

# **ASSESSING INEQUALITIES IN REGISTRATION OF BIRTHS AND DEATHS IN BHUTAN**

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## **1. Acknowledgement**

This report presents findings on the inequality assessment of births and deaths from 2017 to 2022, based on CRVS data obtained from the BCRS. The report was developed in collaboration with UN ESCAP, DCRC, and NSB, with core team members Mr. Tashi Dorjee and Ms. Jigme Choden. The report has benefitted from the valuable input of several experts, including Mr. Tom Moultrie, an independent consultant, whose insights from the technical capacity-building workshop greatly informed the report. We also appreciate the feedback provided during the report writing process. Special thanks to Ms. Petra Nahmias and Ms. Tanja B. Sejersen from ESCAP for their valuable support and feedback.

We extend our gratitude to national CRVS stakeholders, including officials from the MoH, DCRC, and the DoI, whose contributions were instrumental in improving the report.

Our sincere thanks also go to UN ESCAP for its continued financial and technical support in the development of this report.

## **2. Background**

The Royal Government of Bhutan (RGoB) has committed to improving the Civil Registration and Vital Statistics (CRVS) systems in the Asia-Pacific region by signing the Ministerial Declaration of the first high-level regional conference. The declaration designated the period from 2015 to 2024 as the “CRVS Decade.” Subsequently, Bhutan has made significant progress in achieving its CRVS goals and targets by 2025.

Improving CRVS is crucial in the pursuit of Sustainable Development Goals (SDGs) as it provides accurate and timely data on vital events like births, deaths, marriages, and divorces. This data plays a fundamental role in informed policymaking and monitoring progress towards various SDG targets.

Bhutan has implemented several measures to address the gaps in its civil registration and vital statistics (CRVS) system. These initiatives include conducting CRVS Assessments, developing a Multi-sectoral National Strategic Action Plan (MNSAP 2021-2025), and simplifying registration procedures. Furthermore, in July 2023, Bhutan formalized the CRVS Governance Structure to enhance coordination, planning, and monitoring of CRVS programs in the country. The governance structures include the National CRVS Steering Committee, the Inter-Agency CRVS Technical Committee, and the Dzongkhag CRVS Committee. However, an assessment of inequality in birth and death registration in Bhutan has not yet been conducted

Examining inequalities in the civil registration of births and deaths is crucial in recognizing the significance of accurate and fair registration of vital events. While there are 10 vital events, Bhutan places particular emphasis on birth and death registrations. Notably, Bhutan has made commendable progress in achieving completeness in birth registration. In the case of birth registration, there is a specific timeframe within which individuals can register a birth, which is one year from the date of occurrence. Failure to do so within this timeframe leads to a delayed birth registration which entails a complex registration

process. Hence, in order to avoid this tedious birth registration procedures, majority of births are registered in a timely manner.

However, challenges persist in achieving completeness in death registration. In Bhutan, the primary motivation for death registration is the eligibility for Rural Life Insurance (RLI) claims, which is only applicable to the deaths occurring for those year 8 years and above. It is important to note that there is no established timeframe or penalty for late death registration, allowing individuals to register deaths at their own convenience. As a result, deaths can go even unreported, particularly for those deaths involving to individuals who are below the age of 8 years, which are more likely to be overlooked.

### **3. Civil Registration and Vital Statistics System in Bhutan**

The management of the Civil Registration and Vital Statistics (CRVS) system in Bhutan is a collaborative effort involving multiple agencies viz the Department of Civil Registration and Census (DCRC) and the Department of Immigration (DoI) under the Ministry of Home Affairs (MoHA), along with the National Statistics Bureau (NSB) and the Ministry of Health (MoH). The DCRC takes a crucial role in maintaining the Bhutan Civil Registration System (BCRS) in Bhutan. The MoH is responsible for issuing the notification of vital events such as births and deaths to the DCRC, while the NSB uses the data from the BCRS to analyze and produce the annual Vital Statistics Report (VSR).

At present, CRVS stakeholders in Bhutan, including DCRC, DoI, and MoH, maintain separate systems for collecting and storing data related to vital events, such as birth and death. Despite operating independently, these agencies collaborate harmoniously to ensure the accurate registration of vital events.

The introduction of civil registration in Bhutan can be traced back to the late 1980s, when vital events including births and deaths were recorded in Family Diaries as paper-based registers. The responsibility of updating births and deaths and maintaining these registers within their respective jurisdictions was assigned to respective Dzongkhags, Drungkhags, and Gewogs. This practice continued until 2002, when it transitioned to a computerized database in 2003. Subsequently, in 2011, it further developed into an online system through the Government to Citizen (G2C) initiative. At present, the civil registration services are available in all 20 Dzongkhags, 4 Thromdes, and 200 Community Service Centers (CSCs) at the Gewog level.

#### **4. Methodology**

As outlined in the Memorandum of Understanding signed between the DCRC and NSB, the DCRC has shared a dataset on live births and deaths covering the years 2017 to 2022.

The DCRC whose main function is to maintain the comprehensive registry of the population of Bhutan is supported by a computerized system called Bhutan Civil Registration System (BCRS). BCRS is a highly secured system and provides up-to-date and a continuous, real-time, and dynamic flow of information on all vital events occurring in the country.

Of the 14 web-based civil registration and census services, registration of new birth and registration of death are the core services the department performs. Births and death can be registered at any time of the year at any registration point. It can also be registered during the annual census program which is carried out between November and January. The accuracy and completeness of birth information collected are verified at different stages identified as Operator Level, Level 1, Level 2, and Approval Level. The registration of death however has three phases identified as Operator Level, Level 1, and Approval Level. The information is captured online into the BCRS.

The dataset encompasses diverse variables, which could be used to assess the completeness of birth and death registrations in Bhutan.

#### **Methodology and Data Sources for Birth Registration Completeness**

The completeness of birth registration is calculated using the method as per the recommendation made by the UNESCAP.

$$\text{Completeness of Birth} = \frac{\text{Number of registered births within certain period}}{\text{Estimated number of births same period}} * 100$$

For this inequality assessment, the disaggregation is provided by sex and age group of the mother.

## **Birth Registration Data from DCRC**

The data obtained through BCRS contain information on a child's date of birth, sex, place of birth, mothers' education qualification, site of birth, information on mothers' usual place of residence, age of mother and permanent place of residence and some information on father like his unique identification number and name.

