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# 2020 VITAL STATISTICS REPORT BHUTAN



NATIONAL STATISTICS BUREAU



**2020**  
**VITAL STATISTICS**  
**REPORT**  
**BHUTAN**

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# FOREWORD

This is the first Vital Statistics Report of Bhutan published by the National Statistics Bureau (NSB). The report presents the findings on the vital events such as the births and deaths including the infant's deaths for the latest available year. The data is sourced from the time series records maintained in the Bhutan Civil Registration System (BCRS) by the Department of Civil Registration and Census (DCRC) under the Ministry of Home and Cultural Affairs (MoHCA) and some additional information were also collected from the Ministry of Health (MoH).

The report is a part of the commitment Bhutan made for the Asian and Pacific Civil Registration and Vital Statistics (CRVS) Decade, 2015-2024. Since Bhutan is signatory to the Ministerial Declaration of the CRVS Decade **"Get everyone in the picture"**, effort has been made to strengthen the CRVS system in the country. The commitment, stewardship by national authorities, and trust and collaboration of stakeholders has enabled publication of this report. It took almost four years to analyze and publish the data.

Further, this exercise initiated by the Social Statistics Division (SSD) has given us an opportunity to capitalize on the administrative data to produce official statistics, which is the ultimate aim of the NSB. We are hopeful that this report will provide crucial insights into the socio-demographic indicators and become more valid, relevant, regular, and accessible. Your comments will be useful to improve the future series of vital statistics report.



(Chhime Tshering)  
Director  
National Statistics Bureau

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Last but not least, it was because of the consistent support and continuous guidance provided by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) that NSB could bring out its first vital statistics report in the country. Therefore, we would like to sincerely thank and appreciate the technical support and assistance provided by the ESCAP as part of a project to strengthen the National Capacity in Producing and Disseminating Vital Statistics funded by the Bloomberg Philanthropies Data for Health Initiative.

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# LIST OF ACRONYMS

ASDR	Age-Specific Death Rate
ASFR	Age-Specific Fertility Rate
BCRS	Bhutan Civil Registration System
BHU	Basic Health Unit
CBR	Crude Birth Rate
CC	Community Centre
CDR	Crude Death Rate
CID	Citizenship Card
CMC	Court Marriage Certificate
CoD	Cause of Death
CRC	Civil Registration and Census
CRVS	Civil Registration and Vital Statistics
DCRC	Department of Civil Registration and Census
DCRCO	Dzongkhag/District Civil Registration and Census Office
DoI	Department of Immigration
DzCRCO	Dzongkhag/District Civil Registration and Census Officer
G2C	Government to Citizen
HMIS	Health Management and Information System
HQ	Head Quarter
ICD	International Classification of Disease
IIMS	Immigration Information Monitoring System
MoH	Ministry of Health
MoHCA	Ministry of Home and Cultural Affairs
NSB	National Statistics Bureau
PGR	Population Growth Rate
PHCB	Population and Housing Census of Bhutan
RP	Registration Point
SoPs	Standard Operating Procedures
SRB	Sex Ratio at Birth
SRP	Special Resident Permit
TAT	Turnaround Time
TCRCO	Thromde Civil Registration and Census Officer
UN	United Nations
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
VSR	Vital Statistics Report
WHO	World Health Organization

# DEFINITIONS

**Dzongkhag:** Second in administrative hierarchy in Bhutan equivalent to district

**Dungkhag:** Sub-District

**Gewog:** Block

**Thromde:** Municipality

**Gup:** Village Headman at block level

**Tshogpa:** Member of the Census Committee in the village

**Approver:** Officer at DCRC HQ

**Verifier:** Civil Registration & Census Officer at Dzongkhag level. Present also at Thromde and DCRC HQ

**Operator:** Computer Operator at Community Service Centre (CSC) level. Present also at DCRCO or Thromde or DCRC HQ

**Applicant:** Concerned Individual/Person

**Community Service Centre:** Registration points at block level

**Health Facility:** Any health facility operating under the purview of Ministry of Health in the Kingdom of Bhutan

**Requestor:** Parent or Guardian or Relative or Next of kin of the deceased

**Agency:** Labour Recruitment agency or travel agent who is responsible for looking after the welfare of the foreigners or non-Bhutanese while they are in the country

**Foreign National:** Person(s) other than Bhutanese residing temporarily in Bhutan

**Marriage Case:** Marriage case between Bhutanese and non-Bhutanese that occurred after 1985

**Identification:** Citizenship Card/Special Resident Card for Bhutanese Documents and SRP holders, Permits issued by DCRC, MoHCA, Permits for MC After 1985, Permits issued by the Department of Immigration and Passport copy for Non-Bhutanese

**Immigration Card:** Stay permit issued to the foreigners married to Bhutanese after 10th June 1985 and their children.

**Special Resident Card:** Resident card issued to the foreigners married to Bhutanese before 10th June 1985 and their children.

**Annual Census:** Total count of the citizens and resident permit holders carried out in the *Dzongkhags/Thromdes/Drungkhags* by the respective Civil Registration and Census Officials (CRCO) between November and January annually.

**Region:** Statistical boundary of the country ([West: Thimphu, Punakha, Gasa, Paro, Haa, Wangdue Phodrang, Samtse, Chhukha], Central: Trongsa, Bumthang, Zhemgang, Tsirang, Dagana, Sarpang], East: Trashigang, Trashigang, Monggar, Lhuentse, Samdrup Jongkhar, Pema Gatshel)

**BCRS-BR-01:** Bhutan Civil Registration System Birth Registration Form

**BCRS-DR-01:** Bhutan Civil Registration System Death Reporting Form

**BCRS-IB-01:** Bhutan Civil Registration System Information on Birth

**MoH-NB-01:** Bhutan Civil Registration System Notification of Birth

**BCRS-SD-01:** Bhutan Civil Registration System Statement of Death

**MoH-ND-01:** Notification of Death

**Civil Registration (CR):** The continuous, permanent, compulsory, and universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation in accordance with the legal requirements in each country.

**Vital Statistics (VS):** A collection of statistics on vital events in a lifetime of a person as well as relevant characteristics of the events themselves and of the person and persons concerned.

**Age:** The population age is calculated and shows the number of completed years based on date of birth.

**Completeness of Registration:** The proportion of vital events that are registered. It is the number of registered vital events divided by an estimate of the 'actual' number of vital events that occurred in the same population during a specific time.

**Timely Registration:** The registration of a vital event within the legally specified period (within one year).

**Delayed Registration:** The registration of a vital event after one year.

**Live Birth:** The complete expulsion or extraction from the mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered live born (all live-born infants should be registered and counted as such, irrespective of gestational age or whether alive or dead at the time of registration, and if they die at any time following birth, they should also be registered and counted as deaths).

**Death:** The permanent disappearance of all evidence of life at any time after live birth has taken place (postnatal cessation of vital functions without capability of resuscitation). This definition excludes fetal deaths, which are defined separately.

**Crude Birth Rate (CBR):** The number of live births relative to the size of that population during a given period, usually one year. It is expressed as the number of live births per 1,000 population (mid-year) per year.

**Crude Death Rate (CDR):** The number of deaths relative to the size of that population during a given period, usually one year. It is expressed as the number of deaths per 1,000 population (mid-year) per year.

**Sex Ratio at Birth:** The number of male births for a specific area and during a specified

period divided by the number of female births for the same area and period. The sex ratio is an important demographic indicator of the distribution of boys and girls at birth.

**Age-Specific Fertility Rate (ASFR):** The annual number of births to women of a specified age or age group per 1,000 women (mid-year) in that age group.

**Age-Specific Death rate (ASDR):** A mortality rate limited to a particular age group. The numerator is the number of deaths in that age group; the denominator is the number of persons in that age group per 1,000 population (mid-year).

**Cause-of-Death:** All those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced any such injuries. Symptoms and modes of dying, such as heart failure or respiratory failure, are not considered to be causes-of-death for statistical purposes (see 'ill-defined cause-of-death').

**Infant Deaths:** The death of a live-born child under 1 year of age.

**Rate of Natural Increase:** Rate at which a population grows (increase/decrease) during a given year, as the result of a surplus/deficit of births over deaths; expressed as a percentage of the base population.

**Low Birthweight (LBW):** The weight at birth of fewer than 2,500 grams as per World Health Organization definition.

**Place of Occurrence:** The place where the vital event took place.

**Place of Usual Residence:** The place where the person usually resides.

# EXECUTIVE SUMMARY

The National Statistics Bureau is committed to strengthening the use of administrative data including CRVS in Bhutan to complement official statistics from surveys and censuses.

The current report is mainly based on data collected via web-based system in 2019. The report is organized in 6 chapters namely: 1) Introduction; 2) Bhutan civil registration system; 3) Data quality, timeliness of registration and registration completeness; 4) Births statistics, 5) Deaths statistics; and 6) Summary tables. Only the vital events that occurred in 2019 and were registered in the same year is considered for this report.

## Birth Statistics:

The comparison of registered births with estimated live births showed a registration completeness rate of 77.9% in the year 2019. The number of live births was 9,667 in 2019, a decrease of 10.8% as compared to 10,711 in 2018. The CBR declined from 14.6 (2018) to 13.0 (2019) per thousand population. There are more males than females. Out of the total live births in 2019, 4,920 were males and 4,747 were females giving the sex ratio of 104.

With increased accessibility to medical facilities, majority of the births that happened in 2019 took place at the health facility (98.1%) followed by births taking place at home (1.6%). Concerning

the weight at birth, CRVS showed average weight at birth equivalent to 3,199 grams. Low birthweight was found to be 6.8% of the total live births recorded in 2019.

Most (40.0%) of the births in 2019 were first born followed by 32.0% in the second order birth. Number of births reduces as the order increases. There is a total of 3 births with birth order greater than 10. Most of the births (37.3%) have occurred after 5 to 9 years of the previous birth followed by 4 years (15.9%). There were few births that have occurred within less than 12 months of the previous birth and quite a number of births (15.2%) have occurred after more than 10 years from the previous birth.

## Death Statistics:

Vital statistics on deaths showed a total of 3,220 deaths in the year 2019. The calculated CDR using the observed data from CRVS was about 4 deaths per 1000 population (mid-year) in 2019, hence low level of completeness in death registration (63.1%). The CDR declined from 4.6 (2018) to 4.3 (2019) per thousand population. There are more males than females. Out of the total deaths in 2019, mortality statistics showed a high number of deaths among males compared to females.

By site of occurrence of the event, 60.0% of deaths occurred at home while only 36.3% occurred in the health facilities.



# CHAPTER 1 : INTRODUCTION

## 1.1 INTRODUCTION

Vital statistics is the collection of statistics on vital events of a person as well as the relevant characteristics of the events themselves and of the person and persons concerned (UN, 2014). There are ten primary vital events recognized by the United Nations for registration. However, considering the availability of the data, this report presents statistics pertaining to only two vital events namely live births and deaths.

Vital Statistics from administrative data sources provide a continuous picture of fertility and mortality trends in the country. These measures are fundamental for national planning across multiple sectors. Health planners and policy makers require them to track and monitor progress against key health indicators including evaluating the impact of key interventions targeted at improving the health and wellbeing of the population.

Moreover, vital statistics on births can also assist the education sector to estimate and plan the facilities that may be required in schools to accommodate for country's growing/declining child population and to monitor school enrollment and school completion. Likewise, agencies dealing with infrastructure planning including transport, housing, water, and land resources also depend on accurate population data to plan for current and future populations.

Vital statistics can be derived from periodic sources such as population censuses and household surveys as well as from administrative sources i.e., health information and civil registration systems. Administrative sources hold a critical advantage over periodic collections by providing data on a continuous basis. The United Nations specifically recognizes civil registration as the most reliable source of vital statistics, noting its critical features of continuity, permanence, compulsoriness, universality in addition to being legally backed. It is essential that these data systems are strengthened, to ensure that they attain their optimal level of performance.

## 1.2 BACKGROUND

There is evidence that Bhutan was inhabited since time immemorial, however, there is no official record of the population count that pre-dates 18th century and very little is known about the population dynamics in Bhutan. The development of demographic calculations started only in the beginning of the 18th century. These records were maintained by different regions for taxation purposes. However, with the start of the first five-year development plans in the country, the importance of the statistics was critically felt by the government. The systematic registration of annual births and deaths started in late 1980s. While the vital events ideally include

live births, deaths, fetal deaths, marriages, divorces, judicial separations, adoptions, legitimations, and recognitions, in the absence of comprehensive data on all these events, the focus of this report is restricted only to births and deaths. The data on births and deaths are maintained by the DCRC under the MoHCA. However, these data have never been used to produce vital statistics. Therefore, the censuses and surveys conducted by the NSB and MoH were the only sources of vital statistics available in the country.

### 1.3 RATIONALE

Without reliable vital statistics, it would be difficult for any government, donor, and multilateral organization to effectively monitor the plans and programs of a whole range of social and health initiatives. Vital statistics are the cornerstone of a country's health information system. If information on the number of births and deaths, and cause of death is lacking, it would be difficult to achieve real progress towards the fundamental goal of any health system. The civil registration records are the best source of vital statistics. They generate data on a continuous basis for the whole country, both at national and local levels, thus providing invaluable information for regional planning and appropriate allocation of resources in areas such as the education, health, and social security at the appropriate administrative level. The vital statistics would also help country in preparing the population estimates and projections since the natural rate of increase in population can easily be derived from the civil registration records and assuming no migration.

## 1.4 OBJECTIVES, SCOPE AND ORGANIZATION OF THE REPORT

### 1.4.1 General Objective

The general objective of vital statistics report is to present the status of vital events registration in

the country for informed decision making as well as to track the progress made toward achieving the target set under the CRVS decade strategy.

### 1.4.2 Specific objectives

The specific objectives include:

- i. To assess the level of completeness in birth and death registration.
- ii. To assess the level of reliability of demographic indicators obtained from CRVS data through comparison with indicators from other sources, and
- iii. To assess the data in terms of coverage, quality, and timeliness for registration of vital event.

### 1.4.3 Scope of the Report

The United Nations recommends that countries should register and collect information on the vital events such as the: birth; death; fetal death; marriage; divorce; annulment; judicial separation; adoption; legitimation (acknowledgment); and recognition (judicial declarations of paternity) (UN, 2014). However, since Bhutan does not maintain records on some of these vital events as recommended by the UN, the scope of this report is limited to only events related to births and deaths that occurred in 2019 and most of the internationally recommended tables related to these events are tabulated.

### 1.4.4 Organization of the Report

The report is organized in six chapters namely (1) Introduction; (2) Bhutan civil registration system; (3) Data quality, timeliness, and completeness of registration (4) Birth statistics (5) Death statistics, and (6) Summary statistics.

- Chapter 1 presents the introduction and the general overview of the role of vital statistics, objectives, and scope of the report.

- Chapter 2 describes Bhutan civil registration system including history, legal background, administrative structure; organizational structure, registration process and the flows of information; organization of vital statistics production and dissemination plan; incentives and disincentives for civil registration.
- Chapter 3 describes the quality, timeliness and completeness of civil registration data.
- Chapter 4 presents the statistical data on births disaggregated by various aspects.
- Chapter 5 presents disaggregated statistics on deaths.
- Chapter 6 presents summary statistics on births and deaths with explanatory narratives and finally, the annexure I presents the statistical tables, annexure II presents the Memorandum of Understanding (MoU), annexure III presents the birth and death registration flow and annexure IV presents other forms and documents related to birth and death registration.

# CHAPTER : 2

## BHUTAN CIVIL REGISTRATION SYSTEM

The Department of Civil Registration and Census (DCRC) under the Ministry of Home and Cultural Affairs (MoHCA) is mandated to maintain the comprehensive registry of the population of Bhutan. Beginning late 1980's, the DCRC has started recording all the vital events such as the births and deaths in the country. The registration system is at its infancy stage, yet the country has achieved 100 percent geographic coverage in terms of registration, while the completeness rate is steadily improving.

### 2.1 HISTORY

In Bhutan, the civil registry was maintained manually in the paper-based register known as Family Diary until 2002. This family diary was with the respective administration [*Dzongkhag* (District), *Drungkhag* (Sub-district), and *Gewog* (block)]. The system of recording the births and deaths could be done only once a year.

Beginning 2003, the DCRC initiated the computerization of all records from the Family Diaries. Both births and deaths taking place in the country were directly recorded into the computer database. In the following year, a more comprehensive database called Bhutan Civil Registration System (BCRS) was developed. The focus of this system was the issuance of Citizenship Card, but the system for recording births, deaths, move-in and move-out records

of family members, and household details were also integrated.

In 2004, considering the importance of civil registration in the country, the MoHCA bifurcated the then Department of Immigration and Census (Earlier Department of Registration) into Department of Civil Registration and Census and Department of Immigration. Accordingly, *Dzongkhag* Civil Registration and Census Offices (DCRCO) were established and institutionalized in all 20 *Dzongkhags* with the mandate to oversee the civil registration related activities in the *dzongkhag*. In 2009, the DCRC developed guidelines for DCRCO, and in 2016, Standard Operating Procedures (SoP) to guide registration of all births and deaths in their jurisdiction. Further, the timeline, mode of record compilation and transmission of records from *Dzongkhag/Drungkhag/Thromde* to central office and vice versa were also specified in these documents.

In 2011, under the auspices of Government to Citizen (G2C) Project initiatives, the BCRS was made into a web-based system enabling birth and death registration online. Under the G2C project, community centers were also established at gewog (block) level taking the registration points closer to the people.

Even though there was an established civil registration database, the vital statistics still

**Table 2.1** Document Required for Registration of Vital Events

Vital Events	Practice
Birth	Must be reported to any of the Civil Registration Points within one year (now practiced within 30 days) after delivery of the child. Following are the required documents for birth registration;
	✓ Duly filled and signed Birth Registration Form for Citizens & SRP holder; ([BCRS-BR-01] [Annexure IV]);
	✓ Duly filled and signed "Immigration card form" for those children born in Bhutan to a Bhutanese & foreign Spouse (Annexure IV);
	✓ CID/SRP/Passport copies of the parents;
	✓ Copy of Court Marriage Certificate (CMC) of the parents of the newborn. In the absence of CMC, statement of the <i>Tshogpa/Thromde Tshogpa</i> confirming the parentage of the child ( <i>Gup's</i> endorsement is compulsory if birth is certified by <i>Tshogpa</i> );
	✓ Birth documents (Mother and Child Health Card);
	✓ Information of Birth issued by <i>Tshogpa</i> for birth occurring outside health facility ([BCRS-IB-01] [Annexure IV]);
Death	✓ Consent from Head of Household (It is mandatory when the child is to be registered with person(s) other than either of the parents);
	✓ In the event of failure to register the child within one year, the child will be treated as 'Drop-out' from the census. In such case, the parent(s)/guardian(s) will have to report in person to the concerned <i>Dzongkhag/Thromde</i> to complete other formalities for registration.
	Must be reported to any of the Civil Registration Points within one year (now practiced within 30 days) after death of the person. Following are the required documents for death registration;
	✓ Duly filled and signed Death Registration Form ([BCRS-DR-01] [Annexure IV]);
	✓ Notification of Death/Documents related to death (death certificate/statement issued by health facilities) that has occurred in Bhutan and Death Certificate for death that has occurred overseas;
	✓ Statement of death issued by <i>Tshogpa</i> for death occurring outside health facility ([BCRS-SD-01] [Annexure IV]);
	✓ Original CID/SRP card of the deceased;
✓ Copy of CID/SRP of the requestor.	

could not be published due to lack of institutional arrangement and collaboration between the relevant partners.

## 2.2 LEGAL AND ADMINISTRATIVE ISSUES

### 2.2.1 Registration of Birth for Citizen

The Bhutan Citizenship Act, 1985 Clause 2 states

*"A person whose parents are both citizens of Bhutan shall be deemed to be a citizen of Bhutan by birth."*

In accordance with the provision of the Citizen Act, 1985, all children of Bhutanese parentage irrespective of whether born inside or outside Bhutan must be registered into the civil registration system within one year of birth. If

the child is not registered in the civil registration system within the stipulated time, the child's civil status becomes "dropout". Then the process to register the child becomes more cumbersome as it entails filling up individual registration form (BR-BCRS-01) and getting it endorsed from the local government officials justifying their inability to register the births on time. However, there is no penalty or late fees for such late registration.

