Economic and Social Commission for Asia and the Pacific

Second Ministerial Conference on Civil Registration and Vital Statistics in Asia and the Pacific

Bangkok and online, 16–19 November 2021

Items 5 and 10 of the provisional agenda**

Vital statistics production, dissemination and usage: harnessing civil registration data for decision-making

Towards a shared vision of universal and responsive civil registration and vital statistics systems that facilitate the realization of rights and support good governance, health and development

Vital statistics production, dissemination and usage: harnessing civil registration data for decision-making

Note by the secretariat

Summary

The present document provides an overview of the current status and recent evolution of vital statistics production, dissemination and usage in Asia and the Pacific. It provides an up-to-date overview of the vital statistics situation for the region, including recent progress, challenges and potential future directions for the remainder of the Asia and Pacific Civil Registration and Vital Statistics Decade (2015–2024). Given the current challenges the region faces owing to the coronavirus disease (COVID-19), the present document contains a review of the pandemic’s impact on the vital statistics situation in Asia and the Pacific. It also contains a review of how vital statistics are used to advance gender equality and the empowerment of women.

The Second Ministerial Conference on Civil Registration and Vital Statistics in Asia and the Pacific may wish to take note of the present document and to discuss country experiences and opportunities to enhance the production and dissemination of vital statistics on births, deaths, causes of death, marriages, divorces, maternal deaths, fetal deaths and abortions, as a means to support improved understanding of subnational differentials in fertility, mortality and nuptiality outcomes. The Ministerial Conference may also wish to provide guidance and advice on how to ensure that all members and associate members of the Economic and Social Commission for Asia and the Pacific achieve the goal of producing and disseminating accurate, complete and timely vital statistics, including on causes of death, based on registration records. The Ministerial Conference may further wish to take stock of recent innovations that emerged during the COVID-19 pandemic to improve the production, dissemination and usage of mortality statistics.

* Reissued for technical reasons on 20 October 2021.
** ESCAP/MCCRVS/2021/L.1.
I. Introduction

1. Civil registration and vital statistics systems are essential to establish legal identity, support administrative services and government policy, and facilitate evidence-based programme evaluation and research. Vital statistics are defined as statistics on vital events in the lifetime of a person as well as relevant characteristics of the events themselves and of the person(s) concerned. These statistics provide important insights for a country on the characteristics of its population size, structure, dynamics and socioeconomic characteristics. Complete and timely vital statistics provide policymakers with the necessary information to track progress towards achieving the Sustainable Development Goals. More broadly, vital statistics are used to design fundamental demographic and epidemiological measures that are needed in national planning across multiple sectors, such as education, health and labour.1

2. The Regional Action Framework on Civil Registration and Vital Statistics in Asia and the Pacific, as part of the Asia and Pacific Civil Registration and Vital Statistics Decade (2015–2024), includes goal 3 on the production and dissemination of accurate, complete and timely vital statistics (including on causes of death) based on registration records. It specifically builds on goals 1 and 2 on the universal registration of births, deaths and other vital events and on the provision of legal documentation of civil registration for all. Indeed, the recording of demographic and health information is a prerequisite for conferring identity documents through civil registration systems. However, across the Asia-Pacific region, the availability of reliable data is limited by gaps in the registration of births, deaths, marriages and divorces, and/or gaps in processes for the compilation and analysis of vital statistics generated from civil registration. For example, approximately 22 per cent of children born are without a birth certificate, the deaths of at least one in four people (but probably more) are not registered, and an unknown number of marriages are unregistered.2 The gaps in vital event registration completeness pose challenges for the production, dissemination and usage of vital statistics derived from civil registration data.

3. While the coronavirus disease (COVID-19) pandemic has heightened the importance of civil registration and vital statistics systems across Asia and the Pacific, it has also made their maintenance and improvement more challenging. As stated on 28 June 2021 by the Executive Secretary of the Economic and Social Commission for Asia and the Pacific (ESCAP), the Assistant Secretary-General and Director of the Regional Bureau for Asia and the Pacific at the United Nations Development Programme, and the Deputy Executive Director of Programmes at the United Nations Children’s Fund, in their opinion article on the critical nature of universal civil registration and vital statistics for truth, trust and COVID-19 recovery, the need for accurate data and reporting mechanisms is critical at all times and even more crucial during humanitarian situations, whether a natural disaster or health emergency, when urgent decisions are required and hard policy choices have to be made. Governments, health authorities and development partners need timely, reliable and complete data to know the extent of the issue. Such data can guide evidence-based decisions on where resources should be deployed and the assessment of which interventions have been most effective. While making data available does not guarantee they will be used, if the data are not fit for

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1 See ESCAP/MCCRVS/2021/INF/1.
purpose or if they are unavailable, then decision-making will not be evidence informed. The more complete, accurate and trustworthy the data are, the better informed the decisions are likely to be.

