

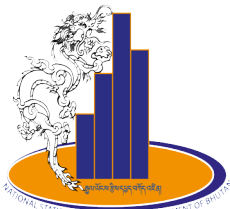


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2018 - 2019 |

ECONOMIC CENSUS OF BHUTAN 2018-2019

In support of better statistics for informed decision making



National Statistics Bureau



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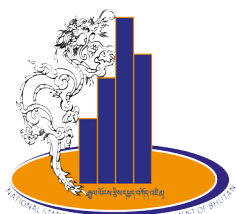


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FOREWORD

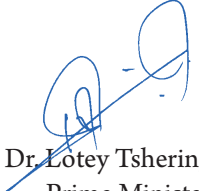
With great pleasure, I present the report on the 2018–19 Economic Census of Bhutan (ECoB 2018–19). This is the first economic census of Bhutan, and I want to take the opportunity to congratulate the National Statistics Bureau (NSB) on this accomplishment, as it adds an important component to the statistical framework of the country.

The ECoB 2018–19 provides a wealth of information that will enhance our understanding of the operations of the establishments within the economy. As such, the present report and additional information will create and enhance the evidence-based decisions that are required to develop and implement effective policies and programs related to the improvement of business opportunities.

The report covers the profiles of economic establishments in terms of their geographic distribution, legal status, ownership characteristics, and foreign investment. It also includes analyses of establishments by economic sectors and by employment. In addition, the report elaborates on the obstacles that are encountered by establishments in their operations.

It is my sincere hope that the report will be a key source of information for policy makers, planners, the business community, and international partners for the development of the country. Without the support of the owners and managers of the establishments, the ECoB 2018–19 would not have been possible. In this regard, I would like to extend my sincere appreciation to the owners and managers of the establishments and all the officials who administered the census, for their support and cooperation.

Tashi Delek



Dr. Lotey Tshering
Prime Minister

PREFACE

The Economic Census of Bhutan 2018–19 report presents the results of the first economic census that Bhutan has ever conducted. It contains basic statistics of non-household-based economic activities carried out within the economic boundaries of Bhutan. The census reference date was December 31, 2017; all information collected for the census is for that reference date.

The main objective of the Economic Census of Bhutan 2018–19 is to collect basic information of establishments such as the number of enterprises, employment therein, number of enterprises by type of activity and by type of ownership, regional distribution of the establishments, and their assets and liabilities. It is also to establish benchmark information and indicators for economic development and reconfirm the economic structure and any changes in the structure therein. Such information is essential for economic development planning purposes and to provide a framework for follow-up surveys. In addition, the data will help validate the Statistical Business Register, which is critical for improving economic statistics.

The census was conducted by 80 enumerators, supervised by the Dzongkhag Statistical Officers and staff of the National Statistics Bureau (NSB) over a period of two-and-a-half months, from December 2018 to February 2019. The World Bank’s Survey Solution facilitated a Computer Assisted Personal Interview (CAPI) system for the census.

While efforts were made in ensuring comprehensive collection of economic data, the census team did face many challenges. Nonetheless, the information collected, processed, and reported in this report provides opportunities for evidence-based policy formulation for supporting the private sector and creating an enabling business environment in Bhutan.

Whereas the present report covers the largest part of the data that were collected during the enumeration period, the NSB plans to undertake more in-depth analysis of relevant topics that are included in the census.

I extend my heartfelt appreciation to the staff of the NSB and all others, including the respondents, for their support and cooperation in the successful conduct of the census. By the same token, I would also like to extend sincere appreciation to the World Bank for providing both technical and financial support for the census.



Chhime Tshering
Director

National Statistics Bureau

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ABBREVIATIONS

ASEAN	Association of South East Asian Nations
BBS	Bhutan Broadcasting Service
CAPI	Computer Assisted Personal Interviewing
CSR	Corporate Social Responsibility
DRC	Department of Revenue and Customs
ECoB	Economic Census of Bhutan
EU	European Union
FDI	Foreign Direct Investment
HQ	Headquarters
ICRC	International Committee of the Red Cross
ICSE	International Classification of Status in Employment
IFC	International Finance Corporation
ILO	International Labor Organization
IMF	International Monetary Fund
ISCED	International Standard Classification of Education
ISIC	International Standard Industrial Classification
IT	Information Technology
JICA	Japan International Cooperation Agency
JUSMAG	Joint United States Military Assistance Group
LFS	Labour Force Survey
NGO	Non-governmental Organization
NQAF	National Quality Assurance Framework
NSB	National Statistics Bureau
PHCB	Population and Housing Census of Bhutan
QAF	Quality Assurance Framework
RTI	Royal Technical Institute
SNA	System of National Accounts
TTI	Technical Training Institute
VTI	Vocational Training Institute

ACKNOWLEDGMENTS

The National Statistics Bureau (NSB) successfully conducted the first economic census from December 2018 to February 2019, with financial and technical support of the World Bank.

In the course of the preparation and administration for the census, the NSB collaborated with many agencies of the government, the private sector, and other international organizations. The NSB is truly thankful and appreciative of the support and cooperation rendered for the census. These agencies include the Gross National Happiness Commission; Department of Industry, Ministry of Economic Affairs; Department of Cottage and Small Industry, Ministry of Economic Affairs; Department of Trade, Ministry of Economic Affairs; Department of Geology and Mines, Ministry of Economic Affairs; Bhutan Chamber of Commerce and Industry; Bhutan Information, Communication and Media Authority; Policy and Planning Division, Ministry of Finance; Royal Monetary Authority of Bhutan; Ministry of Works and Human Settlement; Department of Revenue and Customs, Ministry of Finance; Department of Agriculture, Ministry of Agriculture; Department of Agriculture Marketing and Cooperative, Ministry of Agriculture; Department of Employment and Human Resources, Ministry of Labour and Human Resources; Department of Information Technology and Telecom, Ministry of Information and Communications; National Commission for Women and Children; Dzongkhag and Gewog administrations; Construction Development Board, Association of Bhutanese Industries; Civil Society Organization Authority; Association of Bhutanese Industries; Natural Resource Development Corporation; Thimphu Thomdre; Samdrup Jongkhar Thomdre; Gelegphu Thomdre; Hotel's Association of Bhutan; and the International Monetary Fund.

We would like to place on record our gratitude to the NSB census team, the field supervisors, enumerators, and all the respondents of the establishments for their support and cooperation. Finally, we owe our deepest gratitude to the World Bank particularly Ms. Tenzin Lhaden, the World Bank project team leader, and the World Bank Country Office, Thimphu, for their unwavering support and facilitation in the smooth implementation of the project and Mr. Bart de Bruijn, World Bank consultant for the project, for his technical service.

National Statistics Bureau
Thimphu

EXECUTIVE SUMMARY

The Economic Census of Bhutan 2018–19 (ECob 2018–19) enumerated a total of 13,997 establishments. The census results showed, in many respects, a skewed picture. Geographically, almost 60 percent of the establishments are concentrated in only 6 out of 20 *dzongkhags*, with Thimphu *dzongkhag* accounting for 25 percent of the total. Almost two-thirds (64 percent) of the establishments are located in urban areas, and Thimphu *thromde* alone represents 22 percent of the total.

In terms of the legal status and economic organization of the establishments, the distributions show very large concentrations in single proprietorship and partnership establishments. They account for more than 9 out of 10 (92 percent) establishments, followed by permanent shed vendors with 7 percent. By economic organization, an even larger concentration is observed in single establishments (98 percent), and only 2 percent of the establishments are part of an enterprise with establishments in more than one location.

Different types of establishments show diverse life spans. Private limited companies, public limited companies, and state-owned companies have been in operation significantly longer (on average between 13 and 16 years) than establishments with other legal status. The large number of establishments that are single proprietorships or partnerships were on average operating for 6.4 years, and half of these establishments operated less than 4 years.

A majority (56 percent) of the single proprietorship and partnership establishments are owned by women. On average, these female owners are 39.4 years old, whereas their male peers have an average age of 45.3 years. Some 55 percent of owners of single proprietorship and partnership establishments attained primary education or less. Female owners are at a disadvantage in this respect: whereas 59 percent have primary education or less and 6 percent have higher education, the corresponding figures for male owners are 50 percent and 16 percent, respectively.

With 31 establishments, foreign direct investment (FDI) companies form a very small proportion (0.2 percent) of the total number of establishments in Bhutan. The foreign investments originate from 17 different countries, among which India is the most represented with investments in 10 FDI companies.

The establishments in Bhutan are strongly concentrated in very few economic sectors. Almost two-thirds (63 percent) are operating in the trade sector, mostly as retail trade establishments. Around one-fifth (21 percent) are working in the sector of accommodation and food services, mostly as food and beverage service providers. The next largest representation is in manufacturing, accounting for 5 percent of all establishments. Other economic sectors represent less than 3 percent of all establishments. Trade establishments form the majority in all *dzongkhags*, ranging

between 54 percent and 78 percent of all establishments. With respect to the distribution by the legal status of establishments, the construction and manufacturing sectors represent 35 percent and 5 percent, respectively, among private limited companies.

The distribution of establishments by legal status is different from the distribution of persons they employ. While single proprietorship and partnership establishments represent more than 90 percent of all establishments, they provide employment to only 49 percent of the total workers. On the other hand, private limited companies, state-owned limited companies, and project authorities represent a very small proportion of all establishments (together 1.4 percent), but these provide employment to 39 percent of all workers.

Comparing the establishments by the size of employment, establishments operated by one person represent more than half (55 percent) of all establishments, but these employ only 10 percent of the total workers. On the other hand, the few large-scale establishments with 100 employees or more (0.6 percent of all establishments) employ 46 percent of all workers.

Although wholesale and retail trade accounts for 63 percent of the total establishments, it employs only 24 percent of workers. On the other hand, the smaller number of establishments operating in the construction sector (1.2 percent) and the manufacturing sector (5 percent) employ 19 percent and 14 percent, respectively.

The gender distribution of employees widely differs across legal status categories of establishments. Overall, females account for 36 percent of the total workers. They are more represented in single proprietorship and partnership establishments (47 percent) and especially in permanent shed vendors (82 percent), whereas they are under represented among private and public limited companies (21 percent and 28 percent, respectively) and especially in project authorities.

In terms of nationality, non-Bhutanese workers make up nearly one-fifth (19 percent) of the employed population. The large majority of these 94 percent are men, half of whom are working in project authority construction work.

More than half (53 percent) of the workers consist of regularly paid employees, followed by 18 percent own-account workers and 13 percent contract employees. The majority of regularly paid and contract employees are men (respectively, 66 percent and 89 percent), whereas among own-account workers and unpaid family workers, women make up more than half, respectively, with 61 percent and 58 percent. Most regularly paid, casual-paid, and contract employees work between 40 and 50 hours a week, whereas the majority of own-account workers and unpaid family workers work more than 70 hours a week. The median monthly remuneration of male workers is BTN 9,700 as against BTN 8,000 for female workers.

The ECoB 2018–19 also collected information about business obstacles that establishments experience. The most common obstacles for more than 35 percent of establishments are difficulties with access to finance, rent payment, competition from the informal sector, and electricity supply. The first three of these are not only the most frequently experienced but are also the problems that are considered the most severe. Sector-specific analysis of business obstacles shows variation in the ranking of obstacles. Thus, for the primary sector establishments (mostly in rural areas), the combined ranking for prevalence and severity finds transport and water supply among the three most important obstacles next to access to finance. For the secondary sector the top-three obstacles are access to raw materials, the level of education (skill) of employees, and tax rates, whereas for the tertiary sector the obstacles are electricity supply, competition from the informal sector, and paying rent.

1

INTRODUCTION

1.1 Background

An economic census is a complete enumeration of a population at a point in time with respect to well-defined characteristics. The population of an economic census consists of the economic establishments operating in a country. It is an integrated approach to the compilation of economic statistics, which may include censuses for specific activities/industries on a periodic basis.

While population and housing censuses and agriculture censuses are commonly conducted, the conduct of economic census is more recent. Economic census information allows governments to formulate policies for the development of the private sector. It enables the benchmarking of economic indicators at the national and local levels at regular intervals and provides reliable sampling frameworks for targeted surveys. Furthermore, it also helps determine and validate the structure of the economy and changes over time.

The structure of the Bhutanese economy has changed rapidly over the past few decades. The share of the primary sector, which was 40.7 percent of the economy in 1981, has decreased to 17.3 percent in 2017. At the same time, the share of the secondary sector increased from 17.1 percent to 40.5 percent. The share of the service sector hovered around 40 percent throughout the past few decades. The current and the future economic census shall enable the government to measure the changing pattern and structure of the Bhutanese economy. The challenges in good data points for compilation of the national accounts motivated the National Statistics Bureau (NSB) to look for alternatives to support and validate the existing data sources for the compilation of the national accounts. As such, the economic census proposal was developed and financing mobilized for implementation.

The NSB conducted the first economic census of Bhutan from December 2018 to February 2019 with the technical and financial support of the World Bank. While the census collected basic information for all establishments in existence during the period of census enumeration, a more comprehensive amount of data was collected for establishments that were in operation in 2017. The census reference date was December 31, 2017.

1.2 Objectives of the economic census

The main objective of the economic census was to assess the characteristics of the Bhutanese economy and its performance. The census had the following specific objectives:

1. Identify the population of economic units;
2. Collect data on the various sectors of the economy;
3. Establish benchmark information and indicators for levels of economic growth;
4. Update and improve statistical business register information, and
5. Develop sampling framework for future economic surveys.

1.3 Scope and coverage

An economic census is a statistical survey conducted on the full set of economic units belonging to a given population or universe. It is the complete enumeration of establishments at a point in time with respect to well-defined characteristics. An establishment is defined as an enterprise, or part of an enterprise in a single location, that undertakes a single productive activity or in which the principal productive activity accounts for most of the value added. With this definition of establishment, the 2018–19 Economic Census of Bhutan (ECoB 2018–19) covered the following establishments operating within the territory of Bhutan:

- State-owned enterprises;
- Single proprietorships;
- Partnerships;
- Private limited companies;
- Public limited companies;
- Foreign direct investment (FDI) companies;
- Non-governmental organizations (NGOs);
- Regular vendors operating in a permanent shed;
- Functional cooperatives/farmers' groups, and
- Project authorities.

The ECoB 2018–19 did not cover:

- Household-based businesses such as operation of taxis or trucks and handcraft activities;
- Household-based subsistence growing of crops and rearing of livestock;
- Religious institutions such as *Dratshangs*, *Shedras*, and *Gomdeys*;
- General government offices, and
- Defense services.

While data have been collected for the functional farmers' groups and cooperatives with proper address, the coverage has not been sufficiently complete, as most of the groups did not have a proper office and by and large operated from individual homes. Similarly, despite repeated efforts to locate offices of the NGOs, the number of NGOs covered was only about 50 percent. Hence, the results and analyses for these two categories were undertaken independently.

1.4 Structure of the report

The economic census report presented here contains seven chapters. This introductory chapter aims at providing the general context of conducting the economic census in Bhutan, including the objectives of the census and its scope and coverage. Chapter 2 gives a description of the methodological and operational procedures implemented in the census, to offer readers and census users a better understanding of how the census results have been obtained and how they should be interpreted. The chapter dwells on the stakeholder participation, design of the questionnaire, data capture methodology, the pre-census listing operation, the training of enumerators and supervisors, the census enumeration, data processing data compilation, consolidation, coding of the economic activities, data validation, and editing and tabulation, analysis, and report writing, followed by sections on census quality assurance and limitations of the ECoB 2018–19.

Chapters 3–7 cover the subject matter of the census. In chapter 3, the report describes the general characteristics of the enumerated establishments by geographic area, legal status, and economic organization. It also presents the duration of operation of the establishments, ownership profiles, and FDI information.

The economic sector grouping of the establishments is presented in chapter 4. Through the lens of the distribution across economic sectors, various establishment characteristics are reviewed, including geographic location, legal status, and employment size.

Chapter 5 deals with the gender and nationality-specific employment in the establishments. It has six sections and reports on employment by employment size-class, legal status, and economic sector of the establishments and by status of employment, working hours, and wage level of the employed population.

Information about a series of business obstacles faced by the establishments is reported in chapter 6. The analysis addresses the proportion of establishments that are potentially and actually affected by these obstacles and assesses the severity of the impact. The results are dis-aggregated for the primary, secondary, and tertiary sectors.

Since the non-governmental organization (NGO) establishments and the cooperatives and farmers' groups were only partially covered in the enumeration, information about these establishment categories are not included in chapters 3–6, but these are treated separately in chapter 7 in an abbreviated form. The information includes descriptions of the employment size of the establishments, the economic sector of operation, and the profile of the population employed in these establishments.

The annexes include background documentation of the census, detailed statistical tables, concepts and definitions, and an overview of the quality assurance measures taken in the census operation and quality assessment.



2

CENSUS METHODOLOGY AND OPERATIONS

2.1 Introduction

Like any other census and survey, in the ECoB 2018–19, census methodology and operation standards were strictly followed to assure the quality of the census results. For the first time, the report of a statistical project covers the quality assurance measures that were taken according to an international quality assurance framework (see section 2.7 and Annex I).

2.2 Preparation phase

As a first step, in preparation for the economic census, a project proposal was drafted in early 2015. This was submitted to the World Bank in September 2015 for funding and technical support. Following the acceptance of the project proposal, a project agreement was signed in March 2017. With the release of the funds and with the technical support of the World Bank, the pre-census activities started in April 2017 and the main census was conducted from December 2018 to February 2019.

2.2.1 Stakeholder participation

To ensure proper coordination and planning, the NSB, with the support of the international consultant, convened several rounds of workshops to educate on and advocate the purpose of conducting the economic census. Two major stakeholder workshops were conducted since the inception of the project in 2016 at various stages of the census preparatory phase. To seek support and cooperation of the agencies and agree on census administration and implementation strategies, as well as on information to be produced by the census, seven bilateral meetings were coordinated and convened. In total, 25 departments and agencies participated in the meetings. Annex II provides the list of agencies that were consulted.

2.2.2 Questionnaire design and field staff manual

Since the economic census was the first census in Bhutan, other countries' census questionnaires were reviewed for drafting the census questionnaire. Different versions of the questionnaire were drafted based on the recommendations and feedback from the stakeholder workshops. The first questionnaire that was developed was the establishment listing form. This questionnaire was

developed for the inventory of establishments within the scope of the ECoB 2018–19 that was required for the logistic planning of the enumeration. In addition, the listing form was designed to capture part of the census information, to reduce the respondent burden during the full census enumeration. The listing form contained the following modules:

- Module 1. Identification, and
- Module 2. Establishment information

The main census questionnaire (see Annex III), to be used during the actual census enumeration, contained the following modules:

- **Module 1. Identification.** This module had basic information about the name and location of the establishment, as well as information about the operation of the establishment that was collected during the establishment listing;
- **Module 2. Establishment information.** This module had information about the economic activities performed by the establishments and about establishment operations;
- **Module 3. Employment.** This module focused on the number and characteristics of the persons working in the establishments;
- **Module 4. Income and expenses.** This module had information about the sources and amounts of income generated by the establishments, as well as the types and amounts of expenditures of the establishments;
- **Module 5. Assets and inventory.** This module was about the value of the assets and goods owned by the establishments, and
- **Module 6. Business environment.** The last module assessed the possible obstacles encountered by the establishments.

Two versions of the census questionnaire were agreed and finalized for use with tablets during computer-assisted interviewing (see section 2.2.3). These two versions differed in the extent to which information collected during the establishment listing was accepted (see section 2.2.6). A third paper version of the questionnaire was developed for self-completion by respondents in the establishment in cases where they needed more time to collect the census information. In these cases, a hard copy was left with the respondent to be collected later by the enumerators.

Following the finalization of all versions of the questionnaires, field manuals were developed to guide the enumerators and supervisors during the enumeration. These manuals also provided the basis for the enumerator and supervisor training before the enumeration. Another manual was developed to assist respondents in the self-completion of the census questionnaire in those cases where a paper questionnaire was provided. The following three manuals were drafted:

- Manual for the field enumerators;
- Manual for the field supervisors, and
- Manual for respondents in the case of self-completion of the questionnaire

The questionnaires and manuals were tested in the pilot census (October 2018) and revised on the evaluation of the pilot experience.

2.2.3 Data capture methodology

For the census enumeration, as well as for the preceding establishment listing, Survey Solutions has been used to create the interface for data capture. It is a free software package developed by the World Bank to assist governments, national statistics offices, and NGOs in implementing advanced surveys using mobile devices. The software is then loaded into a tablet to guide the enumerator through the questionnaire. This method of data capture is called Computer Assisted Personal Interviewing (CAPI).

A number of consistency checks have been incorporated, such as automatic skip patterns so that when specific questions need to be skipped depending on answers to previous questions the program automatically guides the enumerator to the next question. Furthermore, specific instructions have been provided against each question to help enumerators and respondents in dealing with the question. In addition, a large number of validation checks have been incorporated to assure data quality.

After the data collection was completed, the data were exported from survey solutions to STATA for analysis.

2.2.4 Tax registration information

Tax information from the Department of Revenue and Customs (DRC) was used to plan the fieldwork of economic census listing.

2.2.5 Listing of establishments

The establishment listing was conducted in May and June 2018, following two days of supervisor training and three days of combined enumerators' and supervisor training. Different groups led by supervisors were deployed for 45 working days to complete the listing of economic establishments.

2.2.6 Assessment of listing data

The establishment listing provided a full inventory of the establishments that had to be covered in the economic census. Based on a quality assessment by the NSB, the information collected from the establishments was either accepted (the large majority) or rejected (a minority). Given these two listing outcomes, two questionnaires were designed for the census:

- **Version A.** This is the version of the questionnaire for establishments for which the listing results were accepted. Part of the information that was collected during the listing was pre-filled in the census questionnaires. Some of this information was checked again during the enumeration.
- **Version B.** This is the version of the questionnaire for establishments for which the listing results were rejected, for establishments that were omitted during the listing exercise, or for establishments that came into operation after the listing. Questions that were asked during the establishment listing were repeated during the enumeration.

A total of 18,420 establishments were listed during the establishment listing. The listing data were checked for inconsistencies. Issues with wrong administrative unit codes have been corrected to enable the enumerators to be able to locate the establishment during the census. Some issues with the order of the questions in the listing questionnaire were addressed, so the order of the questions in module 1 has been changed in the final census questionnaires.

2.2.7 Publicity campaign

Publicity and campaign are critical activities for any census and survey. The cooperation and support of the target audience are contingent on the level of their buy-in. Both print and electronic media were used for publicity and campaign. The National Statistics Bureau used the following methods:

- The NSB convened several rounds of stakeholder meetings with relevant agencies of the government and private sectors;
- A one-page notice regarding the census was inserted in *Kuensel* before the listing and actual census activities;
- A public announcement on the economic census was made during the prime time TV broadcast of the Bhutan Broadcasting Service (BBS) and on radio, and
- The NSB website hosted a banner on the economic census.

2.3 Enumeration phase

2.3.1 Pilot census

A pilot census was conducted during two weeks in October 2018. The purpose of this pilot was to check the structure and flow of the questionnaire and to estimate the average time required to enumerate an establishment. In addition, it provided the opportunity to test the procedures related to the enumerator and supervisor training and data processing. Nine NSB officials were mobilized to conduct the pilot census for the duration of two weeks. The findings from the pilot census were used:

- To make necessary corrections in the structure and flow of the census questionnaire;
- To plan the number of supervisors and enumerators to be recruited to complete the field enumeration in allocated time;
- To revise the tasks of the field supervisors, and
- To revise the contents of the field staff training for the main census.

2.3.2 Selection and training of census staff

For the main census, 24 supervisors, 68 enumerators, and 12 dashboard managers were recruited. The Dzongkhag Statistical Officers and a number of NSB officials were selected as the supervisors, and a pool of university graduates were selected as temporary enumerators and dashboard managers.

The trainings for supervisors and enumerators were conducted for two weeks, from November 19 to November 30, 2018. During the training, they were introduced to the general backgrounds of the census and the concepts and definitions of the terms contained in the questionnaire.

They were also trained in the various enumeration procedures and in recording responses to the questionnaire electronically in the tablets provided to them. Mock interviews in different dialects were conducted among the enumerators to equip them with interviewing techniques during the training sessions. At the end of the training period, they were sent for a field test to get further practical experience and get adapted with the tablet and the questionnaire before the actual census enumeration. The agendas for the enumerator and supervisor trainings are included in this report as Annex IV.

2.3.3 Enumeration

The main census was conducted during two-and-a-half months from December 2018 to mid-February 2019. This was more than the two months originally planned to allow for follow-up on establishment response and withdrawal of a number of enumerators who had to be replaced. The enumerators were divided into 24 teams consisting of three enumerators and a supervisor each. The teams were assigned to Thimphu and Phuentshogling *thromdes* for the first two weeks since these two *thromdes* comprised almost one-third of the total number of establishments in the establishment listing. After completing the enumeration of Thimphu and Phuentshogling *thromde*, the teams were assigned to specific *dzongkhags* (for an explanation of *thromdes* and *dzongkhags*, see Text box 3.1). Apart from the supervisors supervising the fieldwork of the enumerators, there were 12 dashboard managers at NSB headquarters (HQ), who assigned questionnaires to the field teams and checked the quality of the results. The dashboard managers were also tasked to provide the coding for the reported economic activities according to the description provided by enumerators in the field (see section 2.3.4).

2.3.4 Coding of economic activities

The International Standard Industrial Classification (ISIC) Rev. 4 (UNDESA 2008) was used for coding the economic activities that were reported by the establishments. For easy referencing of industry codes, only the industrial codes that were relevant for the economy of Bhutan were drawn from the ISIC classification and were customized for use in the ECoB 2018–19.

During the establishment listing, the coding of economic activities was done by the field supervisors, based on the description of economic activities provided by the enumerators. However, during the actual census, for the new establishments that had come into operation after the listing or change in activities, the coding was done at the head office by the dashboard managers; this arrangement was done to reduce the work burden on the supervisors. If the customized list did not cover specific activities encountered during the enumeration, the list was updated based on feedback from the field supervisors.

2.4 Data processing phase

2.4.1 Data compilation and consolidation

After the data had been collected in the two versions of the questionnaire, the data were compiled and kept in two different data sets. For version A, the data from modules 1 and 2 were extracted from the listing data and merged with the data from version A using the ID variable which was

common for both modules. For version B, the data included the complete set of census information and were therefore kept as they were. The corresponding variables in the two data sets (version A and version B) with different names were renamed and made consistent for merging. The two different data sets were then merged into one data set. A first version of the complete data set was obtained on March 3, 2019.

2.4.2 Data checking and editing

During the data collection, 12 dashboard managers were recruited to assign questionnaires to the enumerators in the field and to verify the quality and consistency of each completed questionnaire. There were 24 enumerator teams in the field, so each dashboard manager handled two teams, to assign questionnaires and check the submitted questionnaires. Missing, incomplete, and inconsistent responses were verified by rejecting the questionnaire as soon as it was received from the enumerators. The enumerators verified the rejected questionnaire and submitted it again after correction, frequently based on revisiting the enumerated establishment. This process was repeated several times until the data had been corrected. The data were verified at two stages, once by the dashboard managers and once at the NSB HQ.

After the data collection was completed, the consolidated data set was thoroughly checked to identify missing values, errors, and inconsistencies and responses that did not meet established criteria for plausibility. This stage of data checking and editing was from March to May 2019. The economic activities that were coded by supervisors and dashboard managers were reviewed and verified industry by industry by the staff in the NSB HQ during the data editing phase. Any inconsistency or apparent mistake in the activity description and activity code was verified and recorded accordingly.

In many cases, data issues were followed up through telephone calls with the establishments involved to resolve the problems. The remaining issues were addressed through the following editing procedure:

- Deterministic editing of individual data issues based on available information in the data set;
- Imputation of sets of data issues, based on logical inference, and
- Assigning of codes for ‘missing values’ if data issues could not be adequately addressed

An operational data set was ready for analysis after the first week of May 2019. The analysis phase included further data editing when more in-depth exploration identified additional data issues.

2.5 Analysis and reporting phase

During the census preparation phase, a detailed report outline and tabulation plan was developed. Upon completion of an operational data set, a set of 48 basic tables were produced in accordance with the tabulation plan. This was used as the basis for the presentation and analysis of results in the census report. The ECoB 2018–19 census team was split into three groups that were assigned the responsibility of drafting the respective sections and chapters of the report. The team had the full-time support of the NSB senior information technology (IT) officer for production of

additional analysis tables and general data management. In addition, the World Bank consultant provided technical assistance in the analysis, presentation of results, and report writing.

The analysis results and report chapters that were produced by the census team underwent several rounds of internal review. A partial draft census report was produced by mid-May 2019, and the full census report was completed by end-May 2019.

2.6 Census quality assurance

Since censuses are huge and costly operations and represent key sources for planning and programming, statistical institutes that conduct a census bear great responsibility for the quality of the results. Therefore, census quality is not only relevant for the reputation and professional status of the statistical agency but more importantly for:

- Census data users, like ministries, government agencies, policy makers, municipalities, business concerns, interest groups, research institutes, donors, international organizations, the general public, and all other entities that are the beneficiaries of policies and programs, and
- Census funding entities, whether external donors or the government through the national budget, and therefore indirectly the taxpayers in the country.

This responsibility requires a user-oriented position and a high level of transparency regarding the procedures and results of a census. Recognizing this, increasingly, statistical institutes report on census quality and quality assurance in a more structured manner and develop quality assurance frameworks (QAFs) to enhance census quality. This trend is confirmed and formalized in the United Nations Fundamental Principles of Official Statistics (United Nations 2015),¹ which received recognition at the highest level through their adoption in a 2014 resolution of the United Nations General Assembly. Similarly, the European Statistics Code of Practice (Eurostat 2017)² formulates the quality dimensions to which the national statistical institutes of the European Union (EU) have to comply.

The quality of a census cannot be indicated with a single measure, as it involves a multitude of quality aspects. Following the European Statistics Code of Practice and applying this to the ECoB 2018–19, three dimensions of quality can be identified:

1. The quality of the census output;
2. The quality of the census production process, and
3. The quality of the NSB institutional environment

The logic behind this grouping is that the census output quality will be largely determined by the quality of the census production process and that in turn the production process will, to a large extent, be determined by the quality of the institutional environment within which the census is conducted.

¹ And the associated guidelines for a generic national quality assurance framework (NQAF) (United Nations, n.d.).

² And the associated QAF of the European Statistical System (Eurostat, n.d.).

Users of the ECoB 2018–19 will be primarily interested in, and/or affected by, the quality of the census output. This output dimension captures five underlying quality aspects:

1. Data relevance;
2. Data accuracy and reliability;
3. Timeliness and punctuality of release of census results;
4. Data coherence and comparability, and
5. Data accessibility and clarity (see Box 2.1 for definitions)

Box 2.1: Aspects of output quality

The following aspects of output quality can be distinguished for statistical data production:

- *Data relevance.* The degree to which information meets real needs of data users
- *Data accuracy.* The degree to which information correctly describes the phenomena it was designed to measure: the closeness between measured values and the (unknown) true values
- *Data reliability.* The degree of variance observed with repeated measurements
- *Timeliness.* The delay between reference point to which information pertains and date on which information becomes available
- *Punctuality.* Whether outputs are delivered on the dates promised, advertised, or announced
- *Coherence and comparability.* The degree to which data are internally consistent and are consistent with other NSI outputs, over time and between countries
- *Data accessibility.* The ease with which information can be accessed by users
- *Data clarity (or interpretability).* The extent to which outputs are presented clearly, are readily understandable, and are accompanied by sufficient metadata to ensure that their fitness for purpose can be accessed by users

In turn, the census production process captures four procedural quality aspects and the institutional environment of another six institutional quality aspects.³ Many of these quality aspects are addressed in the functioning of the NSB and its survey and census operations, either explicitly or implicitly. The ECoB 2018–19 is the agency’s first operation that reports on relevant quality aspects of produced statistics according to a structured quality assurance framework. This experience may serve as a basis to develop a full national statistical quality assurance framework for Bhutan.