The civil registration officials of the respective *Dzongkhags, Drungkhags, and Thromdes*, and Community Service Centre operators in the *Gewogs* register the birth and death as and when reported as well as during the annual census program carried out between November and January each year. The annual census program is an event where the census officials update the vital events such as births, deaths and transfers

of an individual from one household to another. This information compiled is submitted online for verification by the Civil Registration and Census officials (CRCO) at various stages. Once these documents are verified, the child gets registered into the civil registration system and a unique citizenship identity (CID) number against the child is generated by the system. This unique number is later used in issuing the CID card to the child upon reaching 15 years of age.

For the initial registration, there is a minimum requirement of vital information to be collected in addition to the CID card number of the parents.

### 2.2.2 Registration of Birth for Foreign National and Non-Bhutanese Spouse (Registration of an Immigrant Child)

The Immigration Rules and Regulations of the Kingdom of Bhutan 2015, Section 57 states

*"The parents of children born to Bhutanese and foreign spouse holding Immigration Card shall register their child with the department within one year of child's birth along with birth certificate and relevant identity documents of the parents. Certificate of Registration may be issued for one year to facilitate permit and visa."*

In accordance with the provision of immigration rules and regulations 2015, the department of immigration records all births occurring to foreign nationals and non-Bhutanese spouse in Bhutan within one year.

If the child is not registered within one year of birth, verification of report by the respective *dzongkhag* needs be done to carry out the registration as per the prescribed rules and regulations. However, there is no penalty or fine being imposed for such late reporting of births for registration.

### 2.2.3 Registration of Death for Citizens

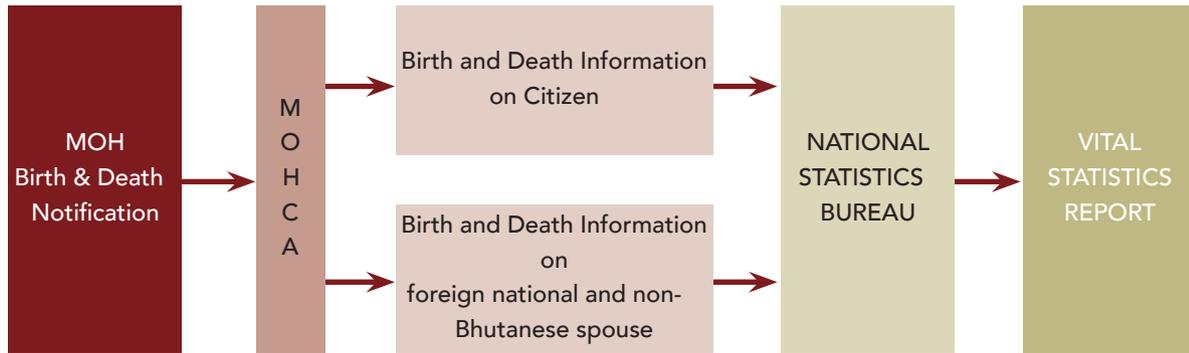
The Citizen Act does not specify a prescribed timeline by which the death of a citizen should be registered. However, most of the family members register the death of a person (above 8 years of age) within one year after the event has occurred. This is done mainly to claim rural life insurance from the relevant agencies to facilitate the funeral rites. The deaths that remain unregistered are mostly of those deaths that occur to persons below 8 years of age. Without any incentives, these deaths remain unregistered leading to low rate of completeness in death registration. However, efforts are being made to capture and update these events during the annual census.

### 2.2.4 Registration of Death for Foreign National and Non-Bhutanese Spouse

There is no specific provision in the immigration law requiring the registration of such events occurring among the foreigners or to non-Bhutanese spouse in Bhutan. However, an attempt has been made by the Department of Immigration to maintain records all reported deaths that occur to foreign nationals including non-Bhutanese spouse in Bhutan.

## 2.3 ORGANIZATIONAL STRUCTURE, REGISTRATION PROCESS AND INFORMATION FLOWS

Figure 2.1 the presents the organizational structure of information flows for developing the vital statistics report. To ensure there is continuous and timely flow of BCRS data from the provider (MoHCA) to the recipient (NSB) and to enable the timely publication of annual vital statistics report, a Memorandum of Understanding (MoU) is signed between the MoHCA and NSB on 9 October 2020 (annexure II). The MoH and Department of Immigration is also mandated to share information related to vital statistics.



**Figure 2.1** Organizational chart presenting information flows for developing VS Report

### 2.3.1 Registration Process for Births and Deaths

#### 2.3.1.1 Birth Registration Process for Citizen

To register a birth into BCRS, the doctor issue birth notification for births occurring inside health facility. For those births that occur outside health facility, the *tshogpa/thromde tshogpa* issue information on birth which is submitted to hospital for obtaining the birth notification/certificate. The applicant completes birth registration forms and gets the endorsement of the local government officials. This completed documents are submitted to the operator located at any of the registration points.

The operator scans the documents and enters the vital information of the child including parent's details into the computer system through online DCRC framework (Annexure III Figure 1 & 2) and submits the application online to verifier (L1) located at *Dzongkhag/Thromde* level. The verifier (L1) verifies the submitted application and further submits it to verifier level (L2) located at DCRC HQ or returns it to the operator. The verifier L2 verifies the application and submits it to the approver located at DCRC HQ or re-submits to the L1 verifier. The approver either approves or returns the application to L2. The online resubmissions of application to the preceding levels occur when the information is wrong or incomplete. Upon approval of the

application by the approver, the name of the child is registered into the BCRS, and unique CID number is generated by the system.

#### 2.3.1.2 Death Registration Process for Citizen

To register a death into the BCRS, doctors issue death notification for deaths occurring inside health facility. For those deaths occurring outside health facility, the *tshogpa/thromde tshogpa* issue statement of death. The applicant then completes death registration forms and gets the endorsement of the local government officials. The completed documents are submitted to the operator located at any of the registration points.

The operator scans the documents and updates the information in the online DCRC framework (Annexure III Figure 3 & 4) and submits the application online to the verifier (L1) located at *Dzongkhag/Thromde* level. The verifier (L1) verifies the submitted application and submits it to the approval level located at DCRC HQ. The approver verifies the submitted application and either approves or re-submits the application. Upon approval of the application, the name of the person is marked as "Deceased" in the BCRS.

#### 2.3.1.3 Birth Registration Process for Foreign Nationals and Non-Bhutanese Spouse

To register the births into Immigration Information and Monitoring System (IIMS), doctors issue

birth notification for births occurring inside health facility. For those births occurring outside health facility, the *tshogpa/thromde tshogpa*

issue information on birth and this information is delivered to hospital for obtaining the birth notification/certificate. The applicant then

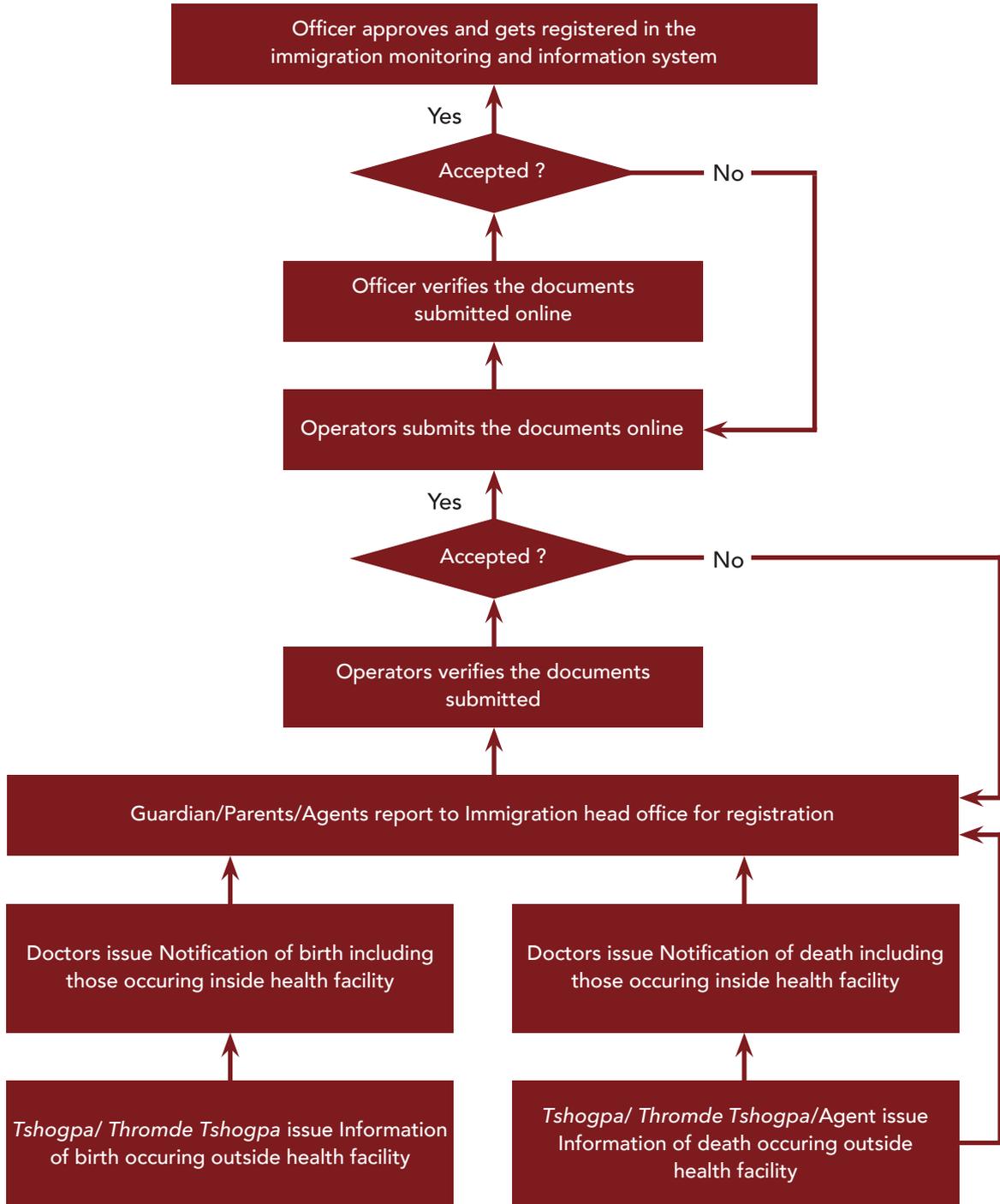


Figure 2.2 Birth and Death Registration for Foreign National and Non-Bhutanese Spouse

completes birth registration forms, and the completed documents are submitted to the operator located at the immigration head office.

The operator physically verifies the completed documents and then enters the birth information of the child including parent’s details into the computer system through the online IIMS and submits the application online to the immigration officer. The officer verifies the submitted application online and approves if it is in order or re-submits to operator. Upon approval of the application by the officer, the name of the child is registered into the IIMS.

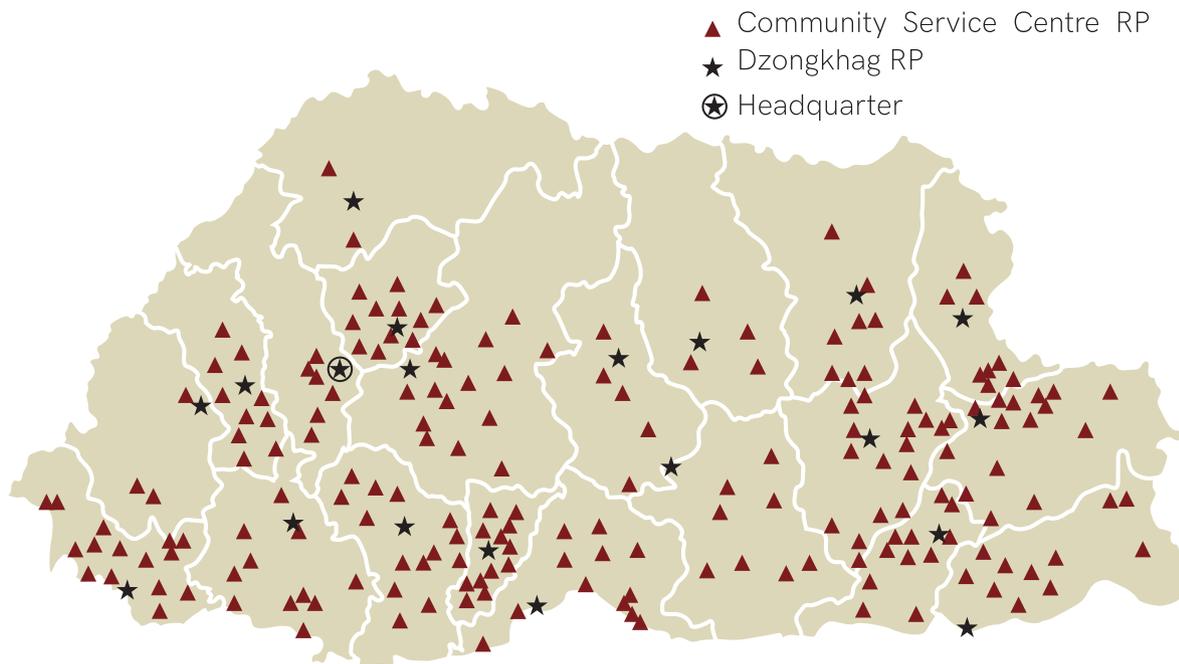
**2.3.1.4 Death Registration Process for Foreign Nationals and Non-Bhutanese Spouse**

To register death into IIMS, doctors issue death notification for deaths occurring inside health facility. For those deaths occurring outside health facility, the *tshogpa/thromde tshogpa* issue statement of death. The applicant then completes death registration forms. The completed documents are submitted to the operator located at the immigration head office.

The operator verifies the documents and update the information in the online IIMS and submits the application online to the immigration officer. The officer verifies the submitted application and either approves or re-submits the application. Upon approval of the application, the deceased is marked as “Cancelled” in the IIMS.

**2.3.2 Registration Points**

Bhutan has a total of 230 registration points (200 *Gewogs*, 4 *Drungkhags*, 4 *Thromde* offices, 20 *Dzongkhags*, and department head office for citizen’s registration and immigration head office for foreign national and non-Bhutanese spouse registration). The applicant/individual can report the birth and death to any of these registration points with the complete set of documents and duly signed birth/death registration forms for registration. Upon receipt of these documents, the officials located at these registration points issue the acknowledgement receipt, particularly for births confirming the receipt of the registration forms to initiate the process.



**Figure 2.3** Map showing the Registration Points in Bhutan

### 2.3.3 Time Allowed for Registration

Another subject of civil registration procedure relates to determining the time within which a vital event (births and deaths) must be registered by the parents/guardians/next of kin. However, the SoPs allow a duration of one year to register an event.

### 2.3.4 Live Births by Place of Occurrence and Place of Registration

In 2019, a total of 9,667 births occurred in Bhutan, out of which 3,948 births were in Thimphu, 1,076 births in Monggar and 942 births in Sarpang dzongkhags. On the contrary, Trashigang dzongkhag has registered the highest number of births with 1,078 followed by Monggar and Samtse dzongkhags with 848 and 796 live births respectively. While Gasa Dzongkhag has recorded lowest number both in terms of occurrence (8) as well as in registration (53) in 2019.

## 2.4 INCENTIVES AND DISINCENTIVES FOR REGISTRATION

The following are some of the factors that influenced the registration of vital events either positively or negatively (incentives and/or disincentives):

### 2.4.1 Incentives:

#### 1. Birth

It is not mandatory for one to have a nationality certificate or birth certificate to avail health services. However, a nationality/birth certificate (proof of child being registered with the civil registration) is required for a child to get school admission and for processing passport and other travel related documents.

#### 2. Death

One of the main reasons for registering the death by the family members within a year of death is to claim rural life insurance against the name of the deceased. The amount claimed from insurance facilitates the family members to perform funeral rites for the deceased person.

### 2.4.2 Disincentives

#### 1. Birth

The factors that negatively affect the registration of births on time is the difficulty in collecting official documents from the local authorities.

#### 2. Death

The rural life insurance could be claimed only for those persons aged 8 years and above. Therefore, the reporting of incidence of death below 8 years of age is low.

**Table 2.2** Number of Births by Place of Occurrence and Place of Registration, Bhutan 2019

Dzongkhag of Birth	Dzongkhag of Registration															Total					
	Bumthang	Chhukha	Dagana	Gasa	Haa	Lhuentse	Monggar	Paro	Pema Gatshel	Punakha	Samdrup Jongkhar	Samtse	Sarpang	Thimphu	Trashigang		Trashi Yangtse	Trongsa	Tsirang	Wangdue Phodrang	Zhemgang
Bumthang	90	0	3	0	0	5	3	1	3	0	4	2	2	0	8	4	4	1	1	4	135
Chhukha	3	246	42	3	8	9	45	17	40	13	34	124	31	6	68	24	3	25	15	22	778
Dagana	0	1	89	0	0	1	1	0	0	0	2	0	0	0	2	0	0	1	1	2	100
Gasa	0	0	0	4	0	0	0	1	0	0	0	0	0	0	1	0	0	2	0	0	8
Haa	0	4	1	0	25	0	2	3	8	2	4	2	1	0	2	0	0	2	1	2	59
Lhuentse	0	0	0	0	0	73	3	1	0	1	3	0	0	0	2	0	0	0	0	3	86
Monggar	16	4	4	0	2	111	454	3	69	5	42	12	4	1	224	94	8	5	0	18	1,076
Paro	3	12	12	0	7	9	13	59	9	11	12	15	9	1	11	12	9	8	12	10	234
Pema Gatsel	0	0	5	0	0	0	7	0	119	1	9	2	0	0	9	2	1	2	1	2	160
Punakha	0	3	4	11	1	6	5	6	3	102	7	5	5	1	4	0	4	8	10	1	186
Samdrup Jongkhar	0	1	2	0	0	1	14	0	36	1	226	4	2	0	24	9	1	2	0	3	326
Samtse	0	13	10	0	7	2	10	2	6	4	11	347	8	1	19	11	4	6	6	13	480
Sarpang	13	15	59	0	2	8	31	5	55	4	81	13	349	3	54	12	17	98	14	109	942
Thimphu	117	174	256	33	99	112	215	323	180	253	192	250	178	262	331	145	151	204	336	137	3,948
Trashigang	0	2	1	0	0	2	18	1	12	0	13	0	2	0	278	25	5	0	2	2	363
Trashi Yangtse	0	0	1	0	0	1	1	0	4	0	2	1	0	0	8	69	0	0	0	0	87
Trongsa	2	0	1	0	0	1	3	0	2	1	0	2	1	0	3	1	44	1	1	3	66
Tsirang	0	0	3	0	0	1	3	0	1	0	1	1	4	0	3	0	1	89	0	2	109
Wangdue Phodrang	5	6	20	2	3	4	10	0	6	9	8	9	14	5	14	4	4	13	120	3	259
Zhemgang	0	1	0	0	0	0	0	0	1	0	1	1	2	0	1	1	4	1	0	79	92
Not Stated	5	5	3	0	3	4	10	23	5	9	15	6	6	40	12	6	4	9	5	3	173
Total	254	487	516	53	157	350	848	445	559	416	667	796	618	320	1,078	419	264	477	525	418	9,667

# CHAPTER 3 : DATA QUALITY, TIMELINESS AND COMPLETENESS OF REGISTRATION

## 3.1 QUALITY OF DATA

In the past births and deaths registration could be done only during the annual census event which is carried out between November and January. Starting in 2011, under the auspices of G2C project initiatives, BCRS was made into an online web-based system enabling the birth and death registration possible at any time of the year with minimal errors. Further, the system provides a continuous, real-time, and dynamic flow of information on major events such as births and deaths happening in the country.

### 3.1.1 Data Source

The dataset on live births and deaths were acquired separately from the DCRC and the data on total population figure was sourced from the population projection (2017-2047) report published by NSB. The information on the top ten leading cause of death is sourced from the 2020 annual health bulletin published by the MoH.