4. The present document contains a description of the current status of civil registration and vital statistics systems in Asia and the Pacific, with a focus on vital statistics production, dissemination and usage. It is anticipated that the analysis and discussion contained in the present document will serve as a basis for designing interventions to strengthen vital event registration processes as well as programmes for data quality evaluation and analysis in Asia and the Pacific, thereby improving the evidence base for policy and planning, and advancing human rights and sustainable development. The present document was developed as part of the Connecting Vital Events Registration and Gender Equality initiative, known as ConVERGE, a global initiative to connect vital events registration and gender equality, led by the United Nations Population Fund (UNFPA) and supported by the Government of Canada. The findings in the present document will be included in a UNFPA report to be published in November 2021.

5. Section II of the present document provides a brief overview of the principles, standards and guidance on vital statistics provided in the United Nations Principles and Recommendations for a Vital Statistics System. It contains a summary of the key commitments agreed by ESCAP members and associate members with regard to vital statistics production, dissemination and usage. Section III provides a formal assessment of the vital statistics situation across the Asia-Pacific region. It contains a summary of the baseline and midterm progress across the 58 countries and areas of the region towards the five core vital statistics targets of goal 3 of the Regional Action Framework, namely:

   (a) Target 3.A on annual nationally representative statistics on births;
   (b) Target 3.B on annual nationally representative statistics on deaths;
   (c) Target 3.F on key summary tabulations of vital statistics on births and deaths using registration records;
   (d) Target 3.G on key summary tabulations of vital statistics on causes of death using registration records;
   (e) Target 3.H on accurate, complete and timely vital statistics reports using registration records.

6. Section IV provides an overview of vital statistics practices, including during the COVID-19 pandemic, including a summary of some of the challenges associated with producing, disseminating and using vital statistics during that period. The section serves to highlight vital statistics practices in selected countries in the region that were included in short case studies. The selection of countries was informed by the situation analysis developed in section III. Section V contains a brief summary of the vital statistics situation in the region, including progress in the first half of the Asia and Pacific Civil Registration and Vital Statistics Decade (2015–2024) and challenges ahead as

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4 Revision 3 (United Nations publication, 2014).
the region advances towards the conclusion of the second half of the Decade and the 2030 Agenda for Sustainable Development.

II. **Overview of international principles and standards of vital statistics**

7. *Principles and Recommendations for a Vital Statistics System* provides an outline of the international technical standards on vital statistics production and dissemination. The core principles guiding vital statistics systems are universal coverage, continuity, confidentiality and regular dissemination. Universal coverage refers to the need for the system to cover the vital events of the entire resident population when they occur in the territory of the country. Continuity of the system refers to ensuring that vital statistics reflect both short-term fluctuations as well as long-term trends in the population dynamics of a country. The confidentiality principle refers to ensuring that information provided for the purpose of vital statistics is used only for authorized statistical or administrative purposes. The principle of regular dissemination, in line with the Fundamental Principles of Official Statistics, is predicated on the understanding of vital statistics as a public good. The regular dissemination of vital statistics should facilitate their comparison within and among countries and over time, and it should include explanation and documentation to support correct interpretation of the statistics.

8. *Principles and Recommendations* serves to highlight that civil registration data are the preferred source for vital statistics. A major advantage of vital statistics derived from civil registration data is that such statistics can be disaggregated by subpopulation and area. Furthermore, it establishes 72 minimum tabulations of vital statistics for compilation from civil registration data under the following broad tabulation categories:

   (a) Live births;
   (b) Deaths;
   (c) Infant deaths;
   (d) Fetal deaths;
   (e) Live births and fetal deaths;
   (f) Marriages;
   (g) Divorces;
   (h) Summary tables.