It should be noticed that different quality aspects can be partially interdependent. For example, the sooner census results are published (timeliness), the higher the relevance of the information will be. Similarly, data relevance increases with data accuracy. In other cases, quality aspects may have contradicting implications and involve a trade-off. For instance, if more time is spent on data checking and editing, data accuracy improves, but it adversely affects the timeliness of publication of results. In such cases, strategic decisions need to be made.

³Respectively, sound methodology, appropriate statistical procedures, non-excessive burden on respondents and cost-effectiveness (procedural quality aspects) and professional independence, institutional mandate, adequacy of resources, commitment to quality, confidentiality and data protection, impartiality, and objectivity.

Annex I presents the measures that were taken in the ECoB 2018–19 to assure the quality of the census results and reports on the quality aspects for which information is available. The main conclusions can be summarized as follows:

- The ECoB 2018–19 complies with international standards and procedures for conducting an economic census, including the application of relevant international classifications;
- The census field staff were extensively trained in the contents and procedures of census taking, enumerators for 8 days and supervisors for 11 days;
- The coverage rate of the ECoB 2018–19 is estimated at 96.7 percent;
- An extensive program for checking and improving the census data was implemented. The overall percentage of missing values is 0.4 percent and
- The census report is released without delay, 4.5 months after completion of the enumeration. Part of the results will be released later.

2.7 Limitations of the ECoB 2018–19 report

2.7.1 Scope

By design, the census did not cover the following economic activities:

- Household-based businesses such as operation of taxis or trucks and handicraft activities;
- Household-based subsistence growing of crops and rearing of livestock;
- Religious institutions such as *Dratshangs*, *Shedras*, and *Gomdeys*;
- General government offices, and
- Defense services

Therefore, the ECoB 2018–19 does not cover the entire economy of Bhutan.

Many of the 479 listed establishments could not be enumerated, mostly because they were not operational or were seasonally inactive, could not be located, or refused to respond during the census. This amounts to 3.3 percent of the establishments targeted by the census. Non-coverage concentrated among NGOs and cooperatives/farmers' groups. Most of the cooperatives and farmers' groups did not have a proper office and by and large operated from individual homes, which were difficult to identify. Consequently, only less than 30 percent were enumerated in the census. Similarly, despite repeated efforts to locate offices of the NGOs, the number of NGOs covered was only about half the total.

In total, 21 NGOs and 116 cooperatives and farmers' groups were enumerated during the census period. Given this high rate of non-coverage, these economic units were not included in the comprehensive analysis in this report. Instead a separate brief analysis is provided for NGOs and cooperatives and farmers' groups in chapter 7.

2.7.2 Reduced information on branch and subcontracting establishments

The census collected information about whether the establishment is a single establishment, a branch only, a branch and head office, or head office only. If an establishment is a branch only and does not maintain separate books of accounts, no detailed information is collected from that establishment but instead from the associated head office. Although the relevant census information could be appropriately collected, the geographic distribution of establishments is biased in the sense that branch establishments without own books of accounts are not enumerated in their own physical location. Consequently, their activities, employment, capital, and so on are presented as if they are located in the head office.

Hydro projects implemented in the country involve many private companies from India for the construction of tunnels, dams, and other infrastructural works, working under the supervision of a government authority. Ideally, all such establishments should have been captured separately in the census. These establishments are scattered all over the country, and even during the listing phase, it was difficult to capture these establishments separately. Consequently, the NSB decided for the strategy to collect information at the aggregate level of the project authority rather than capturing the separate private construction companies.

2.7.3 Remaining data processing and reporting

The census questionnaire collected information about the income, expenses, assets, and inventory of the enumerated establishments. This type of information requires extensive data checking, validation, and data cleaning. The scope of this work went beyond the timeline for the dissemination of the census results and the present census report. The position of the NSB is not to compromise on data accuracy and reliability to adhere to the schedule of releasing information for this part of the census outcomes while observing the dissemination schedule of the largest part of the census results. The office will make further efforts to scrutinize and validate the data on income and expenditure, to release this information once sufficient confidence in the accuracy and reliability of the data has been obtained.

3

GENERAL CHARACTERISTICS OF ESTABLISHMENTS

3.1 Geographic distribution

According to the results of the ECoB 2018–19, there are about 14,000 establishments engaged in different economic activities in the country (Table 3.1). This excludes household-based crop production, public administration, and defense services. Of the total number of establishments, 8,900 (63.5 percent) are located in urban areas and 5,100 (36.5 percent) in rural areas. Four *dzongkhags*—Thimphu (24.9 percent), Chhukha (13.6 percent), Sarpang (8.1 percent), and Paro (6.2 percent)—together accounted for 52.8 percent of the total establishments in the country.

Box 3.1: Geographic distribution by *dzongkhags* and *thromdes*

Bhutan is geographically divided into 20 administrative districts called *dzongkhags*. All *dzongkhags* have urban centers, which function under the *dzongkhag* administration. In addition, there are four major urban centers called *thromdes* (Gelegphu, Phuentshogling, Thimphu, and Samdrup Jongkhar) that function independently of the *dzongkhag* administration. This report presents information by both *dzongkhags* and *thromdes*.

Across *dzongkhags*, Thimphu has the highest number of establishments with 3,500 establishments, of which 90 percent are based in urban areas and the remaining 10 percent in rural areas. On the other hand, Haa, Lhuntse, and Gasa *dzongkhags* have very few establishments, each with less than 200 establishments.

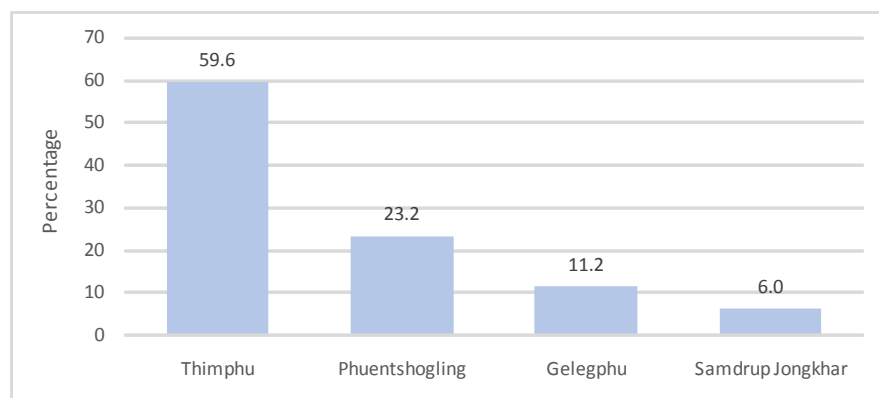
Table 3.1: Establishments, by *dzongkhag* and urban-rural distribution, 2017

<i>Dzongkhag</i>	Number			Percentage		
	Urban	Rural	Total	Urban	Rural	Total
Bumthang	255	91	346	2.9	1.8	2.5
Chhukha	1,449	447	1,896	16.3	8.8	13.5
Dagana	180	347	527	2.0	6.8	3.8
Gasa	27	7	34	0.3	0.1	0.2
Haa	104	61	165	1.2	1.2	1.2
Lhuntse	52	77	129	0.6	1.5	0.9
Monggar	307	239	546	3.5	4.7	3.9

Dzongkhag	Number			Percentage		
	Urban	Rural	Total	Urban	Rural	Total
Paro	472	398	870	5.3	7.8	6.2
Pema Gatshel	167	136	303	1.9	2.7	2.2
Punakha	242	194	436	2.7	3.8	3.1
Samdrup Jongkhar	406	218	624	4.6	4.3	4.5
Samtse	260	680	940	2.9	13.3	6.7
Sarpang	634	502	1,136	7.1	9.8	8.1
Thimphu	3,149	336	3,485	35.4	6.6	24.9
Trashigang	296	323	619	3.3	6.3	4.4
Trashi Yangtse	131	143	274	1.5	2.8	2.0
Trongsa	97	161	258	1.1	3.2	1.8
Tsirang	283	377	660	3.2	7.4	4.7
Wangdue Phodrang	293	248	541	3.3	4.9	3.9
Zhemgang	89	119	208	1.0	2.3	1.5
Total	8,893	5,104	13,997	100.0	100.0	100.0

Of the total number of establishments, 5,200 are located in four *thromdes*, accounting for 37.2 percent of all establishments in the country. As shown in Figure 3.1, about 60 percent of the establishments of *thromdes*(3,100) are based in Thimphu *thromde*. Phuentshogling *thromde* represents around 23 percent (1,200) of the establishments based in the four *thromdes*. The remaining two *thromdes* account for only about 17 percent of the total establishments.

Figure 3.1: Establishments by *thromde*, 2017 (percentage)



3.2 Legal status and economic organization

The legal status in this section refers to the business setup in accordance with the existing business rules and regulations of the country. For the ECoB 2018–19, the following legal statuses were identified:

- Single proprietorship;
- Partnership;
- Private limited companies;
- Public limited companies;
- State-owned limited companies;
- FDI companies;
- Permanent shed vendors;
- Project authorities;
- NGOs, and
- Cooperatives and farmers' groups

Chapters 3–6 report on all categories except NGOs and cooperatives and farmers' groups. The information about the latter two is considered incomplete, and these two categories are separately covered in chapter 7. For definitions of the different types of legal status, refer to Annex VII.

In addition, the establishment status is further identified by economic organization as:

- Single establishment;
- Branch with separate books of accounts;
- Branch and head office, and
- Head office only.

The distribution of establishments by legal status and by economic organization is dominated by establishments that operate as single establishments under single proprietorship or partnership ownership (Table 3.2). This category accounts for 12,700 or 90.5 percent of all establishments in the country. The next largest category of establishments—permanent shed vendors, all operating as single establishments accounts for less than 1,000 or 6.6 percent of the total number of establishments. The remaining categories account for few numbers only, representing around 1 percent or less of the total number of establishments.

Almost all single proprietorships, partnerships, or permanent shed vendors operate as single establishments. Other establishments such as public limited companies, state-owned limited companies, and project authorities are mostly composed of head offices with one or more branches (Table 3.3). With regard to private limited companies, just over half (51.6 percent) consist of single establishments.

Table 3.2: Establishments, by legal status and economic organization, 2017

Legal status	Economic organization					
	Single establishment	Branch with separate books of accounts	Branch and head office	Head office only	Total	
					Number	Percentage
a. Numbers						
Single proprietorship or partnership	12,667	46	38	90	12,841	91.7
Private limited company	81	18	19	39	157	1.1
Public limited company	4	0	5	7	16	0.1
State-owned limited company	4	0	20	4	28	0.2
FDI company	10	0	12	9	31	0.2
Permanent shed vendor	919	0	0	0	919	6.6
Project authority	0	0	2	3	5	0.0
Total	13,685	64	96	152	13,997	100.0
b. Percentages						
Single proprietorship or partnership	98.6	0.4	0.3	0.7	0	100.0
Private limited company	51.6	11.5	12.1	24.8	0	100.0
Public limited company	25.0	0.0	31.3	43.8	0	100.0
State-owned limited company	14.3	0.0	71.4	14.3	0	100.0
FDI company	32.3	0.0	38.7	29.0	0	100.0
Permanent shed vendor	100.0	0.0	0.0	0.0	0	100.0
Project authority	0.0	0.0	40.0	60.0	0	100.0
Total	97.8	0.5	0.7	1.1	0	100.0

Table 3.3 also reveals that the largest share (88.4 percent) of establishments consists of single proprietorship or partnership entities in *thromdes*. Some 4,500 of these operate as single establishments (85.8 percent of the total number of establishments in the *thromdes*). Among the categories of limited companies, the private sector companies form the largest group, most of which are also single establishments.

Table 3.3: Establishments in thromdes, by legal status and economic organization, 2017

Legal status	Economic organization					
	Single establishment	Branch with separate books of accounts	Branch and head office	Head office only	Total	
					Number	Percentage
a. Numbers						
Single proprietorship and partnership	4,464	25	28	79	4,596	88.4
Private limited company	64	14	12	35	125	2.4
Public limited company	2	0	3	5	10	0.2
State-owned limited company	3	0	15	4	22	0.4
FDI company	4	0	10	7	21	0.4
Permanent shed vendor	426	0	0	0	426	8.2
Total	4,963	39	68	130	5,200	100.0
b. Percentages						
Single proprietorship or partnership	97.1	0.5	0.6	1.7	0	100.0
Private limited company	51.2	11.2	9.6	28.0	0	100.0
Public limited company	20.0	0.0	30.0	50.0	0	100.0
State-owned limited company	13.6	0.0	68.2	18.2	0	100.0
FDI company	19.0	0.0	47.6	33.3	0	100.0
Permanent shed vendor	100.0	0.0	0.0	0.0	0	100.0
Total	95.4	0.8	1.3	2.5	0	100.0

3.3 Legal status and duration of operation

Box 3.2: Ownership and duration of operation

During the field operation of the ECoB 2018–19, it was found that there are establishments that changed the legal ownership by transferring ownership from one owner to another. The duration of operation that is reported in the census may in these cases refer to the duration that the new owner is operating the establishment and not to the operation duration of the establishment itself. To the extent that this is the case, the reported number of operational years may involve a downward bias.

Table 3.4 presents the establishments by legal status and by number of years that the establishment has been in operation. It shows that on average, limited companies are longer in business than establishments with other legal status. For each of the limited company categories, the mean duration of operation is at least 13 years, whereas that of other establishments is below 8 years. State-owned limited companies have on average the longest operation duration (16 years). The single proprietorship and partnership establishments that make up the largest category of establishments in terms of legal status operated on average only for around 6 years. The mean years of operation of permanent shed vendors is about 8 years.

One-quarter (26.3 percent) of all establishments reported that they were in operation for 5–10 years and around 19 percent of establishments for more than 10 years. The establishments that are in operation for less than one year constitute 10.4 percent of the establishments.

Figure 3.2 presents the duration of operation in cumulative percentages for different establishments groups. It shows that of all establishments that were operational in 2017, government-related

Table 3.4: Establishments, by legal status and duration of operation, 2017

Legal status	Duration of operation						Total	Mean duration
	Less than 1 year	1–2 years	3–4 years	5–10 years	More than 10 years	Not reported		
Single proprietorship or partnership	1,408	3,045	2,743	3,328	2,304	13	12,841	6.4
Private limited company	7	23	9	34	82	2	157	13.0
Public limited company	2	0	0	4	5	5	16	14.1
State-owned limited company	1	3	3	1	8	12	28	15.9
FDI company	2	6	7	11	3	2	31	5.3
Permanent shed vendor	41	172	174	297	235	0	919	7.8
Project authority	0	1	2	0	0	2	5	3.0
Total (numbers)	1,461	3,250	2,938	3,675	2,637	36	13,997	6.5
Total (percentages)	10.4	23.2	21.0	26.3	18.8	0.3	100.0	

establishments⁴ and private limited companies tend to have longer life spans. The median duration⁵ of operation of government related establishments is indicated by the point where the line for those establishments crosses the 50 percent line, at just over 8 years. The median operation duration of private limited companies is over 11 years. Close to 30 percent of these two categories of establishments were already in operation 20 years before the census reference year (2017).

The other three legal status categories of establishments show a different pattern. The median operation duration of single proprietorships and partnerships, permanent shed vendors, and FDI companies are between 4 and 5 years, around 5 years, and around 6 years, respectively. Less than 10 percent of the single proprietorship, partnership, and permanent shed vendor establishments that were operational in 2017 were already operating 20 years before the census, and none of the FDI companies operational in 2017 were operating earlier than 14 years before the census.

Figure 3.2: Establishments, by duration of operation and legal status, 2017 (cumulative percentage)

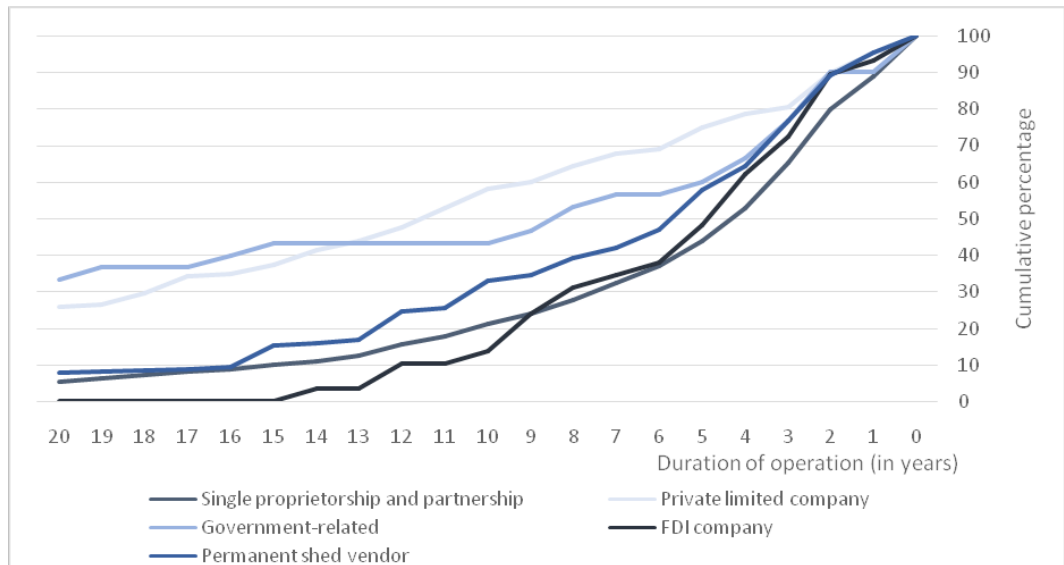


Table 3.5 shows the duration of operation of establishments in *thromdes* and other areas. In any duration category, the number of non-*thromde* establishments is higher than the number of *thromde* establishments. From the percentage distribution for the *thromde* and other establishments across the duration categories, differences can be observed. Relatively more *thromde* establishments started operations in the census reference year 2017 (less than 1-year duration—12.4 percent, against 9.3 percent for non-*thromde* establishments) and relatively more are operating for more than 10 years (21.2 percent against 17.4 percent). Other establishments are better represented among establishments that operate for 3–10 years (49.9 percent, against 42.7 percent for *thromde* establishments). On average, establishments in Bhutan are in operation for about 7 years, and it can be observed from the table that the mean duration of operation is a little higher in *thromdes* than in other areas.

⁴The duration that divides the observations into two equal halves: 50 percent of establishments have a longer duration of operation, and 50 percent have a shorter duration.

⁵These include public limited companies, state-owned limited companies, and project authorities.

Table 3.5: Establishments, by thromde status and duration of operation, 2017

Thromde status	Duration of operation						Total	Mean duration
	Less than 1 year	1–2 years	3–4 years	5–10 years	More than 10 years	Not reported		
Numbers								
<i>Thromde</i>	645	1,207	959	1,265	1,102	22	5,200	7.2
Other than <i>thromde</i>	816	2,043	1,979	2,410	1,535	14	8,797	6.2
Total	1,461	3,250	2,938	3,675	2,637	36	13,997	6.5
Percentages								
<i>Thromde</i>	12.4	23.2	18.4	24.3	21.2	0.4	100.0	—
Other than <i>thromde</i>	9.3	23.2	22.5	27.4	17.4	0.2	100.0	—
Total	10.4	23.2	21.0	26.3	18.8	0.3	100.0	—

3.4 Ownership profile

The ownership profile in this section refers only to those establishments with the legal status of single proprietorship or partnership. Since the information presented here refers to establishment owners and not to establishments and establishments may have more than one owner, the number of owners reported (12,958) is more than the number of establishments (12,841).

3.4.1 Gender, age, and nationality of establishment owners

Table 3.6 shows that 7,200 owners of single proprietorship and partnership establishments are women and 5,700 are men. This means that for this establishment type, there are 26 percent more female than male establishment owners. Male establishment owners are best represented in the age bracket 35–44 years of age, whereas the female owners are concentrated in the lower age bracket 30–39 years of age. On average, female establishment owners also have a lower age than their male peers: 39.4 years against 45.3 years. The combined mean age is 42 years.

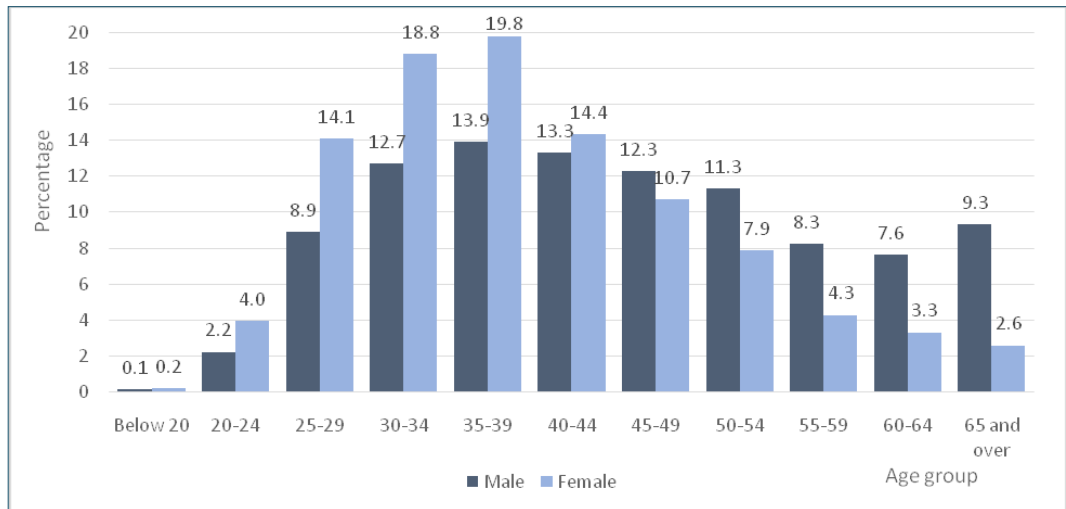
Table 3.6: Owners of single proprietorship and partnership establishments, by five-year age group and gender of owner, 2017

Age group	Male	Female	Both sexes
Below 20	6	13	19
20–24	124	284	408
25–29	500	1,011	1,511
30–34	715	1,353	2,068
35–39	783	1,423	2,206
40–44	749	1,031	1,780
45–49	692	769	1,461
50–54	637	565	1,202
55–59	464	307	771
60–64	429	237	666
65 and over	525	185	710
Not reported	99	57	156
Total	5,723	7,235	12,958

Note: The number of establishment owners is not the same as the number of establishments, as some of the establishments have more than one owner.

A more detailed age profile of establishment owners can be obtained from Figure 3.3. The figure shows a concentration of persons in the young and mid-adult ages, with a tail extending into older ages. The distribution by gender shows a consistent over representation of women in the age categories up to age 40 years, with 40–70 percent more women than men in the age groups. In the age bracket 40–49 years, there is a relative gender balance. On the older side of the age distribution, beyond age 50 years, men are in majority. It is noticeable that while the share of women consistently declines, the percentage of men remains more or less constant from age 55 years onward. This means that male owners tend to maintain their position for a more extended period into old age compared to female owners. The census recorded 710 establishment owners age 65 years or older, among whom 525 are men and 185 are women.

Figure 3.3: Owners of single proprietorship and partnership establishments, by five-year age group and gender of owner, 2017



3.4.2 Educational profile of establishment owners

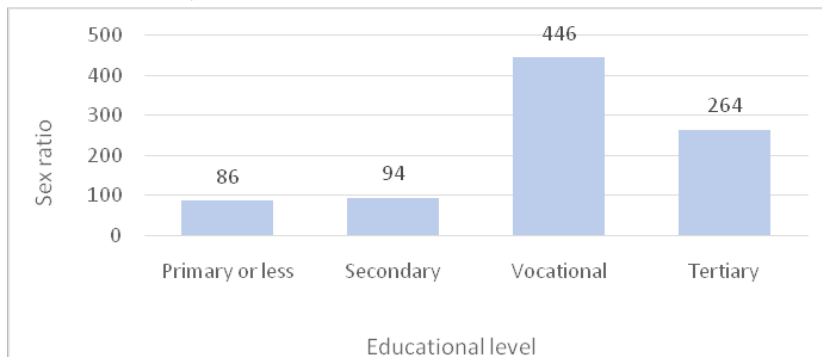
As shown in Table 3.7, the educational profile of owners of single proprietorship and partnership establishments includes a large share of persons with little or no education. Almost half of the owners (47.8 percent) completed only some grade of primary education or had no education at all. The latter group comprises one-third (32.9 percent) of all owners. Another third (34.4 percent) completed secondary education, most of them middle and higher secondary education. The share of establishment owners that have a university degree either bachelor's or master's or above amounts to 9 percent, representing around 1,200 persons.

Table 3.7: Owners of single proprietorship and partnership establishments, by educational attainment and gender, 2017

Educational attainment of owner	Gender of owner					
	Number			Percentage		
	Male	Female	Both sexes	Male	Female	Both sexes
No education	1,474	2,785	4,259	25.8	38.5	32.9
Primary	1,025	905	1,930	17.9	12.5	14.9
Lower secondary	444	585	1,029	7.8	8.1	7.9
Middle secondary	817	1,232	2,049	14.3	17.0	15.8
Higher secondary	630	745	1,375	11.0	10.3	10.6
VTI/TTI certificate/RTI/diploma	133	38	171	2.3	0.5	1.3
Bachelor's degree	645	339	984	11.3	4.7	7.6
Master's degree and higher	139	39	178	2.4	0.5	1.4
Traditional education	218	21	239	3.8	0.3	1.8
Non-formal education	126	510	636	2.2	7.0	4.9
Not reported	72	36	108	1.3	0.5	0.8
Total	5,723	7,235	12,958	100.0	100.0	100.0

There is a large gender difference in terms of educational attainment among establishment owners. Some 39 percent of the female owners have no education at all, compared to around 26 percent of the male owners. On the other hand, 13.7 percent of the male owners completed university education (bachelor's or master's degree), against only 5.2 percent of the female owners. Figure 3.4 shows the owners' gender ratio by main educational level. A gender ratio of 100 indicates an equal distribution. In the lowest two educational categories primary education or less and secondary education—the gender ratio is below 100. The figures indicate that for every 100 female establishment owners in the lowest two educational categories there are, respectively, only 86 and 94 male owners. On the other hand, for owners with more advanced education—vocational and tertiary education—the gender ratio is in favor of men; there are, respectively, 446 and 264 men for every 100 women. The over representation of women in the large number of small-scale establishments—especially in the retail trade sector—that require little education is part of the explanation for this unequal educational gender distribution.

Figure 3.4: Gender ratio of owners of single proprietorship and partnership establishments, by educational level, 2017



3.5 Establishments with FDI

Bhutan has received FDIs in 31 different companies. Table 3.8 presents the number of establishments with foreign investments by investment share categories. The establishments with FDI present a wide distribution of the investment shares, with concentrations in the categories 50–74 percent and 20–34 percent. Almost one-fifth of foreign investors hold even 100 percent of establishment shares.

Table 3.8: Establishments with FDI, by share of foreign investor(s), 2017

Share of foreign investor(s)	FDI companies	
	Number	Percentage
Less than 20 percent	1	3.2
20–34 percent	7	22.6
35–49 percent	2	6.5
50–74 percent	14	45.2
75–99 percent	1	3.2
100 percent	6	19.4
Total	31	100.0

Foreign investments to the establishments in Bhutan are from 17 different countries, of which there are 10 investors from India. The only other countries that have investment in Bhutan by more than one investor are Singapore (4), the United States of America (3), and Australia and Hong Kong SAR, China (2 each). Table 3.9 presents the nationality distribution of all foreign investors.

Table 3.9: Foreign direct investors, by nationality of investor, 2017

Nationality of foreign investor	Foreign investors	
	Number	Percentage
India	10	31.3
Singapore	4	12.5
United States of America	3	9.4
Australia	2	6.3
Hong Kong SAR, China	2	6.3
Bangladesh	1	3.1
France	1	3.1
Japan	1	3.1
Malta	1	3.1
Myanmar	1	3.1
Nepal	1	3.1
Samoa	1	3.1
Switzerland	1	3.1
Thailand	1	3.1
United Kingdom	1	3.1
Vietnam	1	3.1
Total	32	100.0



4

ECONOMIC SECTORS

4.1 Introduction

According to the ISIC Rev.4 (UNDESA 2008), the economy is classified into 21 broad sections (see Annex V). This chapter presents the establishments by economic sectors according to this classification. Of the total 21 sections, 3 sections are outside the scope of the ECoB 2018–19 and are therefore not included in this report:

- O: Public administration and defense; compulsory social security;
- T: Activities of households as employers; undifferentiated goods and services-producing activities of households for own use, and
- U: Activities of extraterritorial organizations and bodies

The information covered for the remaining 18 sections was coded according to the ISIC Rev.4 at four-digit level and further aggregated to one- and two-digit levels.

From the 18 sections covered by the ECoB 2018–19, Section A: Agriculture, forestry and fishing excludes household-based subsistence growing of crops and rearing of livestock. However, functional agriculture cooperatives and farmers' groups were covered by the census and are presented in a separate chapter (chapter 7). These economic units are seasonal in nature, and many could either not be contacted by the enumerators or they do not have a physical address. Therefore, Section A activities as presented in the other chapters of this report exclude these cooperatives and farmers' groups and broadly cover organized economic units (for example, poultry and piggery farms and nurseries). Chapter 7 also includes activities of NGOs, which are classified under Section S: Other service activities; repair of computers and personal and household goods; and other personal service activities.

Establishments may engage in more than one economic activity. The ECoB 2018–19 captured information on the main economic activity, as well as on other economic activities of the establishments. The main activity of an establishment refers to the activity that earns the largest income for the establishment while other activities are those that contribute smaller shares of income. From the total of 14,000 establishments, 75.7 percent (10,600 establishments) reported being engaged in only one economic activity while the remaining 24.3 percent (3,400 establishments) reported engagement in two or more activities next to the main activity. The highest number of different activities reported was seven. This chapter presents information about the main activity of establishments.

4.2 Economic sector distribution

Table 4.1 presents number of establishments by economic sector. In terms of the number of establishments, the economy is dominated by two economic sectors: Wholesale and retail trade, repair of motor vehicles and motorcycles (Section G) with 62.5 percent (more than 8,700 establishments), followed by Accommodation and food service activities (Section I) with 21 percent (2,900 establishments). The next largest section is Manufacturing (Section C), representing only 5.1 percent of all establishments.

The ISIC classification subdivides the main economic sections into divisions. Breaking down the largest sections into the level of divisions shows a further concentration of activities in specific economic subsectors. Within Section G, the division Retail trade accounted for 93.6 percent, while the division of Wholesale accounted for 3 percent. Within Section I, Food and beverage service activities is by far the largest division with 90.2 percent, while Accommodation accounted for 9.8 percent. Within Section C, the division of Manufacturing of wearing apparel (tailoring included) accounted for 30.1 percent, Manufacture of furniture accounted for 15.6 percent, and Manufacture of wood and of products of wood and cork (and so on) accounted for 10.5 percent. The detailed economic sector distribution at two-digit division level is provided in Annex VI, Table A4.1.

