OPERATOR**

##### **What does a woodworking machine setter do?**

- Sets various kinds of machines for operation by other less skilled workers.
- Checks on the operation of machines to ensure that settings produce products of the required quality and standard.
- Makes adjustments to machine settings as required.
- Sometimes operates woodworking machines.
- Undertakes basic maintenance of machinery.

##### **What are the working conditions for a woodworking machine setter?**

A woodworking machine setter normally works in the private sector as an employee of an enterprise producing precision wood and furniture products. Wages and benefits are related to the level of skill and experience. The hours of work are normal with limited requirements for overtime and after hours work.

### **What is the working environment like?**

A wood working machine setter works in a production workshop in an environment characterized by machinery, timber, timber products, and workers. The environment can be noisy and dusty, highlighting the need for steps to be taken to protect workers, including machine setters, from these hazards.

### **What knowledge and skills do I need to be a woodworking machine setter?**

- Good knowledge of woodworking machinery.
- Knowledge of final products to be produced
- Ability to calculate.
- Ability to read diagrams and follow instructions.
- Good observation skills.

### **What personal qualities/attributes do I need to be a woodworking machine setter?**

- An interest in timber and timber products.
- An interest in machinery.
- High levels of precision and accuracy.
- Good eyesight.
- Responsibility and reliability.

### **What are the education requirements to become a woodworking machine setter?**

No formal education is required to become a woodworking machine setter, other than the ability to read, write and calculate. The knowledge and skills required can be acquired through practical experience in on the job situations.

### **Can I study in Bhutan to become a woodworking machine operator?**

Yes, you can study furniture making and woodworking machine operation at the Wood Craft Centre in Thimphu. This course includes aspects of machine setting and machine operations.

### **What are the employment prospects for a woodworking machine operator in Bhutan?**

Bhutan's timber products industry has good growth potential and employment prospects for woodworking machine setters and operators, particularly in the private sector, are expected to grow.



### 8.1.10 Paper making machine operator

**Title: PAPER MAKING MACHINE OPERATOR**

**Description:** A paper making machine operator operates and monitors machinery and equipment that makes paper and paper products from pulp raw materials.

**Alternative and Related Titles: PAPER MAKER** (A machine operator is different from a traditional paper maker and requires considerably lower level of skill).

**What does a paper making machine operator do?**

- Operates and monitors papermaking machinery and equipment that transforms wet pulp into paper.
- Operates specialized equipment to impart gloss and special finishes to paper surfaces.
- Operates and monitors equipment and machinery to glaze or impregnate paper with coating mixtures.

**What are the working conditions for a paper making machine operator.**

The wages for a paper making machine operator are relatively low, reflecting the low level of skill required to this work. The working hours are regular although some overtime work may be required in periods of high demand for the finished products.

**What is the working environment like?**

A paper making machine operator works indoors in a factory environment attending to the operation of a machine. The work is repetitive and monotonous, and the environment can be noisy. Machinery can cause accidents if not operated strictly in accordance with safety procedures and thus a paper making machine operator must be conscious of the potential dangers of machine operation.

**What knowledge and skills do I need to be a paper making machine operator?**

- Good observation skills.
- Good eye hand coordination.
- Knowledge of machine operations.

- Knowledge of safety procedures.

**What personal qualities/attributes do I need to be a paper making machine operator?**

- High responsibility to ensure safe operation of machinery.
- Good eyesight.
- Willingness to engage in work that is monotonous and repetitive.
- Ability to concentrate for long periods.

**What are the education requirements to become a paper making machine operator?**

There are no formal education requirements to become a paper making machine operator. The necessary knowledge and skills can be acquired on the job through practical experience.

**Can I study in Bhutan to be a paper making machine operator?**

Yes, you can learn on the job under the supervision of an experienced machine operator.

**What are the employment prospects for a paper making machine operator in Bhutan?**

Bhutan imports of its paper products, except those produced by traditional paper makers. As Bhutan’s market is very small, the production of paper products using machinery will depend on whether Bhutan would be able to export its products to other countries. Until Bhutan has developed a market for such products the employment opportunities for paper making machine operators will be small.

8.1.11 Cement production machine operator

**Title: CEMENT PRODUCTS MACHINE OPERATOR**

**Description:** A cement products machine operator operates and monitors machines and equipment for the production of concrete and concrete products.

**Alternative and Related Titles: CEMENT PRODUCTS WORKER/ CONCRETE PRODUCTS WORKER**

**What does a cement products machine operator do?**

- Operates and monitors machines, both small and large, that mix sand gravel/stones, cement and water to make concrete (e.g. cement mixers on building sites).
- Operates and monitors moulding and cutting machinery for the manufacture of pre-cast concrete products including paving stones, trench liners, fencing posts, partition slabs, and various building components.
- Undertakes basic cleaning and maintenance of machinery.
- Checks finished products to ensure they meet quality standards.
- Reports defects in machine operations to a supervisor.

**What are the working conditions for a cement products machine operator?**

A cement products machine operator is typically found in the building industry operating a cement mixer on a construction site. The wages for such a machine operator are relatively low, reflecting the relatively unskilled nature of the work involved. The hours of work can be irregular, often involving evening and weekend work.

**What is the working environment like?**

The production of concrete in a mixer, or the manufacture of pre-cast concrete products involves outdoor work in an environment that is often noisy and with high levels of cement dust. The work is repetitive in nature. The operation of the machinery involves long periods of standing that can lead to tiredness and fatigue.

**What knowledge and skills do I need to be a cement products machine operator?**

- Good observation skills.
- Knowledge of concrete and concrete products.
- Knowledge of the safe use of machinery.
- Ability to lead and motivate others (e.g. a cement mixer operator needs to encourage a team of laborers to work quickly and for long periods).
- Basic reading skills and the ability to follow instructions.

**What personal qualities/attributes do I need to be a cement products machine operator?**

- Responsibility and reliability to ensure the correct operation of machinery.
- Good eyesight.
- Willingness to undertake repetitive and monotonous work.
- Ability to concentrate for long periods.
- Reasonable physical fitness.
- Willingness to work as a member of a team.

**What are the education requirements to become a cement products machine operator?**

A cement products machine operator does not require any formal education. The necessary knowledge and skills can be acquired through on the job experience.

**Can I study in Bhutan to be a cement products machine operator?**

Yes, you can learn to be a cement products machine operator through on the job training under the supervision of an experienced operator.

**What are the employment prospects for a cement products machine operator in Bhutan?**

Bhutan's on-going development will require a wide range of cement products thereby providing increased employment opportunities for cement products machine operators, particularly on building sites where concrete mixing machines are rapidly replacing slower and less efficient manual production methods.

8.1.12 Metal finishing machine operator

**Title: METAL FINISHING MACHINE OPERATOR**

**Description:** A metal finishing machine operator operates and monitors equipment that finishes, plates and coats metal articles and parts, in order to give them resistance against corrosion and abrasion, or to improve appearance.

**Alternative and Related Titles: PLATING MACHINE OPERATOR/  
COATING MACHINE OPERATOR**

**What does a metal finishing machine operator do?**

- Operates equipment that cleans metal articles in preparation for electroplating, galvanizing or enamellings.
- Operates electroplating equipment.
- Operates hot-dip equipment used to coat iron and steel products.
- Operates machines that automatically coat wire with non-ferrous metal.
- Operates equipment that sprays molten metal or other substances on metal products to provide a decorative or protective coating.
- Operates equipment used to impart a rust resistant finish to metal articles.
- Undertakes basic cleaning and maintenance of machinery.
- Checks finished products to ensure they meet quality standards.
- Reports problems on machine operations to a supervisor.

**What are the working conditions for a metal finishing machine operator?**

A metal finishing worker is normally employed in the private sector or a large corporation and receives a salary and benefits related to the relatively unskilled nature of the work. In this type of work the worker operates machinery that works semi-automatically and thus is not required to apply high-level skills to produce the finished products. The working hours are regular although some over time work may be required.

**What is the working environment like?**

A metal finishing machine operator works indoors in a factory environment that is often noisy and dirty, depending on the nature of the products being produced. The work may be repetitive and monotonous. A machine operator must be aware of the dangers associated with using machinery and equipment and should be trained in the safe use of all machinery and equipment.

**What knowledge and skills do I need to be a cement products machine operator?**

- Good eye hand coordination.
- Good observation skills.
- Knowledge of machine operations.
- Knowledge of safety procedures.
- Basic reading skills and the ability to follow instructions.

**What personal qualities/attributes do I need to be a metal finishing machine operator?**

- Responsibility and reliability, to ensure proper machine operation.
- Good eyesight.
- Willingness to undertake repetitive and monotonous work.
- Ability to concentrate for long periods.
- Physical fitness to enable standing for long periods.

**What are the education requirements to become a metal finishing operator?**

No formal education is required to become a metal finishing machine operator. The necessary knowledge and skills can be acquired on the job.

**Can I study in Bhutan to be a metal finishing operator?**

Yes, you can learn to be a metal finishing machine operator through practical training on the job, under the supervision of an experienced machine operator.

**What are the employment prospects for a metal finishing machine operator in Bhutan?**

At present Bhutan's market for metal-finished products is small and thus there are relatively few opportunities for machine operators in this field. Additional opportunities in metal finishing will depend on the future development of Bhutan's manufacturing industry and whether it is able to produce products for export.

8.1.13 Printing machine operator

**Title: PRINTING MACHINE OPERATOR**

**Description:** A printing machine operator operates and monitors various types of machinery that print on paper and other materials. A paper products machine operator operates machine that produce boxes, envelopes, bags and other products from paper, paperboard and cardboard.

**Alternative and Related Titles: PRINTER/TRADITIONAL PAPER MAKER/BOOKBINDER** (A bookbinder operates and monitors machines that bind and emboss books. A traditional paper maker uses simple methods with simple equipment. A paper machine operator uses semi-automatic machinery to produce large quantities under mass production methods).

### **What does a paper/printing machine operator do?**

- Operates and monitors machines that glue paper to cardboard and cut it to the required length.
- Operates and monitors machines that crease cardboard or paperboard to form box shapes.
- Operates and monitors pressing machines that form drinking cups and other containers from paper, paperboard or cardboard.
- Operates and monitors machines that cut, fold and glue paper to make envelopes and paper bags.
- Operates and monitors a range of printing machines including cylinder, rotary, offset, lithographic, rotogravure, and wall-paper printing presses.
- Checks on finished products to ensure they meet quality standards.
- Undertakes basic cleaning and maintenance of machinery.
- Reports defects in machine operation to a supervisor.

### **What are the working conditions for a printing machine operator?**

A printing machine operator may work in the Royal Civil Service of the corporate and private sectors. A machine operator receives a relatively low wage because of the relatively low level of skill required. The hours of work are regular except in cases where specific time deadlines apply and overtime work is required.

### **What is the working environment like?**

A printing machine operator works indoors in a factory environment that is often noisy and dusty, depending on the nature of the product being produced. The work may be repetitive and monotonous. A printing machine operator must be aware of the dangers associated with using machinery and equipment and should be trained in its safe use. The work may involve standing for long periods, leading to tiredness and fatigue.

### **What skills do I need to be a printing machine operator?**

- Good eye hand coordination.
- Good observation skills.
- Knowledge of machine operations.
- Knowledge of safety procedures.
- Basic reading skills and the ability to follow instructions.

**What personal qualities/attributes do I need to be a printing machine operator?**

- Responsibility and reliability, to ensure proper machine operation.
- Good eyesight.
- Willing to undertake repetitive and monotonous work.
- Ability to concentrate for long periods.
- Physical fitness to enable standing for long period.

**What are the education requirements to become a printing machine operator?**

No formal education is required to become a printing machine operator. The necessary knowledge and skills can be acquired on the job.

**Can I study in Bhutan to be a printing machine operator?**

Yes, you can learn to be a printing machine operator through practical training on the job, under the supervision of an experienced operator.

**What are the employment prospects for a printing machine operator in Bhutan?**

The employment prospects for printing machine operator will depend on the expansion of printing firm, and the demand for other printed materials. There will always be a need for print machine operators but as the machinery becomes more and more sophisticated and controlled by computers the number of basic operator is not expected to increase greatly. It is likely however those better qualified persons will find opportunities in the printing industry.

8.1.14 Fiber machine operator

**Title: FIBRE MACHINE OPERATOR**

**Description:** A fibre machine operator operates and monitors machinery that prepares fibres and spins, twists and winds yarn and thread.

**Alternative and Related Titles:** **TRADITIONAL SPINNER** (A traditional spinner uses a simple spinning wheel and manual methods to produce small quantities of yarn. A fibre machine operator uses semi automatic machinery to produce large quantities of yarn as part of a mass production process).



**What does a fibre machine operator do?**

- Operates and monitors machines that combine textile fibres into uniform blends.
- Operates and monitors machines that clean and fluff textile fibres, comb them into silvers, and combine silvers into strands of uniform quality and weight.
- Operates and monitors machines that spin thread and yarn.
- Operates and monitors machines that wind thread onto bobbins.
- Observes carefully to ensure that machines produce fibre products of the required quality.
- Reports problems with machine operations to supervisors.
- Undertakes basic maintenance and cleaning of machines.

**What are the working conditions for a fibre machine operator?**

A fibre machine operator normally works in the private sector for a company that produces cloth for use in the garment and textile products industry. Fibre machine operators do not require high levels of skill and thus do not command high wages. The hours of work are regular but overtime work is often required to meet rush orders or in periods of high demand.

**What is the working environment like?**

A fibre machine operator works indoors in a factory environment that is often noisy and dusty. Normally, the work is repetitive and monotonous. A fibre machine operator must be aware of the danger associated with using machinery and equipment and should be trained in its safe use. The work may involve standing for long periods, leading to tiredness and fatigue. The dust created when producing fibres can be harmful to health after long periods of exposure, thereby requiring that every effort be made to minimize dust levels and ensure that workers wear protective masks.

**What knowledge and skills do I need to be a fibre machine operator?**

- Good eye hand coordination.
- Good observation skills.
- Knowledge of machine operations.
- Knowledge of safety procedures.
- Basic reading skills and the ability to follow instructions.

**What personal qualities/attributes do I need to be a fibre machine operator?**

- Responsibility and reliability, to ensure proper machine operation.
- Good eyesight.
- Willing to undertake repetitive and monotonous work.
- Ability to concentrate for long periods.
- Physical fitness to enable standing for long periods.

**What are the education requirements to become a fibre machine operator?**

No formal education is required to become a fibre machine operator. The necessary knowledge and skills can be acquired on the job.

**Can I study in Bhutan to be a fibre machine operator?**

Yes, you can learn to be a fibre machine operator through practical training on the job, under the supervision of an experienced operator.