9. An annual programme of vital statistics reporting and dissemination should provide data on the incidence, patterns, time trends and geographical differentials in the characteristics and determinants of fertility, mortality, fetal mortality, nuptiality and divorce as well as their interrelationships. Such an annual programme should maximize the usage of available information and take account of the completeness and quality of the basic data.

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5 Ibid.
6 General Assembly resolution 68/261.
III. Overview of vital statistics in Asia and the Pacific

A. Vital statistics production and dissemination in Asia and the Pacific, 2009–2018

10. There is a wide range of vital statistics production and dissemination practices across the Asia-Pacific region. According to the 70th issue of the United Nations Demographic Yearbook,7 between 2009 and 2018, 25 of the 58 countries in Asia and the Pacific regularly disseminated aggregate data on registered vital events spanning fetal deaths, legally induced abortion, live births, infant deaths, marriages, divorces and adult deaths. The present subsection contains an assessment of the patterns of vital statistics reporting and dissemination across Asia and the Pacific for the period 2009–2018 against the minimum set of vital statistics tabulations outlined in Principles and Recommendations. The source of the information for the present section is the Demographic Yearbook, which is a compilation of data collected by the Statistics Division of the Department of Economic and Social Affairs of the Secretariat through a set of questionnaires dispatched annually to national statistical offices. The most recent data published in the Demographic Yearbook is from 2018 for most countries.

11. According to the Demographic Yearbook, data on registered live births and registered adult deaths were the most commonly disseminated aggregate information on registered vital events. Meanwhile, 14 countries disseminated data on legally induced abortions for at least one year; 22 countries intermittently disseminated aggregate data on fetal deaths; and 14 countries did not disseminate any aggregate vital registration data. Table 1 contains details on vital statistics reporting and dissemination, including the availability of disaggregated data.

Table 1
Reporting and dissemination of vital statistics and their disaggregations by 58 selected members and associate members of the Economic and Social Commission for Asia and the Pacific, 2009–2018

<table>
<thead>
<tr>
<th>Vital event</th>
<th>Number of countries and areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Data available for at least 1 year</td>
</tr>
<tr>
<td>Live births</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vital event</th>
<th>Number of countries and areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Data available for at least 1 year</td>
</tr>
<tr>
<td>Infant deaths</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fetal deaths</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Abortions</td>
<td>14</td>
</tr>
<tr>
<td>Marriages</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorces</td>
<td>28</td>
</tr>
</tbody>
</table>

Source: Demographic Yearbook: 70th Issue (United Nations publication, 2020).

12. Among the 41 countries in the region that disseminated vital statistics on live births for at least one year, the most common disaggregations were by urban/rural residence, birth order and sex, birth order and age of mother, weight and sex, gestational age, and marriage duration of parents. Dissemination of live birth statistics by age of mother and/or age of father is not routine in the region, even for countries producing regular live birth statistics.

13. In addition, of the 41 countries that disseminated vital statistics on deaths for at least one year between 2009 and 2018, 23 disseminated statistics on general/adult deaths disaggregated by cause of death for every year, and 12 disseminated statistics on general/adult deaths disaggregated by sex and urban/rural region for every year, while 14 disseminated statistics in these three disaggregations for at least one year.

14. Thirty-four countries disseminated infant death statistics based on vital event registration data for at least one year. Of those countries, 21 routinely disseminate vital statistics disaggregated by urban/rural for every year and 24 have produced statistics on infant deaths disaggregated by age, sex, or age and sex together for at least one year.

15. Statistics on fetal deaths were disseminated by 22 countries for at least one year during the period 2009–2018. Fetal death statistics disaggregated by urban/rural were routinely disseminated every year for Japan, New Zealand, the Republic of Korea and Singapore. Sixteen countries disseminated fetal death statistics disaggregated by age of mother for at least one year, and 19 countries disseminated disaggregated fetal death statistics by gestational age for at least one year.
16. The production and dissemination of marriage and divorce statistics based on civil registration data in Asia and the Pacific are notably less common than statistics on births and deaths, as shown in table 1. Across the region, 34 countries disseminated marriage statistics for at least one year, 4 countries disseminated them for every year, and the remaining 24 countries did not disseminate any aggregate marriage registration statistics. Meanwhile, 28 countries disseminated aggregate divorce registration statistics for at least one year, 3 countries disseminated them for every year, and 30 countries did not disseminate any divorce registration statistics. Five countries disseminated disaggregated statistics on marriages by age at first marriage for every year. However, 23 countries did not disseminate any disaggregated marriage or divorce statistics.