Table 4.1: Establishments, by main economic sector, 2017

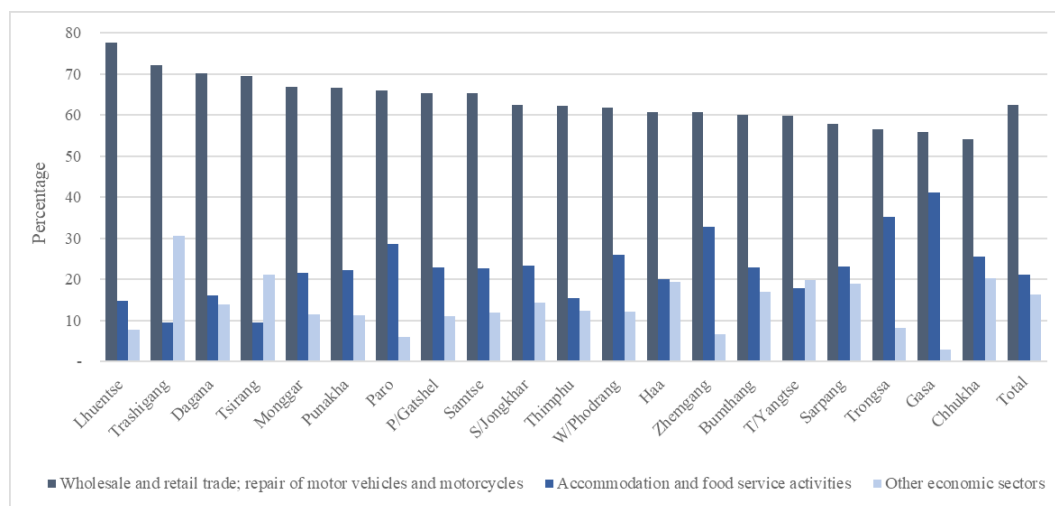
ISIC Section	Economic sector	Number	Percentage
A	Agriculture, forestry and fishing	352	2.5
B	Mining and quarrying	33	0.2
C	Manufacturing	711	5.1
D	Electricity, gas, steam and air-conditioning supply	3	0.0
E	Water supply; sewerage, waste management and remediation activities	5	0.0
F	Construction	168	1.2
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	8,754	62.5
H	Transportation and storage	45	0.3
I	Accommodation and food service activities	2,946	21.0
J	Information and communication	57	0.4
K	Financial and insurance activities	16	0.1
L	Real estate activities	3	0.0
M	Professional, scientific and technical activities	71	0.5
N	Administrative and support service activities	173	1.2
P	Education	71	0.5
Q	Human health and social work activities	30	0.2
R	Arts, entertainment and recreation	171	1.2
S	Other service activities	388	2.8
	Total	13,997	100.0

4.3 Economic sector by geographic distribution

4.3.1 Economic sector by *dzongkhag*

Figure 4.1 presents the percentage distribution of the top two economic sectors and other sectors combined by *dzongkhag*. It is evident that the economic sector of wholesale and retail trade (and so on) is not only by far the largest at the national level but also dominates in all the *dzongkhags*. The share in the number of establishments from this sector ranges from 77.5 percent in Lhuentse to 54.1 percent in Chhukha. The share of establishments engaged in accommodation and food service activities—nationally the second most common activity—shows a wider range across the *dzongkhags*. In three *dzongkhags*, they make up more than 30 percent of the establishments (up to 41.2 percent in Gasa) and in another three, they represent less than 15 percent (the lowest being 9.5 percent in Trashigang and Tsirang). The combined category of other activities never reaches a share of more than 20 percent, except in Chhukha, Tsirang, and especially Trashigang (30.7 percent). A detailed table of economic sector distribution by *dzongkhag* is presented in Annex VI, Table A4.2.

Figure 4.1: Establishments, by selected sectors and *dzongkhag*, 2017 (percentage)



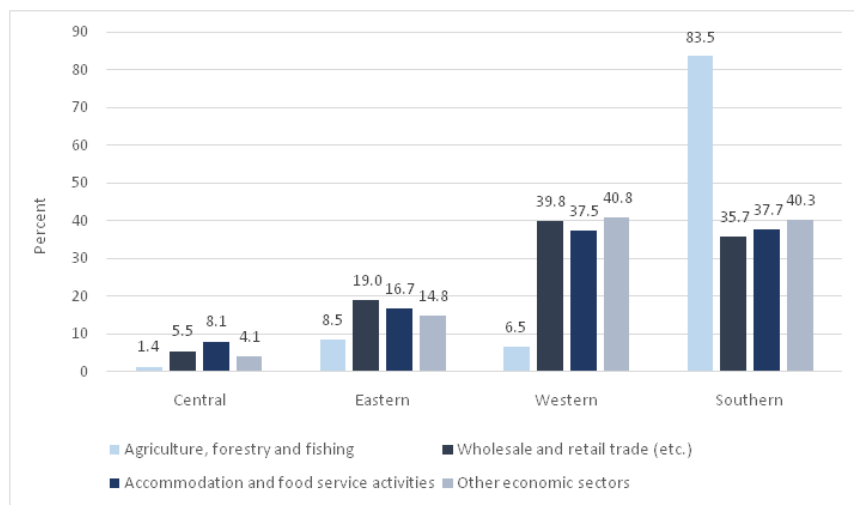
4.3.2 Economic sector by region

Table 4.2 presents establishments by economic sector and by region. The central region includes the *dzongkhags* of Bumthang, Trongsa, and Zhemgang; the eastern region those of Lhuentse, Monggar, Pema Gatshel, Samdrup Jongkhar, Trashigang, and Trashy Yangtse; the western region those of Gasa, Haa, Paro, Punakha, Thimphu and Wangdue Phodrang; and the southern region those of Chhukha, Dagana, Samtse, Sarpang, and Tsirang. In terms of number of establishments, the western and southern regions are by far the largest with, respectively, 39.5 percent (5,500) and 36.9 percent (5,200) of all establishments. The eastern region has 17.8 percent (2,500) of the establishments and the central region has the fewest establishments (5.8 percent).

Table 4.2: Establishments, by economic sector and region, 2017

Economic sector	Region				
	Central	Eastern	Western	Southern	Total
Agriculture, forestry and fishing	5	30	23	294	352
Mining and quarrying	0	8	2	23	33
Manufacturing	36	148	309	219	712
Electricity, gas, steam and air-conditioning supply	0	0	2	1	3
Water supply; sewerage, waste management and remediation activities	1	1	3	0	5
Construction	5	49	48	66	168
Wholesale and retail trade; repair of motor vehicles and motorcycles	480	1,662	3,487	3,124	8,753
Transportation and storage	0	7	8	30	45
Accommodation and food service activities	238	492	1,106	1,110	2,946
Information and communication	3	9	36	9	57
Financial and insurance activities	0	0	15	1	16
Real estate activities	0	0	3	0	3
Professional, scientific and technical activities	3	11	36	21	71
Administrative and support service activities	1	9	113	50	173
Education	2	3	53	13	71
Human health and social work activities	1	3	13	13	30
Arts, entertainment and recreation	18	12	98	43	171
Other service activities	19	51	176	142	388
Total	812	2,495	5,531	5,159	13,997

Figure 4.2 presents the distribution of selected economic sectors by region. Whereas the largest economic sectors of wholesale and retail trade (and so on) and accommodation and food services show largely the same distributions across regions, the establishments engaged in the agriculture, forestry, and fishing sector are concentrated in the southern region. From the total of 14,000 establishments, 352 establishments are engaged in the agriculture, forestry, and fishing sector, of which 83.5 percent (294 establishments) are in the southern region, followed by the eastern region with 8.5 percent (30 establishments) and the western region with 6.5 percent (23 establishments). The detailed two-digit division classification of economic sectors by region is provided in Annex VI, Table A4.3.

Figure 4.2: Establishments, by region and selected sectors, 2017 (percentage)

4.3.3 Economic sector by urban-rural distribution

Table 4.3 presents the number of establishments by economic sector and by urban-rural distribution. Out of the total of 14,000 establishments, 63.5 percent were in urban areas and the remaining 36.5 percent in rural areas. The table also groups the different economic sectors into three broad industry categories:

- The primary sector, related to agricultural production (ISIC section A);
- The secondary sector, related to manufacturing and processing of goods and to construction activities (ISIC sections B to F), and
- The tertiary sector, related to services (ISIC sections G to S)

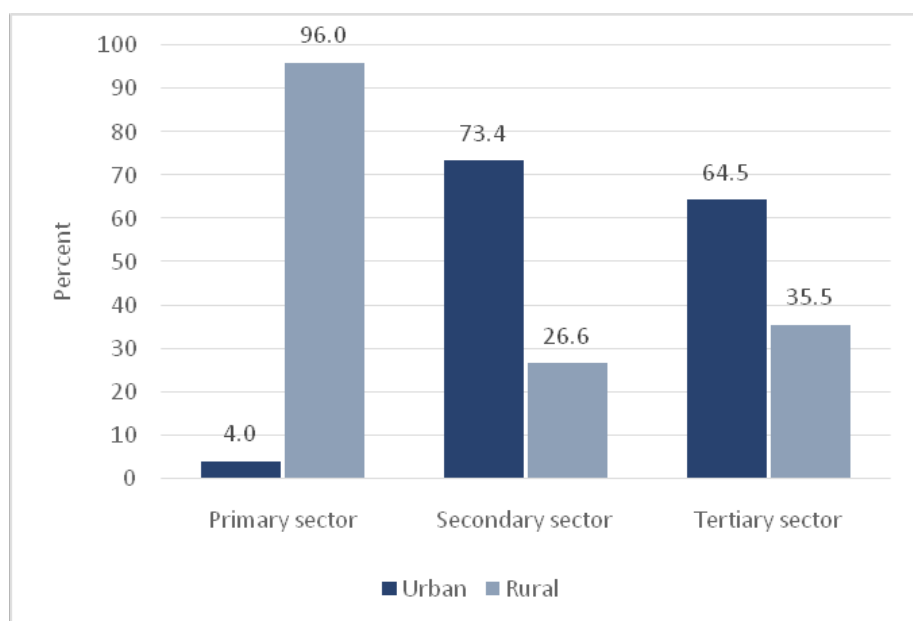
The tertiary sector accounted for 90.9 percent of the establishments, the secondary for 6.6 percent, and the primary sector for 2.5 percent. As can be expected, the primary sector is an almost entirely rural phenomenon with 96 percent dominance, while the secondary and tertiary sectors are predominantly urban, with 73.4 percent and 64.5 percent, respectively, as shown in Figure 4.3.

Table 4.3: Establishments by broad industry, economic sector, and urban-rural distribution, 2017

Broad industry, economic sector	Urban	Rural	Total
<i>Primary sector</i>	14	338	352
Agriculture, forestry and fishing	14	338	352
<i>Secondary sector</i>	675	245	920
Mining and quarrying	24	9	33
Manufacturing	529	182	711
Electricity, gas, steam and air-conditioning supply	2	1	3
Water supply; sewerage, waste management and remediation activities	5	0	5
Construction	115	53	168
<i>Tertiary sector</i>	8,204	4,521	12,725

Broad industry, economic sector	Urban	Rural	Total
Wholesale and retail trade; repair of motor vehicles and motorcycles	5,340	3,414	8,754
Transportation and storage	42	3	45
Accommodation and food service activities	1,927	1,019	2,946
Information and communication	54	3	57
Financial and insurance activities	11	5	16
Real estate activities	2	1	3
Professional, scientific and technical activities	67	4	71
Administrative and support service activities	165	8	173
Education	60	11	71
Human health and social work activities	26	4	30
Arts, entertainment and recreation	150	21	171
Other service activities	360	28	388
Total	8,893	5,104	13,997

Figure 4.3: Establishments by broad industry and urban-rural distribution, 2017 (percentage)



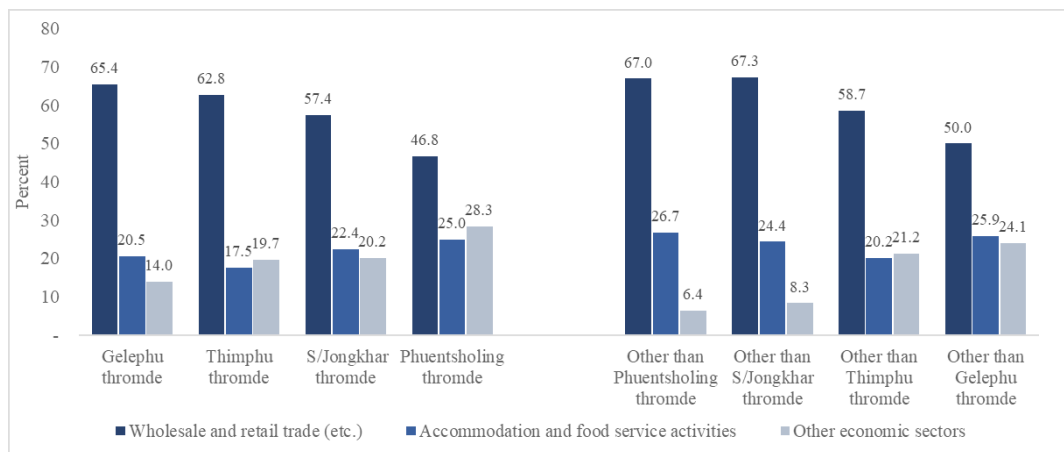
The distribution of establishments by broad industry and legal status indicates that a large number of establishments that are single proprietorship or partnership are concentrated in the tertiary sector (91.2 percent) (Table 4.4). The concentration of permanent shed vendors in the tertiary sector is even almost 100 percent. On the other hand, the private limited companies are more represented in the secondary sector with almost 65 percent, whereas the public limited companies, the state-owned limited companies, and the FDIs are more equally distributed between the tertiary and secondary sectors.

Table 4.4: Establishments, by legal status and broad industry, 2017

Legal status	Broad industry			
	Primary	Secondary	Tertiary	Total
Single proprietorship or partnership	345	783	11,713	12,841
Private limited company	0	102	55	157
Public limited company	0	8	8	16
State-owned enterprise	4	9	15	28
FDI	1	13	17	31
Permanent shed vendor	2	0	917	919
Project authority	0	5	0	5
Total	352	920	12,725	13,997

4.3.4 Economic sector by *thromde*

The distribution of establishments by *thromde* indicates that the sector of wholesale and retail trade (and so on) and that of accommodation and food service activities still dominate the distribution of economic sectors (Figure 4.4). For example, Gelephu *thromde* has almost 65 percent of its economic activity in wholesale and retail trade (and so on), Thimphu *thromde* has almost 63 percent, and Samdrup Jongkhar *thromde* has 57 percent. Phuentsholing *thromde* is the only *thromde* where the trade sector represents less than the majority of establishments (almost 47 percent). The distribution of establishments by economic sector and *thromde* is provided in Annex VI, Table A4.4.

Figure 4.4: Establishments, by selected sectors and *thromde* status, 2017 (percentage)

4.4 Economic sector by legal status of establishments

As mentioned in section 3.2, the legal status of the large majority of establishments is single proprietorship or partnership. Table 4.5 provides the breakdown of the legal status of establishments by industry while Figure 4.5 gives a visual presentation of the legal status distribution for the industries with the largest number of establishments. It shows that irrespective of the industry, single

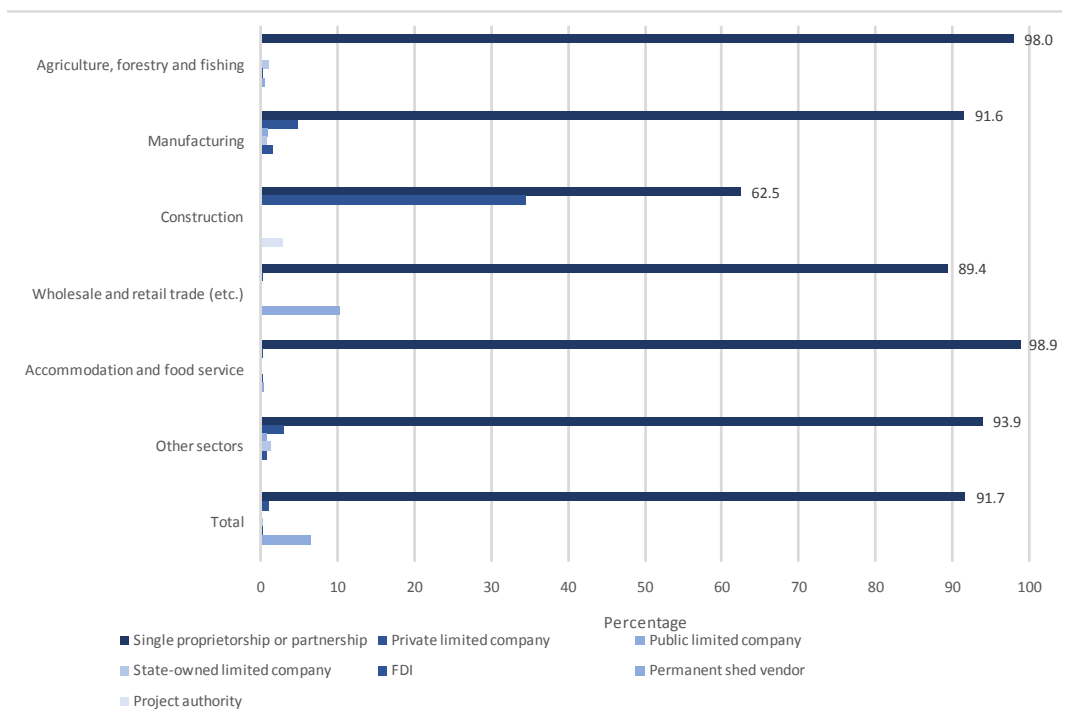
proprietorship and partnership establishments account for the majority of establishments. Except for the construction industry, their share is even around 90 percent or more. The construction industry has a sizable share of 34.5 percent of private limited companies, and the wholesale and retail industry has 10.3 percent permanent shed vendors. Other legal status representations are less than 10 percent across industries and often hardly visible or nonexistent.

Table 4.5: Establishments, by industry and legal status, 2017

Economic sector	Single proprietorship or partnership	Private limited company	Public limited company	State-owned limited company	FDI	Permanent shed vendor	Project authority	Total
Agriculture, forestry and fishing	345	0	0	4	1	2	0	352
Mining and quarrying	22	9	1	1	0	0	0	33
Manufacturing	651	35	7	6	12	0	0	711
Electricity, gas, steam and air-conditioning supply	0	0	0	2	1	0	0	3
Water supply; sewerage, waste management and remediation activities	5	0	0	0	0	0	0	5
Construction	105	58	0	0	0	0	5	168
Wholesale and retail trade; repair of motor vehicles and motorcycles	7,825	22	0	3	0	904	0	8,754
Transportation and storage	38	4	0	3	0	0	0	45
Accommodation and food service activities	2,914	10	0	0	9	13	0	2,946
Information and communication	48	2	0	2	5	0	0	57
Financial and insurance activities	5	0	6	3	2	0	0	16
Real estate activities	0	2	0	1	0	0	0	3
Professional, scientific and technical activities	68	2	0	1	0	0	0	71
Administrative and support service activities	159	12	0	1	1	0	0	173

Economic sector	Single proprietorship or partnership	Private limited company	Public limited company	State-owned limited company	FDI	Permanent shed vendor	Project authority	Total
Education	69	0	2	0	0	0	0	71
Human health and social work activities	29	1	0	0	0	0	0	30
Arts, entertainment and recreation	170	0	0	1	0	0	0	171
Other service activities	388	0	0	0	0	0	0	388
Total	12,841	157	16	28	31	919	5	13,997

Figure 4.5: Establishments, by selected industries and legal status, 2017 (percentage)





5

EMPLOYMENT

5.1 Introduction

The previous chapters focused on establishments and their characteristics; the unit of analysis of the present chapter is the population employed by the establishments that were covered by the ECoB 2018–19. This chapter presents the characteristics of the employed persons in terms of their earnings, working hours, and employment status; the features of the establishments they are engaged in; and the economic sector of employment.

The following employment information was obtained from establishments during the enumeration:

- The total number of workers as of December 31, 2017, by gender and nationality if an establishment has operated for all 12 months in 2017;
- The average number of workers in 2017, by gender and nationality if an establishment has operated for less than 12 months in 2017;
- The average working days per week of these workers in 2017, by gender;
- The average working hours per working day of these workers in 2017, by gender, and
- The total payment by gender and nationality of these workers in 2017 (only for regularly paid employees, contract employees, and casual-paid employees)

The persons who work in or for the establishment include own-account workers, regular-paid employees, contract employees, casual-paid employees, and unpaid family workers. Refer to Annex VII for the definition of the different categories of employees.

5.2 Employment by economic sector

Figure 5.1 illustrates the percentage distribution of total employment by type of economic activity. From the total of 74,000 persons employed in various sectors, the highest share (24.1 percent) of employment is observed in the wholesale and retail trade sector. This sector also comprises more than 60 percent of the total establishments. It is followed by the construction sector, which employs 18.5 percent of the total employment even though the sector accounts for a little over 1 percent of the total number of establishments. Similarly, the sector of electricity gas, steam, and air-conditioning supply, although having a minimal share in terms of the total number of establishments (0.02 percent), employs a substantial 6 percent of the total employment, ranking fifth in terms of share of employment. The distribution of employment across economic sectors is very different from that of establishments (see chapter 4).

Figure 5.1: Persons employed, by economic sector of the establishment, 2017 (percentage)

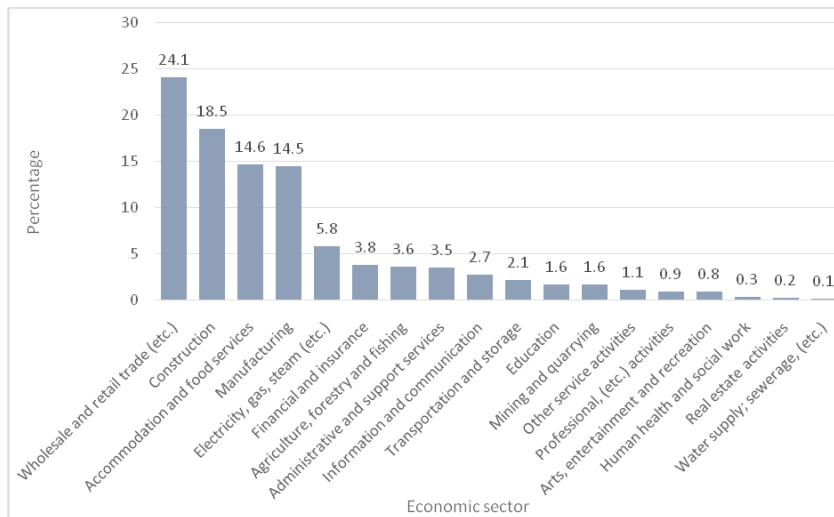
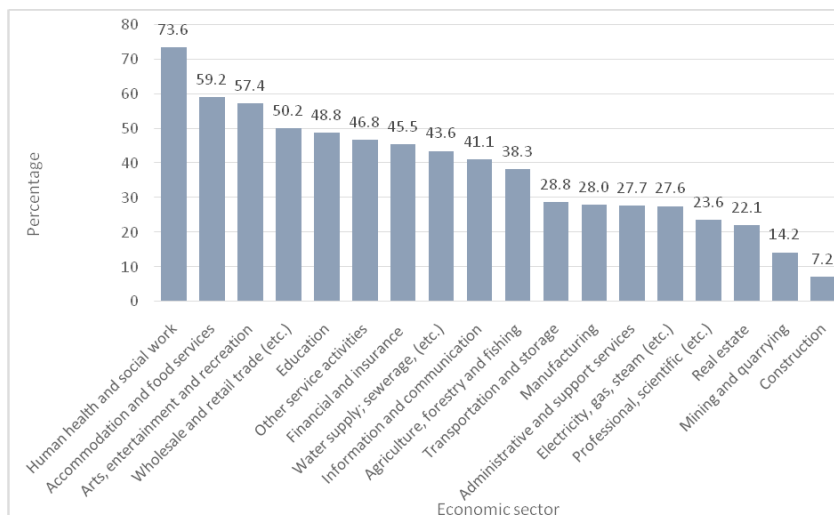


Figure 5.2 presents the percentage of females employed in different economic sectors of establishments. The proportion of females working in the human health and social service sector (73.6 percent) is significantly higher than males (26.4 percent). The share of employment of women is also higher than men in the sectors like accommodation and food services and arts and entertainment. There are almost equal shares of men and women engaged in the sectors of wholesale and retail trade (and so on) and education, while the male proportion is higher than the female proportion in all other sectors. A significant difference is observed in the construction and mining sector, in which the proportion of male employment is six times higher than the female employment. To a large extent, this can be attributed to the population of male non-Bhutanese workers, who are employed as either contract or casual-paid employees in these sectors.

Figure 5.2: Percentage of female employees, by economic sector of the establishment, 2017



5.3 Employment by employment size of the establishment

Table 5.1 shows the number of persons employed by the different employment size groups of the establishments and by nationality and gender of the employees. The ECoB 2018–19 reveals that there are 74,000 persons working in the various establishments covered by the census. The distribution of establishments is highly concentrated in the small establishments with employment size of 1 person and 2–3 persons, representing a share of 84.1 percent of the total establishments. However, a large share of the establishments absorb only 23 percent of the total employment. On the other hand, almost 50 percent of the total employed population are employed by 79 establishments (0.6 percent of the total number of establishments) that employ 100 or more employees.

Of the 74,000 persons employed in various establishments, 47,000 (64 percent) are males and 26,000 (36 percent) are females. Females mostly work in the single person operating establishments, while the share of males is increasing with increase in the size of establishment.

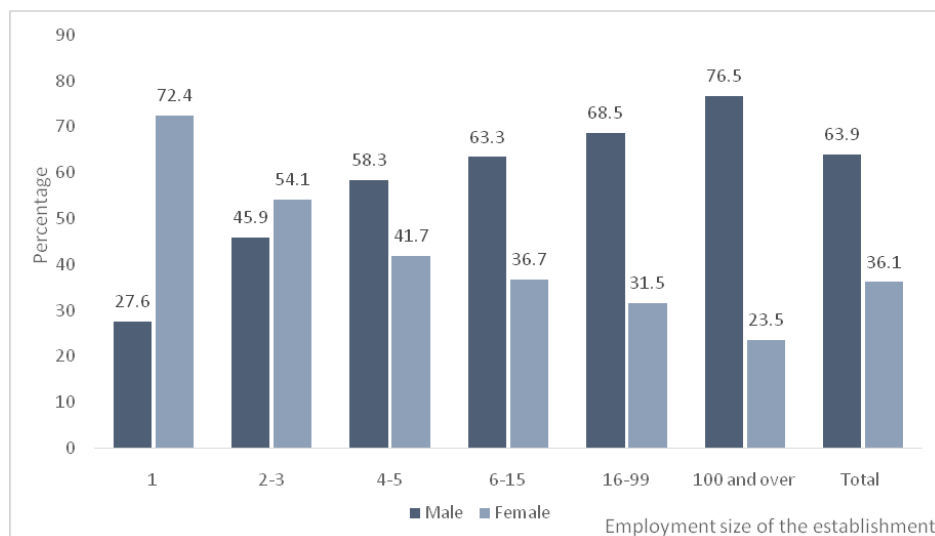
In total, around 80 percent of the total employees are Bhutanese nationals and 20 percent are non-Bhutanese. There are 14,000 non-Bhutanese working in different establishments, out of which almost 95 percent are males and only 5 percent are females. The proportion of employment of non-Bhutanese is higher in larger establishments: 90 percent are in establishments that employ more than six persons, whereas the share of non-Bhutanese working in establishments that employ three persons or less is less than 1 percent of the total non-Bhutanese employees.

Table 5.1: Persons employed, by employment size of the establishment, nationality, and gender, 2017

Employment size of establishment	Number of establishments	Nationality, gender								
		Bhutanese			Non-Bhutanese			Total		
		Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
1	7,653	2,018	5,539	7,557	92	4	96	2,110	5,543	7,653
2–3	4,125	3,867	5,008	8,875	459	97	556	4,326	5,105	9,431
4–5	864	1,757	1,517	3,274	452	65	517	2,209	1,582	3,791
6–15	888	3,740	2,623	6,363	1,177	226	1,403	4,917	2,849	7,766
16–99	388	5,998	3,643	9,641	2,348	202	2,550	8,346	3,845	12,191
100 and over	79	16,673	7,573	24,246	8,807	241	9,048	25,480	7,814	33,294
Total	13,997	34,053	25,903	59,956	13,335	835	14,170	47,388	26,738	74,126

Figure 5.3 shows a clear relation between the gender distribution of employees and the employment size of the establishments. The share of male employees consistently increases with employment size and that of female employees consistently decreases. In the single-person establishments, around three-quarters (72.4 percent) of the employees are female and only around one-quarter (27.6 percent) is male. In the largest employment size category of 100 employees or more, the distribution is the opposite: males make up three-quarters (76.5 percent) of the employees and females one-quarter (23.5 percent).

Figure 5.3: Persons employed, by employment size of the establishment and gender, 2017 (percentage)



5.4 Employment by legal status of establishment

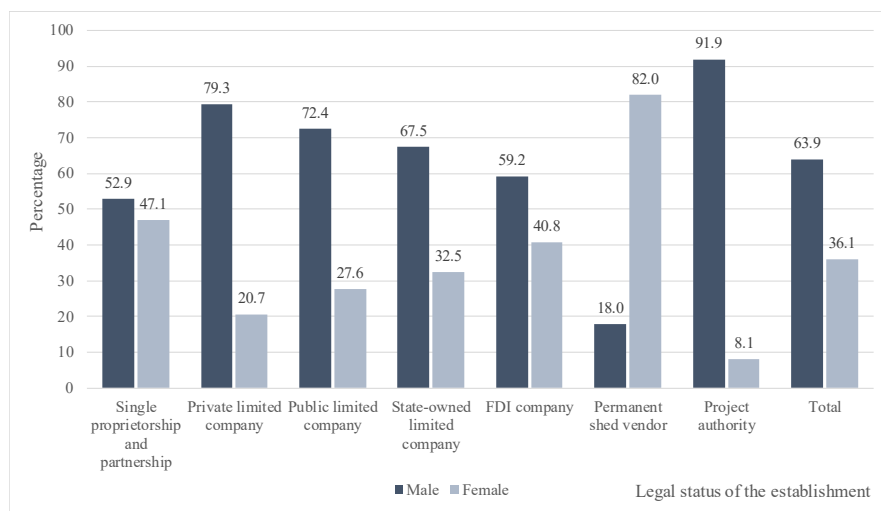
Table 5.2 shows the number of persons employed by the legal status of the establishment, nationality, and gender of the employees. The type of establishments that engage the most employees is the category of single proprietorship and partnership establishments. Of the total number of employed persons, around half (49.2 percent or 36,000 persons) are employed in this category. However, this category represents more than 90 percent of the total number of establishments, indicating the small-scale operation of this type of establishments. As shown in the table, almost 50 percent of the total employment is in larger establishments, although these represent less than 10 percent of the total number of establishments. The category of permanent shed vendors ranks second, with 919 establishments, in terms of number of establishments, but in terms of employment it is the lowest, with employment of only around 1,000 persons.

More than 50 percent of the Bhutanese employees are working in single proprietorship and partnership establishments, which have almost equal shares of males and females. Of the 13,300 non-Bhutanese employees, almost half (46 percent or 6,000 persons) are working in hydroproject constructions and around one-third (32 percent) are working in single proprietorship and partnership establishments. The FDI companies are employing more than 3,000 Bhutanese nationals and just a little over 200 non-Bhutanese persons.

Table 5.2: Persons employed, by legal status of the establishment, nationality, and gender, 2017

Legal status of establishment	Number of establishments	Nationality, gender								
		Bhutanese			Non-Bhutanese			Total		
		Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
Single proprietorship and partnership	12,841	15,310	16,611	31,921	3,959	562	4,521	19,269	17,173	36,442
Private limited company	157	4,738	1,663	6,401	2,402	198	2,600	7,140	1,861	9,001
Public limited company	16	2,325	937	3,262	157	11	168	2,482	948	3,430
State-owned limited company	28	7,517	3,630	11,147	95	32	127	7,612	3,662	11,274
FDI company	31	1,945	1,453	3,398	197	25	222	2,142	1,478	3,620
Permanent shed vendor	919	174	854	1,028	15	7	22	189	861	1,050
Project authority	5	2,044	755	2,799	6,510	0	6,510	8,554	755	9,309
Total	13,997	34,053	25,903	59,956	13,335	835	14,170	47,388	26,738	74,126

Figure 5.4 shows the shares of males and females working in different legal status categories of the establishments. The share of males and females working in single proprietorship and partnership establishments are almost equal with around 53 percent and 47 percent, respectively. With the exception of the category of permanent shed vendors—where more than 80 percent are female workers—in the rest of the categories, the share of male employees is higher than that of female employees. The employment of men in project authorities is 10 times higher than the corresponding female employment, which is mostly due to the presence of the non-Bhutanese workforce in the construction of hydro projects.