**What are the employment prospects for a fibre machine operator in Bhutan?**

At present, fibres in Bhutan are produced by traditional methods that do not require machines. Accordingly there are few opportunities for fibre machine operators and this will remain the case unless Bhutan decides to introduce a modern and mass production approach to the production of cloth and textiles.

### 8.1.15 Tapper

**Title: TAPPER**

**Description:** A tapper's primary responsibility is to drain ferro-silicon formed in the furnace through a tap hole, collect and then to plug the tap hole with clay plugs for next collection or tapping.

**Alternative and Related Titles: DRILL AND MUD GUN OPERATOR**

(Tappers are also referred to by this title because they open the tap hole with a drill and then plug it with a mud gun).

**What does a tapper do?**

- Opens the tap hole.
- Installs ladle under tap hole to collect metal.
- Operates lancing or arcing device.
- Pastes the old tap hole.

- Dresses the runner and makes clay plugs.
- Transfers ladle from tapping area to crane base.
- Pokes rod to drain out slag and makes bed ready for casting.
- Controls the use of consumables' minimize cost.

### **What are the working conditions for a tapper?**

A tapper's job may not seem too exciting for someone who is interested in an office or white-collar occupation but it provides good employment option for those who do not mind physical work and do not have much education. The hours of work are regular although production schedules may require that overtime be worked.

### **What is the working environment like?**

Tappers mostly work outdoors. They use protective safety gear like gloves, safety helmets, nose mask, apron and safety goggles.

### **What knowledge and skills to I need to be a tapper?**

- Knowledge about tap hole condition and tool requirement.
- Able to use hand and power tools and machines.
- Able to handle shifts individually.
- Leadership skills.
- Able to work with a team.
- Manpower management skills.
- Able to read and understand written instructions.
- Practical problem-solving skills.

### **What personal qualities/attributes do I need to become a tapper?**

- Physically fit.
- Hardworking.
- Well behaved and disciplined.

### **What are the education requirements to become a tapper?**

You should at least have primary level education. The occupation requires special training for about a year.

### **Can I study to become a tapper in Bhutan?**

Yes, recruiting agencies like BFAL and BCCL will provide on the job training.

### **What are the employment prospects for tappers in Bhutan?**

Tappers are employed by ferro-silicon and calcium carbide foundries and industries. Elsewhere tappers may also work in ferro-magnesium, ferro-chrome or steel industries. After some years of experience it is possible for a tapper to be self-employed.

#### 8.1.16 Shot firer

##### **Title: SHOT FIRER**

**Description:** A Shot firer decides the location and force of explosions required to dislodge coal, ores, rock or other solid minerals in mines or quarries, or to clear building sites and similar places.

**Alternative and Related Titles: BLASTER / EXPLOSIVES EXPERT** (An explosive expert is responsible for the production, storage and transport of explosives, ensures that explosives are handled safely, and supervises the destruction and disposal of explosive substances).

##### **What does a shot firer do?**

- Decides on the location of explosions required and gives instructions on holes to be drilled.
- Decides on the force of explosions required to dislodge rocks, materials, or to clear building sites.
- Places the correct quantity of explosives to achieve the explosion required and prepares the blasting site.
- Ensure the strict observance of workplace safety regulations and procedures.

##### **What are the working conditions for a shot firer?**

A shot firer is a skilled worker and receives salary and benefits similar to other skilled workers. The hours of work depend on the production schedules of quarries and mines, and may involve after hours and weekend work.

##### **What is the working environment like?**

A shot firer works outdoors in an environment that may be hot, cold or wet depending on the actual location, and on seasonal factors. A shot firer normally works in an environment where dust levels are high. The supervision of blasting operations involves exposure to high noise levels and this requires

that shot firers take adequate protective measures to minimize the risk of hearing impairment.

**What knowledge and skills do I need to be a shot firer?**

- Good communication skills.
- Knowledge of explosives.
- Good observation skills.
- Knowledge of different rocks and their properties.
- Knowledge of safety requirements in handling explosives and from controlled explosions.

**What personal qualities/attributes do I need to be a shot firer?**

- An interest in explosives.
- An interest in protecting the environment.
- Good judgment.
- Not afraid to be underground or to work in enclosed areas (for shot firers working underground).

**What are the education requirements to become a shot firer?**

There are no formal education requirements to become a shot firer but it is necessary to have a Shot firer's Certificate issued by a competent authority to testify that a person has reached the required standard. Basic literacy and numeracy skills, particularly the ability to calculate, are necessary in order to acquire this certificate.

**Can I study in Bhutan to become a shot firer?**

Yes. It is possible to learn the required knowledge and skills through on the job training under the close supervision of a qualified shot firer. There is no organization in Bhutan that issues a Shot firer's Certificate and thus it is necessary to obtain this from outside the country.

**What are the employment prospects for a shot firer in Bhutan?**

Most employment prospects can be expected to come from the quarrying industry. Once a certificate shot firer gains a reputation for good quality work there are prospects for a shot firer to be self-employed.

## 8.1.17 Loom Operator

### **Title: LOOM OPERATOR**

**Description:** A loom operator operates and monitors machines used to weave plain or figured cloth, tapestry, lace, garments and carpets

**Alternative and Related Titles: WEAVING MACHINE OPERATOR/TRADITIONAL WEAVER** (A traditional weaver uses very simple tools and equipment to produce fabric and garments of individual design and style. A weaving machine operator works with semi-automatic machines designed for mass production).

### **What does a loom operator do?**

- Operates and monitors semi-automatic weaving machines to produce materials and fabrics.
- Observes carefully to ensure the machine is producing fabric of the required quality.
- Reports problems with machine operations to supervisors.
- Undertake basic maintenance and cleaning of machines.

### **What are the working conditions for a loom operator?**

A loom operator normally works in the private company that produces cloth for use in the garment and textile products industry. loom operators, unlike traditional weavers, do not require high levels of skill and thus do not command high wages. The hours of work are regular but overtime work is often required to meet rush orders or in periods of high demand.

### **What is the working environment like?**

A loom operator works indoors in a factory environment that is often noisy and dusty. They work repetitive and monotonous. A loom operator must be aware of the dangers associated with using machinery and equipment and should be trained in its safe use. The work may involve standing for long periods, leading to tiredness and fatigue. The dust created when weaving cloth can be harmful to health after long periods of exposure, thereby requiring that every effort be made to minimize dust levels and ensure that workers wear protective masks.

**What knowledge and skills do I need to be a loom operator?**

- Good eye hand coordination.
- Good observation skills.
- Knowledge of machine procedures.
- Knowledge of safety procedures.
- Basic reading skills and the ability to follow instructions.

**What personal qualities/attributes do I need to be a loom operator?**

- Responsibility and reliability, to ensure proper machine operation.
- Good eyesight.
- Willing to undertake repetitive and monotonous work.
- Ability to concentrate for long periods.
- Physical fitness to enable standing for long periods.

**What are the education requirements to become a loom operator?**

No formal education is required to become a loom operator. The necessary knowledge and skills can be acquired on the job.

**Can I study in Bhutan to be a loom operator?**

Yes, you can learn to be a loom operator through practical training on the job, under the supervision of an experienced operator.

**What are the employment prospects for a loom operator in Bhutan?**

In Bhutan at present cloth is woven using traditional methods that do not require machines. Accordingly, there are few opportunities for loom operators and this will remain the case unless Bhutan decides to introduce a modern and mass production approach to the production of cloth and textiles

### 8.1.18 Sewing machinist

**Title: SEWING MACHINIST**

**Description:** Sewing machinist operate and monitor sewing machines to make textile or leather garments, or embroider ornamental designs on garments and other materials.

**Alternative and Related Titles:** SEWING MACHINE OPERATOR/TAILOR/EMBROIDERER (A traditional tailor or embroiderer uses manual methods

and simple tools to produce relatively small quantities of clothing. A sewing machine operator uses semi-automatic machinery, sometimes computer controlled, for mass production).

### **What does a sewing machine operator do?**

- ⇒ Operates standard single needle sewing machine to make or repair garments, gloves or other products.
- ⇒ Operates specialized multiple needle sewing machine to produce garments and other textile products.
- ⇒ Operates standard or specialized machines to embroider ornamental designs on textiles and other materials.
- ⇒ Observes carefully to ensure that machines are producing garments and other fabrics of the required quality.
- ⇒ Reports problems with machine operations to supervisors.
- ⇒ Undertakes basic maintenance and cleaning of machine.

### **What are the working conditions for a sewing machinist?**

A weaving machine operator normally works in the private sector for a company that produces garments and other textile products. A sewing machinist may also work in smaller tailoring and dressmaking business. A sewing machinist does not require high levels of training and skill and thus do not command high wages. The hours of work are regular but overtime work is often required to meet rush orders or in periods of high demand.

### **What is the working environment like?**

A sewing machine operator works indoors in a factory environment that is often noisy and dusty. The work is repetitive and monotonous. A sewing machinist must be aware of the dangers associated with using a sewing machine, particularly the risk of cut fingers resulting from sharp needles piercing the skin. The work involves sitting for long periods, leading to backaches and fatigue. The dust created when sewing cloth can be harmful to health after long periods of exposure, thereby requiring that every effort be made to minimize dust levels and ensure that workers wear protective masks.

### **What knowledge and skills do I need to be a sewing machinist?**

- Good eye hand coordination.
- Good observation skills.
- Knowledge of machine operations.



- Knowledge of safety procedures.
- Basic reading skills and the ability to follow instructions.

**What personal qualities/attributes do I need to be a sewing machinist?**

- Responsibility and reliability, to ensure proper machine operation.
- Good eyesight.
- Willing to undertake repetitive and monotonous work.
- Ability to concentrate for long periods.
- Willingness to sit for long periods.

**What are the education requirements to become a sewing machinist?**

No formal education is required to become a sewing machinist. The necessary knowledge and skills can be acquired on the job.

**Can I study in Bhutan to be a weaving machine operator?**

Yes, you can learn to be a sewing machinist through practical training on the job, under the supervision of an experienced operator.

**What are the employment prospects for a sewing machinist in Bhutan?**

There are good employment prospects for sewing machinist in small scale tailoring and dressmaking business throughout Bhutan. In Bhutan at present there are no large garment factories similar to those found in other countries where hundreds and even thousands of sewing machinists can be employed in the one factory. Such a development would require Bhutan to become a mass producer of garments or export. There are good prospects for a sewing machinist to be self-employed in the repair of garments or actually producing simple garments and other products after gaining the necessary experience. Self-employment as a sewing machinist is appealing because of the relatively small amount of capital required to start a business.

**8.2. Assemblers**

**8.2.1 Assembly worker**

**Title: ASSEMBLY WORKER**

**Description:** An assembly line worker performs one or two tasks as one small part of a production process where the products being manufactured consist of a number of distinct steps to form the completed product.

## **Alternative and Related Titles: ASSEMBLY LINE WORKER/PROCESS WORKER/AUTOMATED ASSEMBLY LINE WORKER/PACKER**

### **What does an assembly worker do?**

- Assembles the parts of a product according to strictly laid down procedures.
- Operates machinery and equipment that packs and labels products in accordance with strictly laid down procedures.
- Stands or sits in a fixed position to perform required tasks as the product moves along a conveyor system.
- Uses manual processes to assemble product components.
- Uses hand tools (e.g. screwdrivers, soldering irons, pliers) to facilitate the assembly of components.
- Maintains production levels in accordance with strict time limits.

### **What are the working conditions for an assembly worker?**

The wage for an assembly worker is similar to that for other unskilled workers. Wages are sometimes a combination of time rates (rate per hour) and piece rates. The hours of work are regular, although some assembly lines operate for 24 hours per day thereby requiring overtime work.

### **What is the working environment like?**

An assembly line worker works indoors, often standing for long periods at a time. The work is of a repetitive nature and the worker needs to maintain concentration for long periods without making mistakes. The monotonous nature of the work is sometimes addressed by rotating workers from one part of the assembly line to another. The difficulty of concentrating on repetitive tasks for long periods sometimes results in minor hand injuries.

### **What knowledge and skills do I need to be an assembly worker?**

- Good eye hand coordination
- Ability to use simple hand tools
- Manual dexterity, particularly where components to be assembled are small
- Basic reading skills and the ability to follow instructions.

### **What personal qualities/attributes do I need to be an assembly worker?**

- Physical fitness, particularly where the work involves standing

for long periods.

- Ability to concentrate for long periods
- Willingness to do repetitive and monotonous work
- Reliability

### **What are the education requirements to become an assembly worker?**

No specific educational qualification is necessary to be employed as an assembly line worker. The main requirement is to have the required personal qualities and the basic skills to enable the work to be properly performed.

### **Can I study in Bhutan to be an assembly line worker?**

No study is required. An assembly line worker can be trained on-the-job.

### **What are the employment prospects for an assembly line worker in Bhutan?**

Assembly line production methods require large quantities of products to make them economical. The best prospects for assembly line work in Bhutan relate to food and beverage products rather than such things as television sets, electrical goods, vehicles or motor-cycles. As Bhutan's industrial sector grows some employment opportunities for assembly workers will be created. At present, the main opportunities exist in companies producing beverages in large quantities.

## **8.3. Drivers and mobile plant operator**

### **8.3.1 Light vehicle driver**

#### **Title: LIGHT VEHICLE DRIVER**

**Description:** A light vehicle driver drives Vans, cars, pick-ups, or other vehicle (weighing not more than 3 tons) to deliver goods or for personal and official travel.

**Alternative and Related Titles:** CAR DRIVER/HILUX DRIVER/LANDCRUISER DRIVER/DIVER (irrespective of whether one is a light vehicle or a heavy vehicle driver the most common occupation term in Bhutan is "driver")

#### **What does a light vehicle driver do?**

- Transports people and delivers goods.
- Checks vehicle documents and travel permits.

- Assists with loading or unloading when delivering goods.
- Obtains receipts when delivering goods.
- Ensures the vehicle is washed and cleaned on a regular basis.
- Carries out basic periodic maintenance of vehicles.
- Reports vehicle maintenance needs to the supervisor.
- Maintains a log-book.
- Runs errands for bosses or employers.

### **What are the working conditions for a light vehicle driver?**

Drivers led physically active lives and driving is not an occupation for the physically weak. Salaries for light vehicle drivers in the government and most private organizations or businesses being at Nu.3,500 per month. Those working in corporation and international organizations earn much better salaries and daily allowances. A driver may be required to work irregular hours including work at night and at weekends.

### **What is the working environment like?**

Drivers seldom work in offices. They are mostly on the road- either doing short trips or traveling between Dzongkhags or even across the country. Some light vehicles drivers may wear uniform, provided by the employer. The work requires high levels of concentration and attention to road safety procedures. The main risk for a light vehicle driver relate to road accidents due to mechanical failures or carelessness, including the carelessness of other drivers.