To ensure that the data acquired is error-free, each of the variables in the dataset were studied carefully and wherever required, data cleaning is performed. The main thrust of the data quality assessment is to check for data inconsistency, 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 are cleaned, while some needed queries with civil registration officials to correct it. All erroneous entries are dealt with following the nature of the error. Although, most of the information for the variables are complete, there are still some variables like "age of mother at birth", "date of registration of events", whose information are missing from the data even upon verification with DCRC. However, since these missing observations are comparatively less, they are imputed taking the average for the particular variables.

## **Census Methods and Limitations**

Since the census being the mother of all statistics and it is critical that we update the population figures as they form the basis of all computations of socio-economic and development indicators. The population and housing census of Bhutan (PHCB) is conducted every 10 years with its first census conducted in 2005. The latest census was conducted in 2017 from 30 May to 01 June 2017. The reference time and date for the census enumeration was midnight of 29 May 2017. This means that the 2017 PHCB provides population data for Bhutan as of 00:00 hours on 30th May 2017 at the end of the three census days.

The census serves as a reliable data source for this assessment report, offering detailed information at the lowest level. It includes data on both mothers and children, such as the mother's marital status, age, the child's sex, as well as the place and site of

birth. For this analysis, the number of births is estimated using children born during the reference period who were aged 0 and those who died at age 0 during the census reference period. This means that children born between May 28, 2016, and May 29, 2017, are included in the analysis and counted in both the numerator (registered births) and the denominator (estimated births derived from the census population).

#### *Completeness of Birth at age 0 using census data*

$$= \frac{\text{Number of births occurred between 28th May, 2016 – 29th May, 2017 that are registered}}{\text{Children aged 0 enumerated in the census 29th May, 2017}}$$

Though there are benefits of using the census data, there are also limitations to using it including:

#### 1. Recall Bias

Though it was specified in manuals about inclusion of birth during the census period, in some cases, respondents may fail to accurately recall the exact birth date of their children, particularly if they had their child close to the census date. This can lead to inaccuracies in reporting, affecting the estimate of births.

2. The 2017 PHCB is De-facto census whereas the data obtained from DCRC is De-jure census, hence some children born outside Bhutan may have counted as registered.

3. The child born and died before the census period might have left out which leads to the undercounting of the child age 0 in the census period.

#### **Methodology and Data Sources for Death Registration Completeness**

The primary source for estimating deaths to evaluate inequalities in death registration completeness was the recorded death notification data from DCRC through BCRS.

Just like the birth data, data on the death of a person is provided by DCRC. The variables include, place of death, age of deceased, sex, and date of registration. Although there is a variable for cause of death, it is not recorded properly and hence, it is difficult to recode as per the International Classification of Disease (ICD) system recommended by the World Health Organization (WHO).

The data are cleaned and any duplicate variables observed are verified and dropped from the analysis.

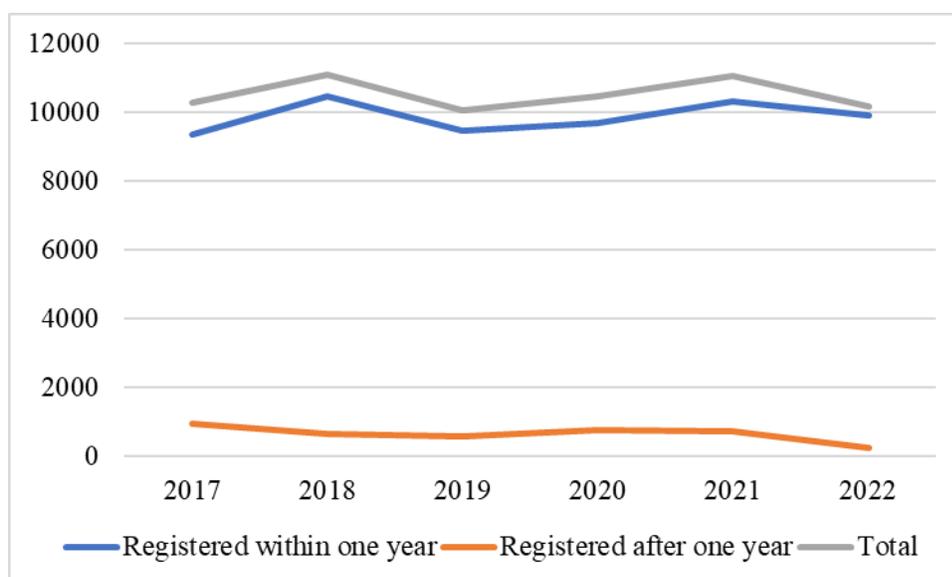
### **5. Timeliness of Registration**

According to the Citizenship Act, all births in Bhutan must be registered within one year of their occurrence. For reporting purposes, delayed registration refers to any event (birth or death) that is registered after more than one year from the date of occurrence. In this context, registration is defined as complete even if an individual has initiated the registration process by submitting the required forms or documents to the competent civil registry authority, or by starting an online application, rather than the completion of the process (i.e., the final approval of the registration). Timeliness of birth and death is analyzed using the administrative data provided by the DCRC from the year 2017 till 2022.