### 3.1.2 Data Quality Assessment

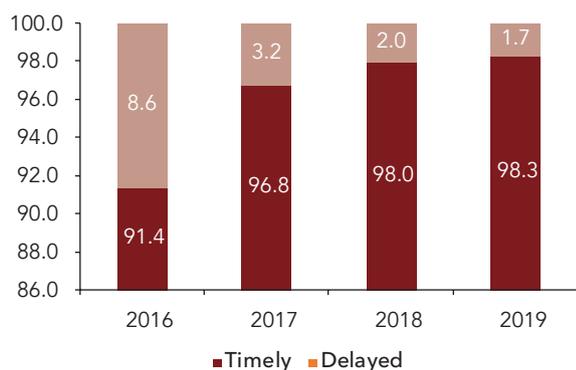
To ensure that the data acquired is error-free, each of the variables in the dataset were studied carefully and wherever required, data cleaning was performed. The main thrust of the data quality assessment was to check for data consistency, its duplicates, erroneous recording

on date of occurrence vis-à-vis the date of registration, duration of registration, missing information, and inconsistent values. Perhaps, it is obvious to have some duplicate entries which were cleaned, while some needed queries with civil registration officers to correct it. All erroneous entries were dealt with in accordance with the nature of the error.

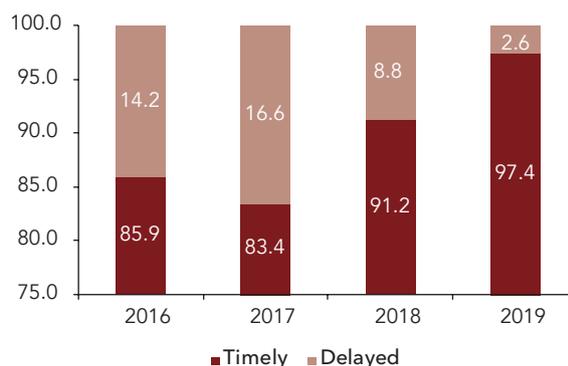
## 3.2 TIMELINESS OF REGISTRATION

The Citizen Act requires all births in Bhutan to be registered within one year after the event has occurred. As result of the requirements, the registration trend has been increasing over the years. Of the total (9,667) registered births that occurred in 2019, 9,503 or 98.3% were registered within one year, while only 164 live births were registered after one year (delayed registration) (Figure 3.1). The term registration here would mean the initiation of submitting the required forms/documents to the competent civil registry authority to register either the birth or the death and not necessarily the end product (the approval of the registration).

Similarly, 97.4% of registered deaths (3,135) that occurred in 2019 were registered within one year (Figure 3.2). Only 85 (2.6%) deaths registered after one year of occurrence. In both the cases, a drastic improvement was seen starting 2017.



**Figure 3.1** Timeliness of Registration of Live Births, Bhutan 2016-2019



**Figure 3.2** Timeliness of Registration of Deaths, Bhutan 2016-2019

**Table 3.1** Mean Duration of Registration, Bhutan 2016-2019

Year	Live births	Deaths
	Mean number of days	Mean number of days
2016	201	168
2017	169	164
2018	160	105
2019	162	65

The mean number of days taken to register an event (live births) was 162 days in 2019, while it took almost 200 days in 2016. Looking at the pattern, there is an improvement in number of days taken to register the event in the past five years.

Likewise, the mean number of days taken to register deaths was 65 days in 2019. The same event took 168 days in 2016.

### 3.3 COVERAGE AND REGISTRATION COMPLETENESS

In terms of geographic coverage, Bhutan has reached 100% for both birth and death registration. However, when it comes to its completeness rate, it remains comparatively low. Completeness is defined as a measure of the extent to which births and deaths that occur in country each year are registered by the civil registration system.

The completeness of events can be used to monitor the performance of the civil registration system. It is computed by taking the registered events (births and deaths) from the BCRS as the numerator and expected events (births and deaths) estimated by NSB as the denominator.

$$\text{Completeness} = \frac{\text{Number of registered vital events within the year of occurrence}}{\text{Estimated number of vital events within the year}} \times 100$$

The table 3.2 presents the completeness rate for birth and death registration in Bhutan for the year 2019. Compared to death registration completeness, birth registration is better with 77.9% as against 63.1% for deaths in 2019.

**Table 3.2** Birth and Death Registration Completeness Rates, Bhutan 2019

	Births	Deaths
Registered	9,667	3,220
Estimate *	12,407	5,105
Completeness rate	77.9	63.1

\*Source: Population Projection Report, NSB

**Table 3.3** Matrix of the Births by Year of Occurrence and Year of Registration, Bhutan 2016-2019

	Years	Year of registration					Total
		2016	2017	2018	2019	2020	
Year of Occurrence (Births)	2016	4,536	4,838	325	15	4	9,718
	2017	0	5,162	4,615	56	8	9,841
	2018	0	0	6,002	4,678	31	10,711
	2019	0	0	0	5,463	4204	9,667
	Total	4,536	10,000	10,942	10,212	4,247	39,937

### 3.3.1 Matrix of Births by Year of Occurrence and Year of Registration

Table 3.3 presents births by year of occurrence and year of registration for the years 2016-2019. It is observed that most of the births were registered in the same year they occurred, while there are some that are registered in the following year and beyond.

In 2019, out of 9,667 births, 5,463 were registered in the same year, while 4,204 births were registered in the following year. Similar pattern is observed for all the preceding years.

### 3.3.2 Matrix of the Deaths by Year of Occurrence and Year of Registration

Table 3.4 presents the cross-tabulation of deaths by year of occurrence and year of registration

for the years 2016-2019. Out of the registered deaths which occurred in the year 2019 (3,220), a majority (2,654) of them were registered in the same year and only 566 deaths were registered in the following year (2020).

### 3.3.3 Completeness Rates over Time

The completeness rate for both birth and death registration has remained steady over the years (table 3.5). However, in 2018 the completeness rate for birth registration was comparatively high (86.4%). The subpopulations that are most likely to be undercounted in vital registration are fetal and infant deaths and deaths below 8 years of age.

**Table 3.4** Matrix of the Deaths by Year of Occurrence and Year of Registration, 2016-2019

	Years	Year of registration					Total
		2016	2017	2018	2019	2020	
Year of Occurrence (Deaths)	2016	2,501	663	221	125	31	3,541
	2017	0	2,311	742	249	65	3,367
	2018	0	0	2,509	700	155	3,364
	2019	0	0	0	2,654	566	3,220
	Total	2,501	2,974	3,472	3,728	817	13,492

**Table 3.5** Birth and Death Registration Completeness over time

Year	Registered Births	Registered within one month	Estimated* birth	Completeness(%)	Registered deaths	Registered within one month	Estimated* death	Completeness(%)
2016	9,718	358	12,359	78.6	3,541	1,177	5,185	68.3
2017	9,841	391	12,342	79.7	3,367	1,031	5,178	65.0
2018	10,711	475	12,390	86.4	3,364	1,544	5,095	66.0
2019	9,667	346	12,407	77.9	3,220	1,686	5,105	63.1

Source: Population Projection Report, NSB

# CHAPTER 4 : LIVE BIRTHS

In 2019 there were a total of 9,667 births which is a decrease of 10.8% as compared to 10,711 births in 2018. The CBR declined from 14.6 (2018) to 13.0 (2019) per thousand population. There were more males than females. Out of the total live births in 2019, 4,920 were males and 4,747 were females giving the sex ratio of 104. The sex ratio at birth is calculated as the number of males per 100 females. The number usually ranges between 103-107 males per 100 females. Numbers very different from this range may indicate faulty registration procedures since Bhutan does not have preference for male births over female births.

The number of births that occurred in 2019 and were registered (9,667) is lower than the preceding years since some births occurring in 2019 may still be registering in the following

year. The highest number of births registration was observed in the year 2018 with 10,711 births and lowest in 2019 with 9,667 births.

In all the years, the registered live births for males are higher than females (Table 4.1).

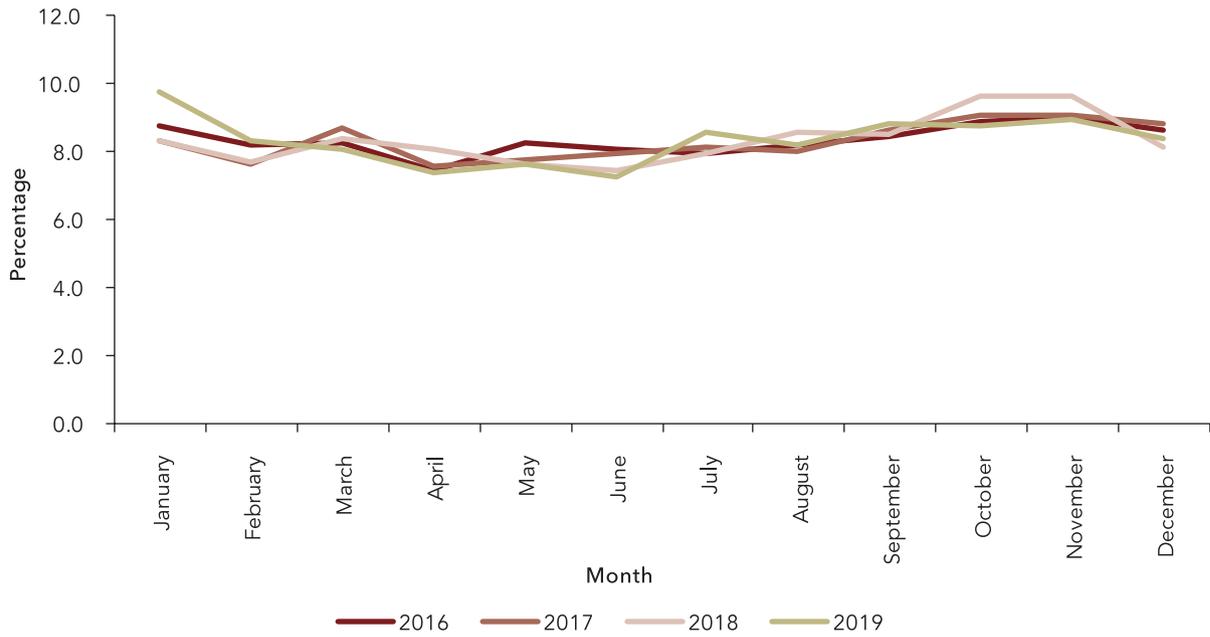
## 4.1 BIRTHS BY MONTH OF OCCURRENCE

The number of births varied seasonally with a peak observed during the winter months in all the years under study. In 2019, the maximum number of births was observed in January (9.8%). The lowest rate was observed in the month of June (7.2%). Most of the births have occurred in the month of November (9.0%) and January (9.8%) for the year 2019 (Figure 4.1).

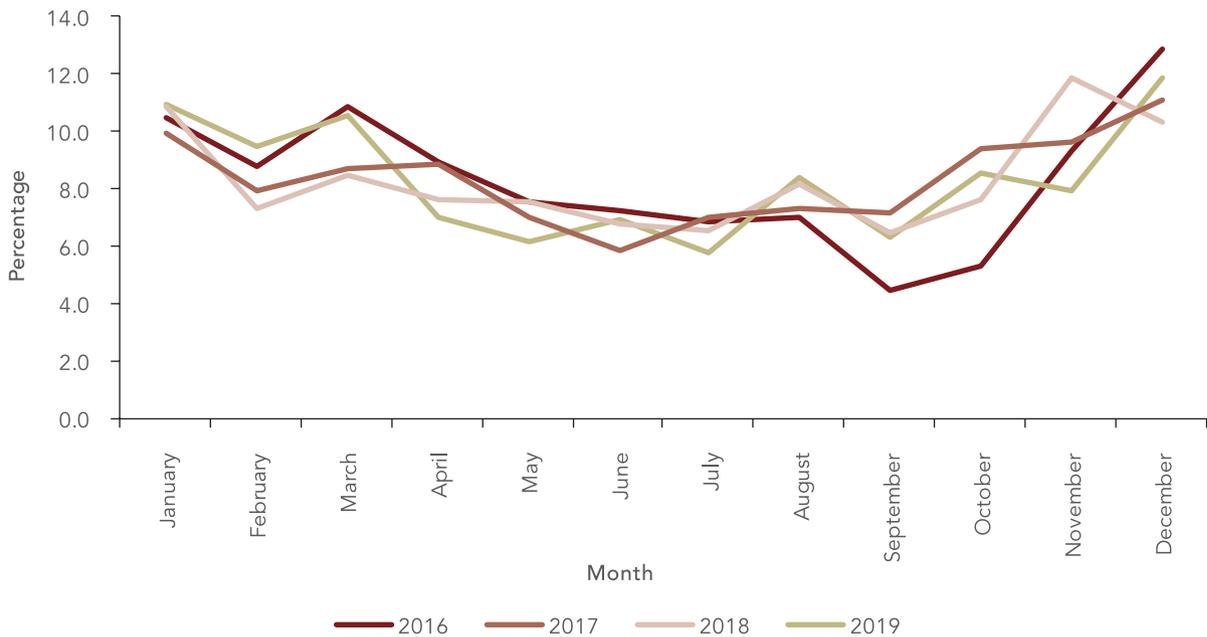
**Table 4.1** Summary Statistics on Fertility by Year of Occurrence

Indicator	2016	2017	2018	2019
Registered live births (number)	9,718	9,841	10,711	9,667
Males	5,003	5,043	5,442	4,920
Females	4,715	4,798	5,269	4,747
Sex ratio at birth	106	105	103	104
Crude birth rate (per 1,000 population)	13.4	13.5	14.6	13.0
Population*	726,596	727,145	734,374	741,672

\* Source: National Population Projection Report 2017-2047



**Figure 4.1** Percentage of Births by Month of Occurrence, Bhutan 2016-2019

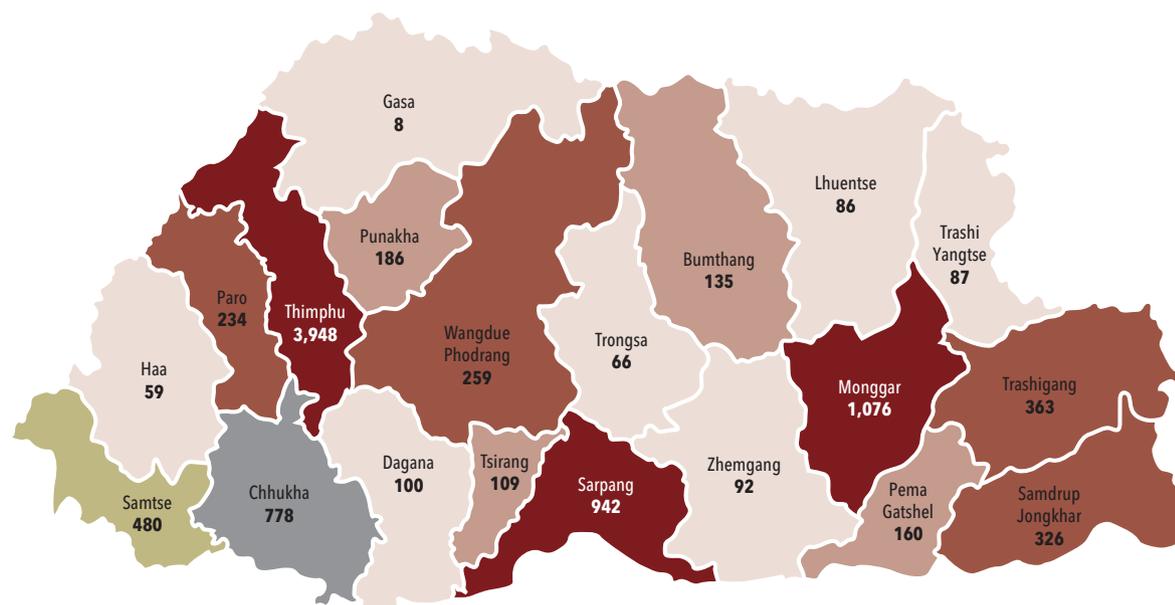


**Figure 4.2** Percentage of Births by Month of Registration, Bhutan 2016-2019

#### 4.2 BIRTHS BY MONTH OF REGISTRATION

Of the total births in 2019, most of them were registered in the months of December (11.1%)

followed by January (9.9%) and November (9.7%). These are the months when the annual census is undertaken by the government officials.



**Figure 4.3** Number of Births by Place of Occurrence, Bhutan 2019

The lowest birth registration was recorded in the months of June (5.9%) and July (7.0%). However, the trends and pattern of birth registration observed is similar in all the years with a slight difference in 2016 (Figure 4.2).

### 4.3 BIRTHS BY PLACE OF OCCURRENCE

The figure 4.3 presents the map of the number of live births by *dzongkhag* for 2019. It was observed that most of the births have occurred in three *dzongkhags* where the tertiary hospitals are located: Thimphu (3,948), Monggar (1,076) and Sarpang (942). A high number of births also occurred in Chhukha (778), while Gasa (8) had the lowest number of births (Table 4.2).

### 4.4 BIRTHS BY PLACE OF USUAL RESIDENCE OF MOTHER

Looking at the births by place of usual residence of mother, it is observed that most of the mothers who gave birth usually resides in Thimphu (19.7%) followed by in Chhukha (7.5%) and Samtse (6.5%) Dzongkhags. A little less than

**Table 4.2** Number of Births by Place of Occurrence and Sex, Bhutan 2019

Dzongkhag	Sex		Total
	Male	Female	
Bumthang	74	61	135
Chhukha	402	376	778
Dagana	39	61	100
Gasa	3	5	8
Haa	25	34	59
Lhuentse	46	40	86
Monggar	552	524	1,076
Pema Gatshel	86	74	160
Punakha	96	90	186
Samdrup Jongkhar	155	171	326
Samtse	233	247	480
Sarpang	497	445	942
Thimphu	2,016	1,932	3,948
Trashigang	187	176	363
Trashi Yangtse	45	42	87
Trongsa	32	34	66
Tsirang	63	46	109
Wangdue Phodrang	118	141	259
Zhemgang	41	51	92
Not Stated	87	86	173
Bhutan	4,920	4,747	9,667

**Table 4.3** Number of Births by Place of Usual Residence of Mother, Bhutan 2019

Dzongkhag	Sex			Percent
	Male	Female	Total	
Bumthang	127	108	235	2.4
Chhukha	371	356	727	7.5
Dagana	170	180	350	3.6
Gasa	33	29	62	0.6
Haa	63	70	133	1.4
Lhuentse	120	118	238	2.5
Monggar	334	289	623	6.4
Paro	278	244	522	5.4
Pema Gatshel	153	151	304	3.1
Punakha	149	166	315	3.3
Samdrup Jongkhar	265	238	503	5.2
Samtse	313	319	632	6.5
Sarpang	227	245	472	4.9
Thimphu	984	925	1,909	19.7
Trashigang	341	327	668	6.9
Trashi Yangtse	142	115	257	2.7
Trongsa	110	118	228	2.4
Tsirang	125	117	242	2.5
Wangdue Phodrang	251	277	528	5.5
Zhemgang	135	130	265	2.7
Not Stated	229	225	454	4.7
Bhutan	4,920	4,747	9,667	100.0

one percent reside in Gasa Dzongkhag (0.6%). About 5.0% of the mothers have not reported their place of usual residence (Table 4.3).

#### 4.5 SEX RATIO AT BIRTH

Table 4.4 presents sex ratio at birth by region. In 2019, the sex ratio at birth is 104 males per 100 females. In the central region, the sex ratio at birth is 107 males per 100 females, compared to 103 males per 100 females in western region and sex ratio at 104 for eastern region. Unlike in some other countries where the sex ratio is greatly influenced by the preference of male births over female births, Bhutan does not have any such preferences and higher sex ratio in any *dzongkhag* is a natural phenomenon.