### **What knowledge and skills do I need to be a light vehicle driver?**

- Good eyesight and color awareness (where traffic lights are used?)
- Ability to act quickly and correctly in various traffic situations.
- Knowledge of roads and highways throughout the country.
- Knowledge of road laws.
- Knowledge of what to do in case of an accident.
- Basic vehicle maintenance skills.
- Good communication skills and some mathematical ability.
- Good interpersonal skills.
- Ability to pass a driving test and acquire a driver's license.

### **What personal qualities/attributes do I need to be a light vehicle driver?**

- 18 years and above and hold a driving license.

- Interest in people
- Sound character.
- Responsibility and high awareness of the importance of safety

**What are the education requirements to become a light vehicle driver?**

You would generally be expected to complete minimum education background. The Road Safety and Transport Act (1999), however, do not stipulate any educational qualification requirement as long as a driver has a valid driving license. Sufficient education to enable a driver to read and follow instructions is essential.

**Can I study to become a light vehicle driver in Bhutan?**

Yes, you can either take up the three month driver’s crash course at TTIs/ Private Driving Institutes throughout the country. TTI, however, requires an entry qualification of Class 10. TTI trainees do not need to sit for driving tests, whereas Private Driving Institutes trainees are required to undertake a driving test to obtain a driving license.

**What are the employment prospects for light vehicle drivers in Bhutan?**

With vehicle numbers in Bhutan increasing at a fast pace drivers can always find employment. You can work as a driver for a government department, for an international organization, or for a well-to-do private family. You can be self-employed if you own a vehicle.

8.3.2 Heavy vehicle driver

**Title: HEAVY VEHICLE DRIVER**

**Description:** a heavy vehicle driver drives a large vehicles (trucks weighing more than five tons or buses with seating capacity of more than 20 passengers) to transport people or goods from one place to another.

**Alternative and Related Titles: BUS DRIVERS/TRUCK DRIVERS** (Most commonly referred to as ‘drivers’.)

**What does a heavy vehicle driver do?**

- Checks vehicles condition and systems every day.
- Stops at set locations to pick up or set down passengers and goods.

- Collets fares, gives change and issues tickets along the way.
- Loads and unloads goods.
- Carries out basic maintenance of vehicles
- Collects payments for cargo transportation and issues receipts/
- Maintains a log-book.

### **What are the working conditions for a heavy vehicle driver?**

Heavy vehicle drivers lead physically demanding lives but they also earn well. The hours of work may be irregular, sometimes involving night and weekend work. A driver-owner normally works in excess of 8 hours per day.

### **What is the working environment like?**

Being a heavy vehicle driver usually means working long hours, which often involves extended periods of travel and physical activity such as loading and unloading goods and materials. Heavy vehicle drivers are often separated for days from family and friends. The work requires high levels of concentration and attention to road safety procedures. The main risks for a heavy vehicle related to road accidents due to mechanical failures or carelessness, including the carelessness of other drivers.

### **What knowledge and skills do I need to be a heavy vehicle driver?**

- Good driving experience and safe driving record.
- Good eyesight and color awareness.
- Knowledge of roads and highways through the country,
- Knowledge of labour laws.
- Knowledge of what to do in case of accidents.
- Mechanical aptitude.
- Sharp sense of vigilance
- Ability to handle hazardous road conditions.
- Innovative approach to loading since work is all done manually.
- Ability to endure long periods of physical discomfort.
- Knowledge of suitable transport arrangements for a wide variety of goods such as flammable substances, raw materials, building material, manufactured goods, livestock, and refrigerated products.

### **What personal qualities/attributes do I need to be a heavy vehicle driver?**

- Physically fit

- Enjoy traveling.
- Responsible attitude and high awareness of the importance of safety.

**What are the education requirements to become a heavy vehicle driver?**

You should complete minimum education background. You can be a heavy vehicle driver irrespective of your education background, provided you are above 25 years and hold a valid heavy driving license.

**Can I study to become a heavy vehicle driver in Bhutan?**

Yes, you can take up the one –year heavy vehicle driver’s course at eh TTIs at Samthang in Punakha. TTI only takes in candidates who have completed Class 10. You can also take an apprenticeship under a qualified and experienced driver.

**What are the employment prospects for heavy vehicle drivers in Bhutan?**

There are relatively fewer heavy vehicle drivers than light vehicle drivers in Bhutan. You can work for construction companies, government organizations dealing with procurement; passengers bus companies, trucking businesses, or other private businesses. Once you have gained sufficient experience and have the necessary capital you can be self-employed as an owner –driver.

8.3.3 Professional Driver

**Title: PROFESSIONAL DRIVER**

**Description:** A Professional Driver transports people from place to place for a fare in a vehicle that, typically in Bhutan, is a yellow – topped vehicles, displaying a “Taxi’ sign. Taxi drivers also occasionally carry goods or cargo in their vehicles.

**Alternative and Related Titles: TAXI DRIVER/PUBLIC TRANSPORT.** (Although elsewhere professional drivers are called ‘cabbies ‘or ‘couriers’, there is no alternative or related titles for this occupation in Bhutan).

**What does a professional driver do?**

- Drives any type of light vehicles licensed as a taxi
- Picks up passengers at designated locations or when hailed and takes them to their desired destinations.

- Checks passenger destinations and determines the most appropriate route.
- Receives money for fares and give change.
- Assists passengers with the handling of luggage.
- Carries out regular repairs, general maintenance and cleaning of vehicles.
- Keeps accurate records of income and expenses.

### **What are the working conditions for a professional driver?**

A professional driver has to be active and particularly hard working. Some professional drivers hire vehicles form others, paying a monthly hire charge depending on the condition of the vehicle. And owner professional driver can gross depending on hours worked and passenger demand. Professional drivers work irregular hours including at night and weekends. Owner –driver work in excess of 8 hours per day.

### **What is the working environment like?**

Professional drivers work day and night enduring all kinds of weather. Some taxi drivers get to work very early in the morning and retire late at night. It is especially hard to be a taxi driver in northern Bhutan in winter. Professional drivers face the risk of road accidents due to mechanical failure, and carelessness, including the carelessness of other drivers.

### **What knowledge and skills do I need to be a professional driver?**

- Good eyesight and color awareness
- Good driving skill.
- Good communication skills.
- Ability to work long and irregular hours.
- Ability to remain calm in difficult situations.
- Knowledge of routes and destinations.
- Knowledge of road laws.
- Knowledge of what to do in case of an accident.
- Mechanical aptitude.
- Ability to handle money

### **What personal qualities/attributes do I need to be a professional driver?**

- Courteous and patient
- Trustworthy



- Sense of humor.
- Responsibility and high awareness of the importance of safety.

**What are the education requirements to become a professional driver?**

There is no education requirement for a taxi driver. You can be a taxi driver if you had light vehicle if you have a light vehicle driving license, with two years experience.

**Can I study to become a professional driver in Bhutan?**

There is no specific training for a professional driver. A potential professional driver has to first train as a light vehicle driver and gain driving experience. The RSTA occasionally conducts short courses for professional Driving.

**What is the employment prospect for professional drivers in Bhutan?**

With more and more taxis in Bhutan, competition is fierce. In Thimphu, the biggest market for taxis, there are already over a thousand vehicles licensed as taxis. Taxis are earning less and less and some taxi drivers are among the lowest paid workers in the country.

8.3.4 Earth moving plant operator

**Title: EARTH MOVING PLANT OPERATOR**

**Description:** Operates and monitors machines and equipment to excavate, grade level and compact earth or similar materials, and lay surfaces of bitumen, asphalt and concrete.

**Alternative and Related Titles: ROAD ROLLER OPERATOR/BULLDOZER OPERATOR/BACK HOE OPERATOR/PILE DRIVER OPERATOR**

**What does an earth moving plant operator do?**

- Operates and monitors machines equipped with moveable shovel, garble bucket or drag-line bucket to excavate and move earth, rock and sand, gravel or similar materials.
- Operates and monitors machines that demolish and tear down buildings and other structures.
- Operates and monitors machines that dig trenches for sewers, drainage, water, or other pipelines.
- Operates and monitors machines with concave steel blades to

- move, distribute and level earth, sand, snow and other materials.
- Operation and monitors machines to hammer wooden, concrete or steel piles into the ground.
- Operates and monitors machines that spread and smooth concert, bitumen, or tar preparations to construct roads.
- Undertakes basic and on-the –spot maintenance of machinery.
- Ensures that all operations are undertaken in accordance with safety requirements.

### **What are the working conditions for an earth moving plant operator?**

An earth moving plant operator receives wages and benefits in accordance with the type of equipment being operated. Most operators work in private sector where wages are reasonable but additional benefits not the same as the in the corporate or government sectors. The nature of the work may require that operators work irregular hours, including weekends.

### **What is the working environment like?**

A plant operator works outdoors in conditions that are hot, cold, wet and dusty, depending on seasonal factors and the nature of the project. The environment can also be noisy requiring that operators be provided with protective equipment. In more modern and larger earth moving equipment the driver’s cabin may be air-conditioned giving the operator protection from the immediate environment. A plant operator is required to work in as sitting position for many hours, which can cause muscle pain and fatigue.

### **What knowledge and skills do I need to be an earth moving plant operator?**

- Ability to work with precision and speed.
- Appropriate operator’s license.
- Good observation skills.
- Knowledge of the particular machine being driven and operated.
- Knowledge of safety procedures.
- Ability to concentrate for long periods.

### **What personal qualities do I need to be an earth moving plant operator?**

- Good physical health
- High responsible
- A high awareness of the importance of safety.

**What are the education requirements to become an earth moving plant operator?**

There are no formal education requirements to become an earth moving plant operator other than to have the required license for each particular type of equipment. The starting career as an earth moving plant operator is a heavy vehicle driver's license that requires reasonable level of literacy. Specific training for each item of equipment can then be provided on the job.

**Can I study in Bhutan to be an earth moving plant operator?**

Yes. It is possible to obtain a heavy vehicle driver's license from the TTI, Samthang, and then received specialized on the job training under the supervision of an experienced operator.

**What are the employment prospects for an earth moving plant operator in Bhutan?**

There are many opportunities for earth moving plant operations in Bhutan who are required in order to meet the demands for construction projects, road building and maintenance and office and commercial building.

8.3.5 Hoist operator

**Title: HOIST OPERATOR**

**Description:** A hoist operator operates and monitors equipment for raising and lowering people and materials using enclosed platforms, buckets and slings on construction sites and in mines.

**Alternative and related Titles: CRANE OPERATOR** (A crane operator operates and monitors equipment for lifting and lowering materials and objects using either a fixed or mobile jib. A crane operator typically is employed on high rise building sites which are not found at present in Bhutan but can be expected to be approved in future.)

**What does a hoist operator do?**

- Ensures that hoisting equipment is firmly attached to the building structure (on construction sites)
- Ensure safe loading of materials and people to be raised or lowered by hoist.
- Operates hosting equipment in accordance with established

- rules and procedures /
- Undertakes basic maintenance of hoisting equipment.

### **What are the working conditions for a hoist operator?**

A hoist operator is normally employed on a building site by a private sector construction company. This type of employment is normally confined to larger building sites for buildings of three or more floors. The salary is usually negotiated between the operator and the Construction Company or owner, or between the operator and the Construction Company or owner, or between the hoist operator and a labour contactor. The hours of work are often irregular and may include after hours and weekend work.

### **What is the working environment like?**

A hoist operator works outdoors on a building site. The environment can be hot, cold, wet or dusty depending on the actual site and seasonal conditions. Building sites also have high dust levels. Hoisting equipment must be carefully handled and there is always a risk of accidents due to overloading, or mal-functioning equipment. The risk of accidents can be reduced by the hoist operator giving detailed attention to safety rules and regulations.

### **What knowledge and skills do I need to be a hoist operator?**

- Good communication skills.
- Good observation skills.
- Knowledge of hoists and their mechanical features.
- Knowledge of safe operating procedures.
- Ability to calculate weights
- Ability to concentrate.

### **What personal qualities do I need to be a hoist operator?**

- Responsibility
- Willingness to undertake work of a repetitive and monotonous nature.
- A high awareness of the importance of safety in all aspects of hoist operation.

### **What are the education requirements to become a hoist operator?**

There are no formal education requirements for employment as a hoist operator. The required knowledge and skills can be acquired on the job under

the supervision of an experienced operator.

**Can I study in Bhutan to be a hoist operator?**

Yes. You can learn to be hoist operator through on the job training and practical experience.

**What are the employment prospects for a hoist operator in Bhutan?**

More and more construction sites throughout Bhutan are using hoists for the movement of materials from ground level to the upper floors of the building. This contributes to more efficient construction methods, and can be expected to increase in future. Accordingly, employment opportunities for hoist operators are expected to increase.

8.3.6 Forklift operator

**Title: FORK LIFT OPERATOR**

**Description:** A fork-lift operator drivers and operates equipment designed to transport, lift and stack goods on pallets.

**Alternative and Related Titles: CARGO LIFTING OPERATOR**

**What does a fork-lift operator do?**

- Operates a fork-lift to transport goods on pallets from one location to another in factories, warehouses, and other establishments.
- Operates the lifting device on the vehicle to load and unload goods stacked on pallets.
- Ensures that lifting equipment is operated in accordance with safety regulation.
- Undertakes basic cleaning and maintenance of lifting equipment.

**What are the working conditions for a fork-lift operator?**

A fork-lift operator normally works for a corporate or private organization that is large enough to use mechanized stacking and storing methods for raw materials and finished products. Wages benefits in the corporate sector are about the same as for similar grades in the Royal Civil Service. Wages in the private sector are also similar but benefits are generally lower. The hours of work are standard although some over time work may be required at peak times.

### **What is the working environment like?**

A fork-lift operator works both indoors and outdoors, moving materials from outdoor unloading bays to indoor storage, finished goods from indoors to outdoor loading bays, as well as moving stacked pallets from one outdoor location to another, or one indoor location to another. The fork-lift operator can spend many hours sitting which can cause muscle soreness and tiredness. The use of fork-lifts creates the possibility of work accidents if the equipment is not used strictly in accordance with safety procedures.

### **What skills do I need to be a fork-lift operator?**

- Good communication skills.
- Good observation skills.
- Knowledge of forklifts and their operation.
- Knowledge of safe driving and stacking procedures.
- Driving skills, including an appropriate driver's license.

### **What personal qualities do I need to be a fork-lift operator?**

- Responsibility.
- Accuracy and precision
- Willingness to undertake repetitive work.
- A high awareness of the importance of safety in all aspects of fork lift operation.

### **What are the education requirements to become a fork-lift operator?**

There are no special education requirements for employment as a fork-lift operator. An operator is required to have a driver's license, but can acquire the knowledge and skills to operate fork-lift through on the job training under the supervision of an experienced operator.

### **Can I study in Bhutan to be a fork-lift operator?**

Yes. You can learn to be a light or heavy vehicle driver at the TTI, Samthang, with an entry requirement of Class 10. The skills required for employment as a fork-lift operator can be acquired through on the job training and supervised practical experience.