B. Midterm review of the Asia and Pacific Civil Registration and Vital Statistics Decade (2015–2024) and the vital statistics situation in the region

17. The present subsection includes a review of the recent progress across the 58 countries and areas spanning the region towards the core vital statistics targets associated with goal 3 of the Regional Action Framework, namely targets 3.A, 3.B, 3.F, 3.G and 3.H.8

18. Goal 3 and its associated targets constitute the civil registration and vital statistics commitments made at the ministerial level by ESCAP members and associate members. They encapsulate shared commitments to the production of routine vital statistics on births, deaths and causes of death, and to accountability through statistical disaggregation by key attributes, such as sex, age and geographic area.

19. Table 2 contains a summary of the baseline situation and the status of the midterm review for the core vital statistics targets of the Regional Action Framework. In the five years since the Decade was declared, and leading up to the midterm review in 2019–2020, the Russian Federation, Palau and Vanuatu reported having begun to produce nationally representative birth statistics with key disaggregation.

20. With regard to public availability of vital statistics, Palau reported having instituted routine electronic dissemination of summary birth and death statistics within one calendar year of the event’s occurrence. The Islamic Republic of Iran, Nauru and the Russian Federation reported having instituted routine electronic dissemination of summary cause-of-death statistics within two calendar years of the event’s occurrence. Kiribati and Nauru reported having instituted the production and dissemination of vital statistics reports for the previous two years. Those developments represent important progress by national statistics authorities in the production and dissemination of vital statistics in the region.

8 Progress towards the targets of the Regional Action Framework was assessed through a questionnaire sent to all members and associate members of ESCAP (https://getinthepicture.org/regional-picture/midterm-reporting). As the countries that responded to the questionnaire differ slightly from the countries that reported data to the United Nations Demographic Yearbook, the figures presented in this section are different from the ones presented in the previous section. For more information on progress against the targets of the Regional Action Framework, see ESCAP/MCCRVS/2021/1.
Table 2
Vital statistics targets of the Regional Action Framework on Civil Registration and Vital Statistics in Asia and the Pacific, baseline and midterm values

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.A</td>
<td>By ... (year), annual nationally representative statistics on births – disaggregated by age of mother, sex of child, geographic area and administrative subdivision – are produced from registration records or other valid administrative data sources.</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>3.B</td>
<td>By ... (year), annual nationally representative statistics on deaths – disaggregated by age, sex, cause of death defined by International Classification of Diseases (latest version as appropriate), geographical area and administrative subdivision – are produced from registration records or other valid administrative data sources.</td>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td>3.F</td>
<td>By .... (year), key summary tabulations of vital statistics on births and deaths using registration records as the primary source, are made available in the public domain in electronic format annually, and within one calendar year.</td>
<td>26</td>
<td>28</td>
</tr>
<tr>
<td>3.G</td>
<td>By ... (year), key summary tabulations of vital statistics on causes of death using registration records as the primary source, are made available in the public domain in electronic format annually, and within two calendar years.</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>3.H</td>
<td>By ... (year), an accurate, complete and timely vital statistics report for the previous two years, using registration records as the primary source, is made available in the public domain.</td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>

Source: For the midterm questionnaire responses, see https://getinthepicture.org/regional-picture/midterm-reporting.
IV. Vital statistics practices in selected countries of the Asia-Pacific region, including during the coronavirus disease pandemic

21. The present section includes examples of challenges and good practices documented by UNFPA in vital statistics case studies in Indonesia, Kyrgyzstan, the Lao People’s Democratic Republic, Pakistan, Tajikistan and Turkmenistan. As the examples contained in the present section are drawn from those six countries, they are not necessarily representative of the entire Asia-Pacific region. The examples are focused on the response to the COVID-19 pandemic and efforts to advance gender equality.

A. Vital statistics production

22. In some countries in Asia and the Pacific, vital statistics production from civil registration data is largely implemented through analog processes across multiple institutions and levels of government administration (see figure on vital statistics production flow in Kyrgyzstan, Tajikistan and Turkmenistan). As is the case in other countries of Asia and the Pacific, most of the business processes in the case study countries are paper based, and national statistical offices must digitize the information. Local civil registration offices and statistical offices are responsible for the information collection stage, which entails gathering forms issued by ministries of health and inputting data from the informant’s oral declaration into the automatic or paper-based system. Once the information has been transferred to the central national statistical offices, converting the data into a proper electronically readable format is usually completed by the main computer centre of the State. For example, in Kyrgyzstan and Tajikistan, the population or demographic division in charge of vital statistics production and dissemination receives data that are already aggregated.

