Economic and Social Commission for Asia and the Pacific
Seventh Asian and Pacific Population Conference
Bangkok and online, 15–17 November 2023
Items 2 and 3 of the provisional agenda*

Review of progress made towards the implementation of the Asian and Pacific Ministerial Declaration on Population and Development, as well as of the Programme of Action of the International Conference on Population and Development and the key actions for its further implementation in Asia and the Pacific

Thematic discussion on achievements, challenges, gaps and emerging issues in the implementation of the Asian and Pacific Ministerial Declaration on Population and Development, as well as of the Programme of Action of the International Conference on Population and Development and the key actions for its further implementation in Asia and the Pacific

Data and statistics to monitor the implementation of the Asian and Pacific Ministerial Declaration on Population and Development, as well as of the Programme of Action of the International Conference on Population and Development and the key actions for its further implementation in Asia and the Pacific**

Summary

At the Sixth Asian and Pacific Population Conference, held in Bangkok from 16 to 20 September 2013, members and associate members of the Economic and Social Commission for Asia and the Pacific (ESCAP) adopted the Asian and Pacific Ministerial Declaration on Population and Development. This, among others, called for regular monitoring and evaluation to assess progress towards the continuing implementation of the Programme of Action of the International Conference on Population and Development and its related follow-up outcomes, as well as the recommendations contained in the Ministerial Declaration.

In response to this call, a list of Sustainable Development Goal-related indicators was developed by ESCAP and the United Nations Population Fund. During the Midterm Review of the Asian and Pacific Ministerial Declaration on Population and Development, held in 2018, the Asia-Pacific Indicator Framework for Voluntary Monitoring of Progress towards the Implementation of the Programme of Action of the International Conference on Population and Development and of the Commitments Contained in the Asian and Pacific Ministerial Declaration on Population and Development (referred to as “voluntary monitoring framework”) was presented to ESCAP members and associate members.

* ESCAP/APPC(7)/1/Rev.1.
** The present document is being issued without formal editing.
In 2020, the ESCAP Committee on Social Development, during its sixth session, endorsed the voluntary monitoring framework, noting that it would serve as an essential tool for voluntary, regular assessment and reporting of progress of implementation of the Programme of Action and the Ministerial Declaration.

The present paper assesses the status of data availability for all indicators contained in the voluntary monitoring framework based on analysis of data available in the Asia-Pacific Sustainable Development Goal Gateway\(^1\) as well as publicly available data sources. It discusses availability of data by subregion and by thematic area, as well as the timeliness of data. The paper further discusses innovative data production methods and provides good practices, such as on data integration, use of big data and other methods.

The paper is intended to inform deliberations during the Seventh Asian and Pacific Population Conference to be held in Bangkok and online from 15 to 17 November 2023.

I. Introduction

1. The Programme of Action of the International Conference on Population and Development provides a unique framework to guide Member States in enhancing the quality of life and well-being of every individual. It promotes human development by underscoring the interrelationship between development policies and programmes, human rights, and economic and social development. At the Sixth Asian and Pacific Population Conference, held in 2013, in conjunction with the 20-year Asia-Pacific regional review of the Programme of Action, ESCAP members and associate members adopted the Asian and Pacific Ministerial Declaration on Population and Development. This Declaration serves as region-specific guidance on population and development, which also supports the implementation of the 2030 Agenda for Sustainable Development.

2. During the Midterm Review of the Asian and Pacific Ministerial Declaration on Population and Development, held in 2018, the Asia-Pacific Indicator Framework for Voluntary Monitoring of Progress towards the Implementation of the Programme of Action of the International Conference on Population and Development and of the Commitments Contained in the Asian and Pacific Ministerial Declaration on Population and Development (referred to as “voluntary monitoring framework”) was presented to ESCAP members and associate members. To reduce the reporting burden to member States, and to harness synergies and ensure commitment to data availability, the framework was based primarily on existing Sustainable Development Goal indicators and targets. It was supplemented with additional non-Sustainable Development Goal indicators where needed, based on data availability through international databases. In 2020, The ESCAP Committee on Social Development, during its sixth session, endorsed the voluntary monitoring framework, noting that it would serve as an essential tool for voluntary, regular assessment and reporting of progress of implementation of the Programme of Action and the Ministerial Declaration.

3. The present paper assesses data availability for monitoring the implementation of the Asian and Pacific Ministerial Declaration on Population and Development and the Programme of Action of the International Conference on Population and Development in Asia and the Pacific, It discusses availability of data by subregion, by thematic area as well as the timeliness of data.