Figure 5.4: Persons employed, by legal status of the establishment and gender, 2017 (percentage)

5.5 Employment by status in employment

Information collected on the employment status shows that regular-paid employees (53.5 percent) accounted for the largest proportion of all employed. Little more than 5 percent of total employees are working as unpaid family workers. These are mostly people working in their family business as co-worker or support staff without payment.

Since the largest share of the employed population is made up of Bhutanese nationals (section 5.2), the employment distribution of Bhutanese employment is close to that of the total distribution. Among non-Bhutanese workers, more than half (51.1 percent) are employed as contract employees and another quarter (23.1 percent) as casual-paid employees. These are mostly laborers working in the construction sector. Refer to Annex VI, Table A5.1 for detailed information about the employed population by employment status, nationality, and gender.

Figure 5.5: Employed persons, by employment status and nationality, 2017 (percentage)

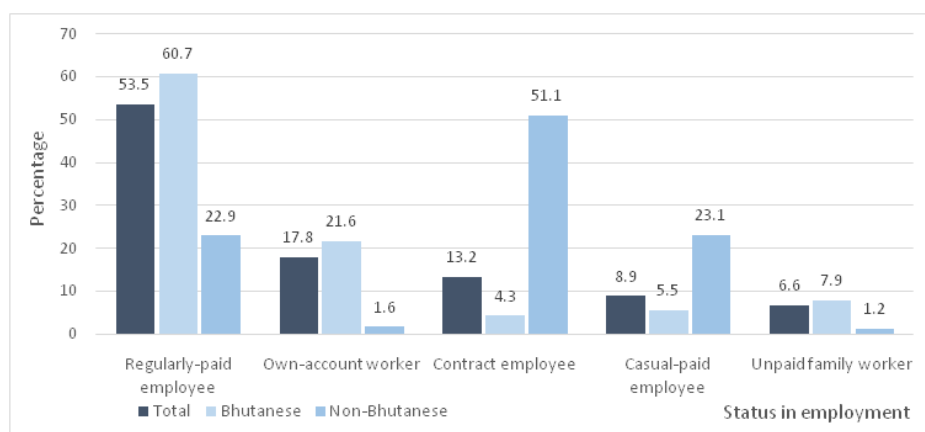
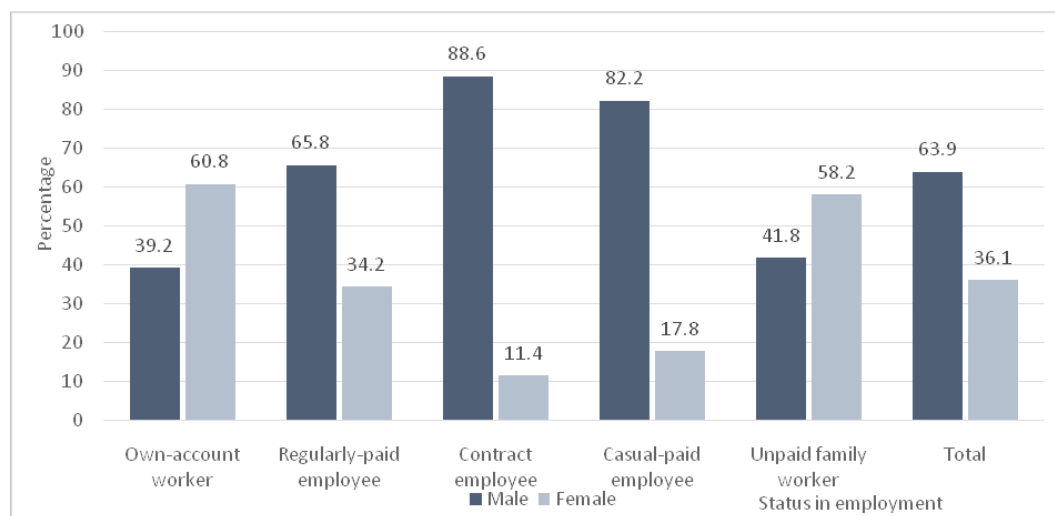


Figure 5.6 shows the percentage distribution of males and females by employment status. As most women are working in single-person establishments, the share of females as own-account workers is higher than that of the male workers. Women also make up the majority in the category of unpaid family workers. This indicates that women are employed more often as workers without wage or salary. The most significant gender difference is observed in the category of contract and casual-paid employees, where the share of male workers is higher by, respectively, eight and more than four times that of female workers. To a large extent, this is because the majority of the non-Bhutanese male workers are employed in these categories. In the category of regular-paid employees, the proportion of male workers (65.8 percent) is almost double that of the female workers (34.2 percent). Overall, 63.9 percent of the employees are male, and 36.1 percent are female.

Figure 5.6: Employed persons, by employment status and gender, 2017 (percentage)

5.6 Working hours by employment status

Information on the average number of working days in a week and the average working hours per day has been collected for all employee categories. The number of working hours per week in Table 5.3 is compiled as an average of working days per week multiplied by the average working hours per day for each category.

Table 5.3 shows the percentage distribution of worker types by the average weekly working hours (Annex VI, Table A5.2 provides the corresponding table with numbers). Around 3 percent of all employees work less than 30 hours a week, which comes to less than five hours a day taking an average of six working days in a week. The larger proportions of persons working less than 30 hours per week are observed for own-account workers, casual-paid workers, and especially unpaid family workers.

More than half of the total employees (57.4 percent) work between 40 hours and 49 hours per week. This comes to around 8 hours a day taking an average of six working days a week. The main contribution to this category of working hours is from regular and contract employees; more than 70 percent of these employees work between 40 hours and 49 hours a week. This is the usual number of working hours for most of the regular employees with fixed monthly remunerations working in the formal sectors.

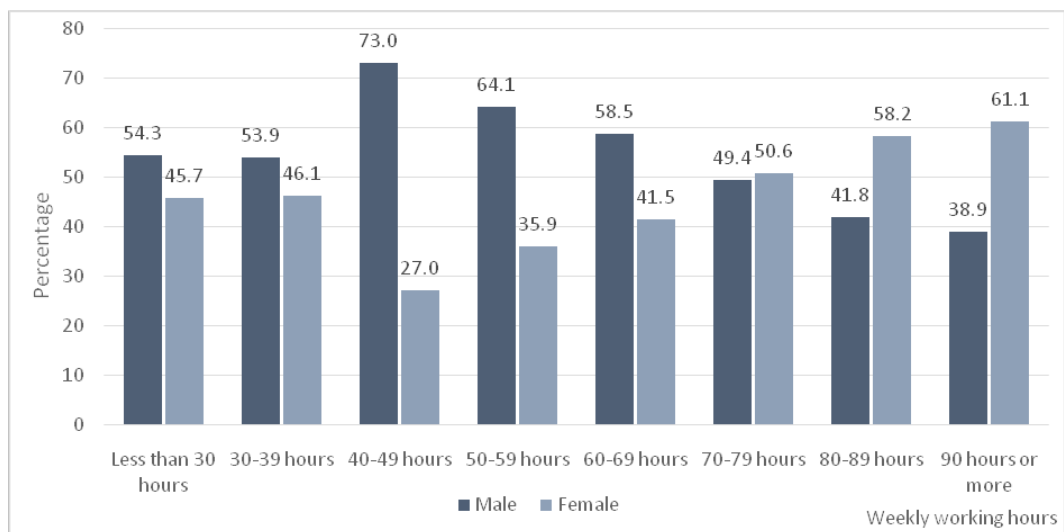
Unpaid family workers, own-account workers, and casual-paid workers comprise higher proportions in the categories of those working more than 60 hours per week. More than 18 percent of the own-account and unpaid family workers even work for more than 90 hours a week. These are the employees who are running their family businesses and are working seven days a week and more than 12 hours a day.

Table 5.3: Employed persons, by weekly working hours and employmentstatus, 2017 (percentage)

Working hours per week	Employmentstatus					Total
	Own-account worker	Regularly paid employee	Contract employee	Casual-paid employee	Unpaid family worker	
Less than 30 hours	4.5	0.6	0.2	4.7	14.0	2.5
30–39 hours	2.4	1.5	1.0	0.9	4.4	1.7
40–49 hours	8.0	72.3	91.0	54.1	8.0	57.4
50–59 hours	7.7	10.5	3.5	12.9	7.8	9.1
60–69 hours	11.2	6.1	1.9	13.7	7.5	7.2
70–79 hours	22.2	4.3	1.7	7.9	19.0	8.5
80–89 hours	25.5	2.5	0.3	4.4	20.3	7.6
90 hours or more	18.6	2.2	0.4	1.4	19.0	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

The analysis of the gender distribution within working hour categories shows a notable gender-specific pattern. Figure 5.7 suggests a divide between workers who work less than 40 hours per week and those who work 40 hours per week or more. The former group shows a gender composition that is close to equal, with a slight over representation of men (54 percent against 46 percent women). The latter group, on the other hand, suggests a strong relation between gender and weekly working hours. Whereas the share of women working 40–49 hours per week is a low 27 percent, their share consistently increases with the number of working hours, to 61 percent for those who work at least 90 hours per week. The trend for men is the opposite: from a large over representation in the 40–69 working hours group (73 percent) consistently downward to 39 percent in the 90-plus working hours category.

Figure 5.7: Employed persons, by weekly working hours and gender, 2017 (percentage)



5.7 Wages and salaries

The ECoB 2018–19 collected information about the payments made by the employers during the census reference year 2017 to all employees of their establishments. The payment is the aggregate amount paid by the establishment for wages and salaries, overtime payment, and other benefits to all regular, contract, and casual-paid employees. This chapter on employment only analyzes and presents the wages and salaries for regular and contract employees, as the payments to casual-paid employees cannot be linked to defined working time and fixed monthly remuneration.

Table 5.4 presents the distribution of regular and contract employees by their monthly remunerations. Out of 49,400 regular and contract employees, one-fifth (20.2 percent) earn more than BTN 25,000 per month. On the other hand, there are also 2,400 employees (4.9 percent) whose monthly remuneration is less than BTN 5,000. The mean monthly remuneration for regular and contract employee is BTN 11,282.

Comparatively, the monthly remuneration of contract employees is higher than that of regular-paid employees. This could be related to the recruitment of relatively high-paid non-Bhutanese contract workers in some companies. These can be identified in the remuneration category of BTN 20,000 to BTN 24,999. The mean monthly remuneration for contract employees is around BTN 18,000, while for regular-paid workers, it is little more than BTN 10,000. Nevertheless, the share of regular-paid employees in the two highest remuneration categories (BTN 30,000 and above) is twice as high as that of contract workers (14.1 percent against 7.1 percent). The highest proportions of both regular and contract employees fall in the category of monthly remuneration of BTN 20,000 to BTN 24,999. In addition, over 5 percent of regular-paid employees earn less than BTN 5,000 per month, compared to only around 2 percent for contract employees.

Table 5.4: Regular-paid and contract employees, by monthly remuneration, 2017

Monthly remuneration (BTN)	Regular-paid employee	Contract employee	Total
Less than 5,000	2,232	168	2,400
5,000–9,999	8,666	827	9,493
10,000–14,999	7,535	885	8,420
15,000–19,999	3,564	218	3,782
20,000–24,999	9,220	6,156	15,376
25,000–29,999	2,813	857	3,670
30,000–39,999	3,495	249	3,744
40,000 and more	2,113	444	2,557
Total	39,638	9,804	49,442

Figure 5.8 presents the percentage distribution of monthly remuneration by gender. Relatively more women than men are in the three lowest remuneration categories (below BTN 15,000), more than half (54.1 percent) of the female workers against just over one-third (35.6 percent) of male workers. On the other hand, the proportion of men is more than twice as high as that of women in the category of monthly remuneration of BTN 20,000 to BTN 24,999, again because of the large number of foreign male contract workers in this category. At the higher end of the remuneration scale, the gender distribution is more balanced again, with even a slightly higher representation of women in the highest remuneration category. The gender-specific distribution of remuneration is reflected in the difference of their median: BTN 8,000 for women and BTN 9,700 for men.

Figure 5.8: Regular-paid and contract employees, by monthly remuneration and gender, 2017 (percentage)

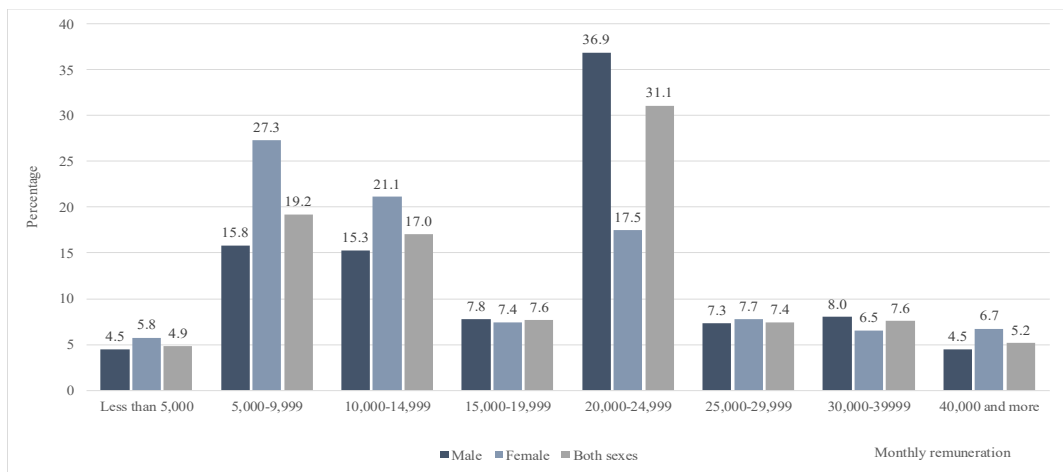
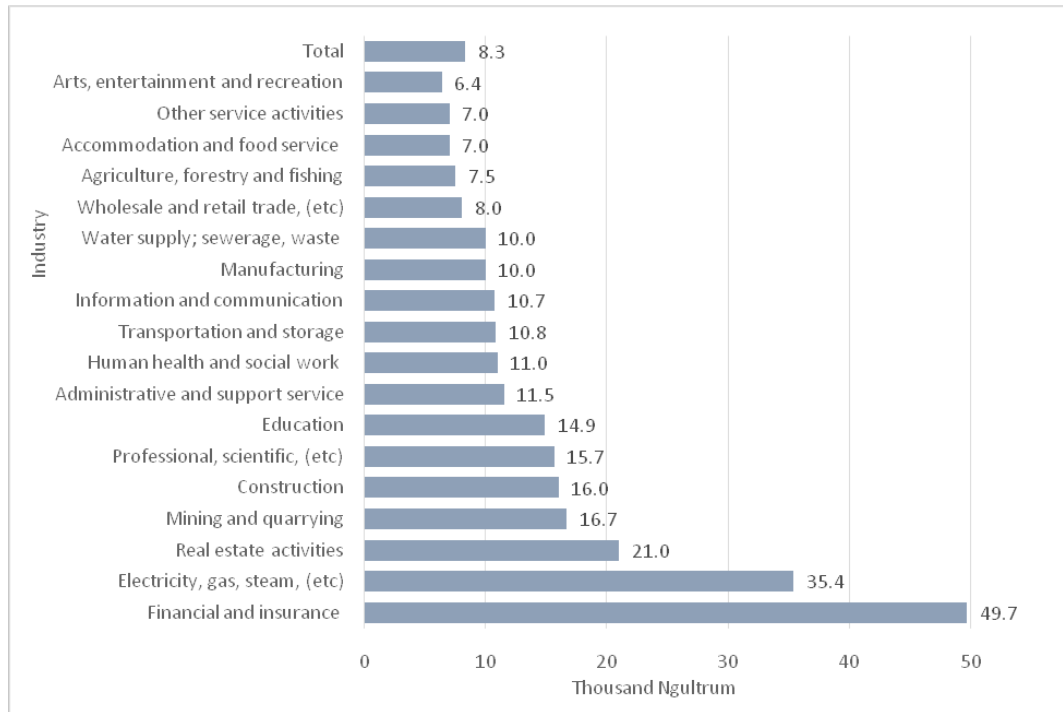


Figure 5.9 shows the median monthly remuneration by industry of the establishment. The overall median across the sectors is over BTN 8,000, indicating that 50 percent of all employees are earning more than this amount per month. There are five industries where the monthly median remuneration is at or below the overall median remuneration. However, these industries include the large majority of employees, in particular the trade and accommodation industries. As shown in Figure 5.9, the median earning in the arts, entertainment, and recreation industry is the lowest (BTN 6,375). The median remunerations in the electricity, gas, steam, (and so on) industry and particularly in the financial and insurance industry are not only the highest but also much higher than remunerations in other industries.

Figure 5.9: Median monthly remuneration of regular-paid and contract employees, by industry, 2017 (in BTN, thousands)





6

BUSINESS ENVIRONMENT

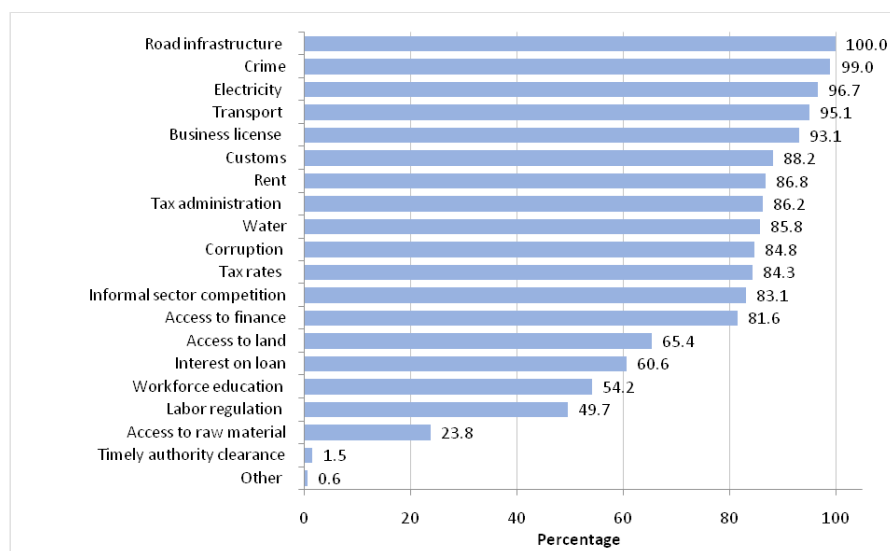
6.1 Introduction

As part of the government's initiative to support private sector development and create an enabling environment for businesses, several policy initiatives and revisions of rules and regulations have been undertaken. Addressing onerous procedures and regulations are important to promote and facilitate business start-ups and expand existing businesses. The census had a module on business environment to assess the challenges faced by businesses in Bhutan. The primary goal of the module was to gage the level of difficulties faced by establishments relating to their business activities.

Sections 6.2–6.5 present different dimensions of business obstacles related to, respectively, the relevance of particular obstacles to establishments. The sections also present the prevalence of the respective obstacles and their severity and the overall obstacles as measured in terms of the combination of prevalence and severity.

These sections 6.2–6.5 on business obstacles may diverge significantly between different types of businesses. Therefore, section 6.6 provides a more differentiated picture in a comparative analysis by categories of broad industry sectors.

Figure 6.1: Obstacles reported as potentially affecting business operations, 2017 (percentage)



6.2 Potential business obstacles

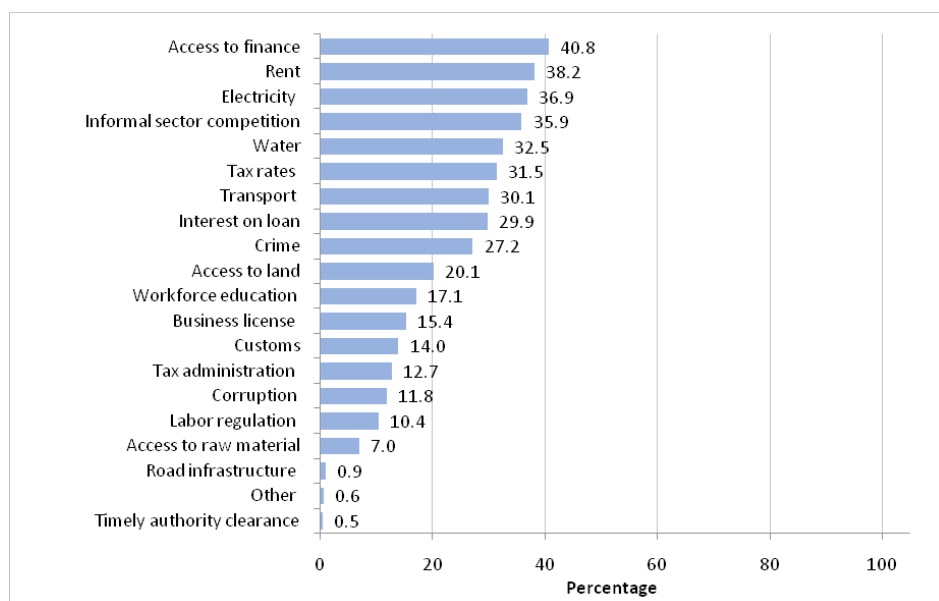
Figure 6.1 depicts the percentage of establishments reporting potential business obstacles. More than 90 percent of the establishments reported that road infrastructure, crime, transport and business licensing, tax administration, and customs regulations may affect their specific business operations. Between 80 percent and 90 percent of the establishments reported customs, rent, tax administration, water, corruption, tax rates, competition from the informal sector, and access to finance as potential obstacles. Access to finance and interest rates were stated as potential bottlenecks by 60–65 percent of the establishments, and less than half considered labor regulations, access to raw materials, and timely clearance or supervision by government authorities as a relevant obstacle.

6.3 Actual business obstacles

When zooming in on issues that actually posed problems to establishments, the percentage reported is lower and a different order emerges. Difficulty in access to finance and paying of rent are the two most common problems, and these affect two out of every five establishments (respectively, 40.8 percent and 38.2 percent). Electricity and water supply, competition from the informal sector, taxes, and transport are mentioned by more than 30 percent of the establishments as actual problems. On the other end of the scale, access to raw materials, road conditions and connectivity, and timely clearance or supervision by government authorities are faced by less than 10 percent of the establishments.

Figure 6.2 presents only the proportion of establishments facing particular problems in any grade of seriousness, ranging from very mild to very severe. This frequency with which a problem is reported is only part of the story, and it should be complemented with a measure of seriousness.

Figure 6.2: Obstacles reported as actually affecting business operations, 2017 (percentage)



6.4 Rating of obstacles

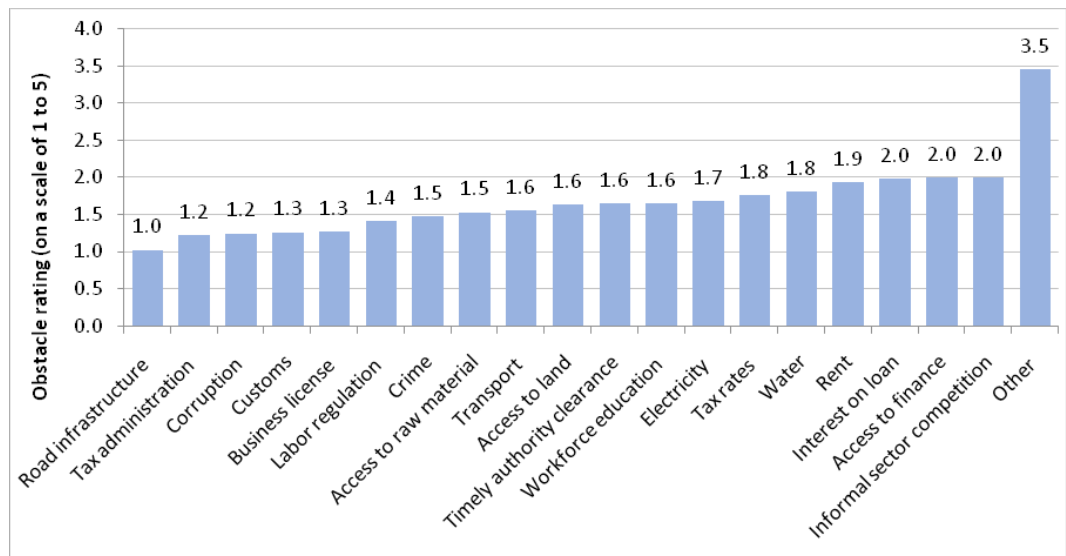
The measure presented in Figure 6.3 is calculated as the obstacle ratings weighted by the number of establishments that selected a specific rating. For each obstacle, the respondents provided a rating of seriousness on a scale of 1 (no obstacle) to 5 (very severe obstacle).

With the exception of the 'Other' obstacle, seriousness of obstacles ranges between 2 (minor obstacle) and 1 (almost all establishments rating this as not being an obstacle). This implies that on average, establishments rated these problems as mild. However, these averages hide the underlying distribution. Thus, while the average rating of 'competition of the informal sector' was 2 on the scale of 1 to 5, 47 percent mentioned that it did not pose a problem to the establishment, but 8 percent mentioned that it was a very severe problem.

Across the set of reported obstacles, competition of the informal sector, access to finance, interest on loan, rent, water supply, and tax rates were on average rated as the most serious problems (scoring a rating of 1.8 or higher). Most of these also appear in the top six problems in Figure 6.2, indicating that these are the most often experienced problems and the most serious ones.

The category of 'Other' is reported by a few establishments, representing only 0.6 percent of the total establishments. It includes problems such as lack of proper parking space, public toilets, street-lighting, and good sewerage. Apparently, these are considered serious problems for this small group of enterprises.

Figure 6.3: Obstacle rating, 2017



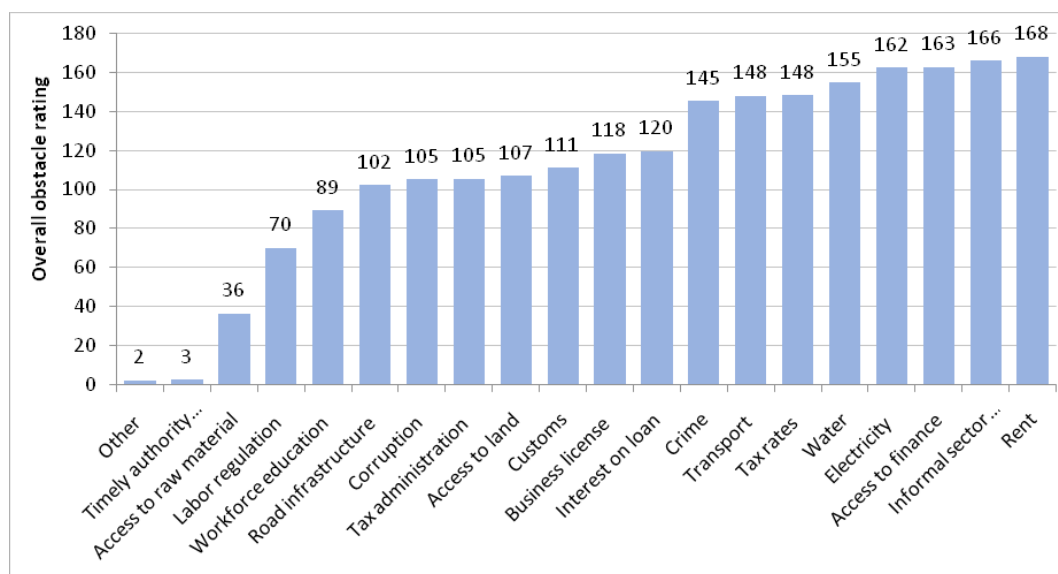
6.5 Overall rating of business obstacles

Figure 6.4 provides an obstacle rating that is the multiplicative combination of the frequency of obstacles being experienced as a problem (Figure 6.2) and the average severity of the obstacle (Figure 6.3). This rating can be interpreted as the overall magnitude of the respective obstacles.

Broadly, there appear to be three classes of obstacles according to this overall rating. The first is the group with ratings of 145 or more, which presents the areas that might be prioritized in policies for providing an enabling business environment. This group includes basic service provision of water and electricity. Most of these obstacles score high on both prevalence and severity.

The second group that can be distinguished has an overall rating between 100 and 120 and includes bureaucratic burdens, related to tax administration and business licensing. The third group with the lowest overall rating (below 100), includes two more obstacles related to bureaucracy, which apparently do not have a major negative impact on doing business in Bhutan.

Figure 6.4: Overall obstacle rating, 2017



6.6 Business obstacles by sector

As mentioned in the introductory section, both the prevalence of business obstacles and their seriousness may differ by type of establishment. These may depend on, for instance, the economic sector of operation, the legal status of the establishment, or the number of employees. Separate analyses should be carried out to identify specific obstacle profiles according to such criteria. In this section, a first attempt is made, by dis-aggregating the analysis by broad industry sectors: primary, secondary, and tertiary (for definitions, see section 4.3.3).

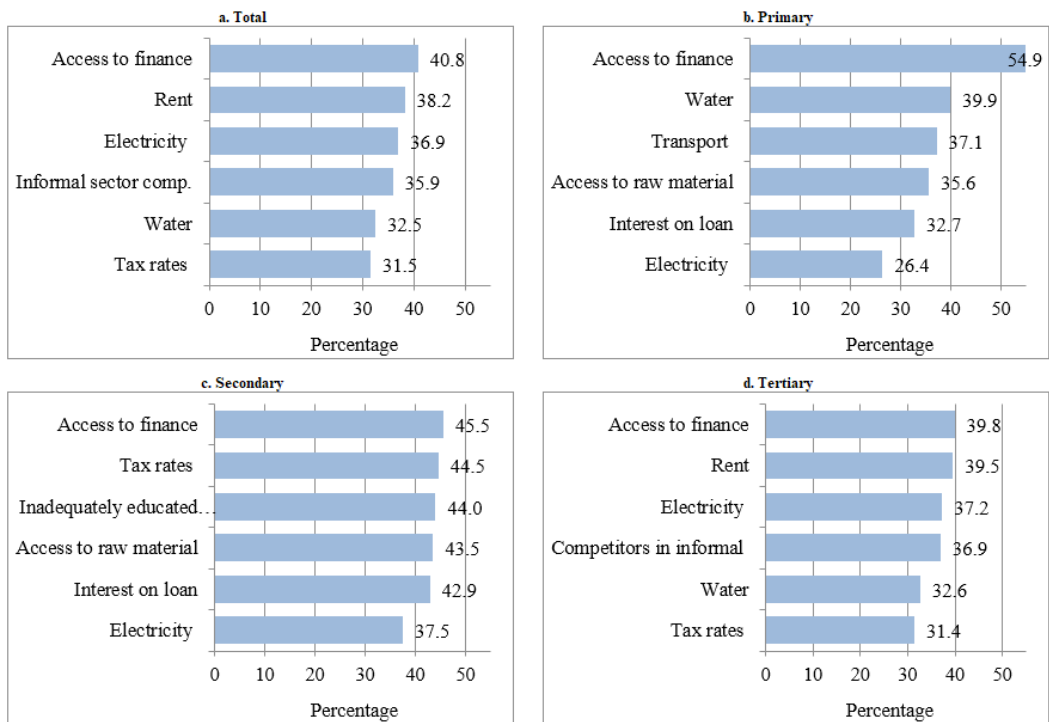
- Sections 6.6.1–6.6.2 provide comparisons for the three broad industry sectors for the following:
 - The percentage of establishments actually experiencing an obstacle;
 - The severity rating of obstacles, and
 - The overall obstacle rating.