9 Findings of the case studies are to be published by UNFPA in November 2021.
## Vital statistics production flow in selected countries

<table>
<thead>
<tr>
<th>Institution/ level</th>
<th>Kyrgyzstan</th>
<th>Tajikistan</th>
<th>Turkmenistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local civil registration office</td>
<td>Oral declaration to fill in AIS ZAGS a</td>
<td>Fill in local office’s paper form</td>
<td>Fill in local office’s paper form</td>
</tr>
<tr>
<td>Local statistical office</td>
<td>-</td>
<td>-</td>
<td>Collect forms from local civil registration office in etraps (districts)</td>
</tr>
<tr>
<td>District statistical office</td>
<td>Gather and digitize hard copies from district office of the Ministry of Health and district civil registration office</td>
<td>Collect form and documents from district civil registration office</td>
<td>-</td>
</tr>
<tr>
<td>Regional statistical office</td>
<td>Collect cause-of-death information at regional office of the Ministry of Health and send to national statistical office</td>
<td>Collect cause-of-death information at regional office of the Ministry and send to national statistical office</td>
<td>Digitize and check the information provided in paper forms from local statistical office</td>
</tr>
<tr>
<td>National statistical office</td>
<td>▲ Main computer centre processes information and checks quality</td>
<td>Main computer centre digitizes the information</td>
<td>▲ Population Division of the Turkmen Statistical Bureau checks quality and publishes in paper format</td>
</tr>
<tr>
<td></td>
<td>Population department publishes in paper and electronic format</td>
<td>▲ Population department publishes in paper format and publishes summaries in electronic format</td>
<td></td>
</tr>
</tbody>
</table>

Collect information from civil registration office

▲ Data quality checks

▲ Cause-of-death coding

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**Source:** Case study reports to be published by the United Nations Population Fund (UNFPA) in November 2021.

a  AIS ZAGS refers to the automated information system of civil registrations of Kyrgyzstan. See https://cis-legislation.com/document.fwx?rgn=63219#A3WW0TDJQK.

23. As the data exchange process is not fully automated, national statistical offices receive data in different formats and on different timelines, which makes for a lengthy process; consequently, other entities, such as national ministries of health and civil registration offices, have taken the initiative to produce and disseminate their own data. The varied and unconnected sources lead to inconsistency in the data and the publication of conflicting figures on the number of vital events, which also constitutes an inefficient use of government resources.
Box 1
Addressing discrepancies in birth data in Tajikistan

In Tajikistan, discrepancies have been identified between the birth counts published by the Ministry of Health and Social Protection of the Population and the Ministry of Justice. The counts differ by as many as 50,000 cases, according to the Ministry of Justice. Discrepancies arise mainly because the Ministry of Justice counts birth registrations in a given year, which includes some births that occurred in a previous year, whereas the Ministry of Health and Social Protection of the Population records births by the year of occurrence.

Source: UNFPA consultations with the Ministry of Health and Social Protection of the Population and the Ministry of Justice of Tajikistan.

B. Quality assurance procedures

24. Across the Asia-Pacific region, a wide range of quality assurance practices have been adopted as part of the vital statistics production process. In the case studies in Indonesia, Kyrgyzstan, the Lao People’s Democratic Republic, Pakistan, Tajikistan and Turkmenistan, data quality protocols were largely based on logical algorithms for automated systems or on the revision of information contained in the digitized certificates or paper forms. The logical algorithms currently eliminate typos and some age- and gender-related errors at the data input phase. In Kyrgyzstan, for example, one of the main problems detected was the lack of harmonization in the coding of most socioeconomic characteristics associated with the vital event, such as education status, occupation and other essential information.10

25. When the registration process is conducted manually, there is often a lack of harmonization with regard to the socioeconomic characteristics associated with the vital event. Identifying or validating information on the causes of death, for example, constitutes an additional challenge at the regional level. At the subnational level, most officers responsible for coding the causes of death do not have medical education, and cause-of-death classification is thus prone to error.