### Timeliness of Birth Registration

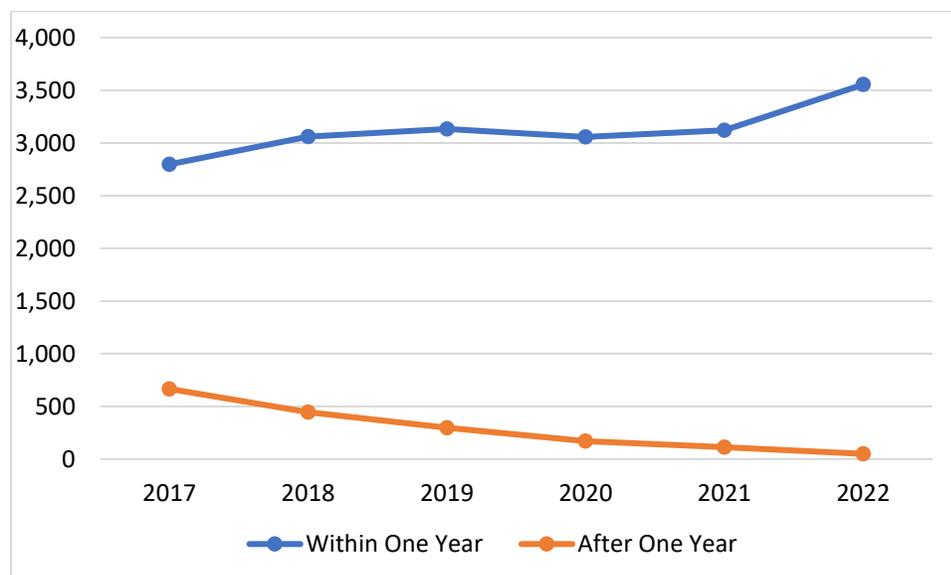
The data on birth registration timeliness from 2017 to 2022 shows significant progress in ensuring the births are registered within one year. Of the total births that occurred from 2017 till 2022, 93.7% of them were registered within the one year of the occurrence of the event. In 2017, 90.8% of births were registered within the first year, while 9.2% were registered late. By 2022, timely registrations have increased to 97.4%, with only 2.6% of registrations occurring after one year, marking a substantial improvement.

Figure 1.1: Timeliness of Birth Registration (2017-2022)



## Timeliness of Death Registration

Figure 1.2: Timeliness of Death Registration (2017-2022)



Of the total deaths that occurred between 2017 and 2022, 91.5% are registered within one year after the occurrence of the event. The timeliness of death registration has improved significantly between 2017 and 2022. There is steady increase in registrations within one year from 2,798 births in 2017 to 3,555 in 2022 (+27%) while there is a sharp decline in delayed registrations (after one year) from 666 births to just 50 (-92.5%). This trend reflects a clear shift towards more timely reporting of the event.

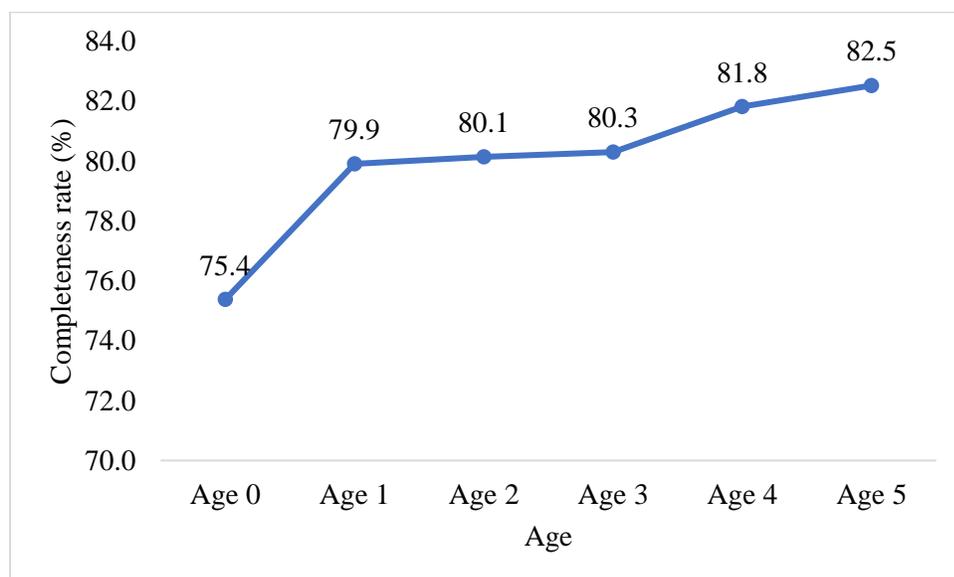
Over the years, registrations within one year have steadily increased, with a significant surge in 2022. In contrast, delayed registrations have declined sharply over the years, indicating reduced systemic bottlenecks and increased compliance with timely reporting requirements.

## 6. Inequalities in Birth Registration

### Inequalities in birth registration using 2017 census data

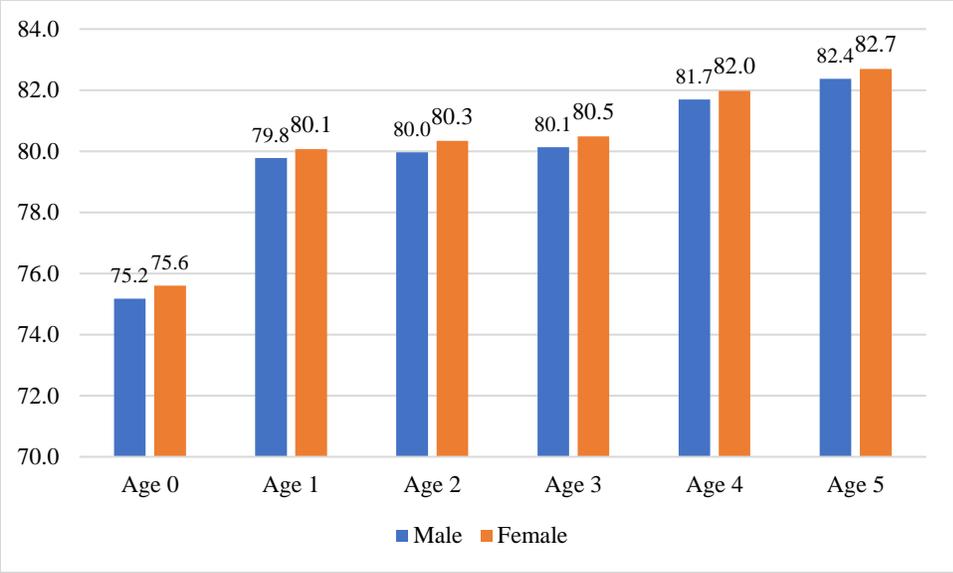
The census data were analyzed by age and sex. The child age zero during the census 2017 is used to estimate the registration completeness.

Figure 2.1: Birth registration completeness for the cohort of children aged 0 in the 2017 census



The figure shows the gradual improvement in birth registration completeness rates by the age of the child, indicating progress in late registrations over time. Approximately 75.4% of children had their births registered before their first birthday, highlighting a gap in timely registration immediately after birth. By their first birthday (age 1), registration completeness increases significantly to 79.9%, reflecting a considerable number of late registrations during the first year. By age 5, the completeness rate reaches its highest level of 82.5%, though a small proportion of children remain unregistered.