### **What are the employment prospects for a fork-lift operator in Bhutan?**

The number of fork-lift operators in Bhutan is relatively small at present. Employment opportunities are expected to increase in future as more and more

enterprises seek to improve the efficiency of their operations by mechanizing their handling and storage operations.

### 8.3.7 Crane Operator

**Title: CRANE OPERATOR**

**Description:** Crane operators mainly work in construction and engineering, lifting and moving heavy loads, such as building materials, tools and equipment.

**What does a crane operator do?**

Based inside the crane cab, operators take instructions from ground assistants via hand signals or radio communication, operating levers and controls to accurately position the crane hook, grab arm or hoist. They must follow strict safety procedures, considering stability limits, safe working loads, and weather conditions and surrounding obstacles.

Crane operators may work different types of cranes, including mobile or static cranes, tower and overhead cranes and lorry loaders. Operators can also work in the media and music industries.

**What are the working conditions like?**

Crane operators usually work Monday to Friday, with more jobs, overtime and weekend opportunities during spring and summer months. Short-term contracts and part-time opportunities are available. Although operators work inside the crane cab, they are exposed to varied weather conditions and temperatures. The work can be strenuous and involves working at heights.

**What is the working environment like?**

A Crane operator works outdoors moving materials and can spend many hours sitting which can cause muscle soreness and tiredness.

**What skills do I need to be a crane operator?**

Crane operators should have:

- good practical and driving skills
- a responsible work attitude towards safety
- high levels of alertness and concentration
- excellent judgment, co-ordination and spatial awareness

- steady hands and a head for heights
- a knowledge of vehicle mechanics.

### **What are the education requirements to become a crane operator?**

There are no special education requirements for employment as a crane operator. An operator is required to have a driver's license, but can acquire the knowledge and skills to operate crane through on the job training under the supervision of an experienced operator.

### **Can I study in Bhutan to be a crane operator?**

Yes. You can learn to be a light or heavy vehicle driver at the TTI, Samthang, with an entry requirement of Class 10. The skills required for employment as a fork-lift operator can be acquired through on the job training and supervised practical experience.

### **What are the employment prospects for a crane operator in Bhutan?**

The number of crane operators in Bhutan is booming as lots of hydro power projects and construction at present. Employment opportunities are increasing. Experienced crane operators may become construction or engineering site supervisors or managers.

## 8.3.8 Boomer operator

### **Title: BOOMER OPERATOR**

**Description:** Boom operators work for the film and TV industry in the area of sound production.

### **Alternative and Related Titles;**

### **What does a boom operator do?**

- arrive half an hour before call time and help to unload and set up all the sound equipment
- read the 'sides' (booklets with the part of the script that is to be shot that day) and memorize the actors' lines
- during rehearsals, note all planned camera movements and changes of lighting
- position microphones so the sound mixer can achieve the best possible sound quality when recording dialogue and sound



effects

- hold the 'boom arm' or set it up on its stand or platform
- anticipate when to move the boom and move with the camera operator to follow the action, holding the boom steady and high
- position other microphones and cables
- Maintain the sound equipment and, if necessary, carry out minor repairs.

Boom operators work in film or television and also on corporate productions and commercials. Increasingly they work in more than one industry sector.

### **What are the working conditions like?**

Boom operators work long, irregular hours including nights and weekends. They may work in a studio or on location, indoors or outdoors, in all weathers. They may have to spend extended periods away from home.

Most boom operators are employed on a freelance or contract basis and there may be periods when they don't earn anything.

### **What is the working environment like?**

They may work in a studio or on location, indoors or outdoors, in all weathers. They may have to spend extended periods away from home.

### **What skills do I need to be a boom operator?**

A boom operator should have:

- excellent hearing, concentration and attention to detail
- knowledge of microphone characteristics, lighting techniques and camera angles
- good timing and the ability to anticipate
- a good memory for dialogue
- physical stamina, balance and agility
- An understanding of on-set protocol and health and safety issues.

### **What are the education requirements?**

There is no set route into working as a boom operator and competition is fierce. Practical experience, either paid or voluntary, in film, broadcasting, theatre, the music industry or radio is essential.

### **Can I study to become a Boomer operator in Bhutan?**

You can get basic on the job training in some of the film industries to become a general boomer operator. For formal training you will need to study outside Bhutan.

### **What are the employment prospects for Boomer Operator in Bhutan?**

Despite the increasing production of the film industries demand for boomer operator is increasing.

#### 8.3.9 Pay loader Operator

##### **Title: PAY LOADER OPERATOR**

**Description:** Operates and monitors machines and equipment to excavate and grade level, compact earth or similar materials, and lay surfaces of bitumen, asphalt and concrete.

##### **Alternative and Related Titles:**

##### **What does a pay loader operator do?**

- Operates and monitors machines equipped with moveable shovel, garble bucket or drag-line bucket to excavate and move earth, rock and sand, gravel or similar materials.
- Operates and monitors machines that demolish and tear down buildings and other structures.
- Operates and monitors machines that dig trenches for sewers, drainage, water, or other pipelines.
- Operates and monitors machines with concave steel blades to move, distribute and level earth, sand, snow and other materials.
- Operation and monitors machines to hammer wooden, concrete or steel piles into the ground.
- Operates and monitors machines that spread and smooth concert, bitumen, or tar preparations to construct roads.
- Undertakes basic and on-the –spot maintenance of machinery.
- Ensures that all operations are undertaken in accordance with safety requirements.

##### **What are the working conditions for a pay loader operator?**

A pay loader operator receives wages and benefits in accordance with the

type of equipment being operated. Most operators work in private sector where wages are reasonable but additional benefits not the same as the in the corporate or government sectors. The nature of the work may require that operators work irregular hours, including weekends.

### **What is the working environment like?**

A pay loader operator works outdoors in conditions that are hot, cold, wet and dusty, depending on seasonal factors and the nature of the project. The environment can also be noisy requiring that operators be provided with protective equipment. In more modern and larger earth moving equipment the driver's cabin may be air-conditioned giving the operator protection from the immediate environment. A plant operator is required to work in as sitting position for many hours, which can cause muscle pain and fatigue.

### **What knowledge and skills do I need to be a pay loader operator?**

- Ability to work with precision and speed.
- Appropriate operator's license.
- Good observation skills.
- Knowledge of the particular machine being driven and operated.
- Knowledge of safety procedures.
- Ability to concentrate for long periods.

### **What personal qualities do I need to be an pay loader operator?**

- Good physical health
- High responsible
- A high awareness of the importance of safety.

### **What are the education requirements to become a pay loader operator?**

There are no formal education requirements to become an earth moving plant operator other than to have the required license for each particular type of equipment. The starting career as a pay loader operator is a heavy vehicle driver's license that requires reasonable entry level of literacy. Specific training for each item of equipment can then be provided on the job.

### **Can I study in Bhutan to be a pay loader operator?**

Yes. It is possible to obtain a heavy vehicle driver's license from the TTI, Samthang, and then received specialized on the job training under the supervision of an experienced operator.

### **What are the employment prospects for a pay loader operator in Bhutan?**

There are many opportunities for pay loader operations in Bhutan who are required in order to meet the demands for construction projects, road building and maintenance and office and commercial building.

#### 8.3.10 Backhoe Operator

##### **Title: BACKHOE OPERATOR**

**Description:** Operates and monitors machines and equipment to excavate and grade level, compact earth or similar materials, and lay surfaces of bitumen, asphalt and concrete.

##### **Alternative and Related Titles:**

##### **What does a backhoe operator do?**

- Operates and monitors machines equipped with moveable shovel, garble bucket or drag-line bucket to excavate and move earth, rock and sand, gravel or similar materials.
- Operates and monitors machines that demolish and tear down buildings and other structures.
- Operates and monitors machines that dig trenches for sewers, drainage, water, or other pipelines.
- Operates and monitors machines with concave steel blades to move, distribute and level earth, sand, snow and other materials.
- Operation and monitors machines to hammer wooden, concrete or steel piles into the ground.
- Operates and monitors machines that spread and smooth concert, bitumen, or tar preparations to construct roads.
- Undertakes basic and on-the –spot maintenance of machinery.
- Ensures that all operations are undertaken in accordance with safety requirements.

##### **What are the working conditions for a backhoe operator?**

A backhoe operator receives wages and benefits in accordance with the type of equipment being operated. Most operators work in private sector where wages are reasonable but additional benefits not the same as the in the corporate or government sectors. The nature of the work may require that operators work irregular hours, including weekends.

**What is the working environment like?**

A backhoe operator works outdoors in conditions that are hot, cold, wet and dusty, depending on seasonal factors and the nature of the project. The environment can also be noisy requiring that operators be provided with protective equipment. In more modern and larger earth moving equipment the driver's cabin may be air-conditioned giving the operator protection from the immediate environment. A plant operator is required to work in as sitting position for many hours, which can cause muscle pain and fatigue.

**What knowledge and skills do I need to be a backhoe operator?**

- Ability to work with precision and speed.
- Appropriate operator's license.
- Good observation skills.
- Knowledge of the particular machine being driven and operated.
- Knowledge of safety procedures.
- Ability to concentrate for long periods.

**What personal qualities do I need to be an earth moving plant operator?**

- Good physical health
- High responsible
- A high awareness of the importance of safety.

**What are the education requirements to become a backhoe operator?**

There are no formal education requirements to become an earth moving plant operator other than to have the required license for each particular type of equipment. The normal starting ping for a career as backhoe operator is a heavy vehicle driver's license that requires reasonable level of literacy. Specific training for each item of equipment can then be provided on the job.

**Can I study in Bhutan to be a backhoe operator?**

Yes. It is possible to obtain a heavy vehicle driver's license from the TTI, Samthang, and then received specialized on the job training under the supervision of an experienced operator.

**What are the employment prospects for a backhoe operator in Bhutan?**

There are many opportunities for backhoe operations in Bhutan who are required in order to meet the demands for construction projects, road building and maintenance and office and commercial building.



BUMPA



*Bumpha's (Vase) symbolic meaning was almost always associated with the ideas of storage and the satisfaction of material desires. In the sagas and fairytales of many different cultures, for example, there is the recurring idea of an inexhaustible vessel.*

# Elementary Occupations

## 9. Elementary Occupation

### 9.1. Cleaner and Helper

#### 9.1.1 Domestic helper,

#### **Title: DOMESTIC HELPER**

**Description:** Domestic helpers assist their employer in running the household. A domestic helper persons innumerable simple and sometimes menial household job. (Although a domestic helper typically is seen to be a female worker, the work is such that it can be done equally well by a male or female).

**Alternative and Related Titles: MAID / BABYSITTER / HOTEL / OFFICE CLEANER (HYGIENIST/JANITOR)** (A domestic helper may also be called a maid or babysitter but the responsibilities are generally the same).

#### **What does a domestic helper do?**

- Prepares food.
- Washes and cleans utensils and dishes.
- Keeps the house in clean and orderly condition.
- Baby sits.
- Washes and cleans clothes either manually or using washing machines, and presses them.
- Assists in household shopping.
- Runs errands.

#### **What are the working conditions for a domestic helper?**

Domestic helpers live with their employers and, in most cases they are overworked and paid rather poorly. Food is usually provided by the employer, it is generally felt that expatriate employers generally pay and treat their domestic helpers better than Bhutanese employers. At present there is no law or regulation protecting domestic workers in Bhutan and thus the employer usually decides what the pay and hours of work will be.

#### **What is the working environment like?**

Domestic helpers perform household chores and mostly work indoors. Sometimes, however, a domestic helper may be required to do outdoor works, such as maintaining and looking after the family's kitchen garden. Because the working hours are usually long, domestic helpers often suffer



from tiredness and fatigue.

**What knowledge and skills do I need to be a domestic helper?**

- Able to do manual work.
- Able to cook and perform other household chores.
- Able to use household appliances such as vacuum cleaners, microwave oven, rice cookers, curry cookers, and washing machines.
- Able to work quickly and efficiently.
- Able to work irregular hours and to stand for long periods.
- Methodical and systematic when working.
- Able to adapt to different living and working conditions.

**What personal qualities/attributes do I need to be a domestic helper?**

- Honest and reliable.
- Willing to take orders.
- Good personal hygiene.

**What are the education requirements to become a domestic helper?**

There is no education requirement for a domestic helper. Ability to speak English well, however, is an advantage if you wish to seek employment with an expatriate family.

**Can I study to become a domestic helper in Bhutan?**

There is no need to study or train to become a domestic helper. The duties can be learned on-the-job.

**What are the employment prospects for domestic helpers in Bhutan?**

Most Bhutanese working families look for domestic helpers but there are not many people willing to take up this type of work. Domestic helpers generally prefer to work for expatriate families but there are very few of them. Other work options for domestic helpers may be in hotels, tourist lodges, guest-houses, and resorts. In some countries, domestic workers apply for jobs overseas but so far there has been no export of Bhutanese domestic workers to other countries.

## 9.1.2 Housekeeper

**Title: HOUSEKEEPER**

**Description:** A housekeeper organizes, supervises and carries out housekeeping functions in hotels, clubs, boarding schools and private houses.

**Alternative and Related Titles: MATRON**

**What does a housekeeper do?**

- Engages trains and supervises the work of domestic staff (including maids, cooks, and helpers).
- Organizes rosters and schedules for domestic staff.
- Purchases or organizes the purchase of supplies.
- Contains the storage and issue of supplies.
- Supervises the general welfare and conduct of individuals in boarding schools, guest houses, and other institutions.
- Provides basic first aid as required.
- Reports on the performance of subordinate staff.

**What are the working conditions for housekeeper?**

A housekeeper in the Royal Civil Service is normally employed at a relatively low level. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. In the private and corporate sectors, the salary for a housekeeper is normally provided with free meals when on duty and also normally receives free or subsidized accommodation. The hours of work are irregular and a housekeeper in residence is on call at all hours. After hours and weekend work are accepted as normal.

**What is the working environment like?**

A housekeeper works indoors supervising the work of other staff and attending to office work. The working environment is generally pleasant and hazard free although some stress and anxiety can be experienced when a housekeeper is responsible for the well being of boarders and guests.

**What knowledge and skills do I need to be a housekeeper?**

- Good communication skills.

- Ability to supervise and motivate subordinate staff.
- Basic calculating skills.
- Ability to organize rosters and schedules.
- Knowledge of internal rules and regulations.
- Knowledge of safety procedures.

**What personal qualities/attributes do I need to be a housekeeper?**

- An interest in helping and serving others.
- A willingness to work long and irregular hours.
- High responsibility.
- Tolerance and patience.

**What are the education requirements to become a housekeeper?**

There are no formal education requirements for a housekeeper, apart from general literacy and numeracy skills. The knowledge and skills required can be acquired through practical experience under the supervision of an experienced supervisor.