26. Comparisons between the number of registered births and deaths and indirect estimates of births and deaths from household surveys and specialized surveys are more likely to show accurate estimates of completeness of civil registration records. Such cross-validation of civil registration records and indirect estimations based on survey data is mostly limited to infant deaths. Further technical capacity development and routine procedures in the area of vital statistics production quality assurance are therefore needed.

C. Vital statistics content and dissemination

27. The availability of vital statistics is essentially driven by the scope and nature of variables that compose the content of vital event notification forms. Principles and Recommendations provides detailed guidance on the variables that should be included for reporting births, perinatal deaths, deaths at all other ages, causes of death, and marriages and divorces for detailed statistical analysis.

28. As part of the case studies, available forms for Indonesia, the Lao People’s Democratic Republic and Pakistan were reviewed and compared with accepted international technical standards. In general, the forms used in Indonesia were found to be largely compliant with those standards. At the same time, it should also be noted that there is no system in place for the compilation of detailed data from the forms, since the civil registration and vital statistics system under the Ministry of Home Affairs only compiles select variables and issues only summary vital statistics based on aggregated data. Therefore, while it is important to have compliant forms, it is also important to ensure that sufficiently detailed data for each case is recorded and captured to enable detailed statistical analysis. The revised registration forms in the Lao People’s Democratic Republic are available for birth registration and are compliant with accepted international technical standards, but the draft forms for deaths and marriages were still under review with the national civil registration and vital statistics committee at the time of reporting. The forms in Pakistan were found to be considerably divergent across provinces and regions. There is a need to reconcile the forms to develop a national standard that will also comply with the recommended norms. The World Health Organization International Form of Medical Certificate of Cause of Death is not yet implemented by any of the three countries, although there is some usage of the form in some locations across Indonesia.

29. All compiled vital records data must be closely examined for quality, using a comprehensive evaluation protocol that examines specific data parameters, such as the plausibility and consistency of collected data and the completeness of vital events. The evaluation of the content and quality of civil registration and vital statistics data should be sufficient to identify any prominent data bias.

30. At the regional level, other civil registration and vital statistics systems not included in these case studies, such as the systems of Fiji, India, the Islamic Republic of Iran, Malaysia, the Philippines, Sri Lanka and Thailand, have a regular programme for data quality evaluation and, where necessary, adjustments, prior to the release of national vital statistics reports. In Malaysia, mortality statistics are compiled for deaths that are medically certified and deaths that are recorded by family notification, and these data are evaluated to determine the proportion of deaths recorded with non-specific causes. In India, given the challenges in implementing civil registration and vital statistics operations across vast areas and populations, assessments of data completeness are conducted each year, although they only use indirect aggregated analysis methods based on external vital rates from the sample registration system, showing 93 per cent and 92 per cent completeness for birth and death registration at the national level. Conducting such assessments needs to also include the use of indirect demographic techniques or record-linkage methods.

D. Vital statistics usage

31. Although there have been increasing efforts across the Asia-Pacific region to improve vital statistics production and dissemination, support for vital statistics end users still requires additional attention. In that regard, in Kyrgyzstan, dynamic and interactive consultations have been established with end users of statistics, including vital statistics.

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Vital statistics consultation processes in Kyrgyzstan

The national statistical office in Kyrgyzstan has established a consultation process through press conferences, email exchanges and chat groups with its primary statistics users. Some non-governmental organizations (NGOs) work in close collaboration with the national statistical office, and some of the collaborative actions result in the production and publication of a section on the national statistical office website for gender statistics. The section includes statistics disaggregated by sex and municipality on a variety of economic and social topics, including marriage, maternal and infant mortality, life expectancy and fertility.

The national statistical office also developed the thematic publication “Youth of Kyrgyzstan”, and a multi-stakeholder working group was formed by state agencies, international organizations, NGOs and universities.

Source: Case study report to be published by UNFPA in November 2021.