It should be noted that the size of the tertiary sector accounts for almost 91 percent of the establishments in the ECoB 2018–19 and therefore weighs heavily in the overall distribution. Consequently, the figures for the tertiary sector and the total are very close.

6.6.1 Actual business obstacles

Figure 6.5 suggests that the secondary sector is more exposed to business obstacles than the other two sectors, since the top six obstacles are more prevalent in this sector, ranging from 46 percent to 38 percent. The access to finance is the most prevalent obstacle across all sectors, especially in the primary sector, with more than 54 percent. Inadequately educated workforce is a particular problem for the secondary sector, related to the need for specialized expertise in the production of goods. Understandably, access to raw materials is not a common problem in the tertiary sector, given the type of operations. However, it prominently features in the other two sectors, as does interest on loans.

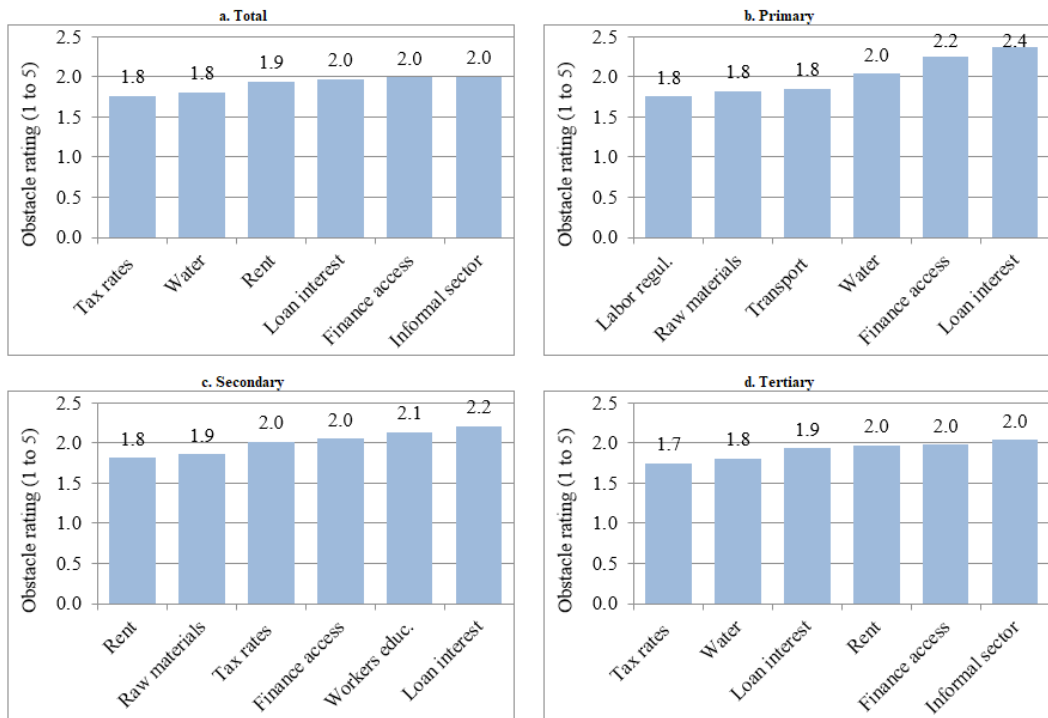
Figure 6.5: Top six obstacles reported as actually affecting business operations, by broad industry, 2017 (percentage)



6.6.2 Rating of obstacles

For all sectors, access to finance is also among the top-rated problems in terms of severity. The same applies to interest on loan, which seems even more serious in the primary and secondary sectors, given the relatively high ratings of, respectively, 2.4 and 2.2. Compared to the total and tertiary-sector picture, the access to raw materials is not only a frequently experienced problem in the primary and secondary sectors (section 6.6.1), it is also among the most severe problems in these sectors (Figure 6.6). The primary sector furthermore faces particularly serious problems with transport, probably related to their mostly rural location. For the secondary sector, the lack of educated/skilled workforce is among the most serious problems.

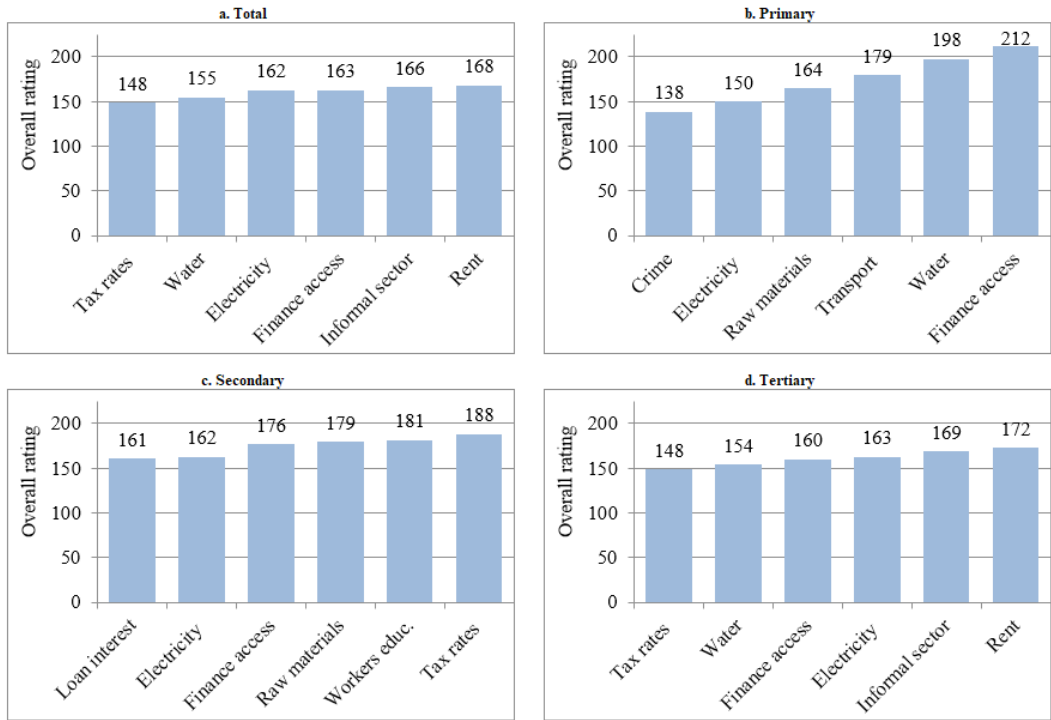
Figure 6.6: Severity rating of the top six obstacles for business operations, by broad industry, 2017



6.6.3 Overall rating of business obstacles

Figure 6.7 shows that the overall magnitude of business obstacles, measured by combining prevalence and severity, differs substantially across broad industry sectors. Access to finance and electricity are among the topsix overall ratings in all sectors. However, access to finance seems to be a larger problem in the primary sector, given its high rating of 212, compared to 176 and 160 in the other sectors. Otherwise, access to raw materials seems to be more of an overriding problem in the primary and secondary sectors. Transport, water, and crime are particularly associated with the primary sector, whereas interest on loan, lack of educated/skilled workers, and tax rates are particularly challenging in the secondary sector. The burden of paying rent stands out in the tertiary sector.

Figure 6.7: Overall rating of the top six obstacles for business operations, by broad industry, 2017





7

NGOs, COOPERATIVES, AND FARMERS' GROUPS

7.1 Introduction

The ECoB 2018–19 enumerated 21 NGOs and 116 cooperatives and farmers' groups. This is, respectively, around 50 percent and 27 percent of the establishments in these categories that were expected to be enumerated. The under-enumeration is caused by the difficulty to identify the physical location of these establishments, as they often operate from private homes and in off-season may not operate at all. As the low coverage may bias the census results for these categories, it was decided to exclude these from the main reporting, as presented in the previous chapters. This chapter provides a brief presentation of census results for the NGOs, cooperatives, and farmers' groups that were covered during the enumeration. It should be emphasized that the results only partially represent the population of the respective establishment types.

7.2 Sectors of operation

The activities of NGOs, cooperatives, and farmers' groups can be classified in different economic sectors. Since the census covered only a limited number of establishments of these legal statuses, presenting the sector classification at one- or two-digit level may give biased information. Therefore, the economic operations of these establishments are presented by broad industry categories. For definitions of the three broad industry categories, refer to section 4.3.3.

Table 7.1 presents the percentage distribution of NGOs, cooperatives, and farmers' groups by broad industry. The large majority of NGO establishments—90.5 percent—are operating in the tertiary sector, a similar percentage as was found in the entire census (see Table 4.3). Some 9.5 percent are operating in the secondary sector. Cooperative and farmers' groups also have more than half of the establishments concentrated in the tertiary sector, with 56 percent, followed by the secondary sector with 34.5 percent and some 9.5 percent in the primary sector. The main economic activities represented in the tertiary and secondary sectors are, respectively, retail sale of food items and manufacturing of dairy products.

Table 7.1: NGOs, cooperatives, and farmers' groups, by broad industry and legal establishment status, 2017 (percentage)

Broad industry	NGO	Cooperative or farmers' group	Total
Primary sector	0.0	9.5	8.0
Secondary sector	9.5	34.5	30.7
Tertiary sector	90.5	56.0	61.3
Total	100.0	100.0	100.0

7.3 Employment

The information on employment in enumerated NGOs, cooperatives, and farmers' groups shows 1,200 persons are employed in these categories. Male employees make up a small majority of these (56.0 percent). Figure 7.1 shows the distribution across categories of establishment employment size for male and female employees. Compared to men, women tend to work more often in establishments with 6–10 and 11–15 employees: almost half of all women (48.3 percent) work here, compared to less than one-third (30.0 percent) of men. On the other hand, men are particularly well represented in the largest establishment category, with a share that is almost twice the share of women working in this category.

Figure 7.1: Persons employed in NGOs, cooperatives, and farmers' groups, by size of establishment and gender, 2017 (percentage)

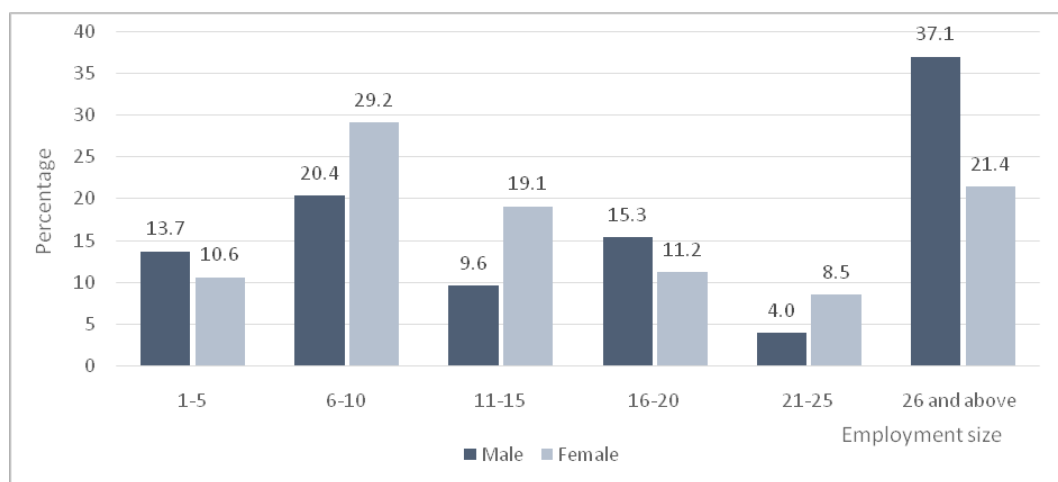


Figure 7.2 illustrates the percentage distribution of employment in NGOs, cooperatives, and farmers' groups by economic sector. The largest share (47.9 percent) of employment is observed in the wholesale and retail trade sector, followed by the manufacturing sector which employs 29.1 percent of the workers. The smallest share of employment in NGOs, cooperatives, and farmers' groups is found in the sectors of education and arts, entertainment, and recreation.

Figure 7.2: Persons employed in NGOs, cooperatives, and farmers' groups, by economic sector of the establishment, 2017 (percentage)

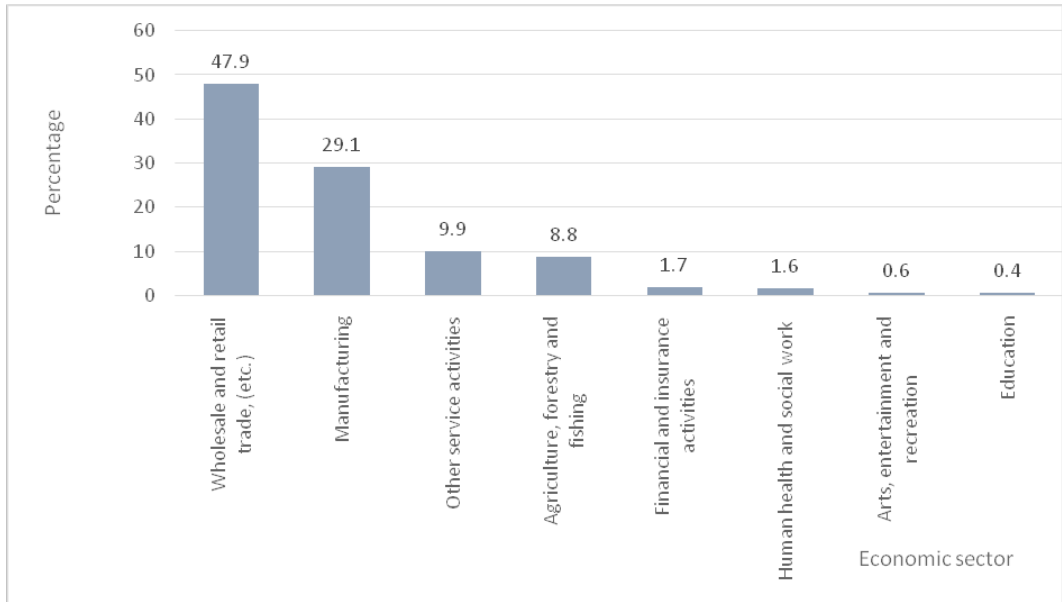
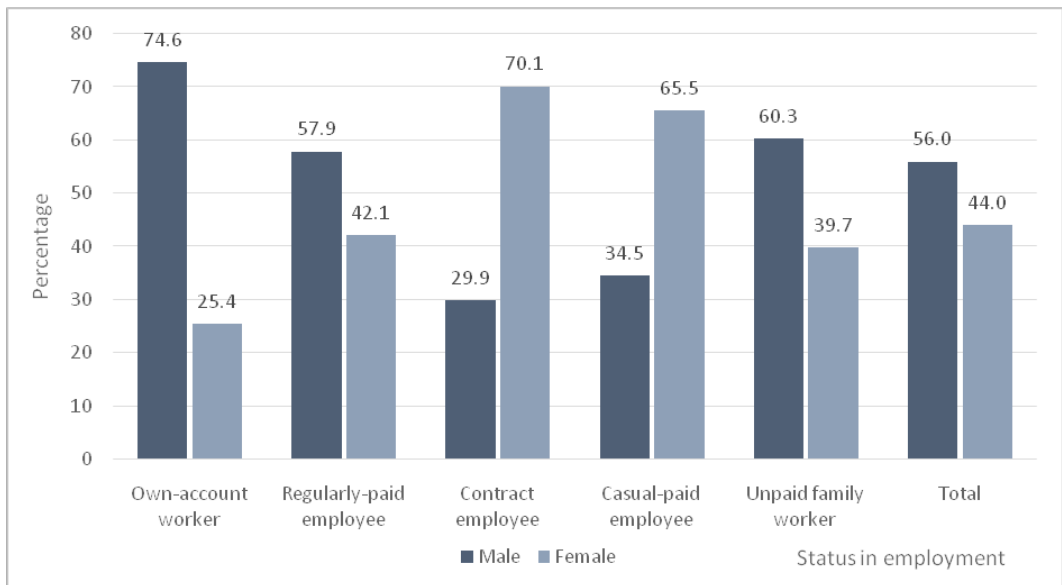


Figure 7.3 shows the gender composition within categories of employment status. Among contract and casual-paid employees, women significantly outnumber men. In the other status-in-employment categories, men form the majority, particularly among own-account workers where there are three times more men than women.

Figure 7.3: Persons employed in NGOs, cooperatives, and farmers' groups, by employment status and gender, 2017 (percentage)

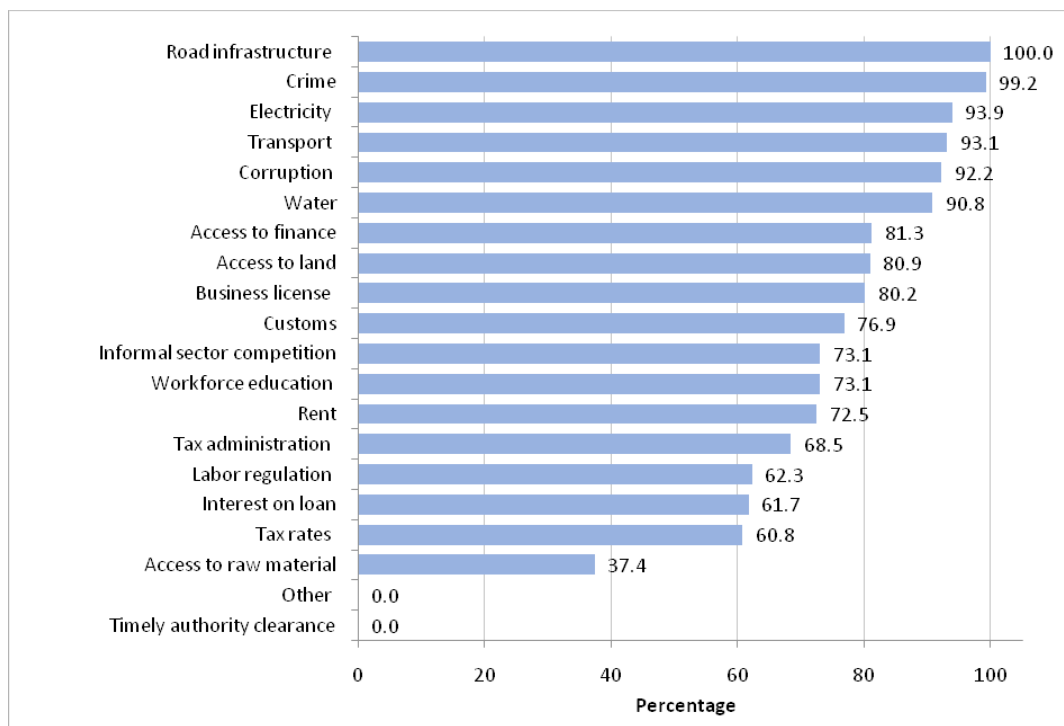


7.4 Obstacles for business operations

7.4.1 Potential business obstacles

Between 90 percent to 100 percent of the NGOs, cooperatives, and farmers' groups reported road infrastructure, crime, electricity, transport, corruption, and water as potential business obstacles (Figure 7.4). In addition, over 80 percent reported that access to finance, high interest rate, and business license may present bottle necks in their business operations. The least reported potential business obstacles for these establishments were timely clearance from the government agencies and access to raw materials.

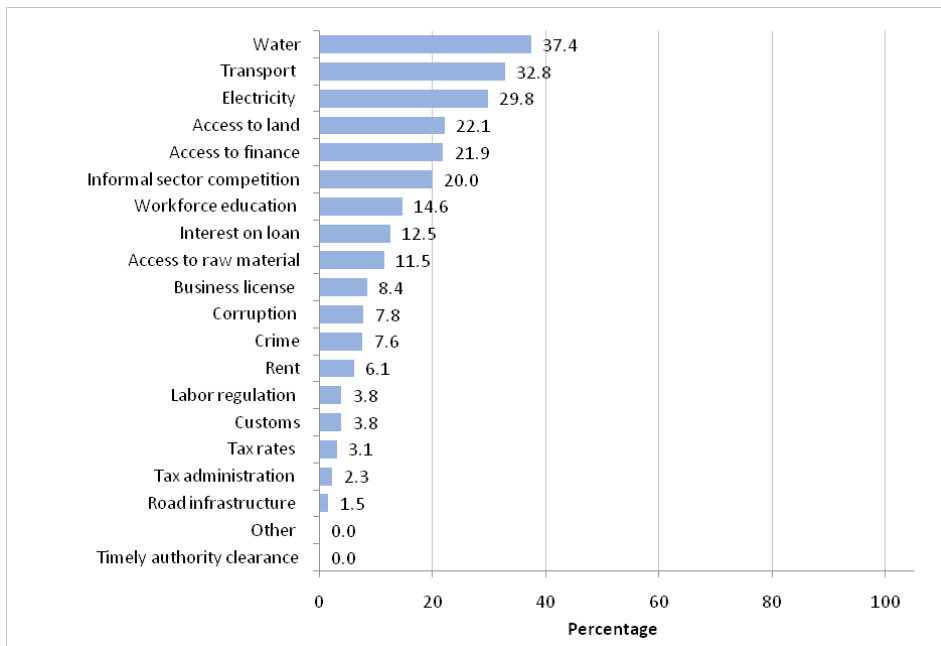
Figure 7.4: Obstacles reported for NGOs, cooperatives, and farmers' groups as potentially affecting business operations, 2017 (percentage)



7.4.2 Actual business obstacles

The most commonly reported actual business obstacles for NGOs, cooperatives, and farmers' groups are water and electricity supply, transport, access to land, finance, and competition of the informal sector (Figure 7.5). These obstacles actually pose problems to at least 20 percent of the establishments. Transport and water supply are reported to be an obstacle for more than 30 percent of the establishments. The lack of educated/skilled workforce, high interest on loans, and access to raw materials were stated as business obstacles by around 10–20 percent of establishments. All other obstacles that were inquired about affected less than 10 percent of the establishments.

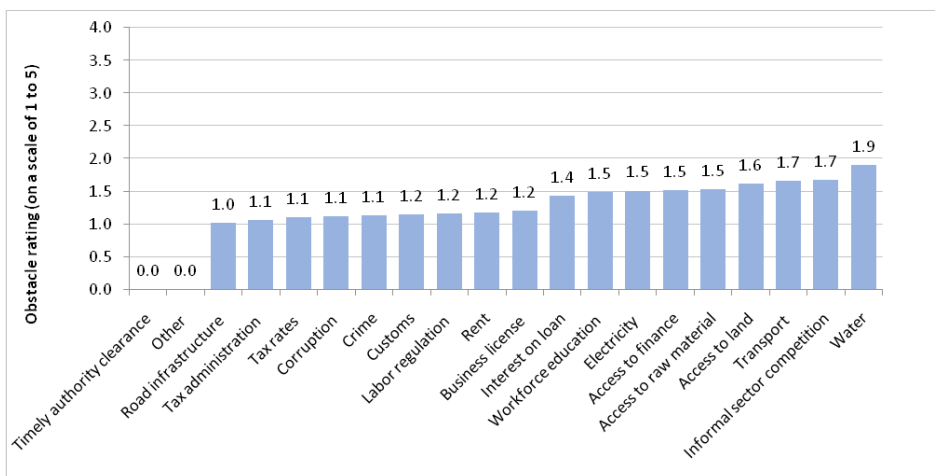
Figure 7.5: Obstacles reported for NGOs, cooperatives, and farmers' groups as actually affecting business operations, 2017 (percentage)



7.4.3 Obstacle rating

For the 137 NGOs, cooperatives, and farmers' groups, 8 out of 20 business obstacles score a rating between 1.5 and 1.9 on a scale of 1 to 5 (Figure 7.6). The provision of water has the highest score (1.9), followed by transport and competition from the informal sector (both at 1.7). The relatively high rating of water supply, informal sector competition, and access to finance corresponds to the overall picture in the ECoB 2018–19 (see section 6.4). Transport, access to land, and raw materials feature among the six most serious obstacles for NGOs, cooperatives, and farmers' groups.

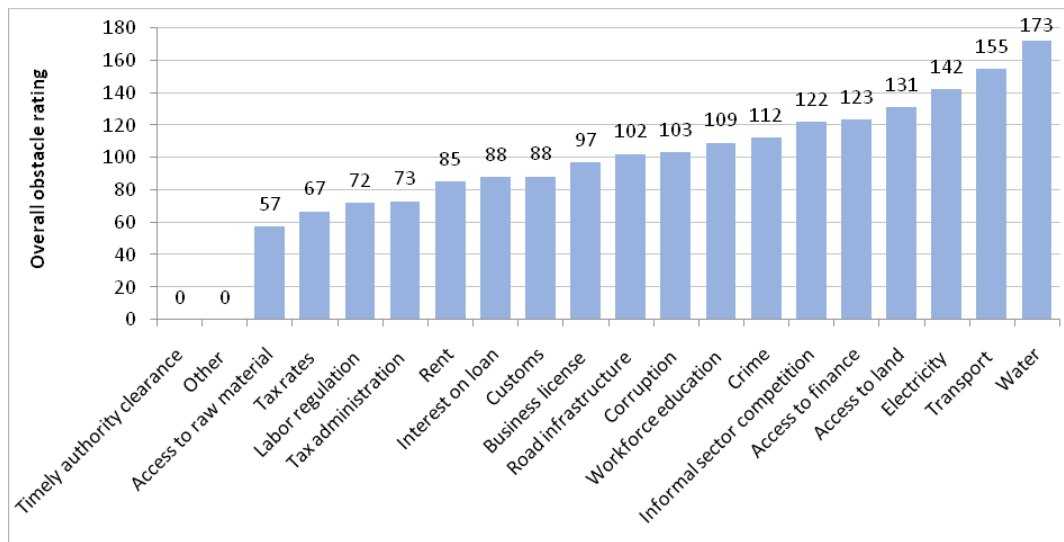
Figure 7.6: Obstacle rating for NGOs, cooperatives, and farmers' groups, 2017



7.4.4 Overall obstacle rating

Figure 7.7 presents the combined rating for the prevalence and severity of obstacles faced by NGOs, cooperatives, and farmers' groups. The highest-rated obstacles are those related to access to factors of production, including water, electricity, land, and finance, as well as transport and competition from the informal sector. These obstacles all rate between 130 and 173. In terms of position among the top six rated obstacles, this corresponds with the rating for the other establishments in the census for electricity, access to finance, and informal sector competition. Access to land, transport, and especially water supply seem to be the most pronounced obstacles for NGOs, cooperatives, and farmers' groups.

Figure 7.7: Overall rating for NGOs, cooperatives, and farmers' groups, 2017



Annex I: Quality assurance and quality assessment

This annex reports on the quality assurance measures that were taken in the ECoB 2018–19 and on available quality indicators. The information is organized according to the aspects of statistical quality that are distinguished in the quality assurance framework of the European Statistical System (Eurostat, n.d.). In total, 15 quality aspects can be identified, which are grouped into three dimensions:

- A dimension associated with the institutional environment. Institutional and organizational factors have a significant influence on the effectiveness and credibility of a statistical authority developing, producing, and disseminating statistics;
- A dimension related to procedural aspects of the ECoB 2018–19. The compliance with international standards, guidelines, and good practices enhances credibility of produced statistics, and
- A dimension describing the census output. The extent to which available statistics meet users’ needs is the ultimate criterion of statistical quality.

The arrangement into three dimensions reflects the critical impact that the institutional environment has on the quality of procedures of census taking and, in turn, the critical impact that census-taking procedures have on the quality of census output.

This annex will not cover the dimension of institutional environment, as this is beyond the scope of the census. However, a few aspects will be addressed as far as specifically related to the ECoB 2018–19. Furthermore, in the absence of a statistical quality assurance framework in Bhutan, several quality aspects cannot be covered to the full extent.

Figure I.1: Dimensions and aspects of statistical quality

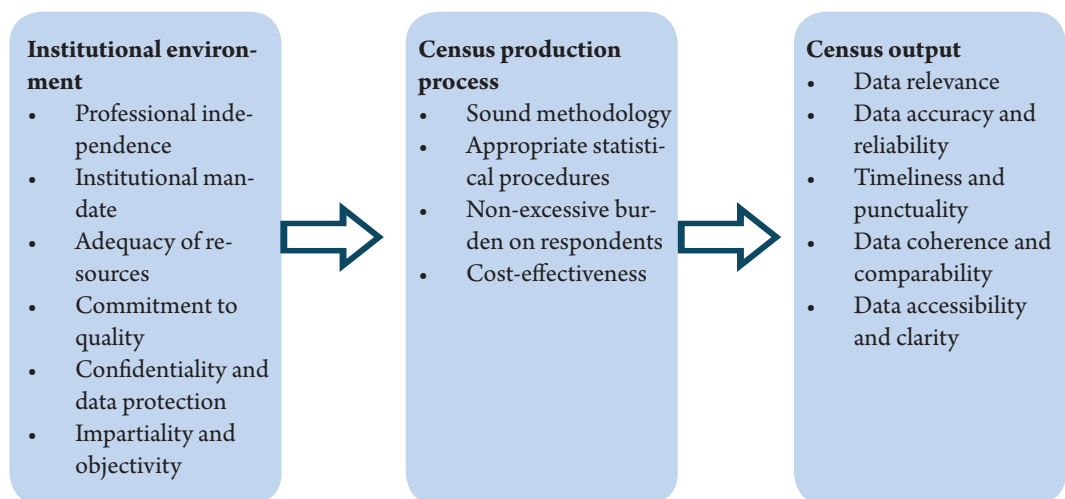


Table I.1 provides the definitions of the different quality aspects.

Table I.1: Dimensions and aspects of statistical quality

Institutional environment	
Professional independence	Professional independence of statistical authorities from other policy, regulatory, or administrative departments and bodies, as well as from private sector operators, ensures the credibility of official statistics.
Institutional mandate	Statistical authorities have a clear legal mandate to collect and access information from multiple data sources for official statistical purposes. Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for official statistical purposes at the request of statistical authorities.
Adequacy of resources	The resources available to statistical authorities are sufficient to meet official statistics requirements.
Commitment to quality	Statistical authorities are committed to quality. They systematically and regularly identify strengths and weaknesses to continuously improve process and product quality.
Confidentiality and data protection	The privacy of data providers, the confidentiality of the information they provide, and its use only for statistical purposes are absolutely guaranteed.
Impartiality and objectivity	Statistical authorities develop, produce, and disseminate European statistics respecting scientific independence and in an objective, professional, and transparent manner in which all users are treated equitably.
Statistical processes	
Sound methodology	Sound methodology underpins quality statistics. This requires adequate tools, procedures, and expertise.
Appropriate statistical procedures	Appropriate statistical procedures, implemented throughout the statistical processes, underpin quality statistics.
Non-excessive burden on respondents	The response burden is proportionate to the needs of the users and is not excessive for respondents. The statistical authorities monitor the response burden and set targets for its reduction over time.
Cost-effectiveness	Resources are used effectively.
Relevance	Official statistics meet the needs of users.
Accuracy and reliability	Official statistics accurately and reliably portray reality.
Timeliness and punctuality	Official statistics are released in a timely and punctual manner.
Coherence and comparability	Official statistics are consistent internally, over time, and comparable between regions and countries; it is possible to combine and make joint use of related data from different data sources.
Accessibility and clarity	Official statistics are presented in a clear and understandable form, released in a suitable and convenient manner, and available and accessible on an impartial basis with supporting metadata and guidance.

Note: Adapted from Eurostat, n.d.

Table 1.2 specifies the quality assurance measures that were taken in the ECoB 2018–19 for each of the process and output quality aspects and provides a series of quantifiable quality indicators.