Figure 2.2: Birth registration completeness for the cohort of children aged 0 in the 2017 census by sex



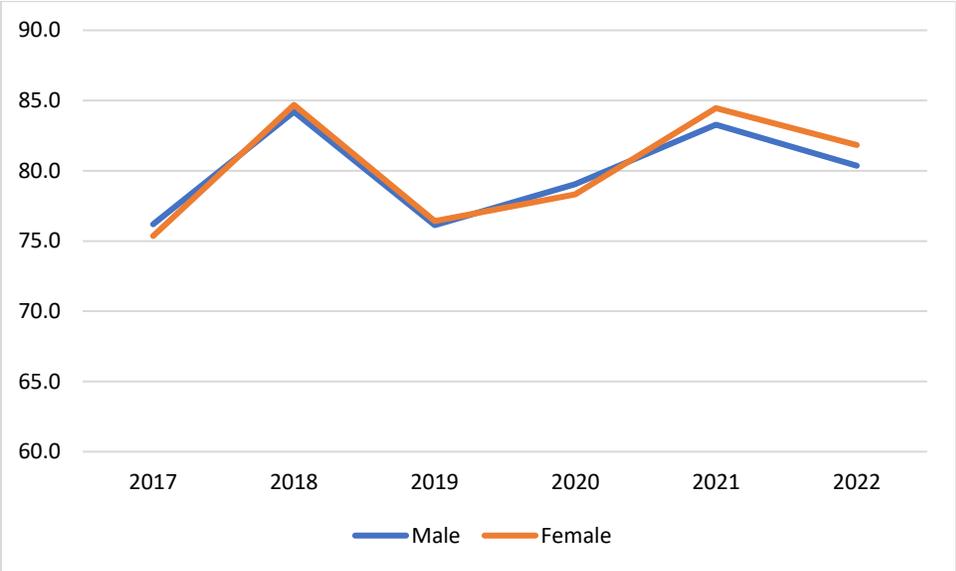
The table presents the birth registration completeness rates by age at registration, disaggregated by sex (male and female). Overall, there is minimal difference between the sexes, with the rates for males and females being almost identical across all ages.

At age 0, the registration completeness for males is 75.2%, and for females, it is 75.6%, indicating a slight edge in registration for females immediately after birth.

By age 5 the registration reaches highest 82.4% for males while it is 82.7% females. This consistency between sexes suggests that birth registration systems treat males and females equally, and there is no notable gender disparity in registration completeness. However, the overall rates indicate room for improvement to ensure all children, regardless of sex, are registered at birth or shortly thereafter.

## Inequalities of Birth Registration using Administrative Data from DCRC

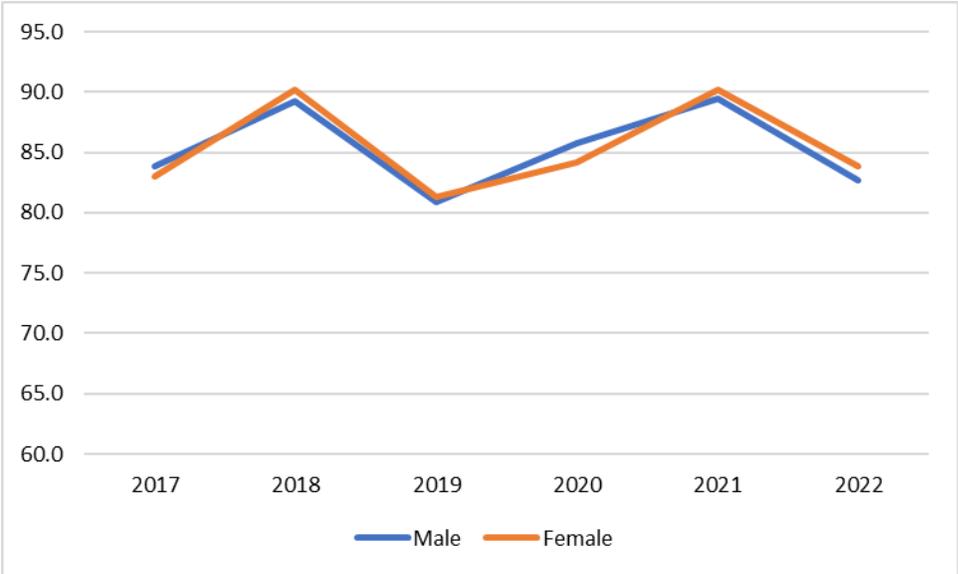
Figure 2.3: Birth Registration completeness by age one year (2017-2022)



The data on birth registration completeness within one year from 2017 to 2022 shows a general improvement, though with some fluctuations over the period. In 2017, the completeness rate stood at 75.8%, which increased significantly to 84.4% in 2018, reflecting notable progress in timely registration efforts. However, the rate dropped to 76.3% in 2019, before recovering to 83.9% in 2021 and stabilizing at 81.1% in 2022.

When disaggregated by sex, the completeness rates for males and females are largely similar, though females often recorded slightly higher rates. In 2018, females had a completeness rate of 84.7% compared to 84.2% for males, and this trend continued in 2021 and 2022. The data highlights progress in ensuring timely birth registration, but the observed fluctuations underscore the need for continued efforts to address barriers and sustain improvements toward universal and timely registration for all children.

Figure 2.4: Birth Registration completeness including delayed registration, by sex (2017-2022)



When considering birth registration completeness, including delayed registrations, the data from 2017 to 2022 reveals an overall improvement over time, though fluctuations persist. In 2017, the completeness rate was 83.4%, which improved to a peak of 89.7% in 2018. This suggests significant progress in ensuring both timely and delayed registrations are captured. However, a notable decline occurred in 2019, with the rate dropping to 81.1, potentially reflecting challenges in maintaining registration momentum. The completeness rate rebounded in 2020 to 85.0%.

When disaggregated by sex, male and female completeness rates remain comparable throughout the period, though females often show slightly higher rates. For example, in 2018, the completeness for females was 90.2%, higher than the 89.2% for males, and this trend continued in 2021 and 2022, with females consistently maintaining a marginally higher rate. The overall data demonstrates progress in capturing both timely and delayed registrations, underscoring the importance of continued efforts to address gaps and ensure comprehensive birth registration across all groups.