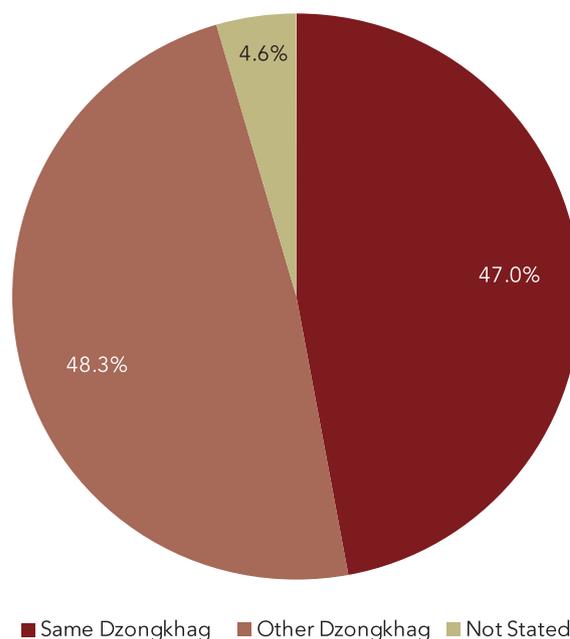
**Table 4.4** Sex Ratio at Birth, Bhutan 2019

Region	Sex			Sex Ratio at Birth
	Male	Female	Total Births	
West	3,016	2,936	5,952	103
Central	746	698	1,444	107
East	1,071	1,027	2,098	104
Not Stated	87	86	173	101
Total	4,920	4,747	9,667	104

#### 4.6 BIRTHS BY PLACE OF OCCURRENCE AND PLACE OF USUAL RESIDENCE OF MOTHER

The number of births by place of occurrence and place of usual residence of mother is used to obtain information on whether mothers gave birth in the same *dzongkhag* where they usually resided or whether it was in another *dzongkhag*.

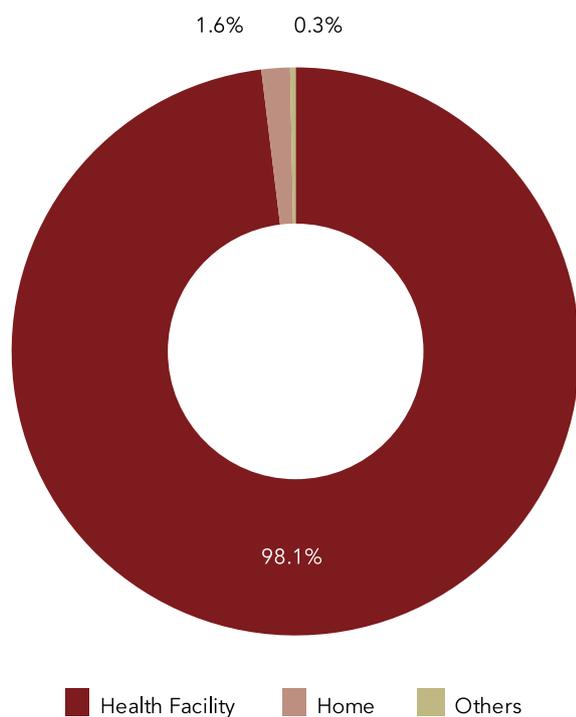
It is observed that 47.0% of mothers gave birth in the *Dzongkhag* where they usually reside, while 48.3% of mothers travelled to another *dzongkhag* for delivery, and some 5.0 % have not stated their place of occurrence (Figure 4.4).

**Figure 4.4** Percentage of Births by Place of Occurrence and Place of Usual Residence of Mother, Bhutan 2019

**Table 4.5** Number of Births by Age of Mother, Bhutan 2019

Mother's Age	Sex			Percent
	Male	Female	Total	
<19	147	130	277	2.9
20-24	1,026	934	1,960	20.3
25-29	1,626	1,539	3,165	32.7
30-34	1,310	1,350	2,660	27.5
35-39	595	597	1,192	12.3
40-44	188	166	354	3.7
45+	28	31	59	0.6
Total	4,920	4,747	9,667	100.0

In 2019, a total of 2,255 mothers gave birth in Thimphu where it was not their usual place of residence. Likewise, Monggar (572), Chhukha (335) and Sarpang (557) Dzongkhags also observed the similar pattern. However, there were also large number of births that occurred in the same *dzongkhag* where the mother usually resides (Table B3).

**Figure 4.5** Percentage of Births by Site of Occurrence, Bhutan 2019

## 4.7 BIRTHS BY AGE OF MOTHER

Table 4.5 presents the distribution of registered births that occurred in 2019 by age of mother. The highest percentage (32.7%) of births have occurred among the mothers whose age ranges between 25 and 29 years, followed by 27.5% in the ages 30-34 years.

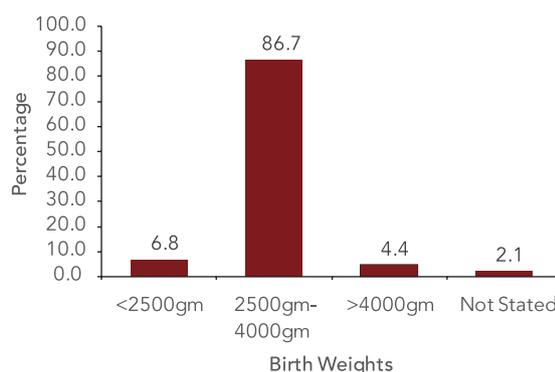
## 4.8 BIRTHS BY SITE OF OCCURRENCE

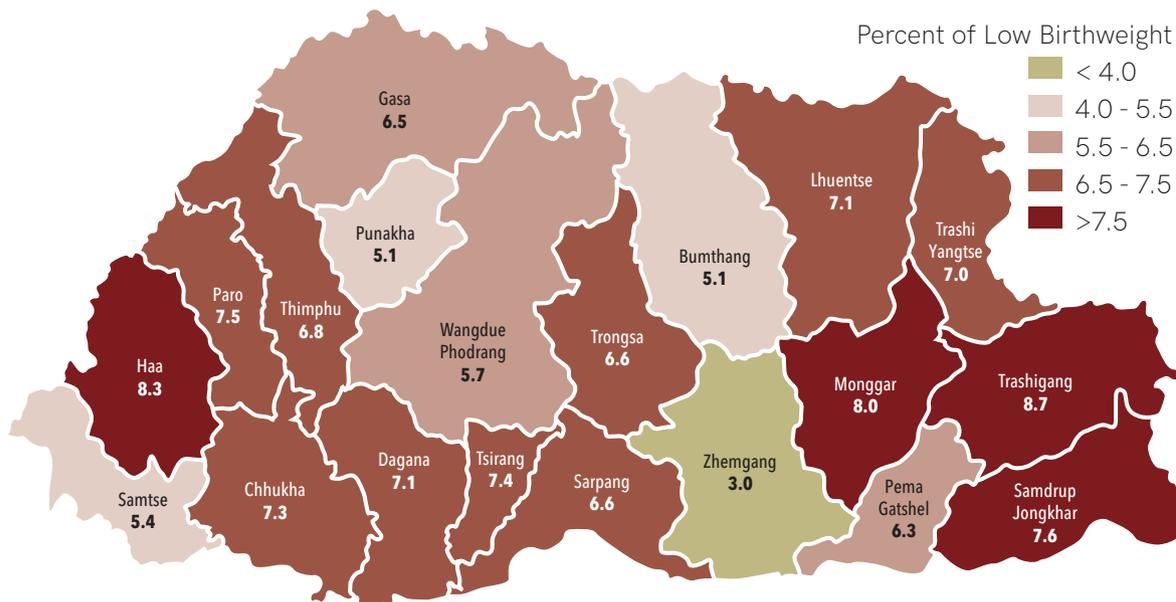
With increased accessibility to medical facilities, the majority of the births in 2019 took place at a health facility (98.1%) followed by some births taking place at home (1.6%). Very few births took place at other (0.3%) places, which includes births on the way to health facility and elsewhere.

## 4.9 BIRTHS BY BIRTH WEIGHT

As per the UN *Principles and Recommendations for a Vital Statistics System*, birth weight is the first weight of a fetus or newborn obtained immediately after birth, preferably within the first hour of life.

The World Health Organization (WHO) defines low birthweight as the weight of a newborn lower than 2,500 grams. In 2019, of the total (9,667) births, 91.1% weighed above the low birthweight cut-off recommended by WHO, while about 7.0% of the births fall in the low birthweight category (Figure 4.6).

**Figure 4.6** Percentage Distribution of Births by Birth Weight, Bhutan 2019



**Figure 4.7** Percentage of Low Birthweight and Place of Usual Residence of Mother, Bhutan 2019

#### 4.9.1 Birth Weight by Place of Usual Residence of Mother

Of the total births within *dzongkhags*, most of the mother who gave low birthweight birth resides in Trashigang (8.7%) followed by Haa (8.3%), Monggar (8.0%) and Samdrup Jongkhar (7.6%) Dzongkhags. On the contrary, Zhemgang (3.0%) Dzongkhag had the lowest percentage of low birthweight births in 2019 Figure 4.7).

#### 4.9.2 Birth Weight by Site of Occurrence

In 2019, most of the birth have occurred at a health facility (98.1%) while about 2.0% of the births have occurred at home. About 10.0% (15) of births occurring at home are low birthweight

while about 7.0% (639) of birth occurring in the health facility are low birthweight (Table 4.6).

#### 4.9.3 Birth Weight by Age of Mother

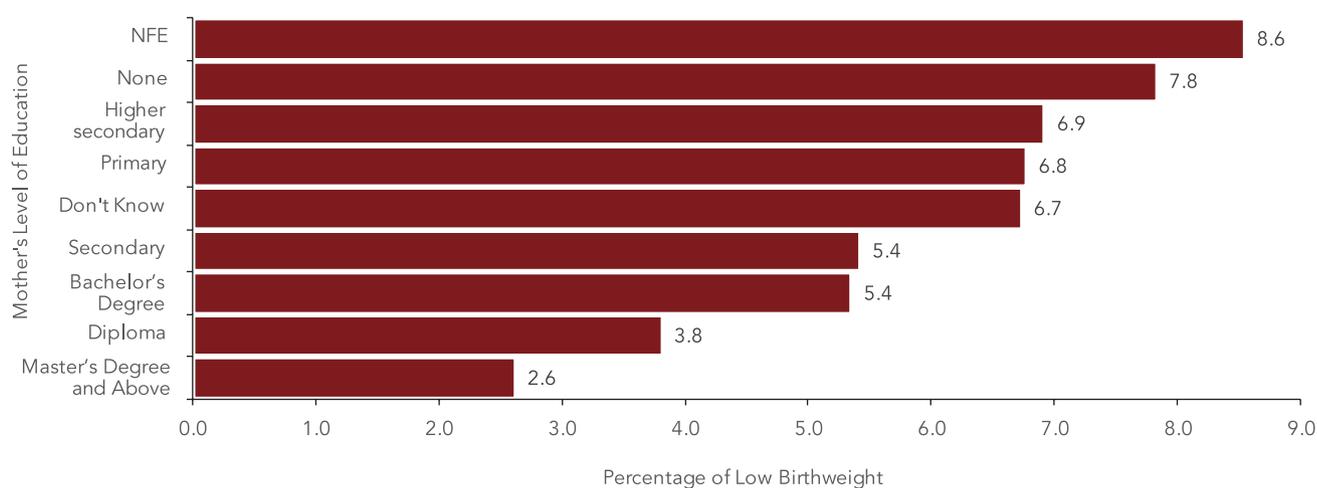
Most (80.5%) of the mothers are between ages 20 and 34. Table 4.7 presents the age of the mother and the birth weights. Around 9.0% of the births in the 15-24 years of age of mother are low birthweight as compared to about 6.0% of births for mothers in the age group 25-34 years. Like the younger mothers, the births to mothers above 35 years of age also had a high percent (8.6%) of low weight births.

**Table 4.6** Percentage of Births by Site of Occurrence and Birth Weight, Bhutan 2019

Site of Occurrence	Less than 2500 gm		2500gm-4000 gm		4000 gm+		Not Stated		Total	
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent
Health Facility	639	6.7	8,279	87.3	417	4.4	145	1.5	9,480	100.0
Home	15	9.6	100	63.7	8	5.1	34	21.7	157	100.0
Others	2	6.7	5	16.7	2	6.7	21	70.0	30	100.0
Total	656	6.8	8,384	86.7	427	4.4	200	2.1	9,667	100.0

**Table 4.7** Birth Weight by Age of Mother, Bhutan 2019

Mother's Age Group	Less than 2500 gm		2500 gm-4000 gm		4000 gm+		Not Stated		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<19	27	9.8	237	85.6	7	2.5	6	2.2	277	100.0
20-24	150	7.7	1,721	87.8	57	2.9	32	1.6	1,960	100.0
25-29	178	5.6	2,793	88.3	140	4.4	54	1.7	3,165	100.0
30-34	157	5.9	2,300	86.5	144	5.4	59	2.2	2,660	100.0
35-39	111	9.3	988	82.9	55	4.6	38	3.2	1,192	100.0
40-44	28	7.9	293	82.8	22	6.2	11	3.1	354	100.0
45+	5	8.5	52	88.1	2	3.4	0	0.0	59	100.0
Total	656	6.8	8,384	86.7	427	4.4	200	2.1	9,667	100.0

**Figure 4.8** Percentage of Low Birthweight by Mother's Level of Education, Bhutan 2019

#### 4.9.4 Birth Weight by Mother's Level of Education

Figure 4.8 presents the percentage of births with low birthweight and mother's level of education. It is observed that with the increasing level of the mother's education, the number of babies born with low birthweight decreases. A total of 236 births were born to mothers who have non-formal education (NFE) or no education which accounts for about 8.0% of the mothers in that education category.

#### 4.10 BIRTHS BY TYPE OF BIRTH

Of the total of 9,667 births in 2019, 9,489 birth were single births, while 178 are twin births. Most of the twin births were to the mothers of age 20-39 years (Table 4.8).

**Table 4.8** Birth Type by Mother's Age, Bhutan 2019

Mother's Age	Single	Twin	Total
<19	269	8	277
20-24	1,924	36	1,960
25-29	3,117	48	3,165
30-34	2,622	38	2,660
35-39	1,158	34	1,192
40-44	342	12	354
45+	57	2	59
Total	9,489	178	9,667

Almost 40.0% of twin births were with low birthweight, while only about 6.0% of the single births fall under the low birthweight category (Table 4.9).

**Table 4.9** Percentage of Births by Birth Type and Birth Weight, Bhutan 2019

Birth Type	Less than 2500 gm		2500-4000 gm		4000 gm+		Not Stated	
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent
Single	588	6.2	8,292	87.4	425	4.5	184	1.9
Twin	68	38.2	92	51.7	2	1.1	16	9.0
Total	656	6.8	8,384	86.7	427	4.4	200	2.1

### 4.11 BIRTHS BY BIRTH ORDER

Little less than half (40.4%) of the births in 2019 were of first (child) order birth followed by 32.0% second order birth. With the increasing birth order, the number of births reduces. There were 3 births with birth order 10 or greater in 2019 (Figure 4.9).

### 4.12 BIRTH INTERVAL

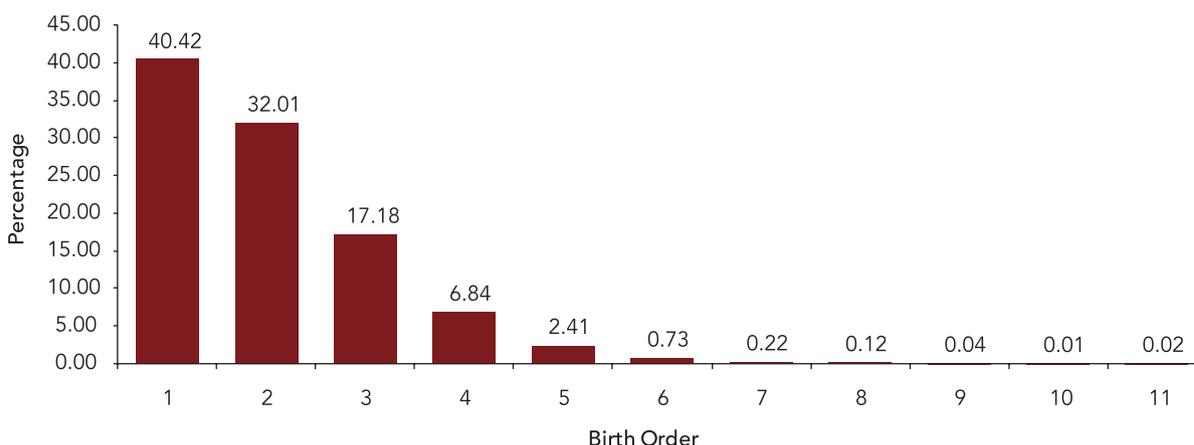
The birth interval is the time in months between the last delivery of a live birth and the previous date of delivery. Information on birth interval may be collected directly or calculated using the data. For this report, the birth interval was calculated based on the date of birth of the last birth and the previous birth of the same mother.

In 2019, out of the total 9,667 live births 3,907 births are of first order. The birth interval of the rest of the 5,760 births are presented in table 4.10

**Table 4.10** Interval between Last Birth and Previous Live Birth, Bhutan 2019

Birth Interval	Numbers	Percent
Less than 12 months	8	0.1
12-17 months	87	1.5
18-23 months	228	4.0
24-29 months	292	5.1
30-35 months	364	6.3
3 years	773	13.4
4 years	916	15.9
5-9 years	2,151	37.3
10+ years	878	15.2
Not Stated	63	1.1
Total	5,760	100.0

A little more than a third (37.3%) of the births occurred between 5 to 9 years after the previous birth, followed by after 4 years (15.9%) of the previous birth. There were only few births that have occurred within 12 months of the previous birth while 15.2% births have occurred after 10 years and more.



**Figure 4.9** Percentage of Births by Birth Order, Bhutan 2019

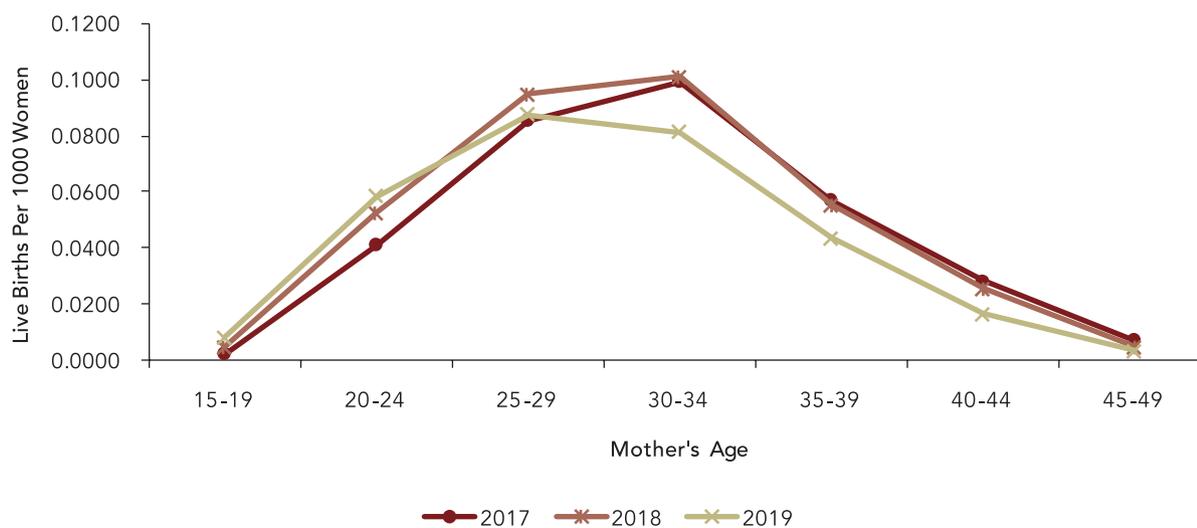
A high proportion (25.0%) of births with birth interval lower than 12 months falls under the underweight category as compared to the other birth interval with more than 12 months birth intervals (Table B9).

### 4.13 AGE-SPECIFIC FERTILITY RATE

The Age-Specific Fertility Rates (ASFR) is computed using the births from the BCRS and the total number of mothers in the age range 15-49 years from the population estimates of the NSB. Within the range of 15-49 years, there are marked differences in the fertility of women of different ages. For this reason, it is customary

to calculate fertility rates for each age group. Typically, the age specific rates are low or moderate in the 15-19 age group, highest in the twenties, and then decline to moderate levels for women in their thirties. Rates after 39 years are usually low.