E. Vital statistics practices during the coronavirus disease pandemic

32. The pandemic has impacted the ability of governments to maintain services and routine functions, including civil registration and vital statistics systems. As the pandemic has continued throughout 2020 and 2021, civil registration and vital statistics systems in the Asia-Pacific region have been adapted to the impact, and national strategies have been devised to maintain operations. In Indonesia, in response to the onset of the pandemic, some civil registration staff were instructed to work from home, reduced attendance was coupled with strict physical distancing in offices, and official measures were taken to invest in information technology to enhance online services. In the Islamic Republic of Iran, operational procedures were revised to facilitate online notification of vital events and clear the backlog of registrations. Similarly, the initial response in the Lao People’s Democratic Republic was to decentralize the recording of vital events to village chiefs, who could then submit records to the district office of the Ministry of Home Affairs for registration and issuance of certificates, instead of the family having to visit the district office for those procedures. For Pakistan, there was no response to the United Nations Legal Identity Task Force survey, but the case study consultation revealed that civil registration and vital statistics operations continued in accordance with standard operating procedures on social distancing, hygiene measures and travel restrictions. In addition, the Government established a mechanism for reporting COVID-19 deaths to the national disease control centre.

33. In Malaysia, the Government adopted a novel approach to maintain death registration and cause-of-death ascertainment practices during the pandemic. As in other Asia-Pacific countries, a large proportion of deaths in Malaysia occur at home without medical attention. Since 2018, Malaysia has commenced a national initiative to strengthen cause-of-death ascertainment for home deaths through the implementation of formal verbal autopsy methods in conjunction with civil registration and vital statistics, as mandated by a regulation from the Ministry of Health. Owing to movement restrictions due to the COVID-19 pandemic, official permission was provided to conduct telephonic verbal autopsy interviews, with the option for families to share available health documents about the deceased by email, electronic messaging service or post. Analysis of a sample of cases demonstrated that this method
was viable, although interviewers and respondents alike stated a preference for face-to-face interviews, whenever feasible.

34. Despite all the challenges, the impact of the COVID-19 pandemic has had some potentially positive outcomes with regard to increased awareness among governments and the public of the importance of mortality reporting and statistics. In several countries, there was a rapid digital transformation of data management and improved intersectoral collaboration for civil registration and vital statistics implementation. Those innovations could help to accelerate civil registration and vital statistics development programmes across Asia-Pacific countries to meet Regional Action Framework targets and enable evidence-based measurement of progress towards the Sustainable Development Goals.

F. Vital statistics in support of gender equality

35. The availability of vital statistics disaggregated by sex is essential for government policies and societal actions for the protection of various human rights and the provision of specific services at both the individual and population levels. For instance, birth registration protects against child marriage and human trafficking at the individual level, while the evaluation of sex ratios at birth can be useful in assessing gender preference in fertility trends at the population level. Similarly, marriage registration protects against child marriage and protects the inheritance rights of women, while divorce registration secures assets and property rights and informs the understanding of nuptiality patterns and trends in society. Information on causes of death from registration data disaggregated by sex is essential to evaluate gender-specific health risks and outcomes for maternal mortality and to evaluate gender differentials in mortality from specific diseases, such as diabetes and cardiovascular disease. Ensuring the completeness and quality of death registration data also requires separate evaluation for men and women, since there are observed patterns of underregistration of deaths of women in many countries for various reasons.12

36. Several gender-based indicators should be available from civil registration and vital statistics systems, including such indicators as the sex ratio at birth, early-year mortality rates and divorce rates by gender. Some countries derive gender statistics from surveys, which may also exclude data on causes of death, given the specialized nature of the required data collection practices. In the Lao People’s Democratic Republic, for example, gender statistics are available from the national social indicator survey carried out in 2017. These statistics are available in Pakistan, from the nationally representative Demographic and Health Survey conducted in 2017–2018, and in Indonesia, from the 2020 census.

37. Table 3 contains a summary of how Kyrgyzstan, Tajikistan and Turkmenistan draw on civil registration data and vital statistics to inform key issues of gender equality, such as femicide, child marriage and gender-biased sex selection.

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12 See ESCAP/MCCRVS/2021/6.
Table 3