## **Need for further Research for Birth Registration**

While there is no significant disparity by sex in birth registration completeness in Bhutan, further research is necessary to explore the underlying reasons for delayed registrations. Delayed birth registration often involves a complex process, making it essential to address these challenges proactively to prevent delays.

Currently, the report only disaggregates data by sex, which limits its scope. To make more informed and impactful policy recommendations, it is crucial to expand the analysis to include additional disaggregation by location and other socio-economic factors. By considering variables such as geographic regions, income levels, education, and occupation, we can gain a deeper understanding of how these factors may influence outcomes. This broader analysis will help identify specific population groups that may be facing challenges, allowing for more targeted interventions and policies that can address inequalities more effectively.

Additionally, it is important to update the most recent data on the marital status of mothers to better understand potential disparities in birth registration. By incorporating marital status into the analysis, we can examine whether there are inequalities in registration rates between married and unmarried mothers. This information could reveal important insights into how social factors, such as marital status, influence the completeness and accuracy of birth registration. Understanding these dynamics would allow for more targeted policy recommendations aimed at addressing any identified disparities and improving the overall effectiveness of registration systems.

## **7. Inequalities in Death Registration Completeness**

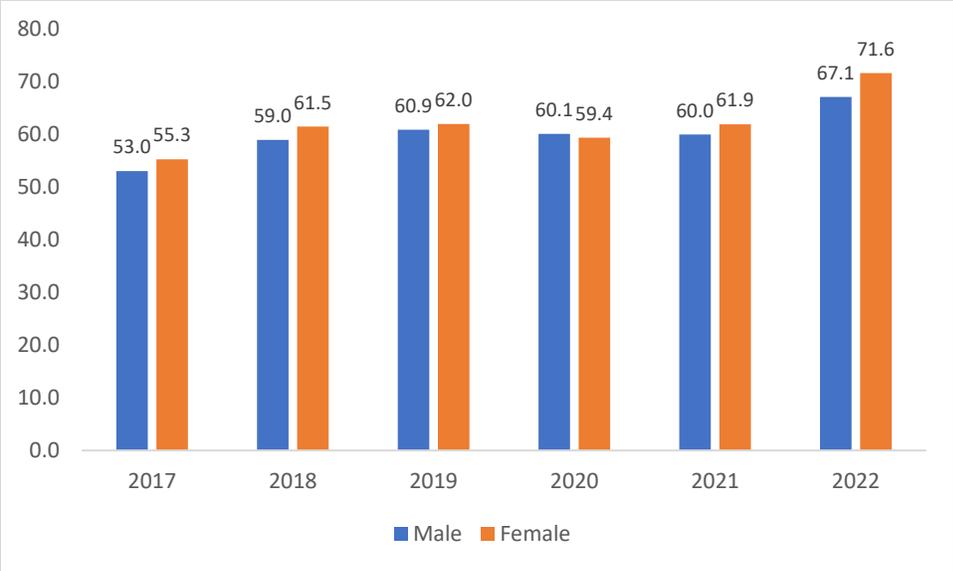
Those deaths that occurred between 2017 and 2022 and for this analysis, the number of births is estimated using children born during the reference period who were aged 0 and those who died at age 0 during the census reference period. Registered with the DCRC are used for the analysis in this report. The inequalities are examined based on the sex and age group of the deceased.

### **Inequalities in Death Registration**

The data on the completeness rate of death registration within one year by sex from 2017 to 2022 shows a clear trend of improvement for both males and females. Both sexes saw steady progress in registration completeness from 2017 to 2019, with a slight decline in 2020, especially for females, possibly due to external factors such as system disruptions. However, from 2020 to 2022, the completeness rates rebounded sharply, with a significant increase in 2022, particularly for females. This overall improvement suggests that measures to enhance the death registration process, such as improved accessibility, public awareness, or policy changes, have been effective.

The male registration rate has increased from 53.0% in 2017 to 67.1% in 2022, while the female rate rose from 55.3% to 71.6%. Throughout the period, the female rate is consistently higher than the male rate except in 2020 where the completeness for the male is 0.7% higher than their counterpart. Despite the progress, the persistent gender gap in completeness rates indicates that additional efforts are needed to address the lower registration completeness among males.

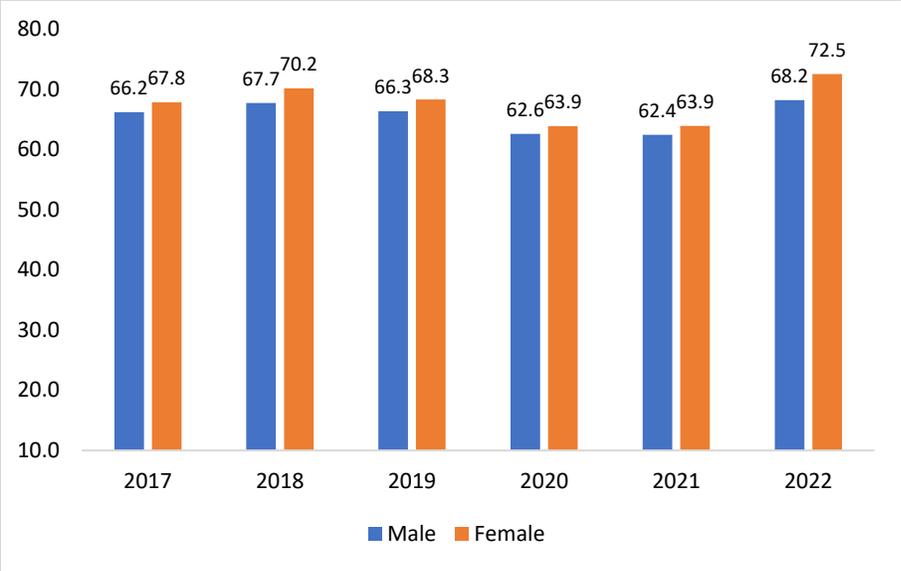
Figure 3.1: Death Registration Completeness by one year of age, by sex (2017-2022)



The data on the death completeness rate, including both timely and delayed registrations, from 2017 to 2022 shows a general upward trend for both males and females, with some fluctuations in certain years. Over the period, the male completeness rate increased from 53.0% in 2017 to 67.1% in 2022, while the female rate rose from 55.3% to 71.6%. Both sexes saw moderate improvements from 2017 to 2018, but there was a slight dip in 2019. The most significant decline occurred in 2020, likely due to the disruptions caused by the COVID-19 pandemic, with both males and females seeing noticeable drops in completeness. However, the rates stabilized in 2021, and by 2022, both male and female rates rebounded sharply.