The figure 4.10 presents ASFR for 2017-2019. It is observed that the highest fertility rate was among mothers of age group 25-29 and 30-34 years and thereafter it declines gradually. It also indicates the delay in giving births as well as the increase in age at marriage.

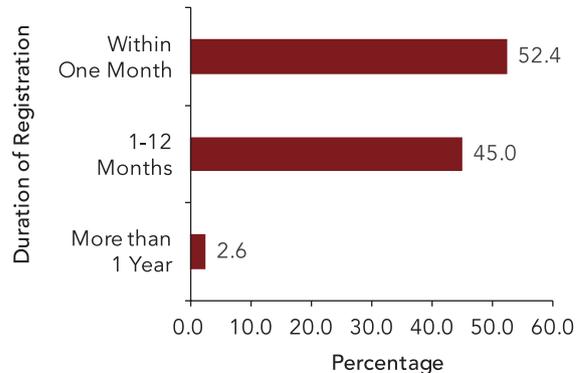


**Figure 4.10** Age-Specific Fertility Rates, Bhutan 2017-2019

## CHAPTER 5 : DEATHS

The number of deaths in 2019 was 3,220, which is a decrease of 4.5 % as compared to 3,364 in 2018. There were more deaths among males than females. Out of the total deaths in 2019, 1,770 were males and 1,450 were females. The Crude Death Rate (CDR) has slightly declined from 4.6 (2018) to 4.3 (2019) per thousand population (mid-year), possibly due to either delayed registration or not registering at all. The calculated CDR using the observed data from CRVS was about 4 deaths per 1000 mid-year population in 2019, reflecting the low level of completeness of death registration (63.1%) (Table 5.1).

observed that most of deaths were registered within one year after the occurrence of the event. However, there are also deaths (2.6%) that are registered even after one year of the occurrence of the event (Figure 5.1).



**Figure 5.1** Duration of Registration between Date of Occurrence and Date of Registration, Bhutan 2019

### 5.1 TIMELINESS OF DEATH REGISTRATION

By duration of registration between date of occurrence and date of registration, it was

**Table 5.1** Summary Statistics on Mortality by Year of Occurrence

Indicator	2016	2017	2018	2019
Registered deaths (number)	3,541	3,367	3,364	3,220
Males	1,953	1,836	1,833	1,770
Females	1,588	1,531	1,531	1,450
Population*	726,596	727,145	734,374	741,672
Crude death rate (per 1,000 population)	4.9	4.6	4.6	4.3

\* Source: Population projection Report 2017-2047, NSB



**Figure 5.2** Percentage of Deaths by Month of Occurrence and Month of Registration , Bhutan 2019

## 5.2 DEATHS BY MONTH OF OCCURRENCE AND MONTH OF REGISTRATION

Figure 5.2 presents the percentage of deaths by month of occurrence and month of registration for 2019. The death registration over the time has been fluctuating with peaks observed during the winter months (December-January). It dropped sharply in the month of April and thereafter maintained steady rate of registration. A similar pattern is also observed for the occurrence, except that the percentage of death between July and November is consistent. The high rate of death registration in December and January could be because of the annual vital events update done by the CRCO of the respective *dzongkhags/Drungkhag/thromdes*.

## 5.3 DEATHS BY AGE AND SEX

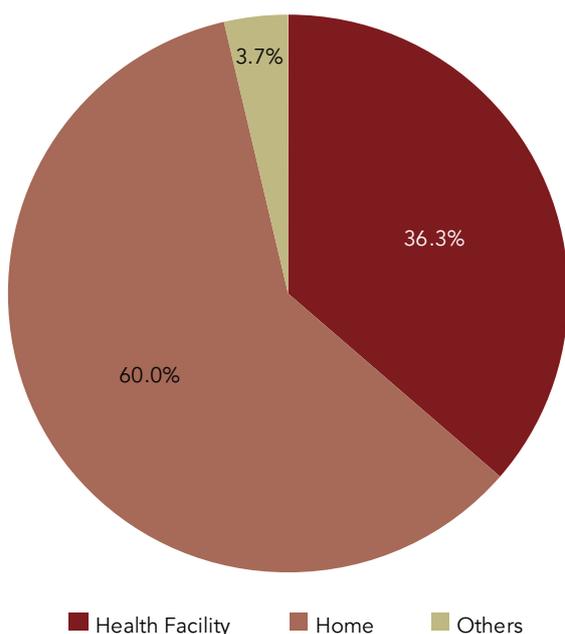
Table 5.2 presents the number of deaths by age and sex of the decedent for the year 2019. Of the registered deaths that occurred in 2019, 1,770 were males and 1,450 females.

In most of the age groups the proportion of deaths is higher for males than females, except for those aged 70+. It is also observed that the number of

deaths increases with increasing age for both the sexes and in all the age groups with exceptions of some fluctuation in mid-childhood and early teens.

**Table 5.2** Percentage of Deaths by Age Group and Sex, Bhutan 2019

Age Group	Number	Sex		
		Male	Female	Total
Less than 1	15	66.7	33.3	100.0
1-4	31	74.2	25.8	100.0
5-9	40	52.5	47.5	100.0
10-14	28	60.7	39.3	100.0
15-19	41	53.7	46.3	100.0
20-24	74	67.6	32.4	100.0
25-29	93	71.0	29.0	100.0
30-34	126	62.7	37.3	100.0
35-39	126	57.1	42.9	100.0
40-44	167	61.7	38.3	100.0
45-49	162	61.7	38.3	100.0
50-54	180	55.6	44.4	100.0
55-59	191	57.1	42.9	100.0
60-64	225	59.1	40.9	100.0
65-69	225	55.6	44.4	100.0
70-74	277	49.8	50.2	100.0
75-79	357	45.1	54.9	100.0
80-84	365	53.2	46.8	100.0
85+	497	49.7	50.3	100.0
Total	3,220	55.0	45.0	100.0



**Figure 5.3** Percentage of Deaths by Site of Occurrence, Bhutan 2019

**Table 5.3** Percentage of Deaths by Place of Occurrence and Site of Occurrence, Bhutan 2019

Dzongkhag	Site of Occurrence			Total
	Health Facility	Home	Others	
Bumthang	17.7	79.4	2.9	100.0
Chhukha	30.6	62.2	7.2	100.0
Dagana	18.1	80.6	1.4	100.0
Gasa	0.0	88.9	11.1	100.0
Haa	35.6	57.8	6.7	100.0
Lhuentse	15.2	83.7	1.1	100.0
Monggar	34.0	61.8	4.2	100.0
Paro	22.9	76.4	0.7	100.0
Pema Gatshel	6.6	90.1	3.3	100.0
Punakha	19.2	78.7	2.1	100.0
Samdrup Jongkhar	27.3	70.1	2.6	100.0
Samtse	23.8	67.5	8.7	100.0
Sarpang	55.9	39.4	4.7	100.0
Thimphu	82.0	17.1	0.9	100.0
Trashigang	12.1	84.4	3.5	100.0
Trashi Yangtse	8.0	87.2	4.8	100.0
Trongsa	13.4	82.1	4.5	100.0
Tsirang	34.2	61.8	4.0	100.0
Wangdue Phodrang	26.4	68.9	4.7	100.0
Zhemgang	13.5	85.7	0.8	100.0
Outside Bhutan	67.6	8.1	24.3	100.0
Bhutan	36.3	60.0	3.7	100.0

### 5.4 DEATHS BY SITE OF OCCURENCE

Figure 5.3 presents the percentage of deaths by site of occurrence for the year 2019. It indicates that more deaths occur at home (60.0%) than in the hospitals (36.3%), while about 4.0% of the deaths occur elsewhere (on the way to hospital, unknown places, etc).

### 5.5 DEATHS BY SITE OF OCCURENCE AND PLACE OF OCCURENCE

Majority of the deaths took place at home (60.0%) in the year 2019. In most of the *dzongkhags*, higher proportion of deaths have occurred at home, except for Thimphu Dzongkhag (82.0%) and death occurring outside Bhutan (67.6%) where most deaths have occurred in the health facility (Table 5.3).

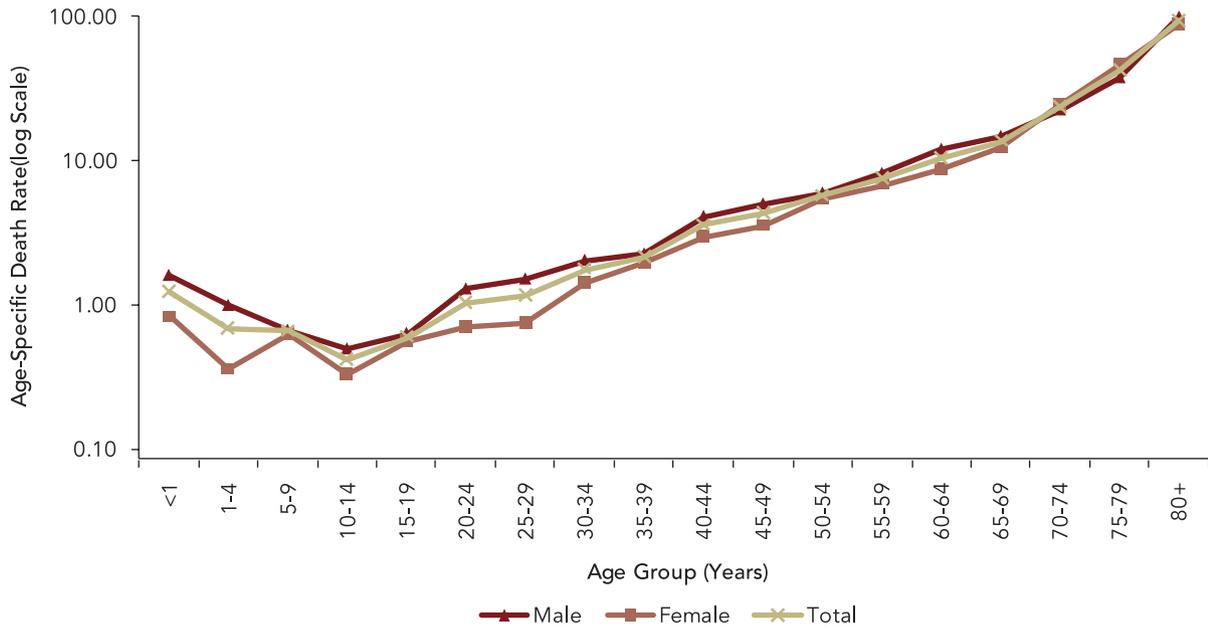
### 5.6 AGE-SPECIFIC DEATH RATE

The percentage distribution of deaths by age group is affected by a population’s age structure. Different age groups in population are exposed to different risk of dying because of their occupation or their age or some other characteristic. Because of these differentials in exposure to the risk of dying, age-specific death is computed to understand this.

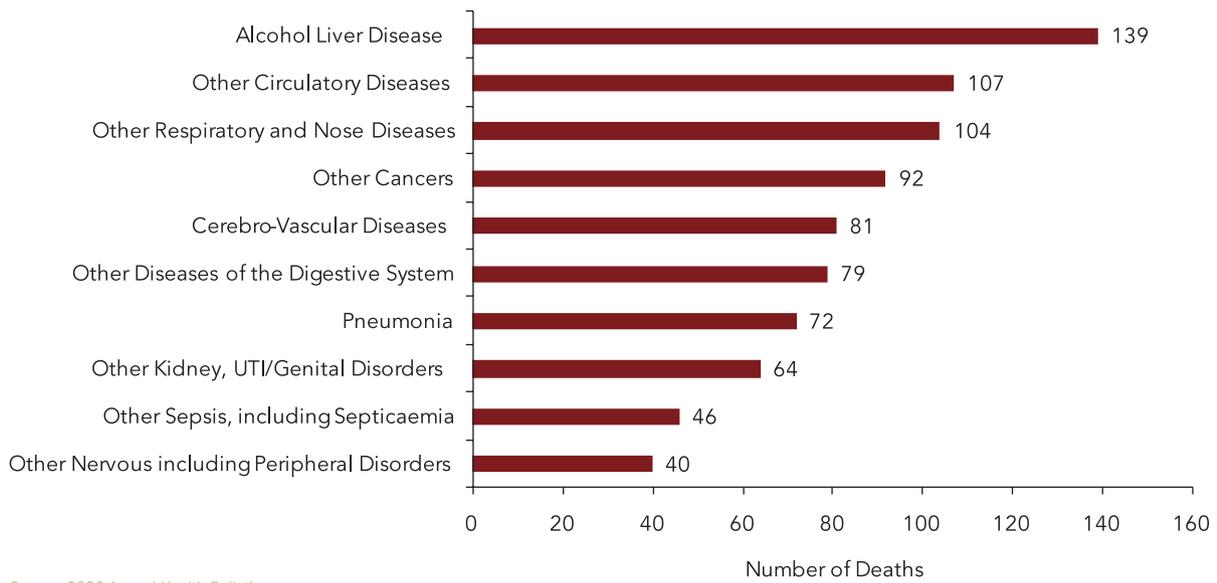
Figure 5.4 presents the pattern of age-specific death rates for Bhutan in 2019. Since there is a great variability in the number of deaths, the graph is presented on a log scale. Generally, the mortality rate is little high at infancy, low during childhood, stable during the adulthood and then it increases gradually for all ages in both the sexes. It is also a common phenomenon to have a higher death rates for males compared to their female counterparts.

### 5.7 TOP TEN CAUSES OF DEATH

In 2019, Alcohol Liver Disease (139) was reported to be the number one cause of death in Bhutan followed by other circulatory diseases (107), other respiratory and nose diseases (104) and other cancers (92) (Figure 5.5).



**Figure 5.4** Age-Specific Death Rates, Bhutan 2019



Source: 2020 Annual Health Bulletin

**Figure 5.5** Top Ten Causes of Death as Reported by the Health Facilities, Bhutan 2019

# CHAPTER 6 : SUMMARY TABLES

Table 6.1 presents the number of vital events by place of occurrence for the year 2019. In 2019, more births have occurred in *dzongkhags* where the referral (tertiary) hospitals are located; Thimphu (3,948), Monggar (1,076), Sarpang (942) and Chhukha (778). In terms of death by place of occurrence, Thimphu (685) still recorded the highest number and is followed by Trashigang (289), Samtse (252) and Monggar (238) dzongkhags. Likewise, more infant deaths were observed in Thimphu dzongkhag for the year 2019.

## 6.1 VITAL EVENTS

Table 6.2 shows the CBR, CDR and population growth rates for years 2016-2019. Although, the crude birth rate is not a refined measure of fertility, most other fertility measures show this pattern. The indicator is widely used to indicate the overall effect of fertility and it could be estimated with minimum data requirements. The difference of CBR and CDR indicates the tempo of how much our population is increasing or decreasing. This can help guide our policy makers and planner in planning socio-economic development to make population related policies. The CBR has increased between 2016 and 2018 and decreased in 2019.

The estimated population growth rate for the year 2019 is 0.87 which is a decrease of 13.0%

**Table 6.1** Number of Vital Events, Bhutan 2019

Dzongkhag	2019		
	Live Births	Deaths	Infant Deaths
Bumthang	135	68	0
Chhukha	778	180	0
Dagana	100	72	2
Gasa	8	18	0
Haa	59	45	0
Lhuentse	86	92	0
Monggar	1,076	238	1
Paro	234	140	0
Pema Gatshel	160	151	1
Punakha	186	94	0
Samdrup Jongkhar	326	154	1
Samtse	480	252	0
Sarpang	942	170	1
Thimphu	3,948	685	4
Trashigang	363	289	2
Trashi Yangtse	87	125	0
Trongsa	66	67	0
Tsirang	109	76	0
Wangdue Phodrang	259	148	1
Zhemgang	92	119	1
Not Stated	173	37	1
<b>Bhutan</b>	<b>9,667</b>	<b>3,220</b>	<b>15</b>

from 2018. The rate of natural increase can be used to help the country to develop population related policies.

**Table 6.2** Vital Rates, Bhutan 2016-2020

Year	CBR	CDR	Population	PGR
2016	13.4	4.9	726,596	0.85
2017	13.5	4.6	727,145	0.89
2018	14.6	4.6	734,374	1.00
2019	13.0	4.3	741,672	0.87

Most of the mother who have given birth in the year 2016-2019 usually resides in Thimphu followed by Chhukha, Samtse and Trashigang Dzongkhag. A little less than 1.0% resides in Gasa Dzongkhag. About 5.0% of the mothers have not reported their *dzongkhag* of usual residence.

## 6.2 BIRTHS BY PLACE OF USUAL RESIDENCE OF MOTHER

The place of usual residence is the place where the person usually resides. The number of births by place of residence is useful for planning services such as the health, education, and housing.

**Table 6.3** Live Births by Place of Usual Residence of Mother, Bhutan (2016-2019)

Dzongkhag	2016	2017	2018	2019	Total
Bumthang	264	244	258	235	1,001
Chhukha	731	735	816	727	3,009
Dagana	351	342	361	350	1,404
Gasa	61	47	51	62	221
Haa	147	172	153	133	605
Lhuentse	234	254	292	238	1,018
Monggar	635	574	695	623	2,527
Paro	526	508	558	522	2,114
Pema Gatshel	275	295	362	304	1,236
Punakha	332	366	342	315	1,355
Samdrup Jongkhar	478	467	504	503	1,952
Samtse	699	710	696	632	2,737
Sarpang	485	477	522	472	1,956
Thimphu	1,833	1,823	2,182	1,909	7,747
Trashigang	660	632	703	668	2,663
Trashigang Yangtse	238	296	322	257	1,113
Trongsa	248	246	276	228	998
Tsirang	274	258	236	242	1,010
Wangdue Phodrang	568	576	602	528	2,274
Zhemgang	258	273	313	265	1,109
Not Stated	421	546	467	454	1,888
Bhutan	9,718	9,841	10,711	9,667	39,937

# ANNEXURE I: LIST OF STATISTICAL TABLES

**Table B1** Births by Month of Occurrence and Month of Registration, Bhutan 2019

Month of Occurrence	Month of Registration												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
January	58	63	116	127	113	78	85	95	49	55	47	58	944
February	42	24	60	111	96	67	89	103	47	54	54	55	802
March	54	23	28	63	85	70	86	105	77	62	60	64	777
April	57	33	27	20	37	63	80	111	60	74	64	86	712
May	67	39	27	24	23	46	76	99	69	109	75	84	738
June	72	35	34	36	25	15	50	79	84	94	101	75	700
July	70	87	60	43	37	22	26	51	80	121	114	115	826
August	86	78	60	53	29	21	23	18	50	104	126	147	795
September	110	87	101	75	39	30	28	9	47	74	127	128	855
October	115	101	99	75	64	38	37	8	32	54	86	136	845
November	143	101	120	107	64	64	48	14	39	53	35	78	866
December	86	94	111	121	70	52	51	15	56	57	44	50	807
Total	960	765	843	855	682	566	679	707	690	911	933	1,076	9,667

**Table B2** Births by Place of Occurrence, Bhutan 2019

Dzongkhag	Sex		
	Male	Female	Total
Bumthang	74	61	135
Chhukha	402	376	778
Dagana	39	61	100
Gasa	3	5	8
Haa	25	34	59
Lhuentse	46	40	86
Monggar	552	524	1,076
Paro	123	111	234
Pema Gatshel	86	74	160
Punakha	96	90	186
Samdrup Jongkhar	155	171	326
Samtse	233	247	480
Sarpang	497	445	942
Thimphu	2,016	1,932	3,948
Trashigang	187	176	363
Trashi Yangtse	45	42	87
Trongsa	32	34	66
Tsirang	63	46	109
Wangdue Phodrang	118	141	259
Zhemgang	41	51	92
Not Stated	87	86	173
Bhutan	4,920	4,747	9,667