Table 1.2: Measures and indicators for quality assurance and quality assessment

Quality aspect	Quality assurance measures taken	Quality indicator
Sound methodology	The overall methodological framework used for the ECoB 2018–19 follows international standards, guidelines, and good practices.	<ul style="list-style-type: none"> • Six NSB staff underwent six days’ study visits to the Philippines and Nepal to acquire knowledge about international best practices. • Five NSB staff attended 10 days’ data analysis training in the Philippines. • An international World Bank consultant provided technical assistance to assure the use of international standards and methodology.
	International classifications were applied for the classification and definition of establishments, expenditures, capital employment, assets, employment status, economic activities, and education.	Number of international classifications applied: 4 (ISIC, ISCED, ICSE, System of National Accounts [SNA])
	The census enumeration logistics were prepared by conducting a full listing of establishments, including establishments that were out of the scope of the ECoB 2018–19.	Number of establishments listed: 18,420
	Specialized staff was assigned to the ECoB 2018–19 to prepare and implement the census.	Number of staff assigned to the ECoB 2018–19 by field of specialization <ul style="list-style-type: none"> • National accounts - 7 • IT- 1 • NSB field operations - 1 • Dzongkhag Statistical Officers - 20
	Census staff were extensively trained (see the training agenda in Annex IV) in the roles and responsibilities of the field staff, enumeration procedures and the questions included in the questionnaire, and handling the tablet application, and the training included practical exercises, mock interviews, and interview test in the field.	<ul style="list-style-type: none"> • 24 field supervisors were trained for 11 days. • 68 enumerators were trained for 8 days.

Quality aspect	Quality assurance measures taken	Quality indicator
Sound methodology	Use of CAPI to reduce data collection errors.	<p>Number of range and consistency checks in CAPI application, by questionnaire module:</p> <ul style="list-style-type: none"> • Module 1: 12 • Module 2: 9 • Module 3: 47 • Module 4: 20 • Module 5: 8 • Module 6: 1
	Procedures were implemented to include all applicable establishments in the ECoB 2018–19. Enumerators revisited non-responding establishments three times. Due to establishment closure between the reference year and the enumeration period, a number of establishments were not identifiable. Follow-up visits by supervisors and NSB HQ staff were done to seek collaboration. Census coverage was assessed against existing administrative listings.	<ul style="list-style-type: none"> • Number of establishments that were listed but could not be identified: 479 (3.3 percent) (non-coverage rate) • Number of establishments that refused providing information: 70 (0.5 percent) • Existing administrative listings used for assessing census coverage: 6 (tax register, state-owned companies list from the Ministry of Finance, list of companies owned by Druk Holding Investment Companies, list of NGOs from Civil Society Organisation Authority, list of cooperatives and farmers' group from the Ministry of Agriculture, and list of FDI companies from the Ministry of Economic Affairs)
	Methodological documentation of the ECoB 2018–19 is developed for each statistical process.	<ul style="list-style-type: none"> • Number of manuals developed for census operations: 5 (listing manual for enumerators and supervisors, enumeration manuals for enumerators and supervisors, and manual for questionnaire self-completion) • Methodology chapter in the ECoB 2018–19 report
	Advance planning for postenumeration tasks was done in November 2018.	<ul style="list-style-type: none"> • Development of detailed report outline/analysis plan • Development of tabulation plan with table specifications

Quality aspect	Quality assurance measures taken	Quality indicator
<p>Appropriate statistical procedures</p>	<p>The census questionnaire was extensively tested and experience used to improve the questionnaire.</p> <p>The census enumeration was intensively supervised and monitored through (a) implementation of supervisor tasks (continuous field support, daily meetings, attending interviews, revisiting interviewed establishments, and reviewing completed questionnaires), (b) monitoring of and support to fieldwork in Thimphu and Phuentsholingthromdes by four NSB HQ staff and to 11 dzongkhags by four NSB HQ staff, and (c) continuous fieldwork monitoring by 12 HQ dashboard managers.</p> <p>Appropriate checking, editing, and imputation methods were used:</p> <ul style="list-style-type: none"> • Wages for employees were checked against plausible sector-specific thresholds. • Legal status of the establishments was verified against the administrative data for FDI enterprises and state-owned enterprises. • Missing information for each variable was checked and followedup with establishments. • Coding of economic activities was checked against enumerator description and name of establishment; inconsistencies were discussed with NSB technical team; and codes of NGOs and state-owned enterprises were all verified. 	<ul style="list-style-type: none"> • Number of establishments interviewed in the pilot census: 75 • Number of questions changed on the basis of the pilot experience: 10 (5 percent) <p>Number of staff involved in field supervision and monitoring: 43•</p> <ul style="list-style-type: none"> • Percentage of skip routines checked: 100 • Percentage of variable frequency tables produced: 100 • Percentage of variable cross tables produced: around 75 • Plausible threshold levels identified for variables: 23

Quality aspect	Quality assurance measures taken	Quality indicator
Non-excessive burden on respondents	<p>The reporting burden is made proportionate to the needs of the users and is not excessive for respondents. Respondents were informed about expected interview time. During the enumeration, CAPI was used to reduce the interview time.</p> <p>Respondents were offered a paper questionnaire for self-completion to allow sufficient time for collecting establishment information.</p>	<ul style="list-style-type: none"> • Average interview time: 70 minutes • Estimated opportunity cost of interview per establishment: BTN 675 • Total estimated opportunity cost for establishments: BTN 9.4 million
	<p>Interview questions were explicitly phrased and in a language that was understandable for the target population.</p> <p>Inclusion of questions in the ECoB 2018–19 questionnaire was justified.</p>	<ul style="list-style-type: none"> • Number of covered establishments that used self-completion questionnaire: 200 (1.4 percent) <p>—</p> <p>Percentage of questions used in census analysis and reporting, by questionnaire module:</p> <ul style="list-style-type: none"> • Module 1: 92 • Module 2: 88 • Module 6: 100 • Total: 97
Cost-effectiveness	<p>Listing information was used whenever information was considered of sufficient quality to avoid duplicating requests for information.</p> <p>Internal and independent external measures applied to monitor the use of resources:</p> <ul style="list-style-type: none"> • Budget justification was made to request funding of the ECoB 2018–19 by the World Bank. • Budget review was done during each phase of the census project. <p>CAPI was used to reduce the routine clerical operation of data collection.</p> <p>Assessment of meeting the census objectives was regularly done by the NSB management and by the World Bank project officer.</p>	<p>Number of establishments for which listing information was used: 11,803 (83.5 percent)</p> <p>—</p> <p>—</p> <p>—</p>

Quality aspect	Quality assurance measures taken	Quality indicator
	<p>The ECoB 2018–19 team consulted potential census users to consider their information needs and priorities. The list of census stakeholders is included as Annex II to this report.</p>	<ul style="list-style-type: none"> • Number of census user workshops conducted: 2 • Number of bilateral consultations with census users: 7 • Total number of stakeholders consulted: 24 <ul style="list-style-type: none"> • Government agencies: 20 • Business agencies: 3 • Civil society agencies: 1
Relevance	<p>The ECoB 2018–19 report informed the census users about the coverage of the census.</p> <p>The ECoB 2018–19 questionnaire was divided into well-defined modules based on international best practice.</p>	<ul style="list-style-type: none"> • Non-coverage rate: 3.3 percent <p>—</p>
	<p>Inclusion of questions in the ECoB 2018–19 questionnaire was justified.</p>	<p>Percentage of questions used in census analysis and reporting, by questionnaire module:</p> <ul style="list-style-type: none"> • Module 1: 92 • Module 2: 88 • Module 3: 100 • Module 6: 100 • Total: 97

Quality aspect	Quality assurance measures taken	Quality indicator
Accuracy and reliability	<p>Appropriate checking, editing, and imputation methods were used:</p> <ul style="list-style-type: none"> • Wages for employees were checked against plausible sector-specific thresholds. • Legal status of the establishments was verified against the administrative data for FDI enterprises and state-owned enterprises. • Missing information for each variable was checked and followed up with establishments. • Coding of economic activities was checked against enumerator description and name of establishment; inconsistencies were discussed with NSB technical team; and codes of NGOs and state-owned enterprises were all verified. • For missing data or data that were not considered correct, extensive telephone follow-up with establishments was conducted. • Out of 194 variables, 6 had a missing percentage rate of more than 2 percent, of which 3 had a missing percentage rate of more than 4 percent. 	<p>Percentage of skip routines checked: 100 Percentage of variable frequency tables produced: 100 Percentage of variable cross tables produced: around 75 Plausible threshold levels identified for variables: 23 Percentage of missing values, by questionnaire module Module 1: 0.1 Module 2: 1.1 Module 3: 0.1 Module 6: 0.2 Total: 0.4 Number of telephone follow-up calls conducted: around 1,350</p>
Timeliness and punctuality	<p>In the ECoB 2018–19 publicity campaign, the release of census results was indicated for five months after the scheduled completion of data collection (end-January 2019).</p> <p>Census results on income and expenditure of establishments and capital formation is not yet released.</p>	<ul style="list-style-type: none"> • Release of census results was realized 4.5 months after completion of data collection (mid-February 2019) (timeliness). • Divergence from the dissemination time schedule: none (punctuality) <p>—</p>

Quality aspect	Quality assurance measures taken	Quality indicator
Coherence and comparability	<ul style="list-style-type: none"> • The ECoB 2018–19 was the first economic census conducted in Bhutan. Therefore, no assessment can be made about comparability overtime. • The geographic distribution as applied in the ECoB 2018–19 is identical to other surveys and censuses conducted in Bhutan. • The scope and universe of the economic census are different from household-based data collection, like the Population and Housing Census of Bhutan (PHCB) and the Labour Force Survey (LFS). This results in different methodology in terms of questions and aggregation. • The ECoB 2018–19 used the same classifications and definitions as the PHCB and LFS for employment status, economic sectors, and educational level attained. The ECoB 2018–19 is fully compatible with the Bhutan SNA. • The ECoB 2018–19 complies with international standards, definitions, and classifications for the classification and definition of establishments, expenditures, capital employment and assets (SNA), employment status (ICSE), economic activities (ISIC, Rev.4), and education (ISCED). 	—

Quality aspect	Quality assurance measures taken	Quality indicator
<p>Accessibility and clarity</p>	<ul style="list-style-type: none"> • Metadata on definitions, data collection methods, reference period, and questionnaire for facilitating proper interpretation and meaningful comparisons were documented and shared with census users (this report). • Census results are disseminated in hard copy (this report) and online on the website of the NSB. • Custom-designed output and analyses will be provided when feasible. • Access to census microdata is allowed for research purposes and is subject to specific protocols as defined by the NSB. <p>Census users are kept informed about the quality of the census outputs (this annex) and the limitations of the ECoB 2018–19 (section 2.7 of this report).</p>	<p>—</p>

Annex II: List of agencies participated in stakeholder consultation meetings

1. Gross National Happiness Commission
2. Department of Industry, Ministry of Economic Affairs
3. Department of Cottage and Small Industry, Ministry of Economic Affairs
4. Department of Trade, Ministry of Economic Affairs
5. Department of Geology and Mines, Ministry of Economic Affairs
6. Bhutan Chamber of Commerce and Industry
7. Bhutan Information, Communication and Media Authority
8. Policy and Planning Division, Ministry of Finance
9. Royal Monetary Authority of Bhutan
10. Ministry of Works and Human Settlement
11. Department of Revenue and Customs, Ministry of Finance
12. Department of Agriculture, Ministry of Agriculture
13. Department of Agriculture Marketing and Cooperative, Ministry of Agriculture
14. Department of Employment and Human Resources, Ministry of Labour and Human Resources
15. Department of Information Technology and Telecom
16. Dzongkhag Administration
17. Construction Development Board
18. Association of Bhutanese Industries
19. Civil Society Organization Authority
20. Natural Resource Development Corporation
21. Thimphu Thomdre
22. Samdrup Jongkhar Thomdre
23. Gelegphu Thomdre
24. Hotel's Association of Bhutan

Annex III: Questionnaires

Module 1. Identification	
1_1	Dzongkhag <input style="width: 50px;" type="text"/>
1_2	Gewog/Town <input style="width: 50px;" type="text"/>
1_3	Chiwog/LAP <input style="width: 50px;" type="text"/>
1_4	Questionnaire number <input style="width: 50px;" type="text"/>
1_5_a	Village name (rural only) _____
1_5_b	Village code (rural only) <input style="width: 30px;" type="text"/>
1_6	EA code (urban only) <input style="width: 30px;" type="text"/>
1_7	Structure number (urban only) <input style="width: 30px;" type="text"/>
1_8	Postal number (Thimphu Thromde) <input style="width: 50px;" type="text"/>
1_9	Name of the establishment _____
1_10	Date and start time of interview (system-generated) <input style="width: 100px;" type="text"/>
1_10_a	Year of questionnaire completion <input style="width: 50px;" type="text"/>
1_11	End time of questionnaire completion (system-generated) <input style="width: 100px;" type="text"/>

Module 2. Establishment information			
2_1	Which of the following best describes your establishment? Single establishment 1 Branch only 2 <input type="checkbox"/> Branch and Head office 3 Head office only 4	Go to 2_4 Go to 2_4 Go to 2_4	
2_2_a	What is the name and address of the head office? Name of the head office _____		
2_2_b	Address of the head office _____		
2_3	Does this establishment maintain separate books of accounts? Yes 1 <input type="checkbox"/> No 2	Go to 2_9_a Go to 2_9_a	
2_4	What type of organisation is this establishment? Single proprietorship 1 Partnership 2 Private limited company (non-FDI) 3 <input type="checkbox"/> Public limited company (non-FDI) 4 State-owned limited company 5 FDI company 6 NGO 7 Cooperative 8 Permanent shed vendor 9 Other (specify) 10	Go to 2_7 Go to 2_7 Go to 2_9_a Go to 2_9_a Go to 2_9_a Go to 2_5 Go to 2_9_a Go to 2_9_a Go to 2_14	
2_4_a	Other type of organisation: _____	Go to 2_9_a	
2_5	How many foreign investors are there in this FDI company? <input type="text"/> <input type="text"/>		
2_6	a What is the share of investment of the foreign investor(s)? 1 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> 2 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> 3 <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	b What is the country of residence of the foreign investor(s)? 1 _____ Country code <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2 _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 3 _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Go to 2_9_a
2_7	How many owners are there in this establishment? <input type="text"/>		

2_8	<p>Ownership details</p> <p>a Name _____ b Age _____ c Sex (1=Male, 2=Female) _____ d Highest _____ e Nationality _____</p> <p>Codes below</p> <table> <tr> <td>1 _____</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>2 _____</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>3 _____</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </table> <p>Codes 1.8d: 00=Pre-primary, 01...12=Grade 1 to Grade 12, 13=VTI Certificate, 14 = TTI Certificate, 15 = RTI, 16 = Diploma, 17 = Bachelor's degree, 18 = Master's degree, 19 = Above Masters, 20 = ECCD, 21 = Day care, 22 = No education</p> <p>Code 1.8e: 1=Bhutanese, 2=Indian, 3=Other than Bhutanese or Indian</p>	1 _____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	2 _____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	3 _____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	If single proprietorship in 2.4, go to 2_9_a
1 _____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>													
2 _____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>													
3 _____	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>													
2_9	Date of registration dd mm yyyy <input type="text"/>																
2_9_a	Day of registration <input type="text"/>																
2_9_b	Month of registration <input type="text"/>																
2_9_c	Year of registration <input type="text"/>																
2_10	License/Registration number (for main activity) <input type="text"/>																
2_11	How many licenses did you have in total in 2017? <input type="text"/>																
2_12	How many of these licenses were operational in 2017? <input type="text"/>																
2_13	TPN number (for main activity) <input type="text"/>																
2_14	Number of years in operation <input type="text"/>																
2_15	Date of start of business (SKIP IF 2_4 IS SINGLE PROPRIETORSHIP OR COOPERATIVE) dd mm yy <input type="text"/>																
2_15_a	Day of start of business <input type="text"/>																
2_15_b	Month of start of business <input type="text"/>																
2_15_c	Year of start of business <input type="text"/>																
2_16_a	Contact for the establishment Name of contact person _____																
2_16_b	Designation of the contact person _____																
2_16_c	Email address _____																
2_16_d	Web address _____																
2_16_e	Mobile/telephone number <input type="text"/>																
2_17	Was this establishment operational in 2017? Yes 1 No 2																

2_18	What was the main activity of this establishment in 2017 or the most recent year of operation? DESCRIBE IN DETAIL THE GOODS OR SERVICES PRODUCED BY THE ESTABLISHMENT IN THE MAIN ACTIVITY	
2_19	Did this establishment carry out any other activities in 2017 or the most recent year of operation? Yes 1 No 2	If 2_17 is 1, go to M3 If 2_17 is 2, END
2_20	How many other activities did this establishment carry out in 2017 or the most recent year of operation? <input type="checkbox"/>	

	What were other activities of this establishment? DESCRIBE IN DETAIL THE GOODS OR SERVICES PRODUCED BY THE ESTABLISHMENT IN THE OTHER ACTIVITIES	
2_21_a	_____	If 2_17 is 1, go to M3
2_21_b	_____	
2_21_c	_____	
2_21_d	_____	If 2_17 is 2, END
2_21_e	_____	
2_21_f	_____	
2_21_g	_____	

Module 3. Employment

3_1	How many months was the establishment operational in 2017?	If less than 12 months, go to 3.3
3_2_a	Information about persons working in this establishment as of 31 December 2017? Were there any own-account workers working in this establishment as of 31 December 2017? Yes 1 No 0	Go to 3_2_b
3_2_a_1	How many of these own-account workers were male Bhutanese?	If 1, go to 3_2_a_5
3_2_a_2	How many of these own-account workers were female Bhutanese?	If 1, go to 3_2_a_6
3_2_a_3	How many of these own-account workers were male non-Bhutanese?	If 1, go to 3_2_a_5
3_2_a_4	How many of these own-account workers were female non-Bhutanese?	If 1, go to 3_2_a_6
3_2_a_5	How many days per week - on average - did this male own-account worker work?	Go to 3_2_a_7
3_2_a_6	How many days per week - on average - did this female own-account worker work?	Go to 3_2_a_8
3_2_a_7	How many hours did this male own-account worker on average work per day?	Go to 3_2_b
3_2_a_8	How many hours did this female own-account worker on average work per day?	
3_2_b	Were there any regularly-paid workers working in this establishment as of 31 December 2017? Yes 1 No 0	Go to 3_2_c
3_2_b_1	How many of these regularly-paid employees were male Bhutanese?	
3_2_b_2	How many of these regularly-paid employees were female Bhutanese?	

3_2_b_3	How many of these regularly-paid employees were male non-Bhutanese?	<input type="checkbox"/>	
3_2_b_4	How many of these regularly-paid employees were female non-Bhutanese?	<input type="checkbox"/>	
3_2_b_5	How many days per week - on average - did these male regularly-paid employees work?	<input type="checkbox"/>	If male employees
3_2_b_6	How many days per week - on average - did these female regularly-paid employees work?	<input type="checkbox"/>	If female employees
3_2_b_7	How many hours did these male regularly-paid employees on average work per day?	<input type="checkbox"/>	If male employees
3_2_b_8	How many hours did these female regularly-paid employees on average work per day?	<input type="checkbox"/>	If female employees
3_2_b_9	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male Bhutanese regularly-paid employees?	<input type="text"/>	If male Bhutanese
3_2_b_10	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female Bhutanese regularly-paid employees?	<input type="text"/>	If female Bhutanese
3_2_b_11	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male non-Bhutanese regularly-paid employees?	<input type="text"/>	If male non- Bhutanese
3_2_b_12	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female non-Bhutanese regularly-paid employees?	<input type="text"/>	If female non- Bhutanese
3_2_c	Were there any contract workers working in this establishment as of 31 December 2017?	Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 0	Go to 3_2_d
3_2_c_1	How many of these contract employees were male Bhutanese?	<input type="checkbox"/>	
3_2_c_2	How many of these contract employees were female Bhutanese?	<input type="checkbox"/>	
3_2_c_3	How many of these contract employees were male non-Bhutanese?	<input type="checkbox"/>	

3_2_c_4	How many of these contract employees were female non-Bhutanese?	<input type="checkbox"/>	
3_2_c_5	How many days per week - on average - did these male contract employees work?	<input type="checkbox"/>	If male employees
3_2_c_6	How many days per week - on average - did these female contract employees work?	<input type="checkbox"/>	If female employees
3_2_c_7	How many hours did these male contract employees on average work per day?	<input type="checkbox"/>	If male employees
3_2_c_8	How many hours did these female contract employees on average work per day?	<input type="checkbox"/>	If female employees
3_2_c_9	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male Bhutanese contract employees?	<input type="text"/>	If male Bhutanese
3_2_c_10	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female Bhutanese contract employees?	<input type="text"/>	If female Bhutanese
3_2_c_11	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male non-Bhutanese contract employees?	<input type="text"/>	If male non- Bhutanese
3_2_c_12	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female non-Bhutanese contract employees?	<input type="text"/>	If female non- Bhutanese
3_2_d	Were there any casual-paid employees working in this establishment as of 31 December 2017?	Yes <input type="checkbox"/>1 No <input type="checkbox"/>0	Go to 3_2_e
3_2_d_1	How many of these casual-paid employees were male Bhutanese?	<input type="checkbox"/>	
3_2_d_2	How many of these casual-paid employees were female Bhutanese?	<input type="checkbox"/>	
3_2_d_3	How many of these casual-paid employees were male non-Bhutanese?	<input type="checkbox"/>	
3_2_d_4	How many of these casual-paid employees were female non-Bhutanese?	<input type="checkbox"/>	

3_2_d_5	How many days per week - on average - did these male casual-paid employees work?	<input type="checkbox"/>	If male employees
3_2_d_6	How many days per week - on average - did these female casual-paid employees work?	<input type="checkbox"/>	If female employees
3_2_d_7	How many hours did these male casual-paid employees on average work per day?	<input type="checkbox"/>	If male employees
3_2_d_8	How many hours did these female casual-paid employees on average work per day?	<input type="checkbox"/>	If female employees
3_2_d_9	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male Bhutanese casual-paid employees?		If male Bhutanese
3_2_d_10	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female Bhutanese casual-paid employees?		If female Bhutanese
3_2_d_11	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male non-Bhutanese casual-paid employees?		If male non-Bhutanese
3_2_d_12	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female non-Bhutanese casual-paid employees?		If female non-Bhutanese
3_2_e	Were there any unpaid family workers working in this establishment as of 31 December 2017?	Yes 1 No 0	Go to 3_3
3_2_e_1	How many of these unpaid family workers were male Bhutanese?	<input type="checkbox"/>	
3_2_e_2	How many of these unpaid family workers were female Bhutanese?	<input type="checkbox"/>	
3_2_e_3	How many of these unpaid family workers were male non-Bhutanese?	<input type="checkbox"/>	
3_2_e_4	How many of these unpaid family workers were female non-Bhutanese?	<input type="checkbox"/>	
3_2_e_5	How many days per week - on average - did these male unpaid family workers work?	<input type="checkbox"/>	If male employees

3_2_e_6	How many days per week - on average - did these female unpaid family workers work?	<input type="checkbox"/>													If female employees
3_2_e_7	How many hours did these male unpaid family workers on average work per day?	<input type="checkbox"/>													If male employees
3_2_e_8	How many hours did these female unpaid family workers on average work per day?	<input type="checkbox"/>													If female employees
3_3	Was this establishment operational in <month> of 2017? Yes = 1; No= 0	Jan <input type="checkbox"/>	Feb <input type="checkbox"/>	Mar <input type="checkbox"/>	Apr <input type="checkbox"/>	May <input type="checkbox"/>	Jun <input type="checkbox"/>	Jul <input type="checkbox"/>	Aug <input type="checkbox"/>	Sep <input type="checkbox"/>	Oct <input type="checkbox"/>	Nov <input type="checkbox"/>	Dec <input type="checkbox"/>		
3_4_a	Were there any own-account workers working in this establishment in 2017?	Yes 1 No 0												Go to 3_4_b	
3_4_a_1	How many of these own-account workers were male Bhutanese?	<input type="checkbox"/>													If 1, go to 3_4_a_5
3_4_a_2	How many of these own-account workers were female Bhutanese?	<input type="checkbox"/>													If 1, go to 3_4_a_6
3_4_a_3	How many of these own-account workers were male non-Bhutanese?	<input type="checkbox"/>													If 1, go to 3_4_a_5
3_4_a_4	How many of these own-account workers were female non-Bhutanese?	<input type="checkbox"/>													If 1, go to 3_4_a_6
3_4_a_5	How many days per week - on average - did this male own-account worker work in 2017?	<input type="checkbox"/>													Go to 3_4_a_7
3_4_a_6	How many days per week - on average - did this female own-account worker work in 2017?	<input type="checkbox"/>													Go to 3_4_a_8
3_4_a_7	How many hours did this male own-account worker on average work per day in 2017?	<input type="checkbox"/>													Go to 3_4_b
3_4_a_8	How many hours did this female own-account worker on average work per day in 2017?	<input type="checkbox"/>													
3_4_b	Were there any regularly-paid workers working in this establishment in 2017?	Yes 1 No 0												Go to 3_4_c	

3_4_b_1	How many of these regularly-paid employees were - on average in 2017 - male Bhutanese?	<input type="checkbox"/>	
3_4_b_2	How many of these regularly-paid employees were - on average in 2017 - female Bhutanese?	<input type="checkbox"/>	
3_4_b_3	How many of these regularly-paid employees were - on average in 2017 - male non-Bhutanese?	<input type="checkbox"/>	
3_4_b_4	How many of these regularly-paid employees were - on average in 2017 - female non-Bhutanese?	<input type="checkbox"/>	
3_4_b_5	How many days per week - on average - did these male regularly-paid employees work in 2017?	<input type="checkbox"/>	If male employees
3_4_b_6	How many days per week - on average - did these female regularly-paid employees work in 2017?	<input type="checkbox"/>	If female employees
3_4_b_7	How many hours did these male regularly-paid employees on average work per day in 2017?	<input type="checkbox"/>	If male employees
3_4_b_8	How many hours did these female regularly-paid employees on average work per day in 2017?	<input type="checkbox"/>	If female employees
3_4_b_9	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male Bhutanese regularly-paid employees?	<input type="checkbox"/>	If male Bhutanese
3_4_b_10	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female Bhutanese regularly-paid employees?	<input type="checkbox"/>	If female Bhutanese
3_4_b_11	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male non-Bhutanese regularly-paid employees?	<input type="checkbox"/>	If male non-Bhutanese
3_4_b_12	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female non-Bhutanese regularly-paid employees?	<input type="checkbox"/>	If female non-Bhutanese
3_4_c	Were there any contract workers working in this establishment in 2017?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Go to 3_4_d
3_4_c_1	How many of these contract employees were - on average in 2017 - male Bhutanese?	<input type="checkbox"/>	

3_4_c_2	How many of these contract employees were - on average in 2017 - female Bhutanese?	<input type="checkbox"/>	
3_4_c_3	How many of these contract employees were - on average in 2017 - male non-Bhutanese?	<input type="checkbox"/>	
3_4_c_4	How many of these contract employees were - on average in 2017 - female non-Bhutanese?	<input type="checkbox"/>	
3_4_c_5	How many days per week - on average - did these male contract employees work in 2017?	<input type="checkbox"/>	If male employees
3_4_c_6	How many days per week - on average - did these female contract employees work in 2017?	<input type="checkbox"/>	If female employees
3_4_c_7	How many hours did these male contract employees on average work per day in 2017?	<input type="checkbox"/>	If male employees
3_4_c_8	How many hours did these female contract employees on average work per day in 2017?	<input type="checkbox"/>	If female employees
3_4_c_9	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male Bhutanese contract employees?	<input type="text"/>	If male Bhutanese
3_4_c_10	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female Bhutanese contract employees?	<input type="text"/>	If female Bhutanese
3_4_c_11	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male non-Bhutanese contract employees?	<input type="text"/>	If male non-Bhutanese
3_4_c_12	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female non-Bhutanese contract employees?	<input type="text"/>	If female non-Bhutanese
3_4_d	Were there any casual-paid employees working in this establishment in 2017?	Yes 1 No 0	Go to 3_4_e
3_4_d_1	How many of these casual-paid employees were - on average in 2017 - male Bhutanese?	<input type="checkbox"/>	
3_4_d_2	How many of these casual-paid employees were - on average in 2017 - female Bhutanese?	<input type="checkbox"/>	

3_4_d_3	How many of these casual-paid employees were - on average in 2017 - male non-Bhutanese?	<input type="checkbox"/>	
3_4_d_4	How many of these casual-paid employees were - on average in 2017 - female non-Bhutanese?	<input type="checkbox"/>	
3_4_d_5	How many days per week - on average - did these male casual-paid employees work in 2017?	<input type="checkbox"/>	If male employees
3_4_d_6	How many days per week - on average - did these female casual-paid employees work in 2017?	<input type="checkbox"/>	If female employees
3_4_d_7	How many hours did these male casual-paid employees on average work per day in 2017?	<input type="checkbox"/>	If male employees
3_4_d_8	How many hours did these female casual-paid employees on average work per day in 2017?	<input type="checkbox"/>	If female employees
3_4_d_9	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male Bhutanese casual-paid employees?	<input type="text"/>	If male Bhutanese
3_4_d_10	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female Bhutanese casual-paid employees?	<input type="text"/>	If female Bhutanese
3_4_d_11	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for male non-Bhutanese casual-paid employees?	<input type="text"/>	If male non- Bhutanese
3_4_d_12	How much was paid in 2017 in total as wages and salaries, including overtime payment and other benefits for female non-Bhutanese casual-paid employees?	<input type="text"/>	If female non- Bhutanese
3_4_e	Were there any unpaid family workers working in this establishment in 2017?	Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 0	Go to 3_5
3_4_e_1	How many of these unpaid family workers were - on average in 2017 - male Bhutanese?	<input type="checkbox"/>	
3_4_e_2	How many of these unpaid family workers were - on average in 2017 - female Bhutanese?	<input type="checkbox"/>	
3_4_e_3	How many of these unpaid family workers were - on average in 2017 - male non-Bhutanese?	<input type="checkbox"/>	

3_4_e_4	How many of these unpaid family workers were - on average in 2017 - female non-Bhutanese?	<input type="checkbox"/>	
3_4_e_5	How many days per week - on average - did these male unpaid family workers work in 2017?	<input type="checkbox"/>	If male employees
3_4_e_6	How many days per week - on average - did these female unpaid family workers work in 2017?	<input type="checkbox"/>	If female employees
3_4_e_7	How many hours did these male unpaid family workers on average work per day in 2017?	<input type="checkbox"/>	If male employees
3_4_e_8	How many hours did these female unpaid family workers on average work per day in 2017?	<input type="checkbox"/>	If female employees
3.5	Did this establishment pay an employer's contribution to the Provident Fund?	Yes 1 <input type="checkbox"/> No 2 <input type="checkbox"/>	Go to M4
3.6	How much was paid in 2017 in total as employer's contribution to the Provident Fund? Nu. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		