**Can I study in Bhutan to become a housekeeper?**

Yes. You can learn to be a housekeeper through on-the-job training. Housekeepers may start their careers as housemaids or room attendants and gain promotion to the position of housekeeper after gaining experience.

**What are the employment prospects for a housekeeper in Bhutan?**

As Bhutan's tourism industry expands the number of hotels and guest-houses will increase, thereby creating more opportunities for housekeepers. Opportunities also exist in boarding schools but the prospects for the employment of housekeepers in private homes are expected to be limited. (The prospects for domestic workers in private homes, however, are expected to increase).

9.1.3 Room attendant

**Title: ROOM ATTENDANT**

**Description:** A room attendant works in a hotel or guest house and is responsible for cleaning and tidying guests' rooms, and providing other services to contribute to the comfort of guests.

## **Alternative and Related Titles: CLEANER/HOUSEKEEPER/ROOM MAID**

### **What does a room attendant do?**

- Cleans and tidies guests' rooms in hotels and guest-houses.
- Cleans bathrooms and toilets in guests' rooms.
- Makes beds and collects used linen and towels for laundering.
- Collects and returns guests' personal laundry.
- Cleans windows, and sweeps, mops or vacuums floors as required.
- Keeps records of rooms cleaned and linen used and replaced.

### **What are the working conditions for a room attendant?**

A room attendant is normally required to clean, tidy and service a fixed number of rooms per day. The work is unskilled and wages are generally low. In some hotels and guest-houses, room attendants are provided with free meals during their working hours. Where room attendants are required to wear uniforms, these are normally provided by the employer. The hours of work may be irregular involving weekend work and some after hours work during busy periods.

### **What is the working environment like?**

A room attendant works indoors usually in a pleasant and hazard free working environment, although room attendants may suffer stress and anxiety if guests are uncooperative and rude.

### **What knowledge and skills do I need to be a room attendant?**

- Good communication skills.
- Ability to work quickly but carefully.
- Ability to complete simple report forms.
- Knowledge of hotel/guest house rules and regulations.

### **What personal qualities/attributes do I need to be a room attendant?**

- Pleasant personality.
- Honesty and reliability.
- Punctuality.
- A willingness to serve others.

**What are the education requirements to become a room attendant?**

No formal education requirements are required to become a room attendant. The required knowledge and skills can be acquired quickly through on the job training.

**Can I study in Bhutan to be a room attendant?**

Yes. The employer can arrange on the job training under the supervision of an experienced supervisor.

**What are the employment prospects for a room attendant in Bhutan?**

The employment opportunities for room attendants are expected to increase in future as the number of hotels and guest houses increases to accommodate the increase in the number of tourists choosing Bhutan as a tourist destination.

#### 9.1.4 Laundry worker

**Title: LAUNDRY WORKER**

**Description:** A laundry worker washes and presses laundry by hand or in some cases uses a machine for washing and a hand iron for pressing.

**Alternative and Related Titles: DOMESTIC HELPER****What does a laundry worker do?**

- Washes clothing, linen and other items by hand in a laundry establishment or a private home.
- Cleans and removes stains by hand on clothing and fabrics, using chemical solutions.
- Presses clothing and linen items, using a hand iron or mechanical press.
- Delivers clean laundry to customers.
- Receives cash payments (when working in a laundry establishment).

**What are the working conditions for a laundry worker?**

A laundry worker in a private home receives benefits similar to those for domestic helpers. In a laundry establishment the wages are similar to those paid to non-skilled workers. The hours of work for a laundry worker are standard although on occasions work may be required after hours and at

weekends.

### **What is the working environment like?**

Where laundry items are washed by machine the working environment is pleasant and not particularly demanding. Where laundry is washed and rinsed by hand the conditions can be physically demanding and laundry workers can suffer from sore backs and hands associated with washing and rinsing, respectively. Pressing clothes using hand irons and ironing boards usually involves extended periods of standing, often in a hot environment. The ironing process sometime results in minor burns to laundry workers.

### **What knowledge and skills do I need to be a laundry worker?**

- Ability to use washing machines and irons safely.
- Ability to distinguish between different fabrics and colors when washing by machine.
- Ability to distinguish between different fabrics for ironing purposes.
- Ability to read washing and ironing instructions as indicated on garments.
- Ability to detect stains on laundry items.
- Ability to follow instructions.

### **What personal qualities/attributes do I need to be a laundry worker?**

- Neatness and cleanliness.
- Physical strength for rinsing clothes by hand.
- Physical strength to stand for extended periods.
- Attention to detail.

### **What are the education requirements to become a laundry worker?**

There are no educational requirements to become a laundry worker. Elementary education is sufficient provided the laundry worker is able to follow simple instructions.

### **Can I study in Bhutan to become a laundry worker?**

No study is required to become a laundry worker. The nature of the work is such that the necessary knowledge and skills can be acquired on-the-job and through experience.

### **What are the employment prospects for a laundry worker in Bhutan?**

Hotels, resorts and restaurants will generate additional employment opportunities for laundry workers. There are also prospects for self-employed in the form of commercial laundry business where customers bring laundry to a service center for washing and pressing.

## **9.2. Manual Workers**

### **9.2.1 Labourer**

#### **Title: LABOURER**

**Description:** A labourer undertakes a range of manual and physical tasks including sweeping, lifting, cleaning and carrying in public places, building sites and location's of infrastructure projects, such as roads and bridges.

**Alternative and Related Titles:** HYGENIST / BELTER/BUILDER'S LABOURER

#### **What does a labourer do?**

- Sweeps streets, parts and various public places.
- Unloads and carries materials such as timber, cement bags, and bricks on building and project sites.
- Digs holes and trenches, and shovels loose metal and sand.
- Chops and stacks firewood.

#### **What are the working conditions for a labourer?**

A labourer receives low wages because of the lack of skills required. A labourer may be employed for short periods, sometimes at daily and hourly rates, and thus does not have permanent employment. The hours may be irregular, particularly for labourers on building sites, who may be required to work at weekends and evenings.

#### **What is the working environment like?**

A labourer spends most time working outdoors and often has to work in a difficult environment including heat, dust, mud and rain. The work is physically tiring. A labourer should wear protective clothing including waterproof boots, gloves and safety helmets (particularly on building sites). The employer is obliged to provide protective clothing and equipment.

### **What knowledge and skills do I need to be a labourer?**

- Ability to work hard under difficult conditions.
- Ability to understand and follow instructions.
- Ability to use simple tools such as shovels, picks and brooms.
- Knowledge of safe work procedures.

### **What personal qualities/attributes do I need to be a labourer?**

- A reasonable level of physical fitness.
- Willingness to do manual work that is often repetitive and monotonous.
- Willingness to work as part of a team.

### **What are the education requirements to become a labourer?**

There are no education requirements to become a labourer. This type of work can be done with minimal education and no training.

### **Can I study in Bhutan to become a labourer?**

You can learn to be a labourer through on-the-job experience. No formal study is required.

### **What are the employment prospects for a labourer in Bhutan?**

There is a high demand for labourers in Bhutan particularly for construction projects and on building site. Much of this work is done by workers from India at present. Employment opportunities for labourers are expected to grow as the private sector expands.

#### 9.2.2 Garbage collector

#### **Title: GARBAGE COLLECTOR**

**Description:** a garbage collector collects and removes garbage from streets, yards, buildings and other public places, and loads it on to carts and vehicles.

#### **Alternative and Related Titles: REFUSE COLLECTOR**

#### **What does a garbage collector do?**

- Collects garbage in bags, from open pits, or from rubbish bins and other containers.
- Loads rubbish into trucks and carts.



- Sorts rubbish into items that can be recycled and those that cannot.
- Unloads rubbish of rubbish tips, using either manual or mechanical methods.
- Works as a member of a small team including a driver and one or two other garbage collectors.

#### **What are the working conditions for a garbage collector?**

Garbage collectors receive relatively low wages in keeping with the unskilled nature of their work. They may receive additional money from the sale of garbage items that are recycled. The working hours are standard with limited demand for evening or weekend work.

#### **What is the working environment like?**

A garbage collector mostly works outdoors in streets and public places where garbage is deposited for collection. The handling of garbage, particularly 'wet garbage's dirty and smelly, and the general working environment is unpleasant. A garbage collector is expected to work in all conditions including heat and cold, dust and rain, to ensure that garbage is collected in accordance with planned schedules. Garbage is a potential health hazard and garbage collectors should wear protective gloves, footwear and clothing. The working environment involves lifting and carrying requiring a degree of physical fitness.

#### **What knowledge and skills do I need to be a garbage collector?**

- Ability to work quickly.
- Ability to distinguish garbage that can be recycled and that which cannot.
- Ability to lift and carry.

#### **What personal qualities do I need to be garbage collector?**

- Willingness to work in conditions that are dirty and smelly
- Physical fitness and good health.
- Willingness to work as part of a team.
- An appreciation of the importance of cleanliness.

#### **What are the education requirements to become a garbage collector?**

There are no education requirements to become a garbage collector.

## **Can I study in Bhutan to become a garbage collector?**

You can learn to be garbage collector through on-the-job experience.

## **What are the employment prospects for a garbage collector in Bhutan?**

Garbage collectors are required in all towns, both large and small. Economic progress generates waste that has to be collected and, if possible, recycled. Employment opportunities for garbage collectors are expected to grow in future.

### **9.3. Street and related services worker**

#### **9.3.1 Shoe cleaner**

#### **Title: SHOE CLEANER**

**Description:** A shoe cleaner provides services to customers by cleaning shoes on the spot while the customer waits.

**Alternative and Related Titles: STREET VENDOR (Services)** Variations include washing car windows, making simple repairs to clothes, or running errands.

#### **What does a shoe cleaner do?**

- Obtains materials to perform shoe cleaning services.
- Carries materials from place to place in search of customers or, alternatively, offers services from a fixed location.
- Cleans and polishes shoes.
- Receives cash payments for services.

#### **What are the working conditions for a shoe cleaner?**

A shoe-cleaner is usually self-employed and earnings depend on individual abilities and willingness to work. A shoe cleaner does not enjoy a regular wage and the amount earned varies from day to day. A shoe cleaner does not have paid leave or other benefits and frequently is required to work long hours to make a living. Where there are many shoe cleaners competing with each other in a given area the amount earned by each is likely to be reduced. Shoe cleaner usually operates from public spaces and normally has to pay a license fee, which permits them to sell their services in a designated area.

**What is the working environment like?**

A shoe cleaner normally works outdoors, occupying footpaths and other public space. Some shoe cleaners move from place to place in their search for customers, others stay in one position hoping to attract passing customers. The working environment may be noisy, dusty and exposed to heat and cold according to the season.

**What knowledge and skills do I need to be a shoe cleaner?**

- Good communication skills to attract customers.
- Ability to select good locations for the sale of their services.
- Basic numeracy skills to fix prices and give change.

**What personal qualities/attributes do I need to be a shoe cleaner?**

- Patience and perseverance while waiting for or seeking customers.
- Honesty and integrity.
- An interest in business.

**What are the education requirements to become a shoe cleaner?**

Apart from the ability to make simple calculations, there are no education requirements to be shoe cleaner.

**Can I study in Bhutan to become a shoe cleaner?**

No study is required to become a shoe cleaner. The knowledge and skills can be acquired on-the-job in a very short period of time.

**What are the employment prospects for a shoe cleaner in Bhutan?**

There are some opportunities for shoe cleaners in urban areas but opportunities are limited because some people prefer to clean their own shoes and others are not prepared to pay for this type of service. This low level work and the number of persons choosing such jobs is expected to be low

### 9.3.2 Street Vendor

**Title: STREET VENDOR**

**Description:** A street vendor prepares and sells foodstuffs (hot or cold), vegetable, fruit, ice cream, drinks or non-food items in public places including street, bus stations, cinemas, sporting arenas, and other public places.

## **Alternative and Related Titles: HAWKER**

### **What does a street vendor do?**

- Obtains food and non-food items for sale.
- Prepares food for sale, either on a pre-prepared basis or on the spot.
- Loads and unloads goods for sale to and from vending cart or other means of transport.
- Transports goods from loading point to point sale.
- Displays food items for sale.
- Sells goods and receives payment in cash.

### **What are the working conditions for a street vendor?**

A street vendor is normally self-employed or working as part of a family. A street vendor does not enjoy a regular wage and the amount earned varies from day to day. A street vendor does not have paid leave or other benefits and frequently is required to work long hours to make a living. Where there are many vendors competing with each other the amount earned by each vendor is likely to be reduced. Vendors normally have to pay a license fee, which permits them to sell their goods in a designated area. A vendor without a permit is likely to be charged by police or licensing inspectors.

### **What is the working environment like?**

A street vendor normally works outdoors, occupying footpaths and other public space. Some vendors may sell their goods in a semi-enclosed market area. The working environment may be nosy, dusty, dirty and exposed to head and cold according to the season. Vendors may be required to spend a lot of time standing on hard surfaces, which is tiring over long periods.

### **What knowledge and skills do I need to be a street vendor?**

- Ability to assess the needs of consumers.
- Ability to select a suitable location.
- Ability to communicate with customers.
- Basic numerical skills to fix prices, calculate sales, and give change.

### **What personal qualities/attributes do I need to be a street vendor?**

- Patience and perseverance for times when customers are few

- and sales are slow.
- An interest in business.
- Honesty and fairness.

### **What are the education requirements to become a street vendor?**

There are no formal education requirements for a street vendor. Many vendors have elementary levels of education and limited capacity to read and write.

### **Can I study in Bhutan to become a street vendor?**

There is no need to undertake studies to become a street vendor. The necessary skills can be acquired on the job by observing the work of others and learning by experience.

### **What are the employment prospects for a street vendor in Bhutan?**

There is always scope for employment as a street vendor provided government authorities are willing to issue permits to allow such vendors to operate. The cost of setting up a business is relatively low, as are operating costs. As Bhutan further develops, however, more and more retail stores and restaurants are likely to be established, making it more difficult for street vendors to attract customers unless they are able to provide goods and services not readily available in shops, and at lower prices.

## 9.3.3 Door to door sales person

### **Title: DOOR-TO-DOOR SALESPERSON**

**Description:** A door-to-door salesmen solicits business from households for an enterprise by going from door-to-door to persuade potential buyers to purchase products or services. (Sometimes similar work is done by a telephone by a tele-sales worker).

### **Alternative and Related Titles: TELE-SALES WORKER**

### **What does a door-to-door sales person do?**

- Provides details of goods and services for sale to potential customers by going from door-to-door.
- Explains to potential customers the terms of sale for goods and services on offer.
- Demonstrates goods by highlighting their main characteristics

and or showing how they work.

- Distributes advertising literature and leaves samples of products.
- Receives orders and forwards them to enterprises, or sometimes sells on the spot.
- Collects payments for goods or arrangements payment by installments.