II. Availability of data to report on the voluntary monitoring framework

A. Methodology

Population and Development is comprised of 76 Sustainable Development Goal indicators and 9 non-Sustainable Development Goal indicators for a total of 85 indicators. However, there are five indicators that appear in two different priority actions (1.3.1: social protection floors/systems; 10.2.1: people below 50 per cent of median income; 3.7.2: adolescent births; 8.5.2: unemployment rate; and 12.8.1 and 13.3.1, which both measure mainstreaming sustainable development into education). Subregional and regional totals of data sufficiency, which are calculated below, are the average of the countries and territories that they are comprised of.

5. Data from the Asia-Pacific SDG Gateway\(^5\) were used to measure and analyse data availability of Sustainable Development Goal indicators at the regional level that make up the voluntary monitoring framework. Indicators falling outside the Sustainable Development Goal framework were assessed for availability directly consulting the respective sources. An important consideration in this approach is that the regional database is constructed using data compiled from United Nations agencies, other international sources of official statistics and various programmes. These databases primarily emphasize the reporting of harmonized data, which may entail potential delays in capturing national-level data. Furthermore, international databases undergo frequent updates, often also retrospectively, with differing reporting and updating cycles, thus the figures discussed in this document represent a snapshot as of the time of data analysis. It is imperative to recognize that continuous endeavours are undertaken to enhance data availability in regional and global Sustainable Development Goal databases.

6. Data availability for these indicators is classified as sufficient for countries or territories when the country or territory has two or more data points between 2000 and 2022. Indicators are classified as insufficient when only one data point is available. Indicators with no data are classified as “no data.” On a regional level, indicators were classified as sufficient when 50 per cent or more of ESCAP members and associate members have two or more data points. The timeliness of data was also assessed. Indicators with a data point from 2018–2022 were coded as timely. It was possible that some indicators were classified as timely, but not sufficient if the indicator had one data point in the period 2018–2022, yet no other prior data points.

B. Availability by country and subregion

7. Sufficiency of data, as defined above, to report on voluntary monitoring framework indicators varies widely across the region. On average, the region has sufficient data to report on between 56 and 60 per cent of all indicators contained in the voluntary indicator framework, depending on whether duplicate indicators are included or not and on the availability of non-Sustainable Development Goal indicators. Nine member States have sufficient data to report on at least three quarters of all indicators, but no member or associate member has sufficient data to report on all indicators. For eight Sustainable Development Goal indicators, no member state or associate member has any data that are reflected in the Asia-Pacific SDG Gateway.\(^6\)

---


\(^6\) These indicators include: 2.4.1; 5.2.2; 11.2.1; 11.3.1; 11.3.2; 11.7.1; 11.7.2; 13.2.1.
8. South and South-West Asia, along with North and Central Asia, has the highest sufficiency of data, with 69 and 68 per cent of indicators having sufficient data, respectively. However, within North and Central Asia there is a wide range of data sufficiency across countries. South-East Asia has, on average, sufficient data for 66 per cent of indicators, and East and North-East Asia has sufficient data for 47 per cent of indicators. The Pacific has the lowest sufficiency of data, with countries and territories, on average, only able to report on 41 per cent of indicators. In spite of improvements, data availability in Pacific island countries is particularly low.

C. Availability by thematic area

9. When examined by thematic area, the achievements as well as gaps in data availability become more apparent. Health is the thematic area with the highest data availability, where all eight indicators are classified as sufficient at the regional level, which means that at least 50 per cent of members and associate members have at least two data points. The thematic area with the second highest data availability is adolescents and young people, where 71 per cent of indicators have sufficient data for at least half of members and associate members. Under poverty eradication and employment, 63 per cent of indicators have regional sufficiency. Population and development as well as gender equality and women’s empowerment are the areas with the least data sufficiency (figure I).

10. When considering the absolute number of sufficient indicators in a thematic area, poverty eradication and employment, and health have the largest number of indicators with data sufficiency, namely ten and eight indicators, respectively. Also, the number of indicators reflected in these thematic areas already took potential data availability into consideration. Poverty eradication and employment is the thematic area comprising the most indicators, with a total of 16 indicators (14 Sustainable Development Goal indicators and two non-Sustainable Development Goal indicators), out of which six lack sufficient data. This is likely due to, in part, a long history of countries and territories collecting this data and thus incorporating collection into their collection plans, as well as having the capacity to collect this data. For example, three of the Sustainable Development Goal indicators in the health thematic area were also Millennium Development Goal indicators (maternal mortality, infant and under 5 mortality, and skilled birth attendance) while another two (new HIV cases and vaccination coverage) are related to the data needed to report on the Millennium Development Goal indicators monitoring HIV prevalence and measles vaccinations. Data collection on poverty were intensified with the adoption of the Millennium Development Goals and corresponding indicators.