**Table B3** Births by Place of Occurrence and Place of Usual Residence of Mother, Bhutan 2019

Dzongkhag of Birth	Dzongkhag of Usual Residence of Mother																			Total			
	Bumthang	Chhukha	Dagana	Gasa	Haa	Lhuentse	Monggar	Paro	Pema Gatshel	Punakha	Samdrup Jongkhar	Samtse	Sarpang	Thimphu	Trashigang	Trashi Yangtse	Trongsa	Tsirang	Wangdue Phodrang		Zhemgang	Not Stated	
Bumthang	97	2	1	0	0	4	6	1	1	1	0	2	2	1	3	1	6	0	1	1	1	5	135
Chhukha	1	385	19	1	5	3	21	19	11	5	17	101	19	48	27	8	6	5	8	11	58	778	
Dagana	0	2	76	0	0	1	0	2	0	2	2	0	2	6	0	0	0	1	2	2	2	2	100
Gasa	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Haa	0	3	0	0	32	0	0	1	1	0	1	1	1	7	2	0	0	1	3	4	2	59	
Lhuentse	1	0	0	0	0	72	3	0	0	0	1	1	2	1	2	0	0	0	0	0	0	3	86
Monggar	21	8	0	1	1	98	464	6	47	3	33	8	4	45	185	89	9	2	6	6	40	1,076	
Paro	2	16	6	3	5	3	4	97	5	8	7	10	5	25	6	2	4	0	9	8	9	234	
Pema Gatshel	0	2	2	0	1	0	8	3	111	1	5	2	1	6	4	0	4	0	2	0	0	8	160
Punakha	4	0	3	11	1	0	2	4	2	110	4	2	0	13	4	2	1	1	14	3	5	186	
Samdrup Jongkhar	0	3	4	0	2	1	3	0	11	1	232	5	4	10	16	3	1	4	1	3	22	326	
Samtse	0	17	5	0	8	2	3	4	3	1	5	349	8	27	12	2	3	8	3	3	17	480	
Sarpang	12	25	61	0	3	4	10	8	36	6	75	13	339	62	31	9	24	77	16	85	46	942	
Thimphu	86	238	149	36	72	40	75	352	57	160	96	129	73	1,508	113	37	112	67	297	66	185	3,948	
Trashigang	1	2	1	0	0	1	16	4	10	0	5	2	1	22	250	24	3	0	2	4	15	363	
Trashi Yangtse	0	0	0	0	0	0	0	1	0	0	2	1	1	0	4	76	0	0	0	0	2	87	
Trongsa	0	2	1	0	0	1	1	1	1	0	1	0	1	2	1	1	48	2	1	1	1	66	
Tsirang	1	3	7	0	0	2	1	1	1	1	0	3	3	8	2	1	1	70	2	1	1	109	
Wangdue Phodrang	5	7	13	2	1	3	2	1	3	13	6	3	2	21	3	1	2	4	152	1	14	259	
Zhemgang	0	2	2	0	2	1	2	3	1	0	0	0	2	7	0	0	2	0	1	66	1	92	
Not Stated	4	10	0	0	0	2	2	14	3	3	11	0	2	90	3	1	2	0	8	0	18	173	
Bhutan	235	727	350	62	133	238	623	522	304	315	503	632	472	1,909	668	257	228	242	528	265	454	9,667	

**Table B4** Births by Place of Usual Residence of Mother, Age of Mother and Mother's Level of Education, Bhutan 2019

Dzongkhag and Age of Mother	Mother's Level of Education										Total
	None	Primary	Secondary	Higher Secondary	Diploma	Bachelor's Degree	Master's Degree and Above	Monastic Education	NFE	Don't Know	
<b>Age Group</b>											
<19	51	61	98	66	1	0	0	0	0	0	277
20-24	204	213	426	578	3	14	0	0	24	498	1,960
25-29	648	365	516	927	81	319	2	1	75	231	3,165
30-34	871	263	265	701	55	342	19	1	118	25	2,660
35-39	632	92	102	201	16	78	16	0	40	15	1,192
40-44	262	19	10	37	1	12	1	0	10	2	354
45+	50	4	1	1	0	0	0	0	2	1	59
<b>Total</b>	<b>2,718</b>	<b>1,017</b>	<b>1,418</b>	<b>2,511</b>	<b>157</b>	<b>765</b>	<b>38</b>	<b>2</b>	<b>269</b>	<b>772</b>	<b>9,667</b>
<b>Dzongkhag</b>											
Bumthang	61	44	37	61	4	14	0	0	1	13	235
Chhukha	210	75	90	192	19	47	1	0	11	82	727
Dagana	101	37	73	82	1	21	0	0	7	28	350
Gasa	24	6	10	6	4	2	0	0	0	10	62
Haa	41	17	20	37	2	9	0	0	1	6	133
Lhuentse	67	40	44	42	0	3	1	0	23	18	238
Monggar	231	78	77	106	4	15	0	0	19	93	623
Paro	98	50	80	191	6	59	2	1	8	27	522
Pema Gatshel	61	45	67	63	1	9	0	0	26	32	304
Punakha	65	55	51	89	3	16	0	0	4	32	315
Samdrup Jongkhar	187	27	44	131	11	27	0	0	20	56	503
Samtse	306	67	65	96	4	30	0	0	22	42	632
Sarpang	137	50	90	117	11	19	1	0	15	32	472
Thimphu	314	129	258	674	58	374	30	0	20	52	1,909
Trashigang	230	71	105	111	6	28	2	0	39	76	668
Trashi Yangtse	90	23	24	51	0	14	0	0	18	37	257
Trongsa	56	25	55	48	4	14	0	1	6	19	228
Tsirang	89	25	26	64	2	16	0	0	7	13	242
Wangdue Phodrang	183	71	88	124	12	22	0	0	8	20	528
Zhemgang	90	26	33	91	1	7	0	0	2	15	265
Not stated	77	56	81	135	4	19	1	0	12	69	454
<b>Bhutan</b>	<b>2,718</b>	<b>1,017</b>	<b>1,418</b>	<b>2,511</b>	<b>157</b>	<b>765</b>	<b>38</b>	<b>2</b>	<b>269</b>	<b>772</b>	<b>9,667</b>

**Table B5** Births by Place of Occurrence and Site of Occurrence, Bhutan 2019

<i>Dzongkhag</i>	Health Facility	Home	Others	Total
Bumthang	133	2	0	135
Chhukha	769	9	0	778
Dagana	90	9	1	100
Gasa	6	2	0	8
Haa	58	1	0	59
Lhuentse	79	6	1	86
Monggar	1,064	12	0	1,076
Paro	232	2	0	234
Pema Gatshel	151	9	0	160
Punakha	178	8	0	186
Samdrup Jongkhar	315	11	0	326
Samtse	467	13	0	480
Sarpang	939	3	0	942
Thimphu	3,945	2	1	3,948
Trashigang	319	44	0	363
Trashi Yangtse	83	3	1	87
Trongsa	60	6	0	66
Tsirang	107	2	0	109
Wangdue Phodrang	251	8	0	259
Zhemgang	86	5	1	92
Not Stated	148	0	25	173
Bhutan	9,480	157	30	9,667

**Table B6** Births by Place of Usual Residence of Mother and Birth Weight, Bhutan 2019

<i>Dzongkhag</i>	Numbers				Total
	Birthweight Less than 2500 gm	Birthweight 2500 gm-4000 gm	Birthweight 4000gm+	Not Stated	
Bumthang	12	213	8	2	235
Chhukha	53	627	33	14	727
Dagana	25	319	4	2	350
Gasa	4	52	2	4	62
Haa	11	119	2	1	133
Lhuentse	17	211	7	3	238
Monggar	50	541	24	8	623
Paro	39	428	30	25	522
Pema Gatshel	19	272	9	4	304
Punakha	16	273	21	5	315
Samdrup Jongkhar	38	442	14	9	503
Samtse	34	570	23	5	632
Sarpang	31	415	21	5	472
Thimphu	129	1,617	108	55	1,909
Trashigang	58	571	22	17	668
Trashi Yangtse	18	228	8	3	257
Trongsa	15	196	12	5	228
Tsirang	18	215	7	2	242
Wangdue Phodrang	30	455	28	15	528
Zhemgang	8	230	23	4	265
Not Stated	31	390	21	12	454
Bhutan	656	8,384	427	200	9,667

**Table B7** Births by Mother's Level of Education and Birth weight, Bhutan 2019

Mothers Level of Education	Birthweight Less than 2500 gm	Birthweight 2500gm-4000gm	Birthweight >4000gm	Not Stated
None	213	2,341	100	64
Primary	69	884	46	18
Secondary	77	1,255	69	17
Higher Secondary	174	2,159	125	53
Diploma	6	141	8	2
Bachelor's Degree	41	644	48	32
Master's Degree and Above	1	35	2	0
Monastic Education	0	2	0	0
NFE	23	233	10	3
Don't Know	52	690	19	11
Total	656	8,384	427	200

**Table B8** Birth Order by Birth Interval, Bhutan 2019

Birth Interval Birth Order	Less than 12 months		12-17 months		18-23 months		24-29 months		30-35 months	
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent
1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	3	0.1	40	1.3	110	3.6	173	5.6	206	6.7
3	2	0.1	25	1.5	69	4.2	72	4.3	95	5.7
4	1	0.2	16	2.4	29	4.4	32	4.8	40	6.1
5	1	0.4	5	2.2	14	6.0	9	3.9	14	6.0
6	1	1.4	1	1.4	5	7.0	3	4.2	6	8.5
7	0	0.0	0	0.0	0	0.0	1	4.8	1	4.8
8	0	0.0	0	0.0	1	8.3	2	16.7	2	16.7
9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
11	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	8	0.1	87	0.9	228	2.4	292	3.0	364	3.8

Birth Interval Birth Order	3 years		4 years		5-9 years		10 + years		Not Stated		Total	
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent
1	0	0.0	0	0.0	0	0.0	0	0.0	3,907	100.0	3,907	100.0
2	492	15.9	532	17.2	1,146	37.0	333	10.8	59	1.9	3,094	100.0
3	180	10.8	242	14.6	654	39.4	321	19.3	1	0.1	1,661	100.0
4	63	9.5	100	15.1	226	34.2	152	23.0	2	0.3	661	100.0
5	25	10.7	27	11.6	92	39.5	45	19.3	1	0.4	233	100.0
6	5	7.0	8	11.3	20	28.2	22	31.0	0	0.0	71	100.0
7	3	14.3	4	19.1	9	42.9	3	14.3	0	0.0	21	100.0
8	2	16.7	2	16.7	2	16.7	1	8.3	0	0.0	12	100.0
9	2	50.0	0	0.0	1	25.0	1	25.0	0	0.0	4	100.0
10	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
11	0	0.0	1	50.0	1	50.0	0	0.0	0	0.0	2	100.0
Total	773	8.0	916	9.5	2,151	22.3	878	9.1	3,970	41.1	9,667	100.0

**Table B9** Birth Interval by Birth Weight, Bhutan 2019

Birth Weight Birth Interval	Less than 2500 gm		2500 gm-4000 gm		4000 gm+		Not Stated		Total	
	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent	Numbers	Percent
Less than 12 months	2	25.0	5	62.5	0	0.0	1	12.5	8	100.0
12-17 months	4	4.6	73	83.9	9	10.3	1	1.2	87	100.0
18-23 months	8	3.5	197	86.4	15	6.6	8	3.5	228	100.0
24-29 months	13	4.5	248	84.9	23	7.9	8	2.7	292	100.0
30-35 months	18	5.0	322	88.5	18	5.0	6	1.7	364	100.0
3 years	41	5.3	689	89.1	30	3.9	13	1.7	773	100.0
4 years	47	5.1	799	87.2	49	5.4	21	2.3	916	100.0
5-9 years	151	7.0	1,850	86.0	107	5.0	43	2.0	2,151	100.0
10+ years	68	7.7	758	86.3	38	4.3	14	1.6	878	100.0
Not Stated	304	7.7	3,443	86.7	138	3.5	85	2.1	3,970	100.0
Total	656	6.8	8,384	86.7	427	4.4	200	2.1	9,667	100.0

**Table D1** Deaths by Place and Duration of Registration, Bhutan 2019

Dzongkhag	Time of Registration			Total
	Within One Month	1-12 months	More than 1 year	
Bumthang	41	36	1	78
Chhukha	55	67	30	152
Dagana	17	76	12	105
Gasa	0	19	0	19
Haa	42	22	2	66
Lhuentse	72	75	1	148
Monggar	127	137	3	267
Paro	55	83	4	142
Pema Gatshel	61	107	10	178
Punakha	67	34	1	102
Samdrup Jongkhar	123	70	7	200
Samtse	254	113	0	367
Sarpang	90	92	3	185
Thimphu	32	45	3	80
Trashigang	217	198	4	419
Trashi Yangtse	106	62	0	168
Trongsa	59	28	0	87
Tsirang	97	45	0	142
Wangdue Phodrang	115	48	3	166
Zhemgang	56	92	1	149
Bhutan	1,686	1,449	85	3,220

**Table D2** Deaths by Month of Occurrence and Month of Registration, Bhutan 2019

Month	Occurrence	Registration	Occurrence (%)	Registration (%)
January	323	340	10.0	10.6
February	251	270	7.8	8.4
March	303	288	9.4	8.9
April	233	289	7.2	9.0
May	255	208	7.9	6.5
June	281	244	8.7	7.6
July	247	226	7.7	7.0
August	257	263	8.0	8.2
September	255	222	7.9	6.9
October	249	272	7.7	8.5
November	232	252	7.2	7.8
December	334	346	10.4	10.8
Total	3,220	3,220	100.0	100.0

**Table D3** Deaths by Place of Occurrence and Sex of Decedent, Bhutan 2019

Dzongkhag	Sex of Decedent		
	Male	Female	Total
Bumthang	42	26	68
Chhukha	97	83	180
Dagana	44	28	72
Gasa	11	7	18
Haa	27	18	45
Lhuentse	49	43	92
Monggar	121	117	238
Paro	65	75	140
Pema Gatshel	73	78	151
Punakha	54	40	94
Samdrup Jongkhar	75	79	154
Samtse	155	97	252
Sarpang	103	67	170
Thimphu	398	287	685
Trashigang	151	138	289
Trashi Yangtse	57	68	125
Trongsa	36	31	67
Tsirang	44	32	76
Wangdue Phodrang	81	67	148
Zhemgang	64	55	119
Outside Bhutan	23	14	37
Bhutan	1,770	1,450	3,220

**Table D4** Deaths by Place of Registration and Sex of Decedent, Bhutan 2019

Dzongkhag	Sex of Decedent		
	Male	Female	Both Sex
Bumthang	49	29	78
Chhukha	77	75	152
Dagana	62	43	105
Gasa	9	10	19
Haa	34	32	66
Lhuentse	81	67	148
Monggar	144	123	267
Paro	67	75	142
Pema Gatshel	93	85	178
Punakha	61	41	102
Samdrup Jongkhar	97	103	200
Samtse	223	144	367
Sarpang	108	77	185
Thimphu	54	26	80
Trashigang	222	197	419
Trashi Yangtse	83	85	168
Trongsa	45	42	87
Tsirang	79	63	142
Wangdue Phodrang	99	67	166
Zhemgang	83	66	149
Bhutan	1,770	1,450	3,220

**Table D5** Deaths by Age Group and Sex, Bhutan 2019

Age Group	Sex		
	Male	Female	Total
Less than 1	10	5	15
1-4	23	8	31
5-9	21	19	40
10-14	17	11	28
15-19	22	19	41
20-24	50	24	74
25-29	66	27	93
30-34	79	47	126
35-39	72	54	126
40-44	103	64	167
45-49	100	62	162
50-54	100	80	180
55-59	109	82	191
60-64	133	92	225
65-69	125	100	225
70-74	138	139	277
75-79	161	196	357
80-84	194	171	365
85+	247	250	497
Total	1,770	1,450	3,220

**Table D6** Age-Specific Death Rates, Bhutan 2019

Age at death	Number of deaths			Age at death	Population			Age group (years)	ASDR		
	Male	Female	Total		Male	Female	Total		Male	Female	Total
0 years	10	5	15	0 years	6,158	5,967	12,125	<1	1.62	0.84	1.24
1-4 years	23	8	31	1-4 years	22,883	22,390	45,273	1-4	1.01	0.36	0.68
5-9 years	21	19	40	5-9 years	31,021	29,746	60,767	5-9	0.68	0.64	0.66
10-14 years	17	11	28	10-14 years	33,825	33,206	67,031	10-14	0.50	0.33	0.42
15-19 years	22	19	41	15-19 years	34,151	33,968	68,119	15-19	0.64	0.56	0.60
20-24 years	50	24	74	20-24 years	38,209	33,591	71,800	20-24	1.31	0.71	1.03
25-29 years	66	27	93	25-29 years	43,071	36,167	79,238	25-29	1.53	0.75	1.17
30-34 years	79	47	126	30-34 years	38,217	32,841	71,058	30-34	2.07	1.43	1.77
35-39 years	72	54	126	35-39 years	31,527	27,441	58,968	35-39	2.28	1.97	2.14
40-44 years	103	64	167	40-44 years	24,779	21,515	46,294	40-44	4.16	2.97	3.61
45-49 years	100	62	162	45-49 years	19,718	17,282	37,000	45-49	5.07	3.59	4.38
50-54 years	100	80	180	50-54 years	16,553	14,797	31,350	50-54	6.04	5.41	5.74
55-59 years	109	82	191	55-59 years	13,212	12,055	25,267	55-59	8.25	6.80	7.56
60-64 years	133	92	225	60-64 years	10,959	10,601	21,560	60-64	12.14	8.68	10.44
65-69 years	125	100	225	65-69 years	8,389	8,020	16,409	65-69	14.90	12.47	13.71
70-74 years	138	139	277	70-74 years	6,068	5,720	11,788	70-74	22.74	24.30	23.50
75-79 years	161	196	357	75-79 years	4,238	4,185	8,423	75-79	37.99	46.83	42.38
80+ years	441	421	862	80+ years	4,424	4,778	9,202	80+	99.68	88.11	93.68

# ANNEXURE II: MEMORANDUM OF UNDERSTANDING



**MEMORANDUM OF UNDERSTANDING BETWEEN  
THE NATIONAL STATISTICS BUREAU  
AND  
DEPARTMENT OF CIVIL REGISTRATION AND CENSUS,  
MINISTRY OF HOME AND CULTURAL AFFAIRS**



## I. PURPOSE AND SCOPE

The National Statistics Bureau, hereinafter referred to as “the recipient”, in its effort towards supporting evidence-based decision making intends to publish annual Vital Statistics Report (VSR) based on the vital events data compiled by the Department of Civil Registration and Census, under Ministry of Home and cultural Affairs, hereinafter referred to as “the provider”. In accordance with the provisions of this agreement, the provider shall share data from the Bhutan Civil Registration System, hereinafter referred to as BCRS, to the recipient. The data will be published only at the aggregated level for vital statistics analysis.

## II. OBJECTIVES

The objective of this MoU is to ensure that there is continuous and timely flow of BCRS data from the provider to the recipient to enable the publication of annual VSR.

## III. RESPONSIBILITIES OF THE RECIPIENT

- A. The recipient promises to comply with all provisions of this agreement to ensure the annual publication of VSR;
- B. The recipient agrees that the BCRS data provided under this agreement shall be strictly restricted to officials assigned with the analysis and publication of the VSR;
- C. Authorized officials shall sign a non-disclosure form with the Chief of Social Statistics Division to ensure the confidentiality of the data;
- D. Authorized officials designated pursuant to this agreement shall not use the BCRS data for any other purpose other than the publication of VSR;
- E. The VSR intended for release or publication must not include or reveal the characteristics of an individual respondent and ensure that the information will be published only at the aggregated level;
- F. The recipient shall share a copy of all the signed non-disclosure form with the focal person of the provider annually; and
- G. The recipient may provide recommendation to the provider for the improvement of BCRS data collection.

#### IV. RESPONSIBILITIES OF THE PROVIDER

- A. The provider promises to comply with all provisions of this agreement to ensure the annual publication of the VSR;
- B. The provider agrees to share the micro data of the BCRS;
- C. The provider shall share the BCRS data by 15<sup>th</sup> January of every year;
- D. The provider shall identify a focal for the same; and
- E. The provider may act on the recommendations made by the recipient on improving the data collection for the BCRS.