Module 4. Income and expenses

PLEASE PROVIDE THE ANNUAL REVENUE OR SALES TURNOVER OF THIS ESTABLISHMENT IN 2017

4_1	From where did this establishment generate its main income in 2017?	Domestic 1 Export 2 Both domestic and export 3	Go to 4_3
4_2	Income generated from domestic	Nu. <input style="width: 100px;" type="text"/>	If 4_1 is 1, go to 4_4
4_3	Income generated from export	Nu. <input style="width: 100px;" type="text"/>	If 4_1 is 2, go to 4_4
4_4	From where did this establishment generate its income for other activity 1 in 2017?	Domestic 1 Export 2 Both domestic and export 3	Go to 4_6
4_5	Domestic income from other activity 1	Nu. <input style="width: 100px;" type="text"/>	If 4_4 is 1, go to 4_7
4_6	Export income from other activity 1	Nu. <input style="width: 100px;" type="text"/>	If 4_4 is 2, go to 4_7
4_7	From where did this establishment generate its income for other activity 2 in 2017?	Domestic 1 Export 2 Both domestic and export 3	Go to 4_9
4_8	Domestic income from other activity 2	Nu. <input style="width: 100px;" type="text"/>	If 4_7 is 1, go to 4_10
4_9	Export income from other activity 2	Nu. <input style="width: 100px;" type="text"/>	If 4_7 is 2, go to 4_10
4_10	From where did this establishment generate its income for other activity 3 in 2017?	Domestic 1 Export 2 Both domestic and export 3	Go to 4_12
4_11	Domestic income from other activity 3	Nu. <input style="width: 100px;" type="text"/>	If 4_10 is 1, go to 4_13
4_12	Export income from other activity 3	Nu. <input style="width: 100px;" type="text"/>	If 4_10 is 2, go to 4_13
4_13	From where did this establishment generate its income for other activity 4 in 2017?	Domestic 1 Export 2 Both domestic and export 3	Go to 4_16
4_14	Domestic income from other activity 4	Nu. <input style="width: 100px;" type="text"/>	If 4_13 is 1, go to 4_16
4_15	Export income from other activity 4	Nu. <input style="width: 100px;" type="text"/>	If 4_13 is 2, go to 4_16
4_16	From where did this establishment generate its income for other activity 5 in 2017?	Domestic 1 Export 2 Both domestic and export 3	Go to 4_19
4_17	Domestic income from other activity 5	Nu. <input style="width: 100px;" type="text"/>	If 4_16 is 1, go to 4_19

4_18	Export income from other activity 5	Nu. <input type="text"/>	If 4_16 is 2, go to 4_19
4_19	From where did this establishment generate its income for other activity 6 in 2017?	Domestic 1 Export 2 Both domestic and export 3	Go to 4_22
4_20	Domestic income from other activity 6	Nu. <input type="text"/>	If 4_19 is 1, go to 4_22
4_21	Export income from other activity 6	Nu. <input type="text"/>	If 4_19 is 2, go to 4_22
4_22	From where did this establishment generate its income for other activity 7 in 2017?	Domestic 1 Export 2 Both domestic and export 3	Go to 4_25
4_23	Domestic income from other activity 7	Nu. <input type="text"/>	If 4_22 is 1, go to 4_25
4_24	Export income from other activity 7	Nu. <input type="text"/>	If 4_22 is 2, go to 4_25
4_25	Did this establishment generate income in 2017 from rent from land?	Yes 1 <input type="checkbox"/> No 0	Go to 4_27
4_26	Income generated in 2017 from rent from land	Nu. <input type="text"/>	
4_27	Did this establishment generate income in 2017 from rent from buildings / space for business use?	Yes 1 <input type="checkbox"/> No 0	Go to 4_29
4_28	Income generated in 2017 from rent from buildings / space for business use	Nu. <input type="text"/>	
4_29	Did this establishment generate income in 2017 from rent from machinery and equipment?	Yes 1 <input type="checkbox"/> No 0	Go to 4_31
4_30	Income generated in 2017 from rent from machinery and equipment	Nu. <input type="text"/>	
4_31	Did this establishment generate income in 2017 from rent from rental income?	Yes 1 <input type="checkbox"/> No 0	Go to 4_33
4_32	Income generated in 2017 from rent from rental income	Nu. <input type="text"/>	
4_33	Did this establishment generate income in 2017 from income from interest?	Yes 1 <input type="checkbox"/> No 0	Go to 4_35
4_34	Income generated in 2017 from income from interest	Nu. <input type="text"/>	
4_35	Did this establishment generate income in 2017 from income from dividend?	Yes 1 <input type="checkbox"/> No 0	Go to 4_37

4_36	Income generated in 2017 from income from dividend	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_37	Did this establishment generate income in 2017 from grants and transfers (government)?	Yes 1 <input type="checkbox"/> No 0	Go to 4_39
4_38	Income generated in 2017 from grants and transfers (government)	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_39	Did this establishment generate income in 2017 from grants and transfers (others)?	Yes 1 <input type="checkbox"/> No 0	Go to 4_41
4_40	Income generated in 2017 from grants and transfers (others)	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_41	Did this establishment generate income in 2017 from other sources?	Yes 1 <input type="checkbox"/> No 0	Go to 4_43
4_42	Income generated in 2017 from other sources	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	

4_43	PLEASE PROVIDE THE EXPENDITURES MADE BY THIS ESTABLISHMENT IN 2017 Did this establishment make expenditures in 2017 for raw materials?	Yes 1 <input type="checkbox"/> No 0	Go to 4_45
4_44	Expenditure in 2017 for raw materials	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	

4_45	Did this establishment make expenditures in 2017 for goods for resale?	Yes 1 <input type="checkbox"/> No 0	Go to 4_47
4_46	Expenditure in 2017 for goods for resale	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_47	Did this establishment make expenditures in 2017 for fuel for transportation, machinery and other equipment?	Yes 1 <input type="checkbox"/> No 0	Go to 4_49
4_48	Expenditure in 2017 for fuel for transportation, machinery and other equipment?	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	

4_49	Did this establishment make expenditures in 2017 for electricity?	Yes 1 <input type="checkbox"/> No 0	Go to 4_51
4_50	Expenditure in 2017 for electricity	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	

4_51	Did this establishment make expenditures in 2017 for water?	Yes 1 <input type="checkbox"/> No 0	Go to 4_53
4_52	Expenditure in 2017 for water	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	

4_53	Did this establishment make expenditures in 2017 for human resources training?	Yes 1 <input type="checkbox"/> No 0	Go to 4_55
4_54	Expenditure in 2017 for	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	

	human resources training	
4_55	Did this establishment make expenditures in 2017 for communication? Yes 1 <input type="checkbox"/> No 0	Go to 4_57
4_56	Expenditure in 2017 for communication Nu. <input type="text"/>	
4_57	Did this establishment make expenditures in 2017 for advertisement? Yes 1 <input type="checkbox"/> No 0	Go to 4_59
4_58	Expenditure in 2017 for advertisement Nu. <input type="text"/>	
4_59	Did this establishment make expenditures in 2017 for maintenance and repair? Yes 1 <input type="checkbox"/> No 0	Go to 4_61
4_60	Expenditure in 2017 for maintenance and repair Nu. <input type="text"/>	
4_61	Did this establishment make expenditures in 2017 for transportation? Yes 1 <input type="checkbox"/> No 0	Go to 4_63
4_62	Expenditure in 2017 for transportation Nu. <input type="text"/>	
4_63	Did this establishment make expenditures in 2017 for rent / imputed rent for land? Yes 1 <input type="checkbox"/> No 0	Go to 4_65
4_64	Expenditure in 2017 for rent / imputed rent for land Nu. <input type="text"/>	
4_65	Did this establishment make expenditures in 2017 for rent / imputed rent for buildings / space for business? Yes 1 <input type="checkbox"/> No 0	Go to 4_67
4_66	Expenditure in 2017 for rent / imputed rent for buildings / space for business Nu. <input type="text"/>	
4_67	Did this establishment make expenditures in 2017 for rent / imputed rent for machinery and equipment? Yes 1 <input type="checkbox"/> No 0	Go to 4_69
4_68	Expenditure in 2017 for rent / imputed rent for machinery and equipment Nu. <input type="text"/>	
4_69	Did this establishment make expenditures in 2017 for rent / imputed rent for other rental expenses? Yes 1 <input type="checkbox"/> No 0	Go to 4_71
4_70	Expenditure in 2017 for rent / imputed rent for other rental expenses Nu. <input type="text"/>	
4_71	Did this establishment make expenditures in 2017 for storage and warehousing? Yes 1 <input type="checkbox"/> No 0	Go to 4_73
4_72	Expenditure in 2017 for storage and warehousing Nu. <input type="text"/>	
4_73	Did this establishment make expenditures in 2017 for	Yes 1 <input type="checkbox"/>

	office supplies? No 0	Go to 4_75
4_74	Expenditure in 2017 for office supplies Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_75	Did this establishment make expenditures in 2017 for interest? Yes 1 <input type="checkbox"/> No 0	Go to 4_77
4_76	Expenditure in 2017 for interest Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_77	Did this establishment make expenditures in 2017 for dividend? Yes 1 <input type="checkbox"/> No 0	Go to 4_79
4_78	Expenditure in 2017 for dividend Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_79	Did this establishment make expenditures in 2017 for indirect taxes? Yes 1 <input type="checkbox"/> No 0	Go to 4_81
4_80	Expenditure in 2017 for indirect taxes Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_81	Did this establishment make expenditures in 2017 for direct taxes? Yes 1 <input type="checkbox"/> No 0	Go to 4_83
4_82	Expenditure in 2017 for direct taxes Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_83	Did this establishment make expenditures in 2017 for royalties? Yes 1 <input type="checkbox"/> No 0	Go to 4_85
4_84	Expenditure in 2017 for royalties Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_85	Did this establishment make expenditures in 2017 for fine & penalties? Yes 1 <input type="checkbox"/> No 0	Go to 4_87
4_86	Expenditure in 2017 for fine & penalties Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_87	Did this establishment make expenditures in 2017 for environmental related expenses (non-CSR)? Yes 1 <input type="checkbox"/> No 0	Go to 4_89
4_88	Expenditure in 2017 for environmental related expenses (non-CSR) Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_89	Did this establishment make expenditures in 2017 for Corporate Social Responsibility (CSR) - environmental re No 0 Yes 1 <input type="checkbox"/>	Go to 4_91
4_90	Expenditure in 2017 for Corporate Social Responsibility (CSR) - environmental related Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
4_91	Did this establishment make expenditures in 2017 for Corporate Social Responsibility (CSR) - other? Yes 1 <input type="checkbox"/> No 0	Go to 4_93
4_92	Expenditure in 2017 for Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	

Corporate Social Responsibility (CSR) - other		
4_93	Did this establishment make expenditures in 2017 for insurance(s)?	Yes 1 <input type="checkbox"/> No 0 Go to 4_95
4_94	Expenditure in 2017 for insurance(s)	Nu. <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/>
4_95	Did this establishment make expenditures in 2017 for professional service fees?	Yes 1 <input type="checkbox"/> No 0 Go to 4_97
4_96	Expenditure in 2017 for professional service fees	Nu. <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/>
4_97	Did this establishment make expenditures in 2017 for other costs not included above?	Yes 1 <input type="checkbox"/> No 0 Go to 4_99
4_98	Expenditure in 2017 for total of other costs not included above?	Nu. <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/>
4_99	Did this establishment receive any type of subsidy in 2017, like tax exemption, price support, interest rate subsidy or price discount?	Yes 1 No 2 Don't know 9 Go to M5 Go to M5
4_100_a	Total amount of subsidies received in 2017 for price support	Nu. <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/>
4_100_b	Total amount of subsidies received in 2017 for tax exemption	Nu. <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/>
4_100_c	Total amount of subsidies received in 2017 for interest rate	Nu. <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/>
4_100_d	Total amount of subsidies received in 2017 for other subsidy (specify)	Nu. <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/> , <input type="text"/>
4_100_d_1	Other subsidy _____	

Module 5. Assets and inventory

PLEASE PROVIDE THE FOLLOWING INFORMATION ABOUT THE ASSETS OF THIS ESTABLISHMENT:

5_1	Did this establishment own land in 2017? Yes 1 <input type="checkbox"/> No 0	Go to 5_3
5_2_a	Book value as of January 1 st 2017 for land Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_2_d	Value of sales in 2017 for land Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_2_e	Value of purchases in 2017 for land Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_2_f	Value of appreciation in 2017 for land Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_2_g	Book value as of December 31 st 2017 for land Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_3	Did this establishment own buildings, other structures or land improvements in 2017? Yes 1 <input type="checkbox"/> No 0	Go to 5_5
5_4_a	Book value as of January 1 st 2017 for buildings, other structures or land improvements Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_4_b	Depreciation for the year 2017 for buildings, other structures or land improvements Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_4_c	Value of losses and damages in 2017 for buildings, other structures or land improvements Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_4_d	Value of sales in 2017 for buildings, other structures or land improvements Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_4_e	Value of purchases in 2017 for buildings, other structures or land improvements Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
5_4_g	Book value as of December 31 st 2017 for buildings, other structures or land improvements Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	

5_5	Did this establishment own transport equipment in 2017?	Yes 1 <input type="checkbox"/> No 0	Go to 5_7
5_6_a	Book value as of January 1 st 2017 for transport equipment	Nu. <input type="text"/>	
5_6_b	Depreciation for the year 2017 for transport equipment	Nu. <input type="text"/>	
5_6_c	Value of losses and damages in 2017 for transport equipment	Nu. <input type="text"/>	
5_6_d	Value of sales in 2017 for transport equipment	Nu. <input type="text"/>	
5_6_e	Value of purchases in 2017 for transport equipment	Nu. <input type="text"/>	
5_6_g	Book value as of December 31 st 2017 for transport equipment	Nu. <input type="text"/>	
5_7	Did this establishment own machinery or other equipment in 2017?	Yes 1 <input type="checkbox"/> No 0	Go to 5_9
5_8_a	Book value as of January 1 st 2017 for machinery or other equipment	Nu. <input type="text"/>	
5_8_b	Depreciation for the year 2017 for machinery or other equipment	Nu. <input type="text"/>	
5_8_c	Value of losses and damages in 2017 for machinery or other equipment	Nu. <input type="text"/>	
5_8_d	Value of sales in 2017 for machinery or other equipment	Nu. <input type="text"/>	
5_8_e	Value of purchases in 2017 for machinery or other equipment	Nu. <input type="text"/>	
5_8_g	Book value as of December 31 st 2017 for machinery or other equipment	Nu. <input type="text"/>	
5_9	Did this establishment own research and development in 2017?	Yes 1 <input type="checkbox"/> No 0	Go to 5_11
5_10_a	Book value as of January 1 st 2017 for research and development	Nu. <input type="text"/>	
5_10_d	Value of sales in 2017 for research and development	Nu. <input type="text"/>	
5_10_e	Value of purchases in 2017 for research and development	Nu. <input type="text"/>	

5_10_g	Book value as of December 31 st 2017 for research and development	Nu.	<input type="text"/>	
5_11	Did this establishment own intangible assets in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_13
		No	0	
5_12_a	Book value as of January 1 st 2017 for intangible assets	Nu.	<input type="text"/>	
5_12_d	Value of sales in 2017 for intangible assets	Nu.	<input type="text"/>	
5_12_e	Value of purchases in 2017 for intangible assets	Nu.	<input type="text"/>	
5_12_g	Book value as of December 31 st 2017 for intangible assets	Nu.	<input type="text"/>	
5_13	Did this establishment own other fixed assets in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_15
		No	0	
5_14_a	Book value as of January 1 st 2017 for other fixed assets	Nu.	<input type="text"/>	
5_14_b	Depreciation for the year 2017 for other fixed assets	Nu.	<input type="text"/>	
5_14_c	Value of losses and damages in 2017 for other fixed assets	Nu.	<input type="text"/>	
5_14_d	Value of sales in 2017 for other fixed assets	Nu.	<input type="text"/>	
5_14_e	Value of purchases in 2017 for other fixed assets	Nu.	<input type="text"/>	
5_14_g	Book value as of December 31 st 2017 for other fixed assets	Nu.	<input type="text"/>	
5_15	Did this establishment own financial assets in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_17
		No	0	
5_16_a	Book value as of January 1 st 2017 for other financial assets	Nu.	<input type="text"/>	
5_16_c	Value of losses and damages in 2017 for other financial assets	Nu.	<input type="text"/>	
5_16_d	Value of sales in 2017 for other financial assets	Nu.	<input type="text"/>	
5_16_e	Value of purchases in 2017 for other financial assets	Nu.	<input type="text"/>	

5_16_g	Book value as of December 31 st 2017 for other financial assets	Nu.	<input type="text"/>	
5_17	Did this establishment own any finished products in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_19
		No	0	
5_18_a	Value as of January 1 st 2017 of finished products	Nu.	<input type="text"/>	
5_18_b	Value as of December 31 st 2017 of finished products	Nu.	<input type="text"/>	
5_19	Did this establishment own any raw materials in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_21
		No	0	
5_20_a	Value as of January 1 st 2017 of raw materials	Nu.	<input type="text"/>	
5_20_b	Value as of December 31 st 2017 of raw materials	Nu.	<input type="text"/>	
5_21	Did this establishment own any work-in-progress in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_23
		No	0	
5_22_a	Value as of January 1 st 2017 of work-in-progress	Nu.	<input type="text"/>	
5_22_b	Value as of December 31 st 2017 of work-in-progress	Nu.	<input type="text"/>	
5_23	Did this establishment own any materials or supplies in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_25
		No	0	
5_24_a	Value as of January 1 st 2017 of materials or supplies	Nu.	<input type="text"/>	
5_24_b	Value as of December 31 st 2017 of materials or supplies	Nu.	<input type="text"/>	
5_25	Did this establishment own any goods for resale in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_27
		No	0	
5_26_a	Value as of January 1 st 2017 of goods for resale	Nu.	<input type="text"/>	
5_26_b	Value as of December 31 st 2017 of goods for resale	Nu.	<input type="text"/>	
5_27	Did this establishment own any fuels in 2017?	Yes	1 <input type="checkbox"/>	Go to 5_29
		No	0	

5_28_a	Value as of January 1 st 2017 of fuels	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
5_28_b	Value as of December 31 st 2017 of fuels	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
5_29	Did this establishment own any other inventories in 2017?	Yes 1 <input type="checkbox"/> No 0	Go to M6
5_30_a	Value as of January 1 st 2017 of other inventories	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	
5_30_b	Value as of December 31 st 2017 of other inventories	Nu. <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>	

Module 6: Business environment

6.1 PLEASE RATE THE FOLLOWING BUSINESS OBSTACLES ON A SCALE FROM 1 TO 5, WITH 1 INDICATING 'NO OBSTACLE' AND 5 INDICATING 'VERY SEVERE OBSTACLE'.

Obstacle	Rating	
a Access to finance	<input type="checkbox"/>	Answer codes for rating: 1 = No obstacle 2 = Minor obstacle 3 = Moderate obstacle 4 = Major obstacle 5 = Very severe obstacle 6 = Does not apply 7 = Don't know
b Interest on loan	<input type="checkbox"/>	
c Access to land	<input type="checkbox"/>	
d Access to raw materials	<input type="checkbox"/>	
e Lack of timely clearance or supervision by by government authorities	<input type="checkbox"/>	
f Rent	<input type="checkbox"/>	
g Business licensing and permits	<input type="checkbox"/>	
h Corruption	<input type="checkbox"/>	
i Crime, theft and disorder	<input type="checkbox"/>	
j Customs and trade regulations	<input type="checkbox"/>	
k Electricity	<input type="checkbox"/>	
l Water	<input type="checkbox"/>	
m Inadequately educated workforce	<input type="checkbox"/>	
n Labor regulations	<input type="checkbox"/>	
o Practices of competitors in the informal sector	<input type="checkbox"/>	
p Tax administration	<input type="checkbox"/>	
q Tax rates	<input type="checkbox"/>	
r Transport	<input type="checkbox"/>	
s Road infrastructure	<input type="checkbox"/>	
t Other (specify)	<input type="checkbox"/>	
t_1 Other obstacle _____		

Annex IV: Training agendas

2018–19 Economic Census of Bhutan Supervisors' Training November 19–21, 2018 AGENDA

Day 1 - Monday, November 19, 2018

08:30–09:00- Registration (distribution of training materials)

09:00–09:20- Opening Remarks, Director

09:20–10:30- Overview of ECoB 2018–19

- Objective
- Reporting Unit
- Scope and Coverage
- Census Reference period (concepts and definitions)

11:00–12:00- Roles and Responsibility of Supervisors

- Checking rejected interviews from HQ
- Control Forms 1 and 2
- Enumerators' Evaluation Form

12:00–13:00 Introduction to Census Questionnaire versions A & B

14:00–15:30- Census Questionnaire Discussion on version A

Day 2 - Tuesday, November 20, 2018

09:00–10:00- Census Questionnaire Discussion on version A

10:00–15:30- Census Questionnaire Discussion on version B

Day 3 - Wednesday, November 21, 2018

09:00–16:00- Survey Solution (Tablet version of questionnaire)

- Overview
- Supervisor Dashboard
- Use of Tablet for Interview

13:00–14:00 - Lunch break, 15:30–16:00 -- Evening tea break, and 10:30–11:00 - Morning tea break.

2018–19 Economic Census of Bhutan

Enumerators' Training Agenda

November 22–30, 2018

Day 1- Thursday, November 22, 2018

08:30–09:00- Registration (distribution of training materials)

09:00–09:20- Opening Remarks by Director, NSB

09:20–10:30- Overview of ECoB 2018–19

Objective

- Reporting Unit

- Scope and Coverage

- Census Reference period

11:00–12:00- Roles and Responsibility of Enumerators

12:00–13:00- Concepts and Definitions

14:00–15:30- Introduction to Questionnaire versions A and B

Day 2- Friday, November 23, 2018

09:00–09:30- Recap of Day 1

09:30–13:00- Questionnaire version A modules 1 and 2

13:00–15:30- Questionnaire version A modules 3 and 4

Day 3- Saturday, November 24, 2018

09:00–10:00- Recap of Day 2

10:00–12:00- Questionnaire version A module 4 continuation

12:00–13:00- Questionnaire version A modules 5 and 6

13:00–16:00- Questionnaire version B modules 1 and 2

Sunday Off, November 25, 2018

Day 4, Monday - November 26, 2018

09:00–16:00- Survey solution

-Overview

-Interviewer

-Testing questionnaire using tablets in group

Day 5, Tuesday- November 27, 2018

09:00–13:00- Field visit

14:00–16:00- Field visit feedback

Day 6, Wednesday - November 28, 2018

09:00–13:00- Mock interview among enumerators

14:00–16:00- Discussion based on mock interview

Day 7, Thursday - November 29, 2018

09:00–13:00- Field visit result presentation

14:00–16:00- Discussion on field visit results

Day 8, Friday - November 30, 2018

09:00–16:00- Administrative arrangement

10:00–15:00- Mock interview among enumerators

15:00–16:00- Administrative, logistics, and any other matters with NSB

End of the Training

13:00–14:00 - Lunch break, 15:30–16.00 - Evening tea break, and 10:30–11:00 - Morning tea break.

Annex V: Classification of economic sectors

According to ISIC Rev.4, the whole economy is classified into 21 broad sections. The definitions of each section are as follows:

Section A: Agriculture, forestry and fishing

According to ISIC Rev.4, this section includes the exploitation of vegetal and animal natural resources, comprising the activities of growing of crops, raising and breeding of animals, and harvesting of timber and other plants and animals or animal products from a farm or their natural habitats.

Section B: Mining and quarrying

This section includes the extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum), or gases (natural gas). Extraction can be achieved by different methods such as underground or surface mining, well operation, seabed mining, and so on. It also includes supplementary activities aimed at preparing the crude materials for marketing, for example, crushing, grinding, cleaning, drying, sorting, concentrating ores, liquefaction of natural gas, and agglomeration of solid fuels.

Section C: Manufacturing

Manufacturing includes the physical or chemical transformation of materials, substances, or components into new products. The raw materials are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing activities. Substantial alteration, renovation, or reconstruction of goods is generally considered as manufacturing. Manufacturing units are described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. Units that transform materials into new products by hand, in the worker's home, or sell products made on the same premises from which they are sold are also included here. Manufacturing units may process materials or may contract with other units to process their materials for them. Both types of units are included in manufacturing.

Section D: Electricity, gas, steam and air-conditioning supply

This section includes the activity of providing electric power, natural gas, steam, hot water and the like through a permanent infrastructure (network) of lines, mains, and pipes. The dimension of the network is not decisive. Also included are the distribution of electricity, gas, steam, hot water, and the like in industrial park or residential buildings. It also includes the operation of electric and gas utilities, which generate, control, and distribute electric power or gas. Also included is the provision of steam and air-conditioning supply.

Section E: Water supply; sewerage, waste management and remediation activities

This section includes activities related to the management of various forms of waste, such as solid or non-solid industrial or household waste, as well as contaminated sites. The output of the waste

or sewage treatment process can either be disposed of or become an input into other production processes. Activities of water supply are also grouped in this section, since they are often carried out in connection with, or by units also engaged in, the treatment of sewage.

Section F: Construction

This section includes general construction and specialized construction activities for buildings and civil engineering works. It includes new work, repair, additions and alterations, the erection of prefabricated buildings or structures on the site, and construction of a temporary nature.

Section G: Wholesale and retail trade; repair of motor vehicles and motorcycles

This section includes wholesale and retail sale (that is, sale without transformation) of any type of goods and the rendering services incidental to the sale of these goods. Wholesaling and retailing are the final steps in the distribution of goods. Goods bought and sold are also referred to as merchandize. Also included in this section is the repair of motor vehicles and motorcycles.

Section H: Transportation and storage

This section includes the provision of passenger or freight transport, whether scheduled or not, by rail, pipeline, road, water, or air and associated activities such as terminal and parking facilities, cargo handling, storage, and so on. Also included in this section are the renting of transport equipment with driver or operator, and the postal and courier activities.

Section I: Accommodation and food service activities

This section includes the provision of short-stay accommodation for visitors and other travelers and the provision of complete meals and drinks for immediate consumption. The amount and type of supplementary services provided within this section can vary widely.

Section J: Information and communication

This section includes the production and distribution of information and cultural products, the provision of means to transmit or distribute these products, as well as data or communications, IT activities, and the processing of data and other information service activities. Publishing includes the acquisition of copyrights to content and making this content available to the general public by engaging in the reproduction and distribution of this content in various forms.

Section K: Financial and insurance activities

This section includes financial service activities, including insurance, reinsurance, and pension funding and activities to support financial services. It also includes the activities of holding assets, such as activities of holding companies and the activities of trusts, funds, and similar financial entities.

Section L: Real estate activities

This section includes acting as lessors, agents, and/or brokers in one or more of the following: selling or buying real estate, renting real estate, and providing other estate services such as appraising real estate or acting as real estate escrow agents. Activities in this section may be carried out on own or leased property and may be done on a fee or contract basis. Also included is the building of structures, combined with maintaining ownership or leasing of such structures.

Section M: Professional, scientific and technical activities

This section includes specialized professional, scientific, and technical activities. These activities require a high degree of training and make specialized knowledge and skills available to users.

Section N: Administrative and support service activities

This section includes a variety of activities that support general business operations. These activities differ from those in Section M since their primary purpose is not the transfer of specialized knowledge.

Section O: Public administration and defense; compulsory social security

This section includes activities of governmental nature, normally carried out by the public administration. This includes the enactment and judicial interpretation of laws and their pursuant regulation, as well as the administration of programs based on them, legislative activities, taxation, national defense, public order and safety, immigration services, foreign affairs, and the administration of government programs. This section also includes compulsory social security activities.

Section P: Education

This section includes education at any level or for any profession, oral or written as well as by radio and television or other means of communication. It includes education by the different institutions in the regular school system at these different levels as well as adult education, literacy programs, and so on. Also included are military schools and academies, prison schools, and so on at their respective levels. This section includes public as well as private education. Also included is instruction primarily concerned with sport and recreational activities and education support activities. Education can be provided in rooms, by radio, by television broadcast, by Internet, through correspondence, or at home.

Section Q: Human health and social work activities

This section includes the provision of health and social work activities, involving a wide range of activities, starting from health care provided by trained medical professionals in hospitals and other facilities, over residential care activities that still involve a degree of health care activities to social work activities without any involvement of health care professionals.

Section R: Arts, entertainment and recreation

This section includes a wide range of activities to meet varied cultural, entertainment, and recreational interests of the general public, including live performances, operation of museums sites, sports, gambling, and recreation activities.

Section S: Other service activities:

This section (as a residual category) includes the activities of membership organizations, the repair of computers and personal and household goods, and a variety of personal service activities not covered elsewhere in the classification.

Section T: Activities of households as employers; undifferentiated goods-and services-producing activities of households for own use

This class includes the activities of households as employers of domestic personnel such as maids, cooks, waiters, valets, butlers, laundresses, gardeners, gatekeepers, stable-lads, chauffeurs, caretakers, governesses, babysitters, tutors, secretaries, and so on.

Section U: Activities of extraterritorial organization and bodies

This class includes the activities of international organizations such as the United Nations and its specialized agencies, regional bodies, and so on; the Association of Southeast Asian Nations (ASEAN); the International Committee of the Red Cross (ICRC); the International Labour Organization (ILO); the International Finance Corporation (IFC); the International Monetary Fund (IMF); the World Bank; the Japan International Cooperation Agency (JICA); and the Joint United States Military Assistance Group (JUSMAG). It also includes activities of diplomatic and consular missions when being determined by the country of their location rather than by the country they represent.