**Availability of vital statistics to inform gender equality issues**

<table>
<thead>
<tr>
<th></th>
<th>Kyrgyzstan</th>
<th>Tajikistan</th>
<th>Turkmenistan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Femicide</strong></td>
<td>Not available. It is hard to observe the causes of femicides or suicides in the statistics, as the relatives tend to hide the real causes of death. People do not allow autopsy for religious reasons. There is insufficient data on the living conditions of women and types of violence.</td>
<td>Not available. Data on causes of death come from the Ministry of Health, and there is no interconnectivity between Ministry of Health and Ministry of Justice. Only a few causes of death are published disaggregated by gender.</td>
<td>Not available. There is no publication of cause-of-death statistics.</td>
</tr>
<tr>
<td><strong>Underage marriage</strong></td>
<td>Available. It is possible to indirectly study underage marriage using birth statistics by mother’s age.</td>
<td>Not available. It would be possible to indirectly study underage marriage using the birth statistics by mother’s age. However, the only birth statistics published are the total number/rate in the country and five urban territories.</td>
<td>Not available. There is no official publication on underage marriage. Birth statistics are published in the statistical yearbook, printed version only, and there is information on birth by mother’s age.</td>
</tr>
<tr>
<td><strong>Maternal mortality</strong></td>
<td>Available. The statistics are not always transparent, as medical institutions tend to hide the real statistics to cast their work in a more positive light.</td>
<td>Available, but only for cases that occurred in the public health system.</td>
<td>Not available. There is no official publication of cause-of-death statistics.</td>
</tr>
<tr>
<td><strong>Infant mortality</strong></td>
<td>Available. However, there is a big difference between vital statistics and multiple indicator cluster surveys statistics, and there are no data on the living conditions of children.</td>
<td>Available.</td>
<td>Available. Data are published in the statistical yearbook, printed version only.</td>
</tr>
<tr>
<td><strong>Gender-biased sex selection</strong></td>
<td>Partially available. There is likely some underregistration of abortions in private clinics.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Children per woman</strong></td>
<td>Available.</td>
<td>Not available. It is only possible to study children per woman using indirect estimations from surveys.</td>
<td>Not available. It is only possible using indirect estimations from surveys.</td>
</tr>
</tbody>
</table>
V. Conclusion

38. Although vital statistics from civil registration records can provide valuable insights into population dynamics and can be used to assess sustainable development progress, many countries in Asia and the Pacific are not able to produce and disseminate them regularly and with key disaggregations. Over the past decade, many countries have faced challenges in routinely producing the minimum core set of vital statistics outputs and have thus been unable to achieve goal 3 of the Regional Action Framework on producing and disseminating accurate, complete and timely vital statistics, including on causes of death, based on registration records. While vital statistics on births are routinely produced in most Asia-Pacific countries, there are considerable impediments across the region to the production of vital statistics on infant deaths, fetal deaths, adult deaths, nuptiality and divorces. Furthermore, increased efforts in the region are required to support the routine production of disaggregated vital statistics by sex, age and geographical location.

39. Quality assurance of vital statistics production processes requires further strengthening in many countries in the region and can be further enhanced through the progressive digitization of civil registration systems. The establishment and effective functioning of a national civil registration and vital statistics coordination mechanism comprising all relevant stakeholders, which is one of the implementation steps of the Regional Action Framework, can further support the improvement of vital statistics. Effective consultation processes with the end users of vital statistics have been pioneered in some countries. Such practices can be further enhanced during the second half of the Decade.

40. Many national statistical systems disproportionately rely on censuses and household surveys for the production and dissemination of gender statistics and sex-disaggregated population statistics. Vital statistics generated from civil registration data can be further utilized, in particular when engaging on key gender equality issues, such as gender-biased sex selection, child marriage and preventable maternal deaths.

41. Progress made in strengthening civil registration and vital statistics systems in the first half of the Decade needs to be further consolidated and accelerated as 2030 approaches, particularly in the areas of vital statistics.
production, dissemination and usage. At the same time, COVID-19 has introduced new challenges for universal, permanent and continuous civil registration and created more demand for timely, comparable, accurate and disaggregated vital statistics, in particular in the area of mortality.

VI. Issues for consideration

42. The Second Ministerial Conference on Civil Registration and Vital Statistics in Asia and the Pacific may wish to take note of the present document and discuss country experiences and opportunities to enhance the production and dissemination of vital statistics on births, deaths, causes of death, marriages, divorces, maternal deaths, fetal deaths and abortions, including their key disaggregations, as a means to support improved understanding of subnational differentials in fertility, mortality and nuptiality outcomes.

43. The Ministerial Conference may also wish to provide further guidance and advice on how to ensure that all members and associate members achieve the goal of producing and disseminating accurate, complete and timely vital statistics, including on causes of death, based on registration records.

44. The Ministerial Conference may further wish to take stock of recent innovations during the COVID-19 pandemic in improving mortality statistics production, dissemination and usage and exploring how such innovations can be adapted to vital statistics on births, marriages and divorces.

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