#### V. DURATION OF THIS AGREEMENT

All agreed clauses herein are effective from the date of signing of this MoU. This MoU shall be amended on mutual agreement between the recipient and the provider at any time.

#### VI. TERMINATION OF MOU

This MoU may be terminated on mutual agreement between the recipient and the provider at any time.

#### VII. EFFECTIVE DATE AND SIGNATURE IN WITNESS WHEREOF,

The recipient and the provider hereby have executed this MoU on the 09<sup>th</sup> October 2020 corresponding to 22<sup>nd</sup> day of 08<sup>th</sup> month of lunar calendar. On behalf of the National Statistics Bureau and on behalf of the Department of Civil Registration and Census, Ministry of Home and Cultural Affairs.



(Signature)

Name: Mr. Chhime Tshering  
Director  
National Statistics Bureau



(Signature)

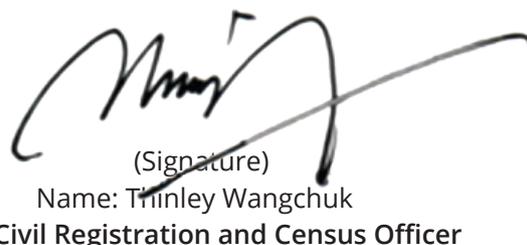
Name: Tashi Tobgye  
Director General  
Department of Civil Registration and Census

Witnessed by:



(Signature)

Name: Tashi Dorjee  
Chief Statistical Officer  
National Statistics Bureau

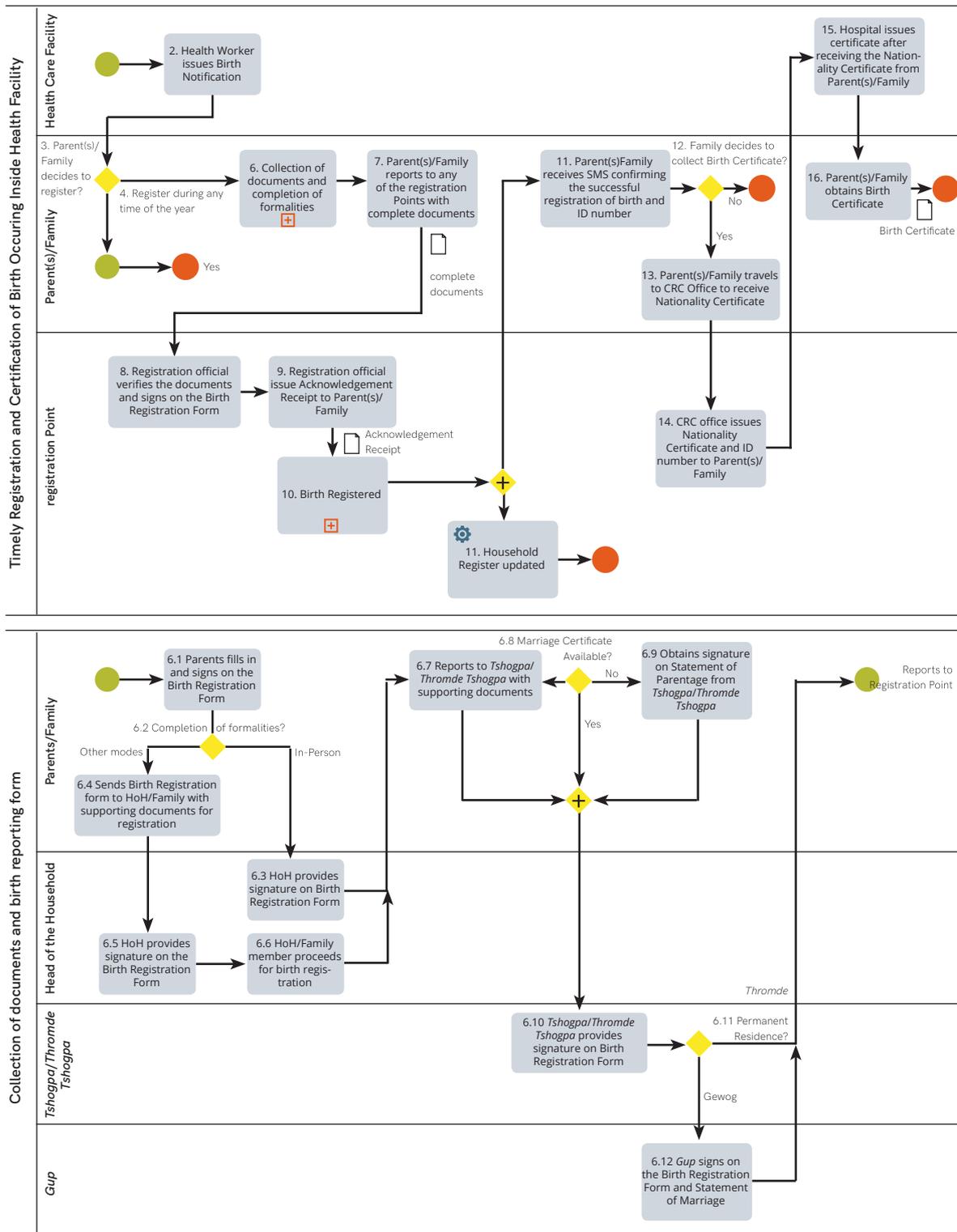


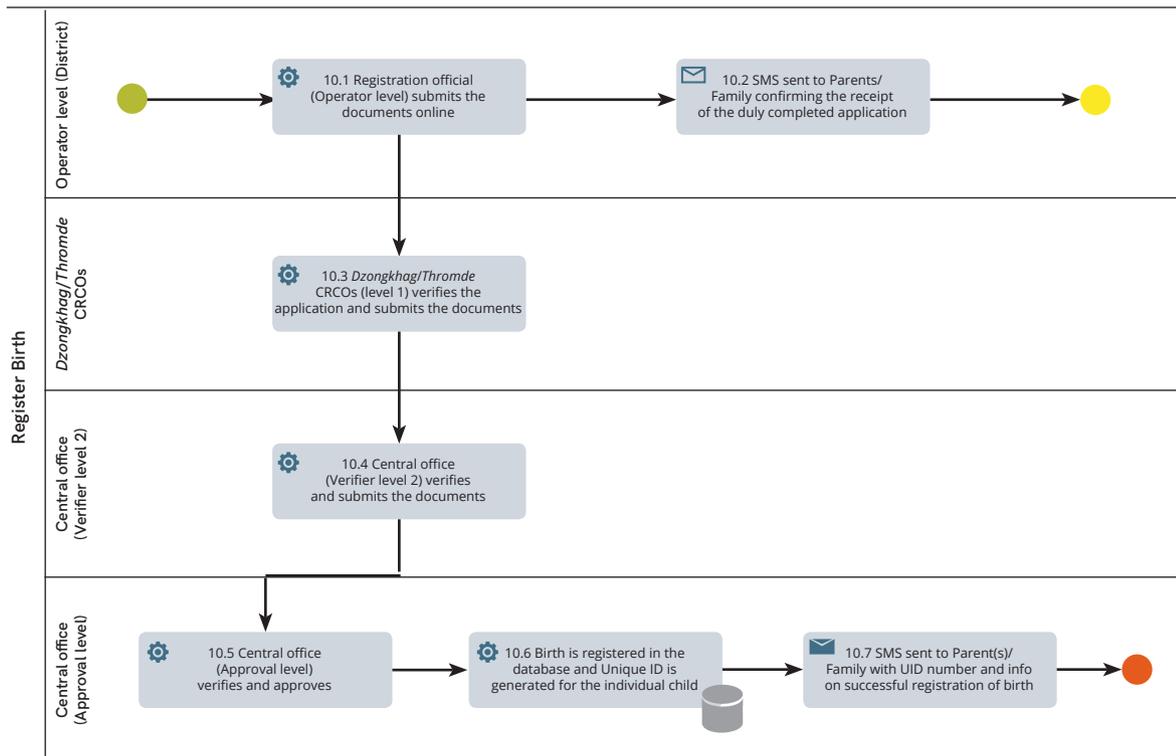
(Signature)

Name: Thinley Wangchuk  
Chief Civil Registration and Census Officer  
Department of Civil Registration and Census

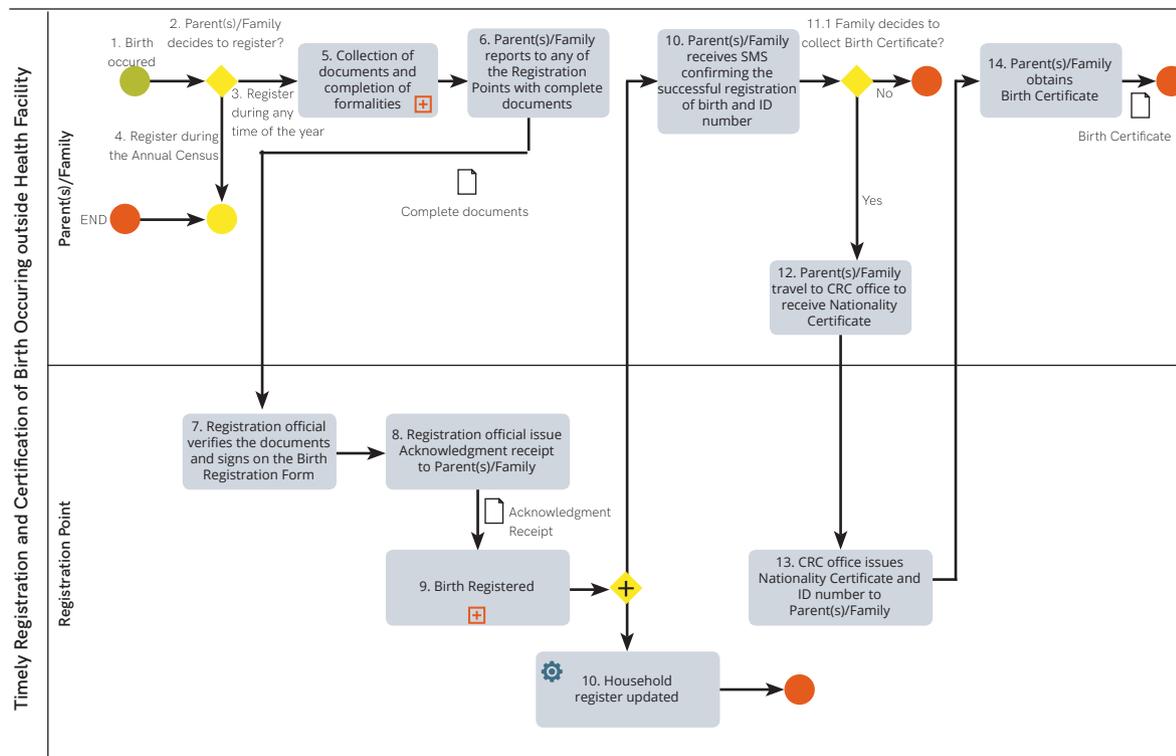
# ANNEXURE III: REGISTRATION PROCESS FOR BIRTHS AND DEATHS

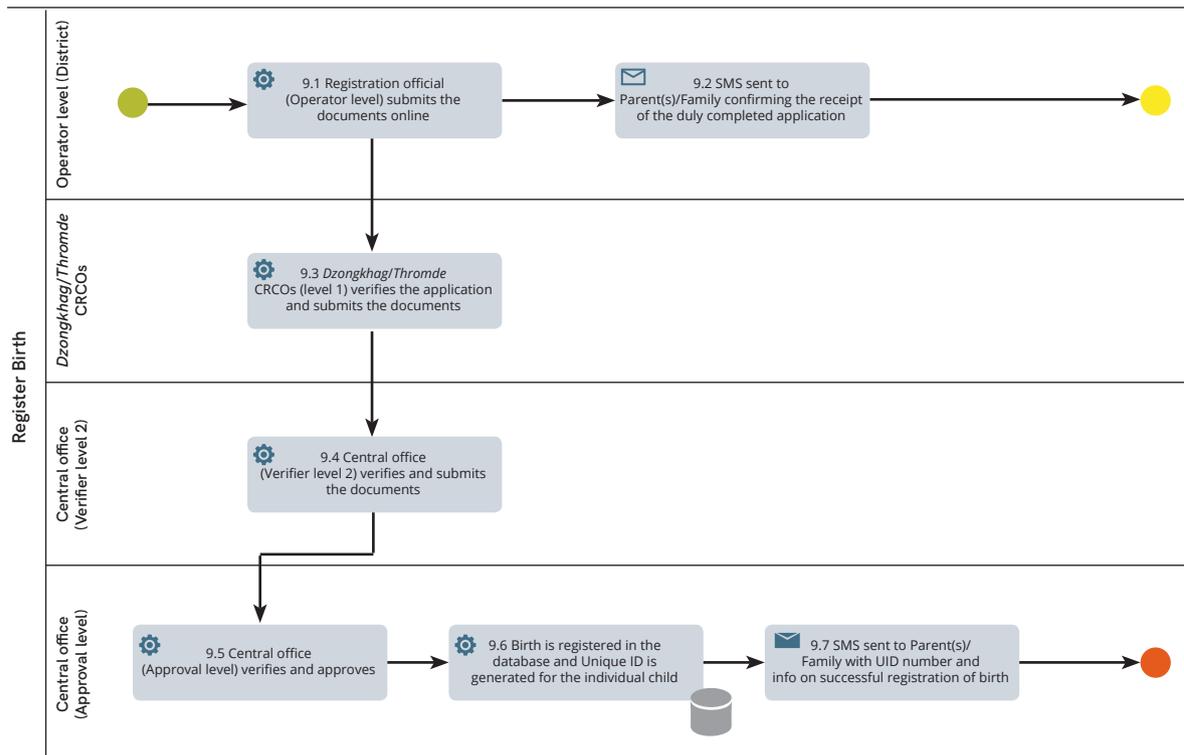
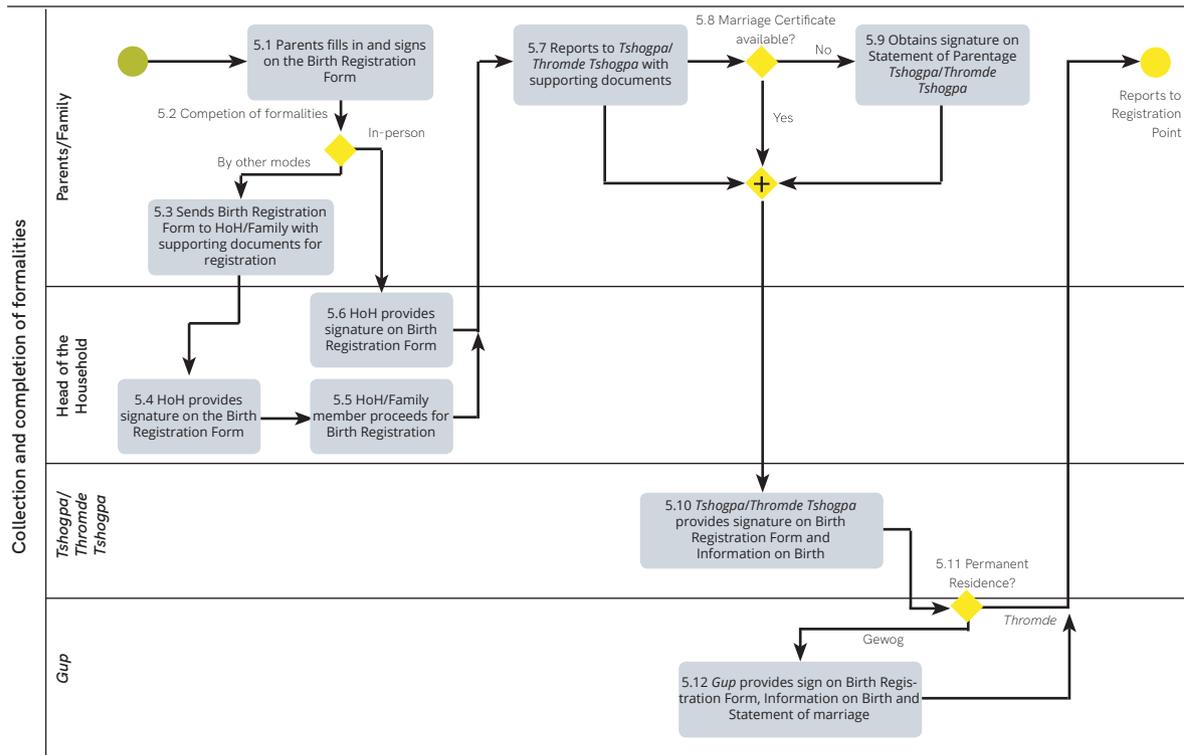
Figure 1 Process of Birth Occurring Inside Health Facility in Bhutan