11. Ageing is an area that contains only five indicators of relatively high data sufficiency. However, the voluntary monitoring framework was designed taking potential data availability into consideration. Additional indicators were not included in the voluntary monitoring framework because such data are not routinely produced by many countries and require specialized surveys on ageing. To regularly assess the situation of older persons, more data, disaggregated by age, sex and other criteria, must be collected.

---

7 It should be noted that East and North-East Asia includes two associate members, which do not routinely collect data for many indicators.

D. Availability of data by collection source

12. Data sources also impact data availability. It is possible to derive one single indicator from multiple sources, and thus each category is not mutually exclusive of the others. Most indicators, namely 64 per cent of all indicators contained in the voluntary monitoring framework, can be derived from household surveys. A total of 39 per cent of indicators can be derived from administrative data, 15 per cent from population and housing censuses, and 24 per cent from other sources, such as individual surveys or non-population-based collection methods.

For example, the thematic area “Adolescents and young people” has 7 indicators. For 71 per cent of all indicators in this thematic area, or 5 indicators, at least 50 per cent of the countries and territories in the region have sufficient data, which means that these countries have at least two data points. For 29 per cent of indicators, or two indicators, at least 50 per cent of the countries or areas have insufficient or no data.
13. Voluntary monitoring framework indicators that can be derived from population and housing censuses are the most likely, at 75 per cent, to have sufficient data. By coincidence, several countries conducted censuses just before the COVID-19 pandemic, which lead to increased data availability from censuses. Administrative data-derived indicators have the second highest level of sufficiency, at 61 per cent. Administrative data are often collected for legal or other bureaucratic purposes, and thus when such collection is mandated by the government, it is routinely available.

14. Indicators that can be derived from other data collection methods have lower sufficiency, at just 47 per cent. National statistical offices may need more support in the calculation or collection of data for these alternate data sources.

15. Household surveys have the lowest sufficiency rate, where just 45 per cent of voluntary monitoring framework indicators that can be derived from household surveys have sufficient data. Household surveys are costly to undertake and require substantial human and technical resources, and thus they are often conducted at a frequency of five years or greater. In this regard, they are less likely to produce the two or more data points required since 2000 to satisfy the requirement for data sufficiency. However, they are a critical source of data, as 64 per cent of voluntary monitoring framework indicators can be derived from them. If more household surveys were conducted and appropriate questions included, data sufficiency could be increased.

16. The COVID-19 pandemic impacted data availability negatively. According to a survey administered to national statistical offices, 40 per cent of offices were either fully or partially closed and more than half had either fully or partially stopped face-to-face surveys as of May 2020. One third of national statistical offices reported that surveys had been delayed or negatively affected by the pandemic. For sensitive data, such as on prevalence of gender-based violence, national partners were advised to prioritize women and girls’ safety over data collection given mobility restrictions.

E. Availability of disaggregated data

17. Disaggregation of data by sex, age, disability or migration status, as well as other characteristics, is crucial to ensure that no one is left behind. Twenty-nine voluntary monitoring framework indicators require further disaggregation, based on the official formulation of the indicators. However, individual indicators can require multiple dimensions of disaggregation. For example, indicator 1.1.1 on the international poverty rate requires disaggregation by age, sex, employment status and urbanization. Further disaggregation of indicators is strongly recommended across many of the

---


Sustainable Development Goals. Disaggregation requirements for non-Sustainable Development Goal indicators were not assessed.

18. In the voluntary monitoring framework, several indicators are required to be disaggregated by sex and age (both required by 20 indicators). No country or territory has sufficient data for all 20 indicators requiring disaggregation by sex and age. There is a wide range of data sufficiency between dimensions. A few indicators have relatively high availability of disaggregated data on Sustainable Development Goals: 98 per cent of countries and territories in the region have data to disaggregate the adolescent birth rate by age groups (10 to 14 years and 15 to 19 years) (Goal 3.7.2) and 90 per cent of countries and territories have sufficient data to disaggregate unemployment rate by sex (Goal 8.5.2). However, no country or territory has data to disaggregate national poverty rates (Goal 1.2.1) or people living below 50 per cent of the median income level (Goal 10.2.1) by sex and age. Several indicators that would require disaggregation have insufficient data in general, such as time spent on unpaid domestic care work (Goal 5.4.1), or no data at all, such as data related to sexual violence (Goal 5.2.1).