Despite the improvements, the female completeness rate has consistently been higher than the male rate. This overall trend suggests that while the death registration system, including delayed registrations, has become more effective, the impact of external factors like the pandemic needs to be acknowledged. Further efforts may be needed to address the gender gap, particularly in improving registration completeness for males.

Figure 3.2: Death Registration Completeness including delayed registration, by sex (2017-2022)



The data shows a clear difference in death registration rates between individuals aged 8 years and above and those aged 7 years and below. For the age group 8 years and above, the registration rate fluctuates but shows an overall upward trend. It begins at 72.1% in 2017, increases to 74.6% in 2018, drops to 69.2% in 2020, and then stabilizes at around 75% in 2022, with a slight dip to 68.6% in 2021. In contrast, the registration rate for those aged 7 years and below is consistently lower, starting at 25.1% in 2017 and steadily declining over the years, reaching a low of 8.5% in 2020. After a slight uptick to 10.3% in 2021, it increases slightly again to 13.1% in 2022. These trends highlight a significant gap in the registration of deaths among children under 8, with rates much lower than those for the older age group.

Figure 3:3: Death Registration Completeness by special age-group (2017-2022)

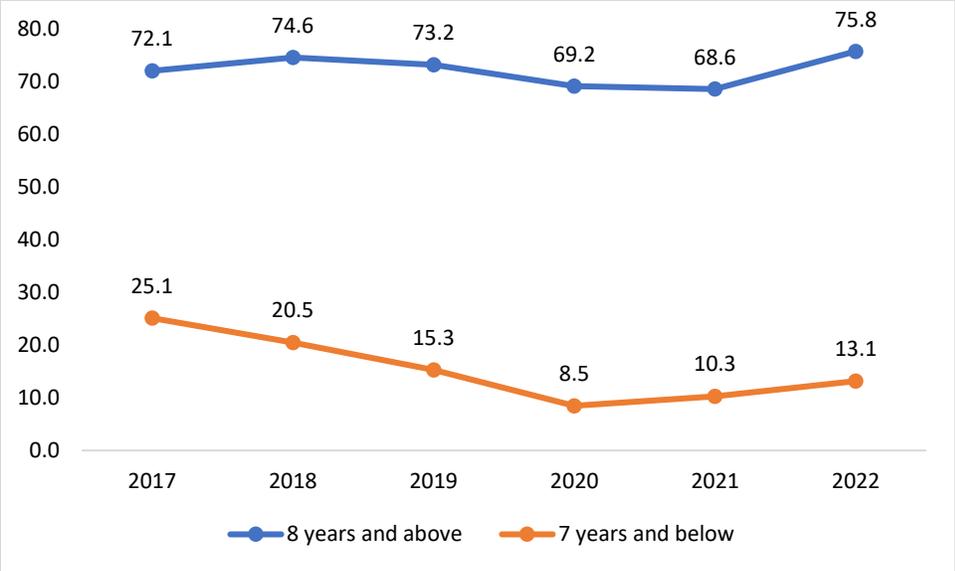
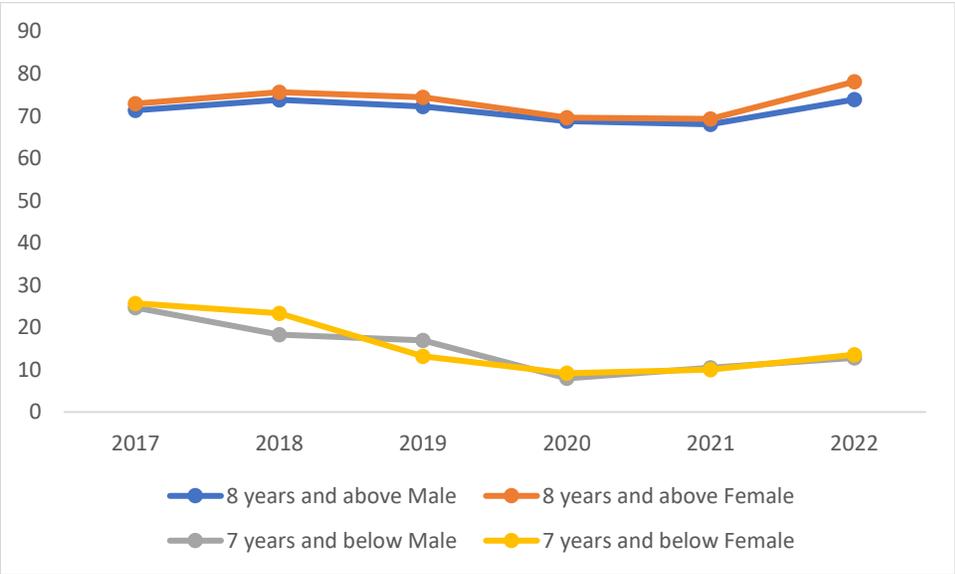


Figure 3.4: Death Registration Completeness by special age-group, sex (2017-2022)



The figure above presents registration statistics by sex for two age groups: individuals aged 8 years and above, and those aged 7 years and below, from 2017 to 2022.

For the age group of 8 years and above, both male and female registration figures show some fluctuations over the years. The registration rates for males and females increased slightly from 2017 to 2018, peaking at around 73.83 %for males and 75.60 % for females in 2018.

For the age group of 7 years and below, the trends show more variability between males and females. Male registration rates in this age group is significantly lower compared to females throughout the years, with the largest gap observed in 2018, where males had a registration rate of 18.33% while females had 23.31%. There was a notable decrease in registration rates for both sexes in 2019, particularly for males, whose registration rate dropped to 16.9%. Female registration also declined to 13.16 % in 2019. The year 2020 saw a further decline for both sexes, with males registering just 7.96 % and females 9.17%. However, by 2021 and 2022, there was a slight increase in both males and females, with female registrations stabilizing at around 13.57% in 2022, while male registrations increased to 12.83% in the same year.