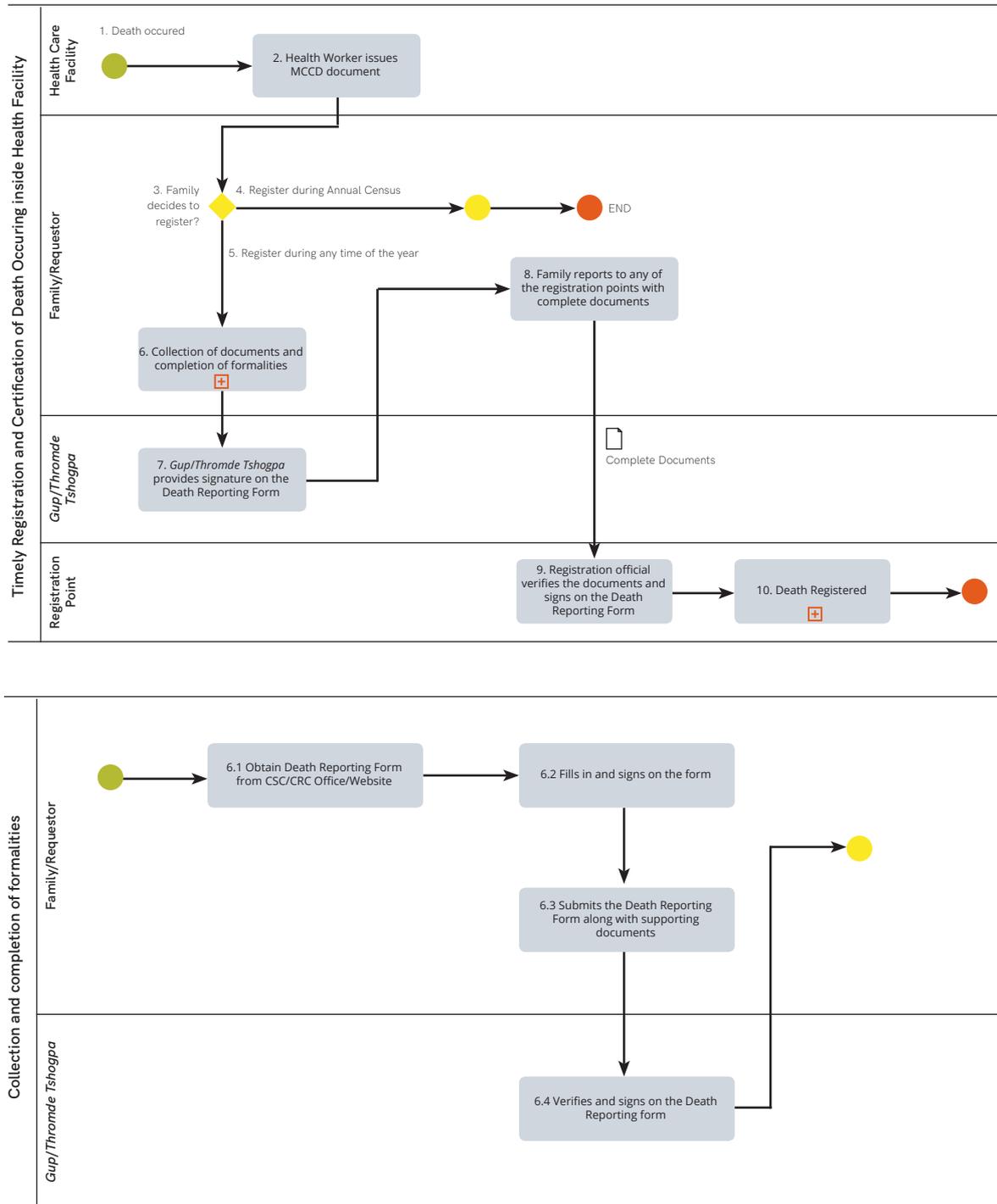


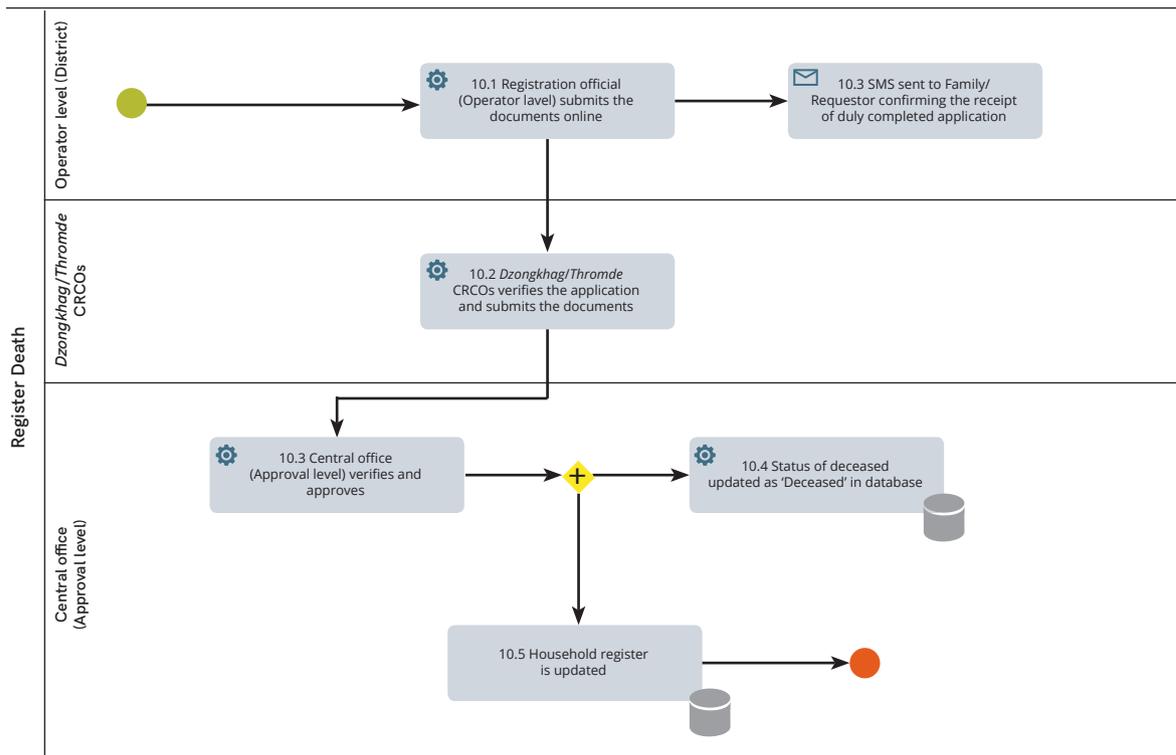
**Figure 2** Process of Birth Occurring Outside Health Facility in Bhutan



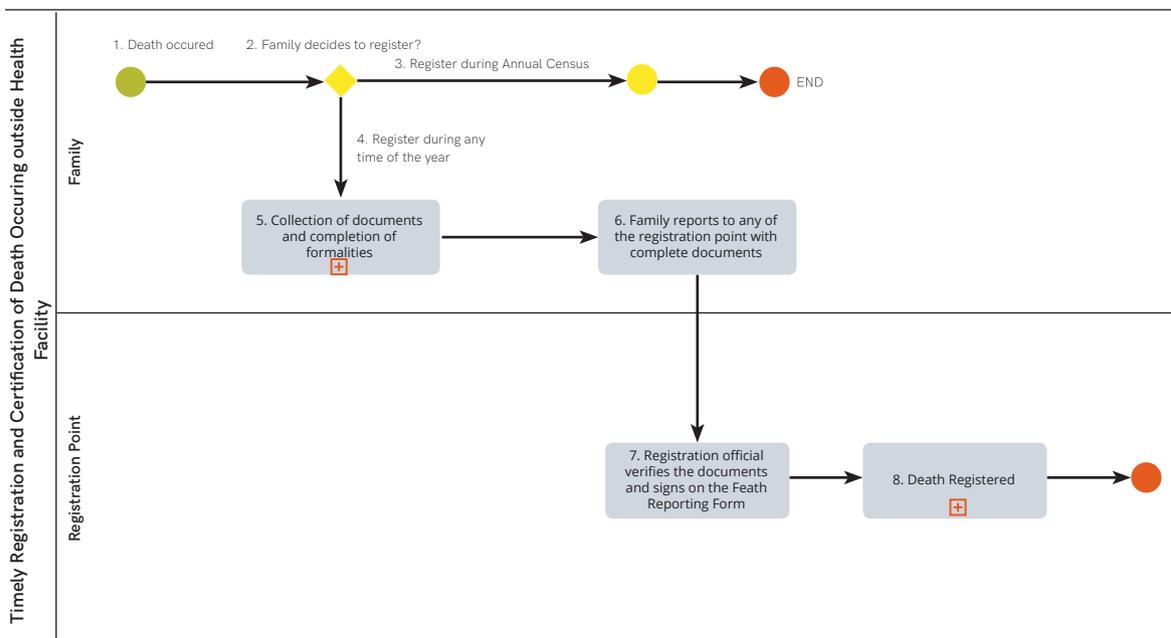


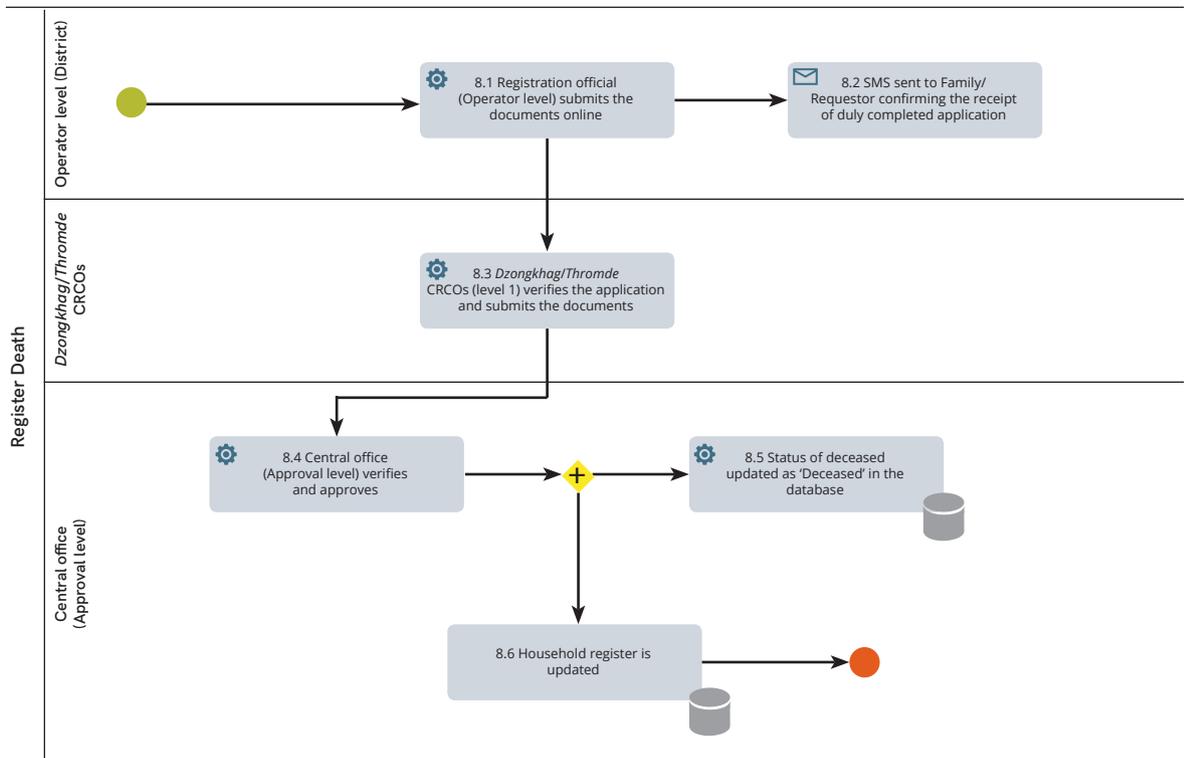
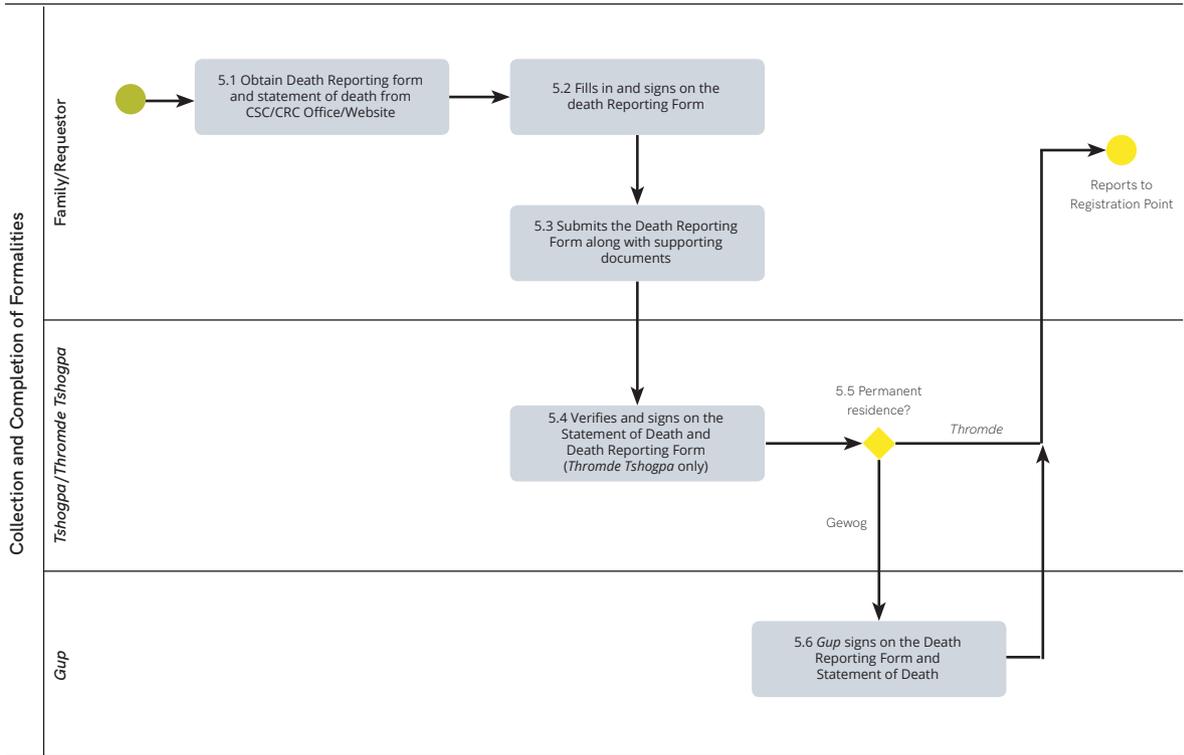
**Figure 3** Process of Death Occurring Inside Health Facility in Bhutan





**Figure 4** Process of Death Occurring Outside Health Facility in Bhutan

















**APPLICATION FORM FOR IMMIGRATION CARD**

*(PLEASE TYPE or WRITE IN CAPITAL LETTERS IN BLUE OR BLACK INK)*

<b>I. Details of Foreign Spouse</b>					Recent Passport size Photo
1. Name (as in passport/voter identity card)					
2. Date of birth (dd/mm/yyyy)		3. Nationality			
4. Sex: Male <input type="checkbox"/> Female <input type="checkbox"/>		5. Occupation			
<b>II. Identity Document Details</b>					
6. Passport/Voter Card No.		7. Place of issue	8. Date of Issue	9. Valid till	
10. Visa/Entry Permit No.		11. Place of issue	12. Date of Issue	13. Valid till	
<b>III. Permanent Address</b>				17. Contact no.	
14. District/city		15. State	16. Pin code no.		
<b>IV. Details of Bhutanese Spouse</b>					
18. Name (as in Citizenship Identity Card)			19. Citizenship Identity Card No.		
20. Date of birth (dd/mm/yyyy)	21. Sex: Male <input type="checkbox"/> Female <input type="checkbox"/>		22. Occupation		
23. Present Address				24. Contact No.	
<b>V. Permanent Address (attach recent Family Tree issued by the Department of Civil Registration and Census)</b>					
25. Village	26. Gewog	27. Dzongkhag.	28. House No.	29. Thram. No.	
<b>VI. Marriage Details (Attach Marriage Certificate issued by the Royal Court of Justice, Bhutan)</b>					
30. Marriage Certificate No.		31. Date of Issue	32. Place of Issue		
<b>Declaration:</b> We hereby solemnly affirm and declare that all documents submitted by us for processing Immigration Card are genuine and truthful in all aspects. I understand that providing incomplete, false or misleading information will result in rejection/cancellation of Immigration Card. Furthermore, we also understand that we will be liable for prosecution by a court of law and/or any fines/penalties under the Immigration Act of the Kingdom of Bhutan and other laws, rules and regulations as may be applicable, for submission of false, fabricated or misleading information or for indulging in any other activities other than the stated.					
Place:	Affix Legal Stamp	Affix Legal Stamp			
	Date:				
Signature of Bhutanese spouse		Signature of foreign spouse		Seal and Signature of Gup	

<b>For official use only</b>	
Approved/Rejected _____	
Signature of approving officer: _____	



### APPLICATION FORM FOR IMMIGRATION CARD (DEPENDENT)

(PLEASE TYPE or WRITE IN CAPITAL LETTERS IN BLUE OR BLACK INK)

<b>I. Details of applicant</b>				Recent Passport size photo
1. Name (as in passport/voter identity card/birth certificate):				
2. Date of birth (dd/mm/yyyy)		3. Nationality		
4. Sex: Male <input type="checkbox"/> Female <input type="checkbox"/>		5. Occupation		
<b>II. Identity Document Details</b>				
6. Passport/Voter Card/Birth Certificate No.		7. Place of issue	8. Date of Issue	9. Valid till
10. Visa/Entry Permit No.	11. Place of issue	12. Date of Issue	13. Valid till	
<b>III. Details of the Bhutanese parent</b>				
14. Name (as in Citizenship Identity Card)			15. Citizenship Identity Card No.	
16. Sex: Male <input type="checkbox"/> Female <input type="checkbox"/>	17. Occupation		18. Contact No.	
19. Village	20. Gewog	21. Dzongkhag	22. House No	23. Thram. No
<b>IV. Details of the non-Bhutanese parent</b>				
24. Name (as in passport/voter identity card)			25. Sex: Male <input type="checkbox"/> Female <input type="checkbox"/>	
26. Passport/Voter Card No.		27. Nationality		
28. Immigration Card No.	29. Date of issue		30. Valid till	
<b>V. Applicant's present address and contact no.</b>				
31. Full Address			32. Contact No.	
<b>Declaration:</b> I hereby solemnly affirm and declare that all documents submitted by me for processing Immigration Card (Dependent) are genuine and truthful in all aspects. I understand that providing incomplete, false or misleading information will result in rejection/cancellation of Immigration Card. Furthermore, I also understand that I will be liable for prosecution by a court of law and/or any fines/penalties under the Immigration Act of the Kingdom of Bhutan and other laws, rules and regulations as may be applicable, for submission of false, fabricated or misleading information or for indulging in any other activities other than the stated.				
Place:	Affix Legal Stamp	Signature of applicant		Affix Legal Stamp
Date:				Signature of either of parents

#### For official use only

Approved/Rejected \_\_\_\_\_

Signature of approving officer: \_\_\_\_\_

# REFERENCES

1. Asia-Pacific CRVS Decade (2015 - 2024) | Get Every One in the Picture [Internet]. [cited 2017 Feb 15]. Available from: <http://getinthepicture.org/asia-pacific-crvs-decade-2015-2024>
2. Five Year Plan | Gross National Happiness Commission [Internet]. [cited 2017 Feb 15]. Available from: <http://www.gnhc.gov.bt/five-year-plan/>
3. First Workshop of the Project to Strengthen the National Capacity in Producing and Disseminating Vital Statistics from Civil Registration Records in Asia and the Pacific | Get Every One in the Picture [Internet]. [cited 2017 Feb 15]. Available from: <http://www.getinthepicture.org/event/first-workshop-project-strengthen-national-capacity-producing-and-disseminating-vital>
4. UN. Principles and Recommendations for a Vital Statistics System [Internet]. 3rd ed. New York: United Nations publication; 2014 [cited 2017 Feb 15]. Available from: <http://unstats.un.org/unsd/demographic/standmeth/principles/M19Rev3en.pdf>
5. Ministry of Home and Cultural Affairs. THE BHUTAN CITIZEN ACT, 1985. Thimphu, Bhutan; 1985
6. Ministry of Home and Cultural Affairs. Immigration Rules & Regulation of The Kingdom of Bhutan (Rev. Dec 2015) [Internet]. Thimphu; 2015 [cited 2017 Feb 15]. 1-58 p. Available from: <http://www.mohca.gov.bt/Publications/IMMIGRATION RULES & REGULATIONS.pdf>
7. Ministry of Home and Cultural Affairs. The Immigration Act of the Kingdom of Bhutan, 2007. Thimphu, Bhutan; 2007.
8. Ministry of Home and Cultural Affairs. Census Handbook 1993. Thimphu, Bhutan; 1993
9. World Health Organization. Improving the quality and use of birth, death and cause-of-death information: guidance for a standards-based review of country practices. 2010;78
10. National Statistics Bureau, Population Projections 2017-2047, Bhutan
11. 2020 Annual Health Bulletin, Ministry of Health, Bhutan
12. Guide to DHS Statistics DHS-7 (version 2); Available from [https://www.dhsprogram.com/pubs/pdf/DHSG1/Guide\\_to\\_DHS\\_Statistics\\_DHS-7\\_v2.pdf](https://www.dhsprogram.com/pubs/pdf/DHSG1/Guide_to_DHS_Statistics_DHS-7_v2.pdf)
13. Production of a Vital Statistics Guide, Rev.1. Available from <https://getinthepicture.org/resource/production-vital-statistics-guide-rev-1>
14. Rwanda Vital Statistics Report 2019. Available from [https://assets.website-files.com/5d7f96ea4cc8598434877fed/5fd1f4eeb526bd53df1f31de\\_Rwanda%20Vital%20Statistics%20Report%202019%20Ed2...pdf](https://assets.website-files.com/5d7f96ea4cc8598434877fed/5fd1f4eeb526bd53df1f31de_Rwanda%20Vital%20Statistics%20Report%202019%20Ed2...pdf)
15. Vital Statistics Report in Georgia 2019. Available from <https://www.geostat.ge/media/33907/2019-VS-Report-%28eng%29.pdf>

16. Vanuatu: First Vital Statistics Report based on civil registration record published.  
[https://getinthepicture.org/sites/default/files/resources/Vanuatu\\_Vital\\_Statistics\\_Report\\_2012\\_2014.pdf](https://getinthepicture.org/sites/default/files/resources/Vanuatu_Vital_Statistics_Report_2012_2014.pdf)
17. Vital Statistics Report 2018; Statistics Botswana.  
<https://www.statsbots.org.bw/sites/default/files/publications/Vital%20Statistics%20Report%202018.pdf>
18. Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance Revision 1
19. Republic of Fiji Vital Statistics Report 2012 - 2017. Available from [https://getinthepicture.org/sites/default/files/resources/Fiji\\_2012\\_2017\\_Vital\\_Statistics\\_Report.pdf](https://getinthepicture.org/sites/default/files/resources/Fiji_2012_2017_Vital_Statistics_Report.pdf).



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