### **What are the working conditions for a door-to-door person?**

A door-to-door salesperson often receives a small wage (known as a retainer) and in addition receives an amount for each sale known as commission. The amount the salesperson can earn thus frequently depends on the ability and motivation of the individual salesperson. In order to make a reasonable living the salesperson may need to work long hours. As many potential customers are householders, a salesperson has to call at times when people can be expected to be in their homes. This frequently involves after-hours and weekend work.

### **What is the working environment like?**

A door-to-door salesperson spends a lot of time outdoors, travelling from one potential customer to another. The salesperson may have to travel by car, motor cycle, public transport, or even by foot in some cases. The environment sometimes can be hostile for the salesperson as visits to private houses are often without appointment, leading to some hostility where potential customers consider their privacy is being disturbed.

### **What knowledge and skills do I need to be a door-to-door sales person?**

- Good communication skills to persuade customers to purchase.
- Ability to write orders.
- Numeracy skills to calculate sales and amounts payable.
- An appropriate driver's license for travel by vehicle.

### **What personal qualities/attributes do I need to be a door-to-door sales person?**

- Patience and perseverance.
- Determination and not easily discouraged.
- An interest in business.
- Honesty and fairness.

**What are the education requirements to become a door-to-door salesperson?**

A door-to-door salesperson does not require any special education other than the basic ability to read, write and calculate. An elementary education is sufficient to perform the required tasks provided the person has the necessary personal qualities.

**Can I study in Bhutan to become a door-to-door sales person?**

There is no need to undertake specific study to be a door-to-door salesperson. The necessary knowledge and skills can be acquired on the job, and by learning from the experience of others.

**What are the employment prospects for a door-to-door sales person in Bhutan?**

Door-to-door sales can be expected to increase in Bhutan, particularly in urban areas and as consumers seek to have more and different goods and services to improve their living standards. Door-to-door salespersons will also have more opportunities as the commercial and services sectors expand in Bhutan, meaning that sales can be made to business enterprises as well as to private persons in their homes.

### 9.3.4 Stall vendor

**Title: STALL VENDOR**

**Description:** A stall vendor sells handicrafts products, fruit and vegetables and prepared foodstuffs at approved locations in markets and streets.

**Alternative and Related Titles: KIOSK OPERATOR/STREET STALL SELLER****What does a stall vendor do?**

- Obtains permission from local authorities to set up a stall in a particular location, on payment of a fee.
- Arranges for the purchase and supply of goods from producers and suppliers on a regular basis, or ensures supply is available through self-production.
- Negotiates prices with producers.
- Displays goods for sale.
- Sells products to customers and receives payment, usually in

- cash.
- Maintains stall area in a clean and tidy condition.

### **What are the working conditions for a stall vendor?**

In most cases a stall vendor is self-employed with the actual earnings depending on the location of the stall, the products sold, and the experience and reputation of the stall vendor. Stall vendor may face considerable competition and thus the skill and reputation of the vendor, as well as the quality of the products sold, are of prime importance in gaining a competitive advantage. The working hours for a stall vendor can be long and may include after hours and weekend work.

### **What is the working environment like?**

A stall vendor may have an open-air stall or one that is enclosed from the elements. The working environment is usually simple and basic. The working environment may be noisy and dusty depending on the actual location of the stall and the conditions can be hot or cold depending on seasonal factors and location.

### **What knowledge and skills do I need to be a stall vendor?**

- Good communication and interpersonal skills.
- Good knowledge of products for sale.
- Ability to count and measure.
- Ability to calculate the price of each sale and to give change if required.
- Knowledge of government rules and regulations concerning stall holders, and knowledge of licensing requirements and fees.

### **What personal qualities/attributes do I need to be a stall vendor?**

- A willingness to serve customers.
- An interest in business.
- Honesty and integrity.
- Patience.

### **What are the education requirements to become a stall vendor?**

No study is required to become a stall vendor. You can learn on the job through trial and error and practical experience, and by learning from the experience of other vendors.



### **What are the employment prospects for a stall vendor in Bhutan?**

Stall vendors are expected to continue for many years in Bhutan and employment opportunities will always be available for those persons prepared to take the risks associated with self-employment. The key to the success of stall vendors rests with good quality products and good service.

#### **9.4. Refuse Worker and other elementary workers**

##### **9.4.1 Refuse Worker**

###### **9.4.1.1. Garbage Collector**

#### **Title: GARBAGE COLLECTOR**

**Description:** a garbage collector collects and removes garbage from streets, yards, buildings and other public places, and loads it on to carts and vehicles.

#### **Alternative and Related Titles: REFUSE COLLECTOR**

#### **What does a garbage collector do?**

- Collects garbage in bags, from open pits, or from rubbish bins and other containers.
- Loads rubbish into trucks and carts.
- Sorts rubbish into items that can be recycled and those that cannot.
- Unloads rubbish of rubbish tips, using either manual or mechanical methods.
- Works as a member of a small team including a driver and one or two other garbage collectors.

#### **What are the working conditions for a garbage collector?**

Garbage collectors receive relatively low wages in keeping with the unskilled nature of their work. They may receive additional money from the sale of garbage items that are recycled. The working hours are standard with limited demand for evening or weekend work.

#### **What is the working environment like?**

A garbage collector mostly works outdoors in streets and public places where garbage is deposited for collection. The handling of garbage, particularly 'wet garbage's dirty and smelly, and the general working environment is unpleasant. A garbage collector is expected to work in all conditions

including heat and cold, dust and rain, to ensure that garbage is collected in accordance with planned schedules. Garbage is a potential health hazard and garbage collectors should wear protective gloves, footwear and clothing. The working environment involves lifting and carrying requiring a degree of physical fitness.

**What knowledge and skills do I need to be a garbage collector?**

- Ability to work quickly.
- Ability to distinguish garbage that can be recycled and that which cannot.
- Ability to lift and carry.

**What personal qualities do I need to be garbage collector?**

- Willingness to work in conditions that are dirty and smelly
- Physical fitness and good health.
- Willingness to work as part of a team.
- An appreciation of the importance of cleanliness.

**What are the education requirements to become a garbage collector?**

There are no education requirements to become a garbage collector.

**Can I study in Bhutan to become a garbage collector?**

You can learn to be garbage collector through on-the-job experience.

**What are the employment prospects for a garbage collector in Bhutan?**

Garbage collectors are required in all towns, both large and small. Economic progress generates waste that has to be collected and, if possible, recycled. Employment opportunities for garbage collectors are expected to grow in future.

9.4.1.2. Hygienist/Scavenger

**Title: HYGIENIST/SCAVENGER**

**Description:** A hygienist/scavenger is responsible for undertaking different types of cleaning in large residences, or commercial, industrial, or office complexes.

**Alternative and Related Titles:** CLEANER/ SWEEPER (These occupations

are virtually the same. The actual tasks, however, may vary from job to job).

### **What does a hygienist do?**

- Cleans and washes toilets and bathrooms.
- Clears sewerage lines and drains.
- Cleans manholes.
- Clears septic tanks.
- Disposes off garbage.
- Sweeps, mops, brushes and cleans rooms and staircases.
- Maintains the general cleanliness of the area assigned.
- Performs any other tasks as assigned by supervisors.

### **What are the working conditions for a hygienist?**

Not everyone admires a cleaner's job but the services rendered by a cleaner are crucial to the health and well being of everyone. Some cleaners look after public toilets and collect fees from people who use them. Cleaners for government, corporations and the private sector usually work normal hours.

### **What is the working environment like?**

A hygienist's work is purely manual and physical in nature. Hygienist work both indoor and outdoors. The working environment is frequently dirty and dusty requiring that suitable protective clothing be worn including waterproof boots, gloves, and headwear.

### **What knowledge and skills do I need to be a hygienist?**

- Able and willing to do grimy and unappealing work.
- Able to crouch, bend, lift, pull and do all kinds of physical work.
- Able and willing to take orders from a lot of people.
- Able to work under all circumstances and conditions.
- Able to stand everyone's scrutiny.
- Able to take in criticism.

### **What personal qualities/attributes do I need to be a hygienist?**

- Appreciate cleanliness.
- Sincere.
- Hardworking.

### **What are the education requirements to become a hygienist?**

There are no education requirements to become a hygienist. It is possible for a scavenger to work satisfactorily without literacy or numeracy skills.

### **Can I study to become a hygienist in Bhutan?**

There is no need to study to become a hygienist. It is an important but elementary occupation that can be learned on-the-job in a very short period of time, the main requirement is the willingness to undertake this type of work

### **What are the employment prospects for hygienist in Bhutan?**

There are many opportunities for employment as a hygienist, provided you are willing to do this type of work. At present most hygienists working in Bhutan are from India. Municipal Corporations in big towns like Thimphu and Phuentsholing and large office, commercial and industrial complexes employ hygienists. As the industrial and scavengers can and often choose to be self-employed.

## 9.4.2 Other Elementary Worker

### 9.4.2.1. Gardner

#### **Title: GARDENER**

**Description:** A gardener is responsible for establishing and maintaining gardens, lawns and parks and the planting and care of trees, shrubs, and flowers.

**Alternatives and Related Titles:** **HORTICULTURIST** (A horticulturist is a professionally qualified person involved in the growing and selling of plants for indoor and outdoor usage) **MARKET GARDENER** (A market gardener is responsible for growing and selling vegetables).

#### **What does a gardener do?**

- Clears ground for the planting of trees, shrubs, flowers and grass.
- Digs holes and trenches for planting of trees, shrubs and flowers.
- Rakes leaves and removes weeds, dead plants and litter.
- Applies fertilizers to assist plant growth and ensures plants are watered regularly.
- Cuts grass using hand or mechanical equipment.

**What are the working conditions for a gardener?**

A gardener may work for the Royal Civil Service as elementary service personnel and receive wages and benefits according to the conditions set by the Royal Civil Service Commission, which change from time to time. A gardener in the private sector or corporate sector receives a wage similar to a gardener in the Royal Civil Service, but the benefits are likely to be less. A gardener may work for a private family and may also be self-employed, in which case the wage will depend on the skill and abilities of the individual gardener. The hours of work for a gardener are regular but his may include some work at weekends.

**What is the working environment like?**

A gardener works outdoor in an environment that may be hot, cold or wet depending on seasonal conditions and the actual work location. The work can be physically demanding resulting in tiredness and fatigue unless the gardener is physically strong and in good health. The working environment involves the use of some chemicals that can be hazardous unless used strictly in accordance with instructions.

**What knowledge and skills do I need to be a gardener?**

- Ability to use basic hand tools such as shovels, hoes, and rakes.
- Ability to use mechanical equipment such as power-mowers if required.
- Knowledge of trees, shrubs and flowers.
- Knowledge of the treatment of diseases in plants.
- Ability to work as a member of a team.

**What personal qualities/attributes do I need to be a gardener?**

- An interest in plants and in outdoor life.
- A good level of physical fitness.
- Neatness and tidiness in the approach to work.

**What are the education requirements to become a gardener?**

There are no formal education requirements to become a successful gardener. The knowledge and skills required can be learned on the job. Basic reading and writing skills are required but this does not require a high level of schooling.

### **Can I study in Bhutan to become a gardener?**

Yes. You can learn to be a gardener through on the job training under the supervision of an experienced gardener.

### **What are the employment prospects for a gardener in Bhutan?**

There are prospects for the employment of gardeners in public parks and gardens, but future opportunities are likely to be greater in the private sector where gardeners are expected to be required in larger hotels and private homes.

#### 9.4.2.2. Building Caretaker

##### **Title: BUILDING CARETAKER**

**Description:** A building caretaker takes care of apartment buildings, houses, offices and public buildings by keeping them clean, and by carrying out basic maintenance.

##### **Alternative and Related Titles: JANITOR/BUILDING CONCEIRGE**

##### **What does a building caretaker do?**

- Assists in the cleaning of building exteriors and common areas.
- Undertakes simple repairs and maintenance of buildings.
- Tends furnaces and boilers to ensure the provision of heat and hot water in the building.
- Regulates the conduct of tenants and visitors to prevent misuse of property and to ensure that noise is kept to the required level.
- Provides small services to absent tenants (e.g. receiving information from callers, accepting deliveries).
- Supervises other workers (e.g. cleaners, maintenance workers).

##### **What are the working conditions for a building caretaker?**

A building caretaker receives a wage similar to other unskilled workers, but in addition, may be provided with accommodation on the premises, free of charge. A building caretaker may also receive payments in the form of tips and gratuities in return for special services. The hours of work for a caretaker may be irregular according to the need of tenants and maintenance requirements. In some cases, a building caretaker is on call 24 hours per day.

**What is the working environment like?**

A building caretaker mostly works indoors, although maintenance and car parking matters may require some outdoor work. As the person responsible for the safety and maintenance of a building, a caretaker may experience periods of stress particularly relating to the threat of fire and emergency maintenance.

**What knowledge and skills do I need to be a building caretaker?**

- The ability to communicate with people at levels (tenants, visitors, maintenance workers, building owners).
- Ability to maintain basic records.

**What personal qualities/attributes do I need to be a building caretaker?**

- A strong sense of responsibility.
- An eye for detail (e.g. concerning the need for maintenance).
- A willingness to provide service to others.
- Honesty and integrity.

**What are the education requirements to become a building caretaker?**

There are no particular educational requirements to become a building caretaker. Basic literacy and numeracy abilities are required but elementary education is sufficient. Personal qualities of responsibility and integrity are more important than education levels.

**Can I study in Bhutan to become a building caretaker?**

No study is required to become a building caretaker. The knowledge and skills required can be acquired on-the-job and through the application of common sense.

**What are the employment prospects for a building caretaker in Bhutan?**

The number of commercial and residential buildings in Bhutan is expected to increase in future thereby creating more opportunities for building caretakers. Although this is unskilled work, it is important and will provide opportunities for responsible and caring persons.

### 9.4.2.3. Security Guard

**Title: SECURITY GUARD**

**Description:** A security guard checks the entry and exit of persons and goods to and from buildings, houses and public places (e.g. sporting areas) to detect weapons, explosives, and dangerous goods, prevent illegal entry and to prevent theft on exit.

**Alternative and Related Titles: NIGHT GUARD/SECURITY OFFICER**

**What does a security guard do?**

- Checks identification of persons entering buildings and public places to prevent illegal entry.
- Inspects baggage and personal belongings on entry to detect weapons, explosives and dangerous goods.
- Operates X-ray equipment to detect weapons and dangerous goods.
- Conducts general body searches to detect weapons and dangerous goods.
- Inspects the exit of persons and goods from buildings to prevent theft.
- Conducts routine patrols of private buildings and houses to deter intruders.