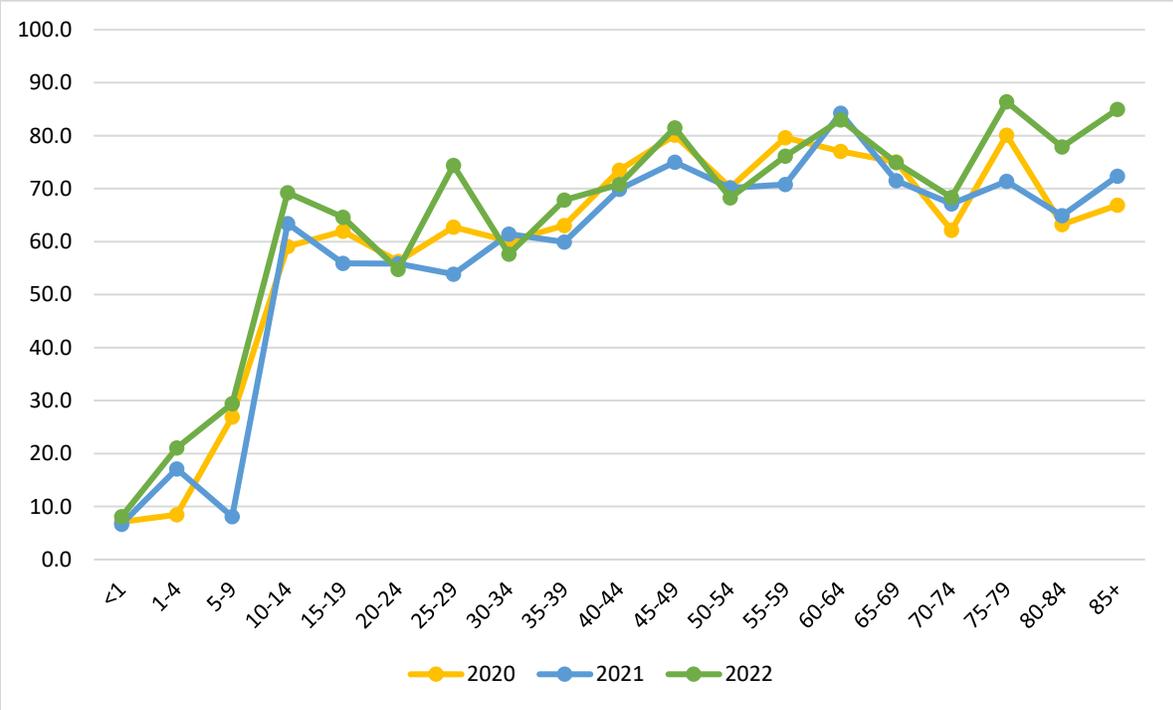
This disparity can be linked to the Rural Life Insurance scheme, which mandates that all citizens aged 8 years and above to contribute annually. As a result, families are more likely to register deaths in this age group, as doing so ensures they can claim the life insurance payout of Nu 30,000, which helps the family members to cover funeral expenses. The higher registration rates for both males and females aged 8 and above suggest that the financial support provided by the Rural Life Insurance scheme plays a significant role in encouraging families to officially report the death.

Conversely, younger children, who are not covered by the scheme, show lower registration rates, possibly due to a lack of financial support for their families in handling funeral costs. The lower registration rates for those aged 7 and below highlights the need for additional strategies to support death registration in younger populations, potentially through extending insurance coverage or providing alternative financial support.

The data on completeness of death registration by age group shows varying rates across different age categories. Death registration rates are generally higher in older age groups, with the highest rates observed in individuals aged 75-79 (82.9%), followed by those aged 60-64 (82.1%) and 85+ (73.03%). The registration rates tend to increase steadily with age, peaking in the 40-44 and 45-49 age groups (74.65% and 79.25%, respectively), and remain relatively high for individuals in their 50s and 60s.

In contrast, the rates are lower in younger age groups, particularly for infants (age 0, 10.26%) and young children aged 1-4 (21.77%) and 5-9 (29.74%). The registration rates for individuals in their teens and early twenties, such as those aged 15-19 years (59.63%) and 20-24 (54.71%) years, are also comparatively high but still lower than for older age groups.

Figure 3.5: Death Registration completeness by age-group (2020-2022)



The figure 3.5 represents the death registration completeness by age group from 2020 to 2022, reflecting the percentage of deaths that were officially registered within each age category. Over the three years, notable trends and fluctuations can be observed across age groups.

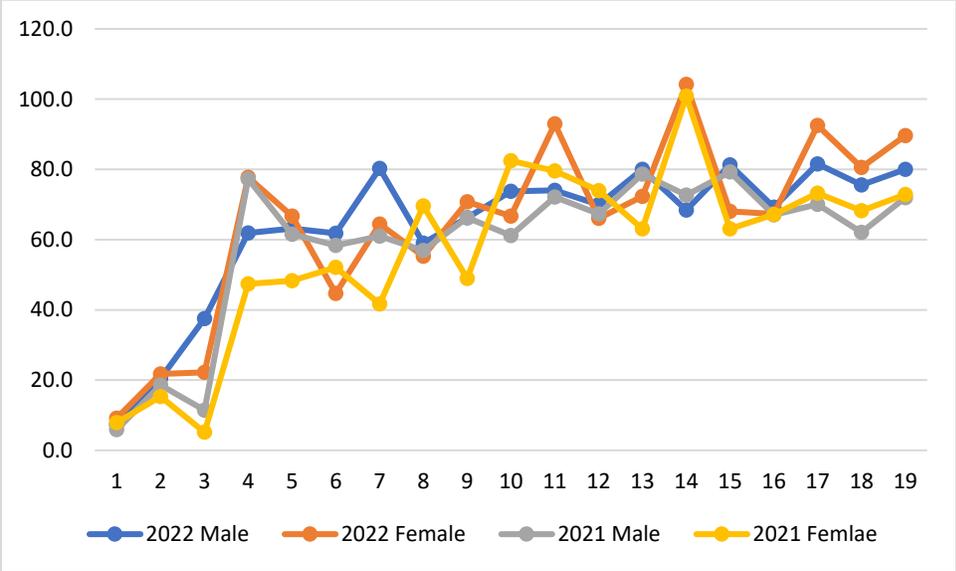
For infants under one year (<1), completeness showed a moderate increase from 7.1% in 2020 to 8.1% in 2022. A significant upward trend is evident among children aged 1–4 years, where completeness more than doubled, rising from 8.4% in 2020 to 21.1% in 2022. Similarly, children aged 5–9 years saw an irregular but notable increase, with 26.9% in 2020, dropping to 8.1% in 2021, and sharply increasing to 29.4% in 2022.