19. Overall, availability of disaggregated data is limited in the region. Despite existing data gaps, disaggregation by sex is more common than by other dimensions. Although several indicators have some form of disaggregation by age group, such as unemployment (Goal 8.5.2), it is often by broad age groups or collection is age-capped at a certain age. The proportion of the population below the international poverty line (Goal 1.1.1) also requires disaggregation by age, but available disaggregated age groups are only 15 years or over, and 25 years or over. There is very limited data availability of other dimensions by which data can be disaggregated, which include disability status, employment status, income quintile, indigenous or migrant population, rural or urban area, or others.

20. Additional data collection and dissemination for the voluntary monitoring framework indicators that require disaggregation would be necessary in order to meet Sustainable Development Goal reporting requirements. While this analysis is based only on disaggregations that are mentioned in the Sustainable Development Goal indicator formulation, more dimensions of disaggregation along with an expanded number of disaggregated indicators would be needed to properly measure the progress of different population groups and to better understand who is most left behind. It is important to note that disaggregated data may be available at the national level, but not reported to be reflected in the regional database.

F. Availability of gender equality and women’s empowerment data

21. In spite of investments in data collection on gender equality and women’s empowerment, it is still an area with low data availability. Among the 12 indicators in this area, just two have sufficient data and there are no data for one indicator, namely for indicator 5.2.2. (table). However, in many countries of the region, while data on this indicator are produced at the national level, they are not reported in international databases due to methodological differences.

22. The lack of data can be attributed to a variety of reasons. Many of the indicators under Sustainable Development Goal 5 did not have clear measurement methodologies when the Sustainable Development Goal framework was adopted (Tier III indicators). The definitions and standards needed for measurement were developed post 2015, so countries have only been able to produce this data for a limited time. The indicator measuring
prevalence of female genital mutilation (Goal 5.3.2) has the scarcest data in this thematic area. This is challenging to measure, particularly among migrant communities that are difficult to reach in surveys. However, data scarcity is more likely because many countries consider this topic irrelevant to their national context. Indicators measuring violence, discrimination and harassment require specialized population-based surveys. The surveys are complex and costly to conduct, requiring technical expertise that may be limited in the region. Some data may be available at the national level, but are not yet reflected in international databases due to the need for harmonized data.

23. Some 7 of the 12 indicators under gender and women’s empowerment can only be collected from household surveys and thus, due to the challenges outlined above, these indicators may require more outreach, outlining their importance and advocating for integrating them into existing household surveys. The indicators derived from administrative data or from other data collection methods may also require more advocacy and education about their importance, as well as coordination and capacity building to collect information as the data collection methodologies may be more novel compared to other indicators that have a long history of collection (table).

Regional data availability and sources for gender equality and women’s empowerment indicators

<table>
<thead>
<tr>
<th>E. Gender equality and women’s empowerment</th>
<th>Percentage distribution of data availability</th>
<th>Source of data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sufficient</td>
<td>In-sufficient</td>
</tr>
<tr>
<td>5.5.1: Women in government</td>
<td>86</td>
<td>5</td>
</tr>
<tr>
<td>5.5.2: Proportion of women in managerial positions</td>
<td>72</td>
<td>12</td>
</tr>
<tr>
<td>5.4.1: Unpaid domestic and care work</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>5.1.1: Legal frameworks on gender equality</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>16.3.1: Violence reporting to authorities</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>5.c.1: Tracking of public allocations for gender equality</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>10.3.1: Discrimination and harassment</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>5.2.1: Violence against women (by intimate partner)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.1: Women married before age 15 and 18</td>
<td>0</td>
<td>69</td>
</tr>
<tr>
<td>5.3.2: Female genital mutilation/cutting</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>5.a.2: Legal framework on equal rights to land ownership</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>5.2.2: Violence against women (by non-intimate partner)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total for data sources</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: ESCAP compilation and Asia-Pacific SDG Gateway, online. Available at https://data.unescap.org/home.