**What are the working conditions for a security guard?**

Security officers are employed by private companies that then provide services to government, corporations and private individuals on a contract basis. The salary and benefits for security guards are relatively low, which reflects the relatively low level of skills required for this work. A security guard is required to work long shift and some are required to work throughout the night. Security guards are required to wear a uniform, provided by the employer.

**What is the working environment like?**

Most security guards work outdoors at the entrance to buildings or compounds. They are usually required to stand for long periods at a time, which can cause tiredness and fatigue. The environment may be hot, cold, wet or dusty depending on seasonal factors and the actual location of the



work. Some security guards are required to patrol the premises they are guarding, involving considerable periods of walking.

**What knowledge and skills do I need to be a security guard?**

- Communication skills.
- Knowledge of security rules and regulations of the client.
- Observation skills.
- Ability to apprehend wrongdoers if required.
- Ability to read and follow instructions.

**What personal qualities do I need to be a security guard?**

- Willing to undertake routine and monotonous work.
- Integrity.
- Reliability.
- Willing to work at nights on a regular basis.
- Physical fitness.

**What are the education requirements to become a security guard?**

There are now formal education requirements to become a security guard, other than the ability to read and write. The knowledge and skills required can be acquired through in-service training.

**Can I study in Bhutan to become a security guard?**

Yes. private training providers provide the necessary training.

**What are the employment prospects for a security guard in Bhutan?**

The protection of lives and public and private property is a matter of concern to all. Employment opportunities for security guards are expected to increase.

9.4.2.4. Ward Attendant

**Title:** WARD ATTENDANT

**Description:** A ward person works in a hospital ward and is responsible for making hospital beds, the cleaning of wards and hospital common areas, and assisting in the provision of basic and simple services for hospital patients.

**Alternative and Related Titles:** WARD BOY/WARD ATTENDANT/  
CLEANERE

### **What does a ward person do?**

- Sweeping, cleaning, and polishing floors and fixtures in hospital wards.
- Cleaning of toilet and bathroom areas used by hospital patients.
- Removing soiled linen from beds and transporting it to hospital laundry services.
- Making beds in accordance with hospital procedures.
- Assisting in the lifting and movement of patients.
- Providing basic services for patients and assisting with meal services for patients confined to their beds.

### **What are the working conditions for a ward person?**

A ward person is employed by the Royal Civil Service as elementary service personnel within the Ministry of health. Ward persons do not require high level qualifications and thus are employed in elementary positions. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by the Royal Civil Service Commission, and vary in accordance with changing circumstances. A ward person works regular hours but the nature of hospital work involves shift work, including work at weekends.

### **What is the working environment like?**

A ward person works indoors in a clean and hazard free environment. The environment is one that places very high importance on cleanliness. A ward person is exposed to the risk of air borne diseases but proper attention to safety and health procedures minimizes this risk. A ward person is required to work in an environment where people are suffering from sickness and accidents and this can result in an environment that is sometimes sad and depressing.

### **What knowledge and skills do I need to be a ward person?**

- Good communication and interpersonal skills.
- Knowledge of hospital rules and regulations.
- Ability to use basic cleaning equipment.
- Knowledge of the importance of hospital and personal hygiene.

### **What personal qualities/attributes do I need to be a ward person?**

- Physical fitness to help in lifting and moving patients.

- A caring and sympathetic manner.
- Willingness to work in an environment that may be depressing.
- Responsibility and honesty.

**What are the education requirements to become a ward person?**

There are no special education requirements for a career as a wards person. The knowledge and skills required can be acquired on the job under the supervision and direction of an experienced supervisor.

**Can I study in Bhutan to be a ward person?**

Yes, you can learn on the job in a hospital. If you have the required motivation and personal qualities, learning on the jobs is relatively easy.

**What are the employment prospects for a ward person in Bhutan?**

The employment opportunities for ward persons in Bhutan are directly related to the number and size of the country’s hospitals. As more and hospital health services are provided there will be more opportunities for ward persons.

9.4.2.5. Life Guard

**Title: LIFEGUARD**

**Description:** Lifeguards patrol places where the public go swimming including indoor and outdoor pools, beaches and lakes. They are responsible for making sure that people are safe in and near the water.

**Alternative and Related title:**

**What does a lifeguard do?**

- keeping a close watch over the pool and the pool users
- anticipating problems and preventing accidents by keeping a keen eye out for swimmers in difficulties
- intervening to prevent behavior which is unsafe
- identifying emergencies quickly and taking appropriate action
- carrying out rescues from the water using life-saving aids such as ropes, poles and torpedo buoys
- Giving immediate first aid to any casualty.

A key task is to make sure that people do not stray outside safe areas where there may be hazards, such as submerged rocks and strong currents. These

areas are often marked out using a series of flags on the beach or are roped off using buoys.

They need to pay special attention to inflatable such as dinghies, which can be easily carried out to sea. They also need to know about local tides.

### **What are the working conditions for a lifeguard?**

They normally work five days a week. This includes evenings, weekends and public holidays and may involve shift work. Lifeguards often work on a casual basis or as volunteers. Work for beach lifeguards is seasonal.

### **What is the working environment like?**

Most pool lifeguards work indoors; the pool area is wet, noisy and humid. Beach lifeguards work outdoors.

### **What skills do I need to be a lifeguard?**

- be strong swimmers and physically fit
- have good vision and hearing
- have a knowledge of first aid
- be able to concentrate for long periods, often in noisy environments
- be observant
- be able to think and act quickly
- be able to cope calmly in an emergency
- communicate with members of the public effectively and with authority
- be able to deal with difficult people firmly but tactfully
- Work well in a team.

### **What are the education requirements to become a lifeguard?**

There are no special education requirements to become a lifeguard. The required knowledge and skills can be acquired on-the-job.

### **Can I study in Bhutan to become a lifeguard?**

You can learn to be a lifeguard in Bhutan not through formal study but by learning through experience.

### **What are the employment prospects for a lifeguard in Bhutan?**

Larger hotels and swimming pool are likely to employ lifeguard and employment opportunities will become available as more hotels and resorts are constructed and become operational.

#### 9.4.2.6. Housekeeping

##### **Title: HOUSE KEEPING**

**Description:** Housekeepers make sure that places providing accommodation are clean, safe, welcoming and attractive. They work in hotels, conferences centres, hospitals, care homes, university halls of residence and private households.

##### **Alternative and Related Titles: HOUSEKEEPER**

##### **What does a Housekeeper do?**

- checking that staff maintain high standards of cleanliness and that rooms are correctly serviced to company or household standards
- supervising and training staff
- organizing staffing rotas
- making sure there are supplies of linen, cleaning materials and items for the rooms, such as tea and coffee, soap and shampoo
- stocktaking
- paperwork, such as maintenance reports and room check sheets
- managing budgets and controlling costs
- health and safety matters, including those related to hazardous cleaning materials
- Dealing with lost property.

##### **What are the working conditions for a housekeeper?**

In private households, they may do cleaning, ironing, household shopping and other tasks required by the employer. They are likely to undertake these tasks themselves, although in large households there may be other staff, such as cooks, or chefs, butlers and nannies.

Some housekeepers are responsible for catering as well as cleaning.

Housekeepers work closely with a wide range of people, including cleaning staff, receptionists, and administrative staff

The working hours can be irregular including weekend work, to meet the requirements of visitors and guests. A housekeeper at a hotel may be provided with free meals. In other countries bell boy receive tips from guests and visitors but tipping is not common in Bhutan.

### **What is the working environment like?**

The work may involve unsocial hours. This could mean starting work very early in the morning, working in the evenings and nights, and possibly weekends and public holidays.

Housekeepers may be able to work part time or only during the busy holiday seasons. Some jobs are offered on a live-in basis.

Some housekeepers have an office where they can deal with paperwork. Many employers supply a uniform or have a dress code.

### **What knowledge and skills do I need to be a housekeeper?**

- Good communication and interaction skills.
- Alertness and good observation skills.
- Knowledge of the location of each tenant in the building.
- Knowledge of fire and safety procedures.
- to be an excellent organiser
- an eye for detail
- to be good at training, supporting and motivating staff
- good numeracy skills
- a knowledge of cleaning techniques
- tact in dealing with guests, accommodation users and staff
- to be able make quick decisions and solve problems on the spot
- to be physically fit and prepared to work hard

### **What personal qualities/attributes do I need to be a bell boy?**

- practical management and organization
- providing high standards of service
- An interest in helping people.
- A willingness to take instructions from many different people.

- Reasonable physical fitness.
- Willing to work as a member of a team (particularly in larger hotels).
- Neat and tidy appearance.

### **What are the education requirements to become a housekeeper?**

There are no special education requirements to become a housekeeper. The required knowledge and skills can be acquired on-the-job. Many housekeepers start out with few or no formal qualifications, and it is not unusual for people to work their way up from the position of hotel/accommodation room attendant or cleaner. Many employers want to see some evidence that applicants are good organizers and communicators.

### **Can I study in Bhutan to become a housekeeper?**

Yes, you can learn to be a housekeeper in Bhutan not through formal study but by learning through on the job training and private training institutes.

### **What are the employment prospects for a housekeeper in Bhutan?**

In smaller hotels, the work of housekeeping is often combined with other duties such as reception and clerical work. Larger hotels are likely to employ housekeeper and employment opportunities will become available as more hotels and resorts are constructed and become operational. Highly experienced housekeepers may be able to move into general management or run their own establishments, such as hotels or care homes.

#### 9.4.2.7. Bell Boy

##### **Title: BELL BOY**

**Description:** a doorkeeper undertakes duties in hotels, apartments and other buildings to prevent illegal entry or theft, and to detect potential hazards. Sometimes a doorkeeper also attends to the parking of vehicles.

**Alternative and Related Titles:** PORTER / DOOR KEEPER / SECURITY OFFICER / WATCHPERSON / CONCIERGE

##### **What does a bell boy do?**

- Assists apartment residents and their visitors with luggage.
- Checks that visitors have the right to enter the building.

- Provides callers with information.
- Helps guests on arrival in hotels and quest-houses with luggage and keys, and provides them with information and directions.
- Watches houses and apartments to prevent illegal entry.
- Checks premises and surrounding areas for hazards, particularly fires.

### **What are the working conditions for a bell boy?**

A bell boy receives a wage similar to other unskilled workers. The working hours can be irregular including weekend work, to meet the requirements of visitors and guests. A bell boy at a hotel may be provided with free meals. In other countries bell boy receive tips from guests and visitors but tipping is not common in Bhutan.

### **What is the working environment like?**

A bell boy works both indoors and outdoors. The working environment is generally clean and safe. The work may involve lifting and carrying and thus some physical exertion is required.

### **What knowledge and skills do I need to be a bell boy?**

- ☞ Good communication and interaction skills.
  - Driving skills (where assistance with car parking is involved).
  - Alertness and good observation skills.
  - Knowledge of the location of each tenant in the building.
  - Knowledge of fire and safety procedures.

### **What personal qualities/attributes do I need to be a bell boy?**

- An interest in helping people.
- A willingness to take instructions from many different people.
- Reasonable physical fitness.
- Willing to work as a member of a team (particularly in larger hotels).
- Neat and tidy appearance.

### **What are the education requirements to become a bell boy?**

There are no special education requirements to become a bell boy. The required knowledge and skills can be acquired on-the-job.



**Can I study in Bhutan to become a bell boy?**

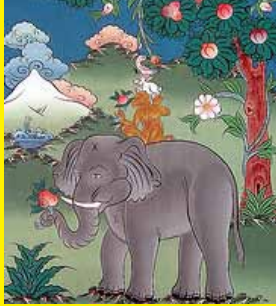
You can learn to be a bell boy in Bhutan not through formal study but by learning through experience.

**What are the employment prospects for a bell boy in Bhutan?**

In smaller hotels, the work of a bell boy is often combined with other duties such as reception and clerical work. Larger hotels are likely to employ bell boy and employment opportunities will become available as more hotels and resorts are constructed and become operational.



THUENPA PUEN ZHI



*Long ago these animal friends learned how to live together happily by respecting those who were older. It is believed that wherever this picture is displayed, the wholesome deeds of its beholders and the harmony among them will increase, making much auspiciousness available.*

# **Military Occupations (Armed Forces)**

## 10. **Military Occupations (Armed Force)**

### 10.1. **Commissioned armed forces**

#### 10.1.1 Royal Bhutan Police

#### **Title: POLICE OFFICER**

**Description:** A police officer investigates facts and circumstances relating to crimes committed, and collect information not otherwise available to assist in deciding future action concerning the crime under investigation.

#### **Alternative and Related Titles:**

#### **What does a police officer do?**

- Establishes contacts with persons and sources of information able to provide information on crimes committed or planned.
- Investigates events and circumstances suspected of being criminal in nature to obtain evidence and identity perpetrators.
- Supervises the collection of evidence (including fingerprints if necessary) at crime scenes.
- Makes arrests or assists in making arrests if so authorized.
- Prepares accurate reports of investigations.
- Testifies in court about the circumstances and results of investigations.
- Supervises the work of subordinate officers.

#### **What are the working conditions for a police officer?**

A police officer is a government official in the Royal Civil Service and is responsible for ensuring that crimes are investigated and charged persons brought before a court of law. The entry level to the Royal Civil Service and the actual salary and benefits payable for each position are determined by Royal Civil Service Commission, and inspector are irregular and involve work during the day, night and weekends.

#### **What is the working environment like?**

A police officer works both indoors and outdoors. The indoor work is concerned with analyzing evidence, interviewing witnesses and preparing reports. The outdoor work focuses on the investigation of crime scenes, interviewing witnesses on the spot, and coordinating the collection of evidence. Investigating crimes can be stressful work but police inspectors are

well trained to cope with the emotions they may face at a crime scene.

**What knowledge and skills do I need to be a police officer?**

- Good communication and interpersonal skills.
- Knowledge of criminal laws and regulations.
- Knowledge of crime scene detection procedures.
- High level analytical skills.
- Good observation skills.
- Computer skills.
- Report writing skills.
- Ability to lead and motivate a small team.

**What personal qualities/attributes do I need to be a police officer?**

- An interest in community service.
- An interest in law and order.
- High level of integrity.
- Fairness and objectivity.
- Responsibility and dedication.
- Patience.
- Ability to concentrate for long periods.

**What are the education requirements to become a police officer?**

A police officer needs a good general education followed by specific studies in police work. A police officer normally has a degree as a pre-requisite for specialized in-service training.

**Can I study in Bhutan to become a police officer?**

Yes, you can study at the Police Training College in Chukha to establish the foundation for a career as a police officer. Entry to this course requires that you already possess a degree. Specialized areas of work undertaken by police inspectors and detectives will have to be undertaken overseas.

**What are the employment prospects for a police officer in Bhutan?**

Law and order and crime detection is essential in any society. There will always be some opportunities for police inspectors, but these will be relatively few in number.