Among adults aged 20–39 years, registration completeness showed some variability, with marginal declines in the 20–24 and 30–34 age groups but a sharp increase in the 25–29 age group, from 62.8% in 2020 to 74.4% in 2022. Older adults (40–64 years) generally maintained high levels of completeness, with most groups showing gradual improvements or stable percentages over time.

For those aged 65 years and older, death registration completeness is consistently higher, with some groups exhibiting significant increases. For instance, the 75–79 age group rose sharply from 80.1% in 2020 to 86.4% in 2022, while those aged 85+ years experienced a marked increase from 66.9% in 2020 to 85.0% in 2022. The 60–64 and 70–74 years age groups also demonstrated strong and steady performance, with completeness levels exceeding 60% throughout the period.

Overall, while registration completeness varied across age groups, there is a general trend of improvement over time, particularly for younger and older populations. However, the lower completeness levels in certain child and adolescent age groups highlight potential areas for targeted interventions to ensure more accurate and comprehensive death registration.

Figure 3.6: Death Registration completeness by age-group and sex (2021-2022)



The figure shows the death registration completeness by age group and sex for 2021 and 2022, highlighting differences between males and females. In 2022, female completeness was generally higher than male completeness in most of the age groups, particularly for infants (<1), where females were at 9.2% compared to 7.4% for males, and for those aged 45–49 (92.9% for females vs. 74.0% for males). In contrast, males had higher completeness in some age groups, such as 60–64, with 68.4% compared to 104.2% for females. Comparing by years, males showed significant increases across many age groups, such as 5–9 (from 11.4% in 2021 to 37.5% in 2022). Females exhibit a notable growth in certain categories, like 1–4 years (from 15.3% in 2021 to 21.7% in 2022). Overall, while improvements are observed across years, disparities between sexes and age groups remain, with females showing consistently higher completeness in key groups.

### **Further Research for Death Registration**

Although there is no significant disparity, the data indicates that death registration completeness is slightly lower for males compared to females. This suggests the need for further investigation to understand the underlying factors contributing to this difference. Additionally, the overall completeness of death registration is lower among the younger population compared to older age groups. Specifically, children under the age of 8 show a significantly lower completeness rate compared to individuals aged 8 years and above. This highlights a gap in the registration process for younger children, which may stem from the absence of incentives for timely registration.

To address this issue, introducing an insurance scheme for children under the age of 8, similar to those in place for older populations could encourage families to register deaths promptly. Such a scheme would not only provide financial support during challenging times but also serve as a motivation for families to complete the registration process.

Further, there is a need to record the cause of death according to the ICD system managed by WHO. ICD coding enhances the quality, utility, and global relevance of mortality data, which is essential for advancing public health and addressing emerging health challenges.

## 8. Conclusion and policy implications

This report highlights the progress Bhutan has made in strengthening its Civil Registration and Vital Statistics (CRVS) system, particularly in achieving improvements in birth and death registration completeness over time.

While the overall trends are positive, the findings suggest that structural challenges, such as lack of financial incentives for certain groups hinders universal and timely registration. These barriers must be addressed to ensure that Bhutan's CRVS system becomes fully inclusive, enabling the country to meet its Sustainable Development Goals (SDGs) and provide accurate data for evidence-based policymaking.

### Policy Recommendations

#### 1. Incentivizing Death Registration for Younger Children

Address the low registration rates for children below eight years by exploring financial support mechanisms similar to the Rural Life Insurance scheme. Providing monetary or non-monetary incentives for registering deaths of younger children may encourage families to comply with registration requirements.

#### 2. Enhancing Public Awareness Campaigns

Conduct targeted awareness campaigns to educate citizens on the importance of timely and accurate registration of vital events. Focus on marginalized populations, rural communities, and regions with lower registration rates to promote understanding and participation.

#### 3. Strengthening the Data Ecosystem for Reliable and Accurate CRVS Data

To enhance the effectiveness and accuracy of CRVS data, strengthening the data ecosystem is essential. This includes addressing data gaps, particularly those related to immigration, and resolving ambiguities in existing classifications. A key priority should be improving the accuracy, consistency, and clarity of the data by ensuring that the most up-to-date information on individuals is accurately recorded and maintained.

The policy should focus on:

- **Standardizing Data:** Implementing clear and consistent classification systems for all collected data is crucial to eliminate ambiguity and facilitate accurate comparisons across

various sectors and regions. For example, causes of death should be categorized according to ICD coding to prevent misclassification and ensure alignment with international standards.

- Integrating Data:** Improving the integration of various data sources, such as immigration data, is crucial for obtaining a more comprehensive view of vital statistics. A Memorandum of Understanding between the two agencies could facilitate data sharing while ensuring data security and preventing misuse. Additionally, there are opportunities to integrate the CRVS system with the judiciary system to obtain up-to-date information on the marital status of mothers and expand the scope of vital events beyond just births and deaths.

- Improving Data Governance:** Implementing robust governance frameworks to ensure data is properly managed, secure, and accessible to relevant stakeholders, while protecting individual's privacy.

#### 4. Building Capacity of CRVS Stakeholders.

Invest in training programs for officials involved in the CRVS system to enhance their capacity to handle registrations efficiently and address inequalities. Provide technical resources and tools to improve the quality and completeness of registration data.

#### 5. Strengthen the CRVS data collection system.

While the basic information on child and mother is asked, there is also possibility of asking the current information on the information like Mothers Current Place of residence, Occupation and educational attainment which could in turn help with the government with the relevant policy formulation.

By implementing these policy recommendations, Bhutan can address existing gaps in its CRVS system and ensure that all vital events are registered in a timely and equitable manner. This will not only support the country's developmental goals but also enhance its ability to provide accurate, inclusive, and actionable data for policymaking and resource allocation.