Notes: HH – household; Adm. – administrative; Oth. – other.
G. Timeliness of data

24. For those data that are available, whether sufficient or insufficient, it is worth understanding how timely available data are. Data that are more than five years old may no longer be representative of the current country context and may be less reliable when informing population and development policies. Examination of timeliness is done while taking into consideration that the COVID-19 pandemic may have impacted data collection from 2020 to 2022, and so that indicators lacking recent data can be prioritized for collection going forward.

25. Less than half of the voluntary monitoring framework indicators had timely data in at least half of the countries or territories. Thematic areas where most indicators have timely data\(^\text{13}\) in at least half of the countries or territories include education, adolescents and young people, health, and data and statistics. In the international migration category, half of the indicators have timely data in at least half of the countries or territories. Thematic areas with the least timely data include sexual and reproductive health and reproductive rights, urbanization and internal migration, poverty eradication and employment, population and sustainable development, gender equality and women’s empowerment, and ageing, where less than half of all indicators have data five or fewer years old in 50 per cent or more countries and territories. Of particular importance are poverty eradication and employment, where 11 of the 16 indicators are more than five years old in 50 per cent or more of countries and territories, as are 9 of the 12 gender equality and women’s empowerment indicators, and 4 out of the 5 ageing indicators (figure II).

26. Indicators that could be derived from a population and housing census had the timeliest data, in spite of the long-time intervals over which they are conducted: it also reflects the high number of censuses that were conducted just before the COVID-19 pandemic. About 58 per cent of indicators that could be derived from a population and housing census had data that was less than five years old. About half (52 per cent) of indicators that came from administrative data or other data collection methods (47 per cent) had timely data, compared to just 37 per cent of indicators that required a household survey.

27. Among the 47 indicators that do not have timely data, slightly more than half (29 indicators) have no data at all in 50 per cent or more countries and territories. This indicates that the data seems not to be collected in general, and that the lack of sufficient data cannot entirely be attributed to delayed collection due to the COVID-19 pandemic.

\(^{13}\) Timely data are defined as where data are less than five years old.
Figure II
Percentage and number of voluntary monitoring framework indicators with timely data by thematic area

Source: ESCAP compilation and Asia-Pacific SDG Gateway, online. Available at https://data.unescap.org/home.

Note: Timely data are defined as data that are less than five years old.

III. Challenges in the data ecosystem

28. Examining frameworks and capacities of national statistical systems is crucial to assess their ability to produce timely, complete and accurate data.

A. Data quality

29. While data may be available broadly speaking for some indicators, the quality and usability of the data that are being collected have to be considered when data informs policy. Data quality has many dimensions – relevance, accuracy, cohesion, accessibility and interpretability – and many of these relate to the use of the data. Challenges related to quality of data also depend on the source of data and collection method.
30. The challenges in ensuring quality in data from household surveys are:

(a) Reliability and usability depend on data user needs. Data producers should follow the fundamental principles of official statistics and apply professional statistical standards in questionnaire and methodology design. Interviewer training, quality controls in the field, as well as investment in analysis and dissemination of data, are critical to assure quality and eventual usability;

(b) Some individual-level household survey modules allow for proxy respondents to report on behalf of adult household members. This practice can introduce additional data errors and impact on data quality;

(c) If the sample drawn is not nationally representative, the representativeness and therefore data quality of the survey becomes less robust. This can occur, for example, if certain regions are removed from selection due to budget constraints or limited accessibility due to extreme weather events, or conflict;

(d) Household surveys are known to have respondent bias, where an interviewee may respond in a way that they believe is “correct” or that the interviewer wants to hear, particularly for sensitive questions.

31. The challenges in ensuring quality in data from administrative data are:

(a) They are mainly collected for legal or other bureaucratic or administrative purposes and therefore may not be collected with the rigor of data collected for the sake of data collection, such as with a census or household survey;

(b) They are prone to missing or erroneous variables, duplicate records, or other issues that can make analysis challenging and interpretations less robust than other data collection methods;

(c) They often require substantial cleaning and imputation to improve data quality and usability of data;

(d) Concerns about privacy issues related to administrative data linked to personal identification numbers of individuals.

32. The challenges in ensuring quality in data from censuses are:

(a) Although censuses provide a rich source of data that are meant to cover all people residing in the country or territory, in reality they often suffer from under-enumeration, particularly among children under age five and hard to reach or marginalized populations;

(b) Because of that under-enumeration, indicators that are meant to be disaggregated by these populations that are difficult to reach can be distorted. The problem is particularly acute when countries and territories do not undertake post-enumeration surveys to adjust for such undercounts.


33. There are challenges associated with all data collection methodologies, and thus it is important to