## 10.1.2 Royal Bhutan Army

**Title: ROYAL BHUTAN ARMY**

**Alternative and Related Titles: ARMY OFFICER**

**What does a army officer do?**

- Oversee the security of the country.
- Take care of the welfare of the citizen.
- Disaster management
- Assist police in internal security especially in times of national emergency.

**What is the working environment like?**

An army is categorized under the Armed forces of Bhutan. Army is normally recruited at different levels. Other than salary, an army is entitled to other allowances. An army may be required to work irregular hours.

**What knowledge and skills do I need to be an army officer?**

An army spends lot of time outside and away from home. An army is post on outposts in strategic border areas for a month at a stretch and sometimes up to 2-3 months. An army carries a gun and may need to go for war in times of war. He should be ready to report for duty whenever called.

**What knowledge and skills do I need to an army officer?**

The knowledge and skills are imparted during training. Army officers need to undergo socialized course as follows:

- Commando
- Junior command
- Senior command

**What personal qualities/attributes do I need to be army officer?**

- Ability and willingness to work under difficult conditions and pressure.
- Willingness to sacrifice one's comfort for the security of the country.
- Be physically and mentally strong/ fit.
- Alert and attentive.

- Safely conscious
- Ability to work as a team.

### **What are the education requirements to be an Army officer?**

To become an Army officer, after Class 12 you will be selected by the government to undergo training in the National Defense Academy (India) for 3 yrs and an additional 1 yr in the Indian Military Academy or you can complete Bachelor's degree in any recognized university and go to IMA for year.

### **Can I study in Bhutan to become an army officer?**

Yes, to become an officer, you can study still Cl.12 or get a Bachelor's Degree in Bhutan and train in India.

## 10.1.3 Royal Body Guard

### **Title: ROYAL BODY GUARD**

#### **What does a Royal Body Guard do?**

Provide security to the king and the Royal Family and on command, provide security to international dignitaries.

#### **What are the working conditions for RBG?**

All officers in RBG spend most of the time outside office with the Royal Family. RBG carries gun and should be ready to report for duty whenever needed.

#### **What is working environment like?**

All officers in RBG spend most of the time outside office with the Royal Family. RBG carries gun and should be ready to report for duty whenever needed.

#### **What knowledge and skills do I need to be a RBG?**

The knowledge and skills are imparted during training. Officers need to undergo socialized course as follows:

- Commando
- Junior command
- Senior command

### **What personal qualities/attributes do I need to a RBG?**

- Ability and willingness to work under difficult conditions and pressure.
- Willingness to sacrifice one's comfort for the security of the country.
- Be physically and mentally strong/ fit.
- Alert and attentive.
- Safely conscious
- Ability to work as a team.
- Willingness to sacrifice one's comfort for the security of Royal family.

### **What are the education requirements to be RBG?**

To become an Army officer, after CL.12 you will be selected by the government to under go training in the National Defense Academy (India) for 3 yrs and an additional 1 yr in the Indian Military Academy or you can complete Bachelor's degree in any recognized university and go to IMA for year.

### **Can I study in Bhutan to become an RBG?**

Yes, to become an officer, you can study still Cl.12 or get a Bachelor's Degree in Bhutan and train in India.

## **10.2. Non Commissioned**

### **10.2.1 Royal Bhutan Police**

#### **Title: POLICE CONSTABLE**

**Description:** A police personal helps to maintain law and order by ensuring compliance with laws and regulations by enforcement and other means.

**Alternative and Related Titles: CONSTABLE / POLICE INSPECTOR / DETECTIVE**

#### **What does a police constable do?**

- Protects persons and property from hazards and unlawful acts.
- Issues warnings to individuals and makes arrests for contraventions of the law.
- Directs traffic and assumes authority in the case of accidents.
- Undertakes routine patrols by foot, vehicle, motor-cycle, or horse



to deter potential wrongdoers.

- Maintains records of arrests and accidents.
- Gives evidence in court as required.
- Assists in raising public awareness on crime prevention.
- Supervises the work of junior police officers.

### **What are the working conditions for a police constable?**

A police constable is a government servant and in Bhutan all police constables, whether armed or unarmed, fall under the responsibility of the Armed Forces. A police constable is employed as a semi skilled servant of the people. The entry level to the Armed Forces and the actual salary and benefits payable for each position are determined by government, and vary in accordance with changing circumstances. The working hours for a police constable are irregular involving shift work and the need to respond to emergency situations at short notice. A police constable is required to wear a uniform.

### **What is the working environment like?**

A police constable works both indoors and outdoors. The outdoor work focuses on patrols, and traffic duties, as well as responding to emergency situations. Police work has its dangers but police constables are trained in safety procedures to minimize dangers to the general public and themselves.

### **What knowledge and skills do I need to be a police constable?**

- Good communication skills.
- Ability to read and write and follow instructions.
- Ability to use weapons if required.
- Knowledge of criminal laws and traffic regulations.
- Observation skills.

### **What personal qualities/attributes do I need to be a police constable?**

- A genuine interest in serving the community and helping people.
- Physical fitness.
- Minimum height and weight requirements and minimum and maximum age requirements (which may vary from time to time).
- Integrity.
- Responsibility and reliability.
- Calmness in the face of danger.
- Alertness.

### **What are the education requirements to become a police constable?**

The normal requirement for a career as a police constable is to complete an in-service training program that covers various aspects of theory and practice.

### **Can I study in Bhutan to become a police constable?**

Yes. You can apply for selection to the Royal Bhutan Police and it successfully undergoes a 9-month training course for police constables at the Royal Bhutan Police Training Center, Jigmeling. Entry to this course requires Class 10 and above.

### **What are the employment prospects for a police constable in Bhutan?**

There will always be a need for police constables and there are good employment prospects for those persons who meet the physical entry requirements.

## 10.2.2 Soldier

**Title: SOLDIER**

### **What does an army personnel do?**

- Oversee the security of the country.
- Take care of the welfare of the citizen.
- Disaster management
- Assist police in internal security especially in times of national emergency.

### **What is the working environment like?**

A soldier is categorized under the Armed forces of Bhutan. Army is normally recruited at different levels. Other than salary, an army is entitled to other allowances. An army may be required to work irregular hours.

### **What knowledge and skills do I need to be a soldier?**

A soldier spends a lot of time outside and away from home. An army is posted on outposts in strategic border areas for a month at a stretch and sometimes up to 2-3 months. An army carries a gun and may need to go for war in times of war. He should be ready to report for duty whenever called.

**What knowledge and skills do I need to a soldier?**

The knowledge and skills are imparted during training. A soldier to undergo socialized course as follows:

- Commando
- Junior command
- Senior command

**What personal qualities/attributes do I need to be soldier?**

- Ability and willingness to work under difficult conditions and pressure.
- Willingness to sacrifice one's comfort for the security of the country.
- Be physically and mentally strong/ fit.
- Alert and attentive.
- Safely conscious
- Ability to work as a team.

**What are the education requirements to be a soldier?**

To become a soldier, after class 8 you will be selected by the government to under go training in Tenchholing Training Centre.

**Can I study in Bhutan to become a soldier?**

Yes, to become a soldier, you can study still class 8 in Bhutan.

### 10.2.3 Kusung Magmi

**Title: KUSUNG MANGMI****What does a Kusung Magmi do?**

Provide security to the king and the Royal Family and on command, provide security to international dignitaries.

**What are the working conditions for Kusung Magmi?**

All RBG spend most of the time outside office with the Royal Family. RBG carries gun and should be ready to report for duty whenever needed.

**What is working environment like?**

All RBG spend most of the time outside office with the Royal Family. RBG

carries gun and should be ready to report for duty whenever needed.

### **What knowledge and skills do I need to be a RBG?**

The knowledge and skills are imparted during training. Officers need to undergo socialized course as follows:

- Commando
- Junior command
- Senior command

### **What personal qualities/attributes do I need to a RBG?**

- Ability and willingness to work under difficult conditions and pressure.
- Willingness to sacrifice one's comfort for the security of the country.
- Be physically and mentally strong/ fit.
- Alert and attentive.
- Safely conscious
- Ability to work as a team.
- Willingness to sacrifice one's comfort for the security of Royal family.

### **What are the education requirements to be RBG?**

To become an Kusung Magmi, after Class 8 you will be selected by the government to under go training in the Army Training Centre, Tencholing or Dechenchholing.

### **Can I study in Bhutan to become an RBG?**

Yes, to become Kusung Magmi, you can study still class 8 in Bhutan.

# **Registered Training Providers**

# Registered Training Providers

As per the **Regulation for Registration of Training Providers 2010**, it is mandatory for all training providers (private, public, corporation, NGOs and associations) to register with the Department of Occupational Standards (DOS), Ministry of Labour and Human Resources and obtain the Registration Certificate to conduct training in Bhutan. Training Providers are not permitted to offer training without the Registration Certificate issued by the Ministry.

The Department of Occupational Standards is mandated to regulate the quality of training through registration of training providers and accreditation of courses. Further it is mandatory for all private training providers to produce valid Registration Certificate during renewal of business license from the Regional Trade and Industry Offices, Ministry of Economic Affairs.

## Training Providers Registered with the Department as on June 2012

Sl no	Name of Training Provider	Location	Grade	Sector	Contact number
1	Computer Management Institute	P/Ling	B	Private	17110661
2	Royal Institute of Health Sciences	Thimphu	B	Govt.	17111328
3	Rigsum Institute of Information Technology & Management	Thimphu	B	Private	17604714
4	Institute for Management Studies	Thimphu	B	Private	17140510
5	Agriculture Machinery Centre	Paro	B	Govt.	17606742
6	Choki Traditional Art School	Thimphu	B	Private	17603135
7	Rural Development Centre	Zhemgang	B	Govt.	17671676
8	Samthang Institute of Automobile Engineering	Wangdue	B	Govt.	17959791

9	Chumey Institute of Civil Engineering	Bumthang	B	Govt.	17883371
10	Thimphu Institute of Automobile Engineering	Thimphu	B	Govt.	17609752
11	Khuruthang Institute of Electrical Engineering	Punakha	B	Govt.	17645440
12	Athang Training Academy	Thimphu	B	Private	17110989
13	Bhutan International School of Hospitality & Tourism	Thimphu	B	Private	17110503
14	BK ONE Bhutan Center of Excellence	Thimphu	B	Private	17110307
15	GPY Computer Training Institute	P/ling	B	Private	17560848
16	Gangjung Driving Centre of Excellence	Thimphu	B	Private	17118801
17	Royal Institute for Tourism and Hospitality	Thimphu	B	Govt.	331272
18	Bhutan School of Management and Technology	Thimphu	B	Private	17116545
19	Rangjung Institute of Electrical Engineering	Tashigang	C	Govt.	17608870
20	Trashy Yangtse Institute of Zorig Chusum	Trashiyangtse	C	Govt.	17111288
21	Bright Life Institute of Management	Thimphu	C	Private	17117226
22	National Institute of Zorig Chusum	Thimphu	C	Govt.	17693004
23	AA-Yang Music School	Thimphu	C	Private	17110979
24	G4S Security Service International	Thimphu	C	Private	17110024

25	Serzhong Institute of Civil Engineering	Gelephu	C	Govt.	17625174
26	Nazhoen Pelri Skills Training Centre	Punakha	C	NGO	77815399
27	Dzongkha Development Training Institute	Thimphu	C	Private	17118547
28	Dzongkha Language Institute	Thimphu	C	Private	17679951
29	Kuenzang Institute of Information Technology	Gelephu	C	Private	17150038
30	Bhutan Institute of Media	Thimphu	C	Private	17110002
31	Kesang Driving School	Thimphu	C	Private	17607933
32	ST IT Institute	Tsirang	C	Private	17117729
33	Digital Shangri-la	Thimphu	C	Private	17600093
34	Dechen IT and Management Institute	Thimphu	C	Private	17111988
35	InfoTech learning Centre	Thimphu	C	Private	17607627
36	KheyRig Institute of Accounts & Management	Thimphu	C	Private	17116336
37	Nyinshar Computer Learning Centre	P/Ling	C	Private	17616747
38	Habibs Hair & Beauty Academy	Thimphu	C	Private	17114256
39	Nyesel Institute of Technology	Paro	C	Private	17115229
40	ZAS Multimedia	Thimphu	C	Private	17628078
41	Tashi Lekphel Computer Training Institute	Wangdue	C	Private	17617708
42	Himalayan Institute of Information Technology	Gelephu	C	Private	17613724



43	Wood Craft Centre	Thimphu	C	Corp.	17609323
44	USD Driving School	P/ling	C	Private	17110863
45	USD Driving School	Gelephu	C	Private	17110863
46	Kuenphen Institute of Technology	Thimphu	C	Private	17110145
47	Link2 Support 168	Paro	C	Private	17112525
48	Jampel Computer & Management Training Institute	HAA	C	Private	17633275
49	Green Dragon Media Academy	Thimphu	C	Private	17172071
50	Rimpung Computer Training Centre	Paro	C	Private	17647546
51	Bhutan Center for Japanese Studies	Thimphu	C	Private	17111557
52	Institute of Service Management	P/Ling	C	Private	17110452
53	Global Computer Training Center	Wangdue	C	Private	17527672
54	NorChuk Institute of Technology	Samtse	C	Private	17867620
55	Computer Management Institute	Thimphu	C	Private	17110661
56	Local Development Training Institute	Thimphu	C	Private	17141035
57	Gangjung Driving Centre of Excellence	Wangdue	C	Private	17776508
58	Ugyen Wangchuck Institute for Conservation & Environment	Bumthang	C	Govt.	03-631926
59	Druk Info Tech Institute	Mongar	C	Private	17652173
60	Eastern Computer Training Centre	S/Jongkhar	C	Private	17702197
61	Karma Driving Training Institute	Gedu, Chukha	C	Private	17119788

62	Bhutan Media Institute	Thimphu	C	Private	17117585
63	Guide Association of Bhutan	Thimphu	C	Association	17333982
64	Sunkosh International Institute of Management	Thimphu	C	Private	17646148
65	Niche Institute of Management & Technology	Thimphu	C	Private	17110508
66	Institute of Technology & Computer Education	Thimphu	C	Private	17518084
67	USD Driving Institute	Thimphu	C	Private	17110863
68	Gangjung Driving Center of Excellence	Paro	C	Private	17118801
69	Gangjung Driving Center of Excellence	Bumthang	C	Private	17971294
70	Central Maintenance and Training Division	Thimphu	C	Corporation	361075
71	Dzongkha Learning Centre	Thimphu	C	Private	17669089

**Information to training seekers: (school leavers, graduates, parents, government organizations, corporate agencies etc.)**

A total of 71 training providers are registered with the Department of Occupational Standards, Ministry of Labour and Human Resources as on June 2012. The department would like to urge training seekers to avail your training from the Registered Training Providers only as well as use the Registration Certificate (Grade A, B and C) as the basis for selection of training provider for your training needs.