Annex VI: Statistical tables

Table A3.1: Number of Establishments by Gewog/Town, 2017

Gewog/Town	Number of Establishment
Bumthang	346
Chhokhor	29
Tang	22
Chhumig	26
Ura	14
Bumthang Town	246
Chhumay Town	9
Chhukha	1,896
Bjagchhog	19
Bongo	69
Chapchha	42
Darla	112
Getana	4
Doongna	13
Geling	35
Loggchina	34
Maedtab-Maed	8
Phuentshogling	71
Samphelling	40
Phuentsholing Thromde	1,206
Tsimasham Town	86
Chhukha Colony Town	29
Dala Town	34
Gedu Town	94
Dagana	527
Drukjeygang	21
Gozhi	35
Karna	24
Khebisa	10
Largyab	12
Tseza	10
Tsangkha	41
Karmaling	33
Dorona	13

Gewog/Town	Number of Establishment
Gesarling	27
Lhamoi Dzingkha	17
Nichula	8
Tashiding	27
Tsenda-Gang	69
Dagana Town	38
Lhamoyzingkha Town	86
Dagapela Town	33
Drujegang Town	16
Sankosh Town	7
Gasa	34
Khamaed	2
Khatoed	3
Laya	2
Gasa Town	19
Damji Town	8
Haa	165
Bji	15
Kar-tshog	6
Uesu	26
Gakiling	8
Sangbay	6
Haa Town	93
Jyenkana Town	11
Lhuentse	129
Gangzur	11
Khoma	10
Kurtoed	5
Minjey	6
Jarey	6
Maenbi	23
Maedtsho	3
Tsaenkhar	13

Gewog/Town	Number of Establishment
Lhuentse Town	24
Autsho Town	28
Monggar	546
Balam	7
Chagsakhar	16
Dramedtse	8
Na-Rang	7
Ngatshang	15
Shermuhoong	21
Thang-Rong	5
Gongdue	19
Jurmed	8
Kengkhar	11
Saling	34
Silambi	8
Chhaling	33
Drepoong	16
Monggar	20
Tsakaling	5
Tsamang	6
Gyalposhing Town	58
Kilikhar Town	12
Monggar Town	178
Yadi Town	21
Drametse Town	11
Lingmethang Town	27
Paro	870
Dokar	25
Loong-nyi	39
Nagya	13
Sharpa	37
Dopshar-ri	34
Doteng	20
Hoongrel	7
Lamgong	103
Tsento	117

Gewog/Town	Number of Establishment
Wangchang	3
Paro Town	465
Beteykha Town	7
Pema Gatshel	303
Chhimoong	5
Chongshing	7
Dungmaed	11
Khar	8
Yurung	11
Nanong	16
Shumar	26
Zobel	4
Chhoekhorling	6
Dechhenling	17
Norboogang	25
Denchi Town	13
Nanglam Town	111
Old Pema Gatshel Town	39
Nangkor Town	4
Punakha	436
Barp	53
Guma	12
Goenshari	7
Kabisa	28
Talog	7
Toedpaisa	46
Chhubu	1
Dzomi	14
Lingmukha	5
Shelnga-Bjemi	5
Toedwang	16
Punakha Town	165
Lobaysa Town	77
Samdrup Jongkhar	624
Dewathang	25
Gomdar	41
Orong	42

Gewog/Town	Number of Establishment
Phuentshogthang	20
Wangphu	12
Langchenphu	3
Lauri	16
Martshala	21
Pemathang	16
Samrang	6
Serthig	16
Samdrup Jongkhar Thromde	312
Samdrupcholing Town	59
Diafam Town(Jomotsangkha)	35
Samtse	940
Duenchukha	18
Dophuchen	59
Doomtoed	13
Tading	54
Norboogang	73
Phuentshogpelri	51
Samtse	51
Norgaygang	42
Pemaling	29
Tashichhoeling	71
Tendruk	88
Sang-Ngag-Chhoelin	47
Namgyalchhoeling	39
Ugyentse	22
Yoeseltse	23
Samtse Town	128
Gomtu Town	90
Sipsu Town	42
Sarpang	1,136
Samtenling	66
Chhuzanggang	36
Gelegphu	63
Jigme Chhoeling	30

Gewog/Town	Number of Establishment
Serzhong	27
Tareythang	5
Umling	14
Dekiling	161
Chhudzom	29
Gakiling	22
Senggey	15
Shompangkha	34
Gelephu Thromde	584
Sarpang Town	50
Thimphu	3,485
Kawang	70
Lingzhi	3
Chang	94
Darkarla	16
Ge-nyen	22
Maedwang	131
Thimphu Thromde	3,098
Khasadrapchu Town	51
Trashigang	619
Bartsham	16
Bidoong	9
Yangnyer	19
Shongphu	14
Kanglung	46
Samkhar	18
Udzorong	23
Merag	11
Phongmed	18
Radhi	33
Sagteng	25
Kangpar	11
Thrimshing	23
Khaling	19
Lumang	38
Trashigang Town	132

Gewog/Town	Number of Establishment
Rangjung Town	50
Kanglung Town	61
Khaling Town	23
Resarbu Town	6
Wangrong Town	24
Trashigang	274
Boomdeling	18
Jamkhar	11
Tongmajangsa	16
Yangtse	19
Ramjar	10
Khamdang	38
Toedtsho	18
Yalang	13
Trashigang Town	104
Duksum Town	27
Trongsa	258
Draagteng	61
Korphu	7
Langthil	54
Nubi	12
Tangsibji	27
Trongsa Town	87
Kuengarabten Town	10
Tsirang	660
Barshong	7
Patshaling	44
Kilkhorthang	32
Mendrelgang	29
Rangthangling	28
Tsholingkhr	50
Doonglagang	19
Gosarling	56
Sergithang	25
Pungtenchhu	26
Semjong	24

Gewog/Town	Number of Establishment
Tsirang Toed	37
Tsirang Town	273
Mendrelgang Town	10
Wangdue Phodrang	541
Athang	3
Bjenag	22
Darkar	59
Gase Tshogongm	30
Gase Tshowogm	3
Nahi	6
Theedtsho	44
Ruebisa	5
Dangchhu	3
Gangteng	21
Kazhi	5
Nyishog	10
Phangyuel	12
Phobji	10
Saephu	15
Wangdue Phodrang Town	272
Nobding Town	17
Rurichu Town	4
Zhemgang	208
Bardo	9
Nangkor	17
Shingkhari	8
Trong	33
Bjoka	6
Goshing	9
Ngangla	27
Phangkhar	10
Zhemgang Town	45
Panbang Town	25
Tingtibi Town	19
Total	13,997

Table A3.2: Number of Establishments by Thromdes, by legal status and economic organisation, 2017

Legal status	Economic organisation					
	Single establishment	Branch with separate books of accounts	Branch and head office	Head office only	Total	
					Number	Percentage
Phuentsholing Thromde						
Single proprietorship or partnership	1,069	4	9	18	1,100	91.2
Private limited company	18	6	8	21	53	4.4
Public limited company	0	0	0	3	3	0.2
State-owned limited company	1	0	1	1	3	0.2
FDI company	1	0	1	4	6	0.5
Permanent shed vendor	41	0	0	0	41	3.4
Total	1,130	10	19	47	1,206	100
Percentage	94	1	2	4	100	
Samdrup Jongkhar Thromde						
Single proprietorship or partnership	286	0	0	1	287	92.0
Private limited company	4	0	0	2	6	1.9
Public limited company	0	0	0	0	0	0.0
State-owned limited company	0	0	0	0	0	0.0
FDI company	0	0	1	0	1	0.3
Permanent shed vendor	18	0	0	0	18	5.8
Total	308	0	1	3	312	100
Percentage	99	0	0	1	100	
Gelephu Thromde						
Single proprietorship or partnership	504	2	1	1	508	87.0
Private limited company	9	0	0	0	9	1.5
Public limited company	0	0	0	0	0	0.0
State-owned limited company	0	0	0	0	0	0.0
FDI company	0	0	1	0	1	0.2
Permanent shed vendor	66	0	0	0	66	11.3
Total	579	2	2	1	584	100.0
Percentage	99	0	0	0	100	
Thimphu Thromde						
Single proprietorship or partnership	2,605	19	18	59	2,701	87.2
Private limited company	33	8	4	12	57	1.8
Public limited company	2	0	3	2	7	0.2
State-owned limited company	2	0	14	3	19	0.6
FDI company	3	0	7	3	13	0.4
Permanent shed vendor	301	0	0	0	301	9.7
Total	2,946	27	46	79	3,098	100
Percentage	95	1	1	3	100	

Table A4.1: Number of Establishments by Economic Sectors, 2017

Economic sector	Number		
	Urban	Rural	Total
Agriculture, forestry and fishing	14	338	352
Crop and animal production, hunting and related service activities	10	307	317
Forestry and logging	1	0	1
Fishing and aquaculture	3	31	34

Mining and quarrying	24	9	33
Mining of coal and lignite	2	0	2
Mining of metal ores	1	0	1
Other mining and quarrying	21	9	30

Manufacturing	529	182	711
Manufacture of food products	63	16	79
Manufacture of beverages	9	6	15
Manufacture of textiles	4	0	4
Manufacture of wearing apparel	209	11	220
Manufacture of leather and related products	2	0	2
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	33	42	75
Manufacture of paper and paper products	1	7	8
Printing and reproduction of recorded media	44	1	45
Manufacture of chemicals and chemical products	13	6	19
Manufacture of basic pharmaceutical products and pharmaceutical preparations	3	0	3
Manufacture of rubber and plastics products	8	4	12
Manufacture of other non-metallic mineral products	18	17	35
Manufacture of basic metals	11	4	15
Manufacture of fabricated metal products, except machinery and equipment	14	12	26
Manufacture of electrical equipment	3	0	3

Manufacture of furniture	62	49	111
Other manufacturing	25	6	31
Repair and installation of machinery and equipment	7	1	8

Electricity, gas, steam and air conditioning supply	2	1	3
Electricity, gas, steam and air conditioning supply	2	1	3

Water supply; sewerage, waste management and remediation activities	5	0	5
Water collection, treatment and supply	5	0	5

Construction	115	53	168
Construction of buildings	64	30	94
Civil engineering	48	23	71
Specialized construction activities	3	0	3

Wholesale and retail trade; repair of motor vehicles and motorcycles	5,340	3,414	8,754
Wholesale and retail trade and repair of motor vehicles and motorcycles	247	48	295
Wholesale trade, except of motor vehicles and motorcycles	232	32	264
Retail trade, except of motor vehicles and motorcycles	4,861	3,334	8,195

Transportation and storage	42	3	45
Land transport and transport via pipelines	16	2	18
Air transport	3	0	3
Warehousing and support activities for transportation	20	1	21
Postal and courier activities	3	0	3

Accommodation and food service activities	1,927	1,019	2,946
Accommodation	212	77	289
Food and beverage service activities	1,715	942	2,657

Information and communication	54	3	57
Publishing activities	3	0	3
Motion picture, video and television programme production, sound recording and music publishing activities	6	0	6
Programming and broadcasting activities	3	0	3
Telecommunications	31	3	34
Computer programming, consultancy and related activities	9	0	9
Information service activities	2	0	2

Financial and insurance activities	11	5	16
Financial service activities, except insurance and pension funding	7	5	12
Insurance, reinsurance and pension funding, except compulsory social security	4	0	4

Real estate activities	2	1	3
Real estate activities	2	1	3

Professional, scientific and technical activities	67	4	71
Legal and accounting activities	27	1	28
Activities of head offices; management consultancy activities	4	0	4
Architectural and engineering activities; technical testing and analysis	12	0	12
Scientific research and development	1	1	2
Advertising and market research	1	0	1
Other professional, scientific and technical activities	22	2	24

Administrative and support service activities	165	8	173
Rental and leasing activities	16	0	16
Employment activities	29	0	29
Travel agency, tour operator, reservation service and related activities	98	7	105
Security and investigation activities	1	1	2
Office administrative, office support and other business support activities	21	0	21

Education	60	11	71
Education	60	11	71

Human health and social work activities	26	4	30
Human health activities	11	-	11
Residential care activities			
Social work activities without accommodation	15	4	19

Arts, entertainment and recreation	150	21	171
Creative, arts and entertainment activities	30	4	34
Libraries, archives, museums and other cultural activities	2	1	3
Gambling and betting activities	7	-	7
Sports activities and amusement and recreation activities	111	16	127

Other service activities	360	28	388
Activities of membership organizations	2	-	2
Repair of computers and personal and household goods	127	6	133
Other personal service activities	231	22	253
Total	8,893	5,104	13,997

Table A4.2 Establishments by economic sector, and by Dzongkhag, 2017

Economic sector	Dzongkhag				
	Bumthang	Chhukha	Dagana	Gasa	Haa
Agriculture, forestry and fishing	5	9	30	0	2
Mining and quarrying	0	10	1	0	0
Manufacturing	24	134	13	1	17
Electricity, gas, steam and air conditioning	0	0	1	0	0
Water supply; sewerage, waste management and remediation activities	1	0	0	0	0
Construction	1	22	11	0	1
Wholesale and retail trade; repair of motor vehicles and motorcycles	208	1,026	369	19	100
Transportation and Storage	0	25	0	0	0
Accommodation and food service activities	79	485	85	14	33
Information and communication	0	4	3	0	1
Financial and insurance activities	0	0	0	0	0
Real estate activities	0	0	0	0	0
Professional, scientific and technical activities	1	12	0	0	1
Administrative and support service	0	39	0	0	0
Education	2	8	0	0	0
Human health and social work activities	1	10	0	0	0
Arts, entertainment and recreation	13	25	3	0	4
Other service activities	11	87	11	0	6
Total	346	1,896	527	34	165

	Lhuentse	Monggar	Paro	P/Gatshel	Punakha
Agriculture, forestry and fishing	0	15	2	0	1
Mining and quarrying	0	0	0	0	0
Manufacturing	5	17	38	9	17
Electricity, gas, steam and air conditioning	0	0	0	0	0
Water supply; sewerage, waste management and remediation activities	0	0	1	0	0
Construction	3	7	0	3	3
Wholesale and retail trade; repair of motor vehicles and	100	365	573	198	290
Transportation and Storage	0	1	3	1	0
Accommodation and food service activities	19	118	200	87	97
Information and communication	0	1	1	1	2
Financial and insurance activities	0	0	0	0	0
Real estate activities	0	0	0	0	0
Professional, scientific and technical activities	0	4	3	0	0
Administrative and support service	0	0	4	0	1
Education	0	0	6	0	3
Human health and social work activities	0	1	2	0	0
Arts, entertainment and recreation	0	3	12	1	8
Other service activities	2	14	25	3	14
Total	129	546	870	303	436

	S/Jongkhar	Samtse	Sarpang	Thimphu	Trashigang
Agriculture, forestry and fishing	5	34	111	17	9
Mining and quarrying	4	9	3	1	3
Manufacturing	33	29	31	211	32
Electricity, gas, steam and air conditioning	0	0	0	2	0
Water supply; sewerage, waste management and	0	0	0	2	0
Construction	6	9	20	37	13
Wholesale and retail trade; repair of motor vehicles and motorcycles	389	613	658	2,172	446
Transportation and Storage	5	2	2	5	0
Accommodation and food service activities	146	214	263	621	96
Information and communication	2	1	0	30	3
Financial and insurance activities	0	0	1	14	0
Real estate activities	0	0	0	3	0
Professional, scientific and technical activities	5	2	6	29	1
Administrative and support service	7	2	8	107	2
Education	3	0	4	43	0
Human health and social work activities	1	1	2	11	0
Arts, entertainment and recreation	5	9	4	65	1
Other service activities	13	15	23	115	13
Total	624	940	1,136	3,485	619

	T/Yangtse	Trongsa	Tsirang	W/Phodrang	Zhemgang
Agriculture, forestry and fishing	1	0	110	1	0
Mining and quarrying	1	0	0	1	0
Manufacturing	52	7	12	24	5
Electricity, gas, steam and air conditioning	0	0	0	0	0
Water supply; sewerage, waste management and remediation activities	1	0	0	0	0
Construction	17	4	4	7	0
Wholesale and retail trade; repair of motor vehicles and motorcycles	164	146	458	334	126
Transportation and Storage	0	0	1	0	0
Accommodation and food service activities	26	91	63	141	68
Information and communication	2	2	1	2	1
Financial and insurance activities	0	0	0	1	0
Real estate activities	0	0	0	0	0
Professional, scientific and technical activities	1	1	1	3	1
Administrative and support service	0	0	1	1	1
Education	0	0	1	1	0
Human health and social work activities	1	0	0	0	0
Arts, entertainment and recreation	2	4	2	9	1
Other service activities	6	3	6	16	5
Total	274	258	660	541	208

Table A4.3 Establishments by economic sector (2-digits classification), and by region, 2017

Economic sector	Number				
	Central	Eastern	Western	Southern	Total
Agriculture, forestry and fishing	5	30	23	294	352
Crop and animal production, hunting and related service activities	5	18	21	273	317
Forestry and logging	0	0	1	0	1
Fishing and aquaculture	0	12	1	21	34

Mining and quarrying	0	8	2	23	33
Mining of coal and lignite	0	1	0	1	2
Mining of metal ores	0	0	0	1	1
Other mining and quarrying	0	7	2	21	30

Manufacturing	36	148	309	219	712
Manufacture of food products	6	15	37	21	79
Manufacture of beverages	1	2	5	7	15
Manufacture of textiles	0	0	4	0	4
Manufacture of wearing apparel	11	46	101	62	220
Manufacture of leather and related products	0	0	2	0	2
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	4	32	27	12	75
Manufacture of paper and paper products	0	7	1	0	8
Printing and reproduction of recorded media	1	4	31	9	45
Manufacture of chemicals and chemical products	1	5	3	11	20
Manufacture of basic pharmaceutical products and pharmaceutical preparations	0	0	2	1	3
Manufacture of rubber and plastics products	0	0	4	8	12
Manufacture of other non-metallic mineral products	1	9	11	14	35
Manufacture of basic metals	0	1	4	10	15
Manufacture of fabricated metal products, except machinery and equipment	1	2	15	8	26
Manufacture of electrical equipment	0	0	0	3	3
Manufacture of furniture	10	21	53	27	111
Other manufacturing	0	2	7	22	31

Repair and installation of machinery and equipment	0	2	2	4	8
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Electricity, gas, steam and air conditioning supply	0	0	2	1	3
Electricity, gas, steam and air conditioning supply	0	0	2	1	3

Water supply; sewerage, waste management and remediation activities	1	1	3	0	5
Water collection, treatment and supply	1	1	3	0	5

Construction	5	49	48	66	168
Construction of buildings	1	35	25	33	94
Civil engineering	4	14	21	32	71
Specialized construction activities	0	0	2	1	3

Wholesale and retail trade; repair of motor vehicles and motorcycles	480	1,662	3,487	3,124	8,753
Wholesale and retail trade and repair of motor vehicles and motorcycles	12	55	134	94	295
Wholesale trade, except of motor vehicles and motorcycles	4	33	89	138	264
Retail trade, except of motor vehicles and motorcycles	464	1,574	3,264	2,892	8,194

Transportation and storage	0	7	8	30	45
Land transport and transport via pipelines	0	2	1	15	18
Air transport	0	0	3	0	3
Warehousing and support activities for transportation	0	5	1	15	21
Postal and courier activities	0	0	3	0	3

Accommodation and food service activities	238	492	1106	1110	2946
Accommodation	34	47	125	83	289
Food and beverage service activities	204	445	981	1,027	2,657

Information and communication	3	9	36	9	57
Publishing activities	0	0	3	0	3

Motion picture, video and television programme production, sound recording and music publishing activities	0	0	6	0	6
Programming and broadcasting activities	0	0	2	1	3
Telecommunications	3	9	14	8	34
Computer programming, consultancy and related activities	0	0	9	0	9
Information service activities	0	0	2	0	2

Financial and insurance activities	0	0	15	1	16
Financial service activities, except insurance and pension funding	0	0	11	1	12
Insurance, reinsurance and pension funding, except compulsory social security	0	0	4	0	4

Real estate activities	0	0	3	0	3
Real estate activities	0	0	3	0	3

Professional, scientific and technical activities	3	11	36	21	71
Legal and accounting activities	1	4	13	10	28
Activities of head offices; management consultancy activities	0	0	4	0	4
Architectural and engineering activities; technical testing and analysis	0	0	11	1	12
Scientific research and development	0	0	2	0	2
Advertising and market research	0	0	1	0	1
Other professional, scientific and technical activities	2	7	5	10	24

Administrative and support service activities	1	9	113	50	173
Rental and leasing activities	0	2	6	8	16
Employment activities	0	4	2	23	29
Travel agency, tour operator, reservation service and related activities	1	0	92	12	105
Security and investigation activities	0	0	2	0	2
Office administrative, office support and other business support activities	0	3	11	7	21

Education	2	3	53	13	71
Education	2	3	53	13	71

Human health and social work activities	1	3	13	13	30
Human health activities	0	1	2	8	11
Residential care activities					-
Social work activities without accommodation	1	2	11	5	19

Arts, entertainment and recreation	18	12	98	43	171
Creative, arts and entertainment activities	9	3	13	9	34
Libraries, archives, museums and other cultural activities	1	0	2	0	3
Gambling and betting activities	0	0	5	2	7
Sports activities and amusement and recreation activities	8	9	78	32	127

Other service activities	19	51	176	142	388
Activities of membership organizations	0	0	2	0	2
Repair of computers and personal and household goods	8	21	45	59	133
Other personal service activities	11	30	129	83	253
Total	812	2,495	5,531	5,159	13,997

Table A4.4 Establishments by economic sector, and by Thromdey, 2017

Economic sector	Number							
	Phuentshogling		Thimphu		Sarpang		S/Jongkhar	
	Phuentshogling Thromde	Other than Thromde	Thimphu Thromde	Other than Thromde	Gelephu Thromde	Other than Thromde	S/Jongkhar Thromde	Other than Thromde
Agriculture, forestry and fishing	3	6	6	11	0	111	0	5
Mining and quarrying	9	1	0	1	3	0	3	1
Manufacturing	124	10	168	43	22	9	21	12
Electricity, gas, steam and air conditioning supply	0	0	2	0	0	0	0	0
Water supply; sewerage, waste management and remediation activities	0	0	2	0	0	0	0	0
Construction	18	4	35	2	17	3	3	3
Wholesale and retail trade; repair of motor vehicles and motorcycles	564	462	1,945	227	382	276	179	210
Transportation and storage	25	0	5	0	1	1	5	0
Accommodation and food service activities	301	184	543	78	120	143	70	76
Information and communication	3	1	30	0	0	0	1	1
Financial and insurance activities	0	0	11	3	0	1	0	0
Real estate activities	0	0	2	1	0	0	0	0
Professional, scientific and technical activities	10	2	28	1	5	1	4	1
Administrative and support service activities	37	2	102	5	8	0	7	0
Education	8	0	38	5	3	1	3	0
Human health and social work activities	10	0	10	1	1	1	1	0
Arts, entertainment and recreation	20	5	63	2	4	0	4	1
Other service activities	74	13	108	7	18	5	11	2
Total	1,206	690	3,098	387	584	552	312	312

Table A5.1: Persons employed, by economic sector of establishment, and by status in employment, 2017

	Own-account	Regularly-paid	Contract	Casual-paid	Unpaid	Total
	worker	employee	employee	employee	family worker	
Agriculture, forestry and fishing	345	1,032	516	418	323	2,634
Mining and quarrying	19	940	61	196	0	1,216
Manufacturing	597	7,628	778	1,594	122	10,719
Electricity, gas, steam and air conditio	0	4,271	19	24	0	4,314
Water supply; sewerage, waste management	5	96	0	0	0	101
Construction	143	3,690	7,478	2,426	12	13,749
Wholesale and retail trade; repair of mo	8,418	5,656	150	896	2,748	17,868
Transportation and storage	26	1,054	186	313	3	1,582
Accommodation and food service activitie	2,785	6,024	193	306	1,539	10,847
Information and communication	40	1,917	32	22	0	2,011
Financial and insurance activities	5	2,705	103	1	1	2,815
Real estate activities	1	153	0	0	0	154
Professional, scientific and technicala	62	521	33	42	4	662
Administrative and support service active	146	2,088	70	274	28	2,606
Education	54	993	135	31	8	1,221
Human health and social work activities	25	161	16	9	1	212
Arts, entertainment and recreation	157	377	29	11	41	615
Other service activities	366	332	5	16	81	800
Total	13,194	39,638	9,804	6,579	4,911	74,126

Table A5.2: Percentages distribution of worker types by working hours per week, 2017

Working hours per week	Own-account worker	Status in employment					Unpaid family worker	Total
		Regularly-paid employee	Contract employee	Casual-paid employee	Unpaid family worker	Total		
Male	5,173	26,063	8,687	5,410	2,055	47,388		
Less than 30 hours	238	136	4	275	350	1,003		
30-39 hours	146	332	67	49	98	692		
40-49 hours	630	19,470	8,059	2,738	172	31,069		
50-59 hours	467	2,747	233	693	172	4,312		
60-69 hours	604	1,395	150	830	161	3,140		
70-79 hours	1,105	980	134	485	392	3,096		
80-89 hours	1,166	549	20	265	362	2,362		
90 hours or more	817	454	20	75	348	1,714		
Female	8,021	13,575	1,117	1,169	2,856	26,738		
Less than 30 hours	357	102	13	35	338	845		
30-39 hours	176	260	30	9	118	593		
40-49 hours	421	9,186	860	820	220	11,507		
50-59 hours	543	1,400	108	154	213	2,418		
60-69 hours	877	1,027	40	74	207	2,225		
70-79 hours	1,822	740	37	36	539	3,174		
80-89 hours	2,194	423	7	24	634	3,282		
90 hours or more	1,631	437	22	17	587	2,694		
Total	13,194	39,638	9,804	6,579	4,911	74,126		

Table A5.3: Persons employed, by economic sector of establishment, and by nationality, sex, 2017

	Bhutanese			Non-Bhutanese			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Agriculture, forestry and fishing	1,606	998	2,604	19	11	30	1,625	1,009	2,634
Mining and quarrying	830	157	987	213	16	229	1,043	173	1,216
Manufacturing	6,273	2,739	9,012	1,449	258	1,707	7,722	2,997	10,719
Electricity, gas, steam and air conditio	3,123	1,191	4,314	0	0	0	3,123	1,191	4,314
Water supply; sewerage, waste management	57	44	101	0	0	0	57	44	101
Construction	3,943	982	4,925	8,820	4	8,824	12,763	986	13,749
Wholesale and retail trade; repair of mo	7,125	8,875	16,000	1,775	93	1,868	8,900	8,968	17,868
Transportation and storage	999	412	1,411	128	43	171	1,127	455	1,582
Accommodation and food service activitie	3,800	6,064	9,864	630	353	983	4,430	6,417	10,847
Information and communication	1,168	827	1,995	16	0	16	1,184	827	2,011
Financial and insurance activities	1,525	1,280	2,805	10	0	10	1,535	1,280	2,815
Real estate activities	120	34	154	0	0	0	120	34	154
Professional, scientific and technical a	496	156	652	10	0	10	506	156	662
Administrative and support service activ	1,837	720	2,557	47	2	49	1,884	722	2,606
Education	576	566	1,142	49	30	79	625	596	1,221
Human health and social work activities	49	154	203	7	2	9	56	156	212
Arts, entertainment and recreation	253	351	604	9	2	11	262	353	615
Other service activities	273	353	626	153	21	174	426	374	800
Total	34,053	25,903	59,956	13,335	835	14,170	47,388	26,738	74,126

Table A5.4: Paid worker types, by monthly remuneration (in Ngultrum), 2017

Monthly remuneration	Status in employment	
	Regularly-paid employee	Contract employee
Male		
Less than 5000	1427	127
5000-9999	4885	601
10000-14999	4821	497
15000-19999	2504	190
20000-24999	6739	6072
25000-29999	1819	713
30000-39999	2579	208
40000 and more	1289	279
Female		
Less than 5000	805	41
5000-9999	3781	226
10000-14999	2714	388
15000-19999	1060	28
20000-24999	2481	84
25000-29999	994	144
30000-39999	916	41
40000 and more	824	165

Annex VII: Concepts and definitions

For the ECoB 2018–19, the concepts and definitions shall be as follows:

Census period. The period when the census data collection will be conducted across the country from December 2018 to January 2019.

Dividend. A payment made by a corporation to its shareholders, usually as a distribution of profits.

- **Economic organization.** The following types of economic organization are distinguished:
- **Single Establishment.** An establishment that has neither a branch nor a separate main office
- **Branch only.** An establishment that has a separate main office located elsewhere.
- **Branch and head office.** An establishment where the head office and at least one enterprise branch are located on the same address and with another branch or other branches located elsewhere.
- **Head office only.** An establishment that constitutes only of a head office, which controls, supervises, and directs one or more establishments of the enterprise (branches) located elsewhere.

Employment status:

- **Casual-paid employees.** These are workers working as and when a job is available in the establishment on a daily or weekly basis, and they do not have an explicit or implicit employment contract.
- **Contract employees.** These are workers who have a temporary contract for a specific period to perform a particular work but are not regular employees of the establishment, as defined below.
- **Own-account workers.** These are workers who work on their own account or with one or a few partners, for example, a person who owns and operates a business without drawing any salary from the business operation.
- **Regular-paid employee.** These are workers who receive a fixed amount of salary or any compensation in kind on a regular basis in the usual business of the employer. The basic remuneration is not directly dependent upon revenue of the employing establishment.
- **Unpaid family worker.** This is a person who helps his/her family business without any payment of wages or salary, for example, a wife who helps the tour business owned and operated by her husband.

Environmental-related expenses (non-corporate social responsibility [CSR]). Expenditures made by the establishment or entity to protect or maintain the health of the natural environment and ecosystem in compliance with the requirement of the environmental rules and regulations of the government. For example, if an establishment 'B' in Pasakha, Phuentshogling, spent BTN5 million in 2017 for installing pollution control device as required by the National Environment Commission, the expenditure incurred shall be treated as environment-related expenditure non-CSR.

Environment-related CSR. Expenditures made by the establishment or entity to protect or maintain the health of the natural environment and ecosystem on moral and voluntary responsibility. For example, if an establishment 'A' spent BTN5 million in 2017 in plantation voluntarily, the expenditure incurred shall be treated as environment-related expenditure CSR.

Other CSR. Expenses incurred by the establishment through voluntary services to benefit the society such as free school for the locality and regular donations for local festivals.

Establishment

According to SNA, an establishment is defined as an enterprise, or part of an enterprise, that is situated in a single location and in which only a single productive activity is carried out or in which the principal productive activity accounts for most of the value added.

The establishment is a physical entity where mainly one entrepreneurial activity (or sometimes more than one, with no separate accounts) is carried out. Examples of establishments are workshops, factories, manufacturing plants, warehouses, shops, and offices.

If an establishment engages in more than one entrepreneurial activity and does not maintain separate books of accounts, the establishment shall be treated as single establishment. However, the same establishment engaging in more than one entrepreneurial activity and maintaining separate books of accounts shall be treated as separate establishments.

Financial assets. Entities from which economic benefits may be derived by their owners by holding them or using them over a period of time; they differ from other assets in that there is a counterpart liability on the part of another institutional unit. Cash, stocks, bonds, and bank deposits are examples of financial assets.

Intangible assets. Nonphysical assets having a useful life greater than one year, such as trademarks, computer software, performance events, and literary or artistic originals.

Legal organization. The following types of legal organization are distinguished:

Single proprietorship. An establishment owned and managed by one person, who alone assumes the risk of the business enterprise.

- **Partnership.** An association of two or more individuals for operating a business enterprise based upon an agreement or contract between or among them to contribute money, property, or industry into a common fund with the intention of dividing profits among themselves.
- **Private limited company (non-FDI).** A company owned by 50 or less individuals and is a separate legal entity. It restricts the right of its members to transfer its shares, and it does not offer subscription of its shares to the general public.
- **Public limited company (non-FDI).** A company owned by more than 50 persons and is a separate legal entity of which the shares are traded in a stock market.
- **State-owned company.** A company that is owned by the government (with a minimum

share of 51 percent) and operates as a corporation.

- **Foreign direct investment (FDI) company.** A company with an investment from a foreign company or from a foreign individual, in the form of either an established company or with business assets in Bhutan, such as ownership or controlling interest.
- **Non-governmental organization (NGO).** A legal or social entity created to provide goods and services to other institutional units, whose status does not permit them to create income, profit, or financial gains to those who control and finance them.
- **Cooperative and group.** Economic establishments set up by economic agents for marketing their collective output. The profits of such cooperatives are distributed in accordance with bylaws/rules and not necessarily in proportion to shares owned.

Main economic activity. The activity that earned the largest income for the establishment.

Materials and supplies. Goods that their owners intend to use as intermediate inputs in their own production processes, not to resell.

Other economic activity. Establishments may undertake different activities. Whereas the main activity of an establishment refers to the activity that earned the largest income for the establishment, 'other activities' are those activities that contribute smaller shares of income.

Prefilled information. Information generated by the tablet software on the basis of the establishment listing, which cannot be edited during enumeration by the enumerator.

Preloaded information. Information generated by the tablet software on the basis of the establishment listing, which can be edited during enumeration by the enumerator.

Raw materials. Materials or substances used in the primary production or manufacturing of goods.

Reference year. The year of operation of establishments that is covered by the census is 2017. In several census questions, reference is made to December 31, 2017, for which data should be collected.

Research and development. Activities for discovering or developing new products, including improved versions or qualities of existing products, or discovering or developing new or more efficient processes of production.

Respondent questionnaire. A paper questionnaire that can be left at the establishment to be completed by the respondent. During a follow-up visit, the information needs to be transferred from the paper questionnaire to the tablet. There may also be enterprises that have received the respondent questionnaire by mail that the enumerators may be requested to collect upon completion.

Work in progress. Goods and services that are partially completed but that are not usually turned over to other units without further processing or that are not mature and whose production process will be continued in a subsequent period by the same producer.

REFERENCES

Eurostat. 2017. *European Statistics Code of Practice*. Luxembourg, Eurostat.

Eurostat. n.d. *Quality Assurance Framework of the European Statistical System (ESS QAF)*. Luxembourg, Eurostat.

UNDESA (United Nations Department of Economic and Social Affairs). 2008. *International Standard Industrial Classification of All Economic Activities Revision 4*. New York, UNDESA.

United Nations. 2015. *Fundamental Principles of Official Statistics. Implementation Guidelines*. New York, United Nations.

United Nations. n.d. "Guidelines for the Template for a Generic National Quality Assurance Framework (NQAF)." <https://unstats.un.org/unsd/dnss/docs/nqaf/GUIDELINES%208%20Feb%202012.pdf>.

National Statistics Bureau
Royal Government of Bhutan
PO Box No 338
Thimphu, Bhutan
Tel: +975 2 333296, +975 2 335848
Fax: +975 2 323069
www.nsb.gov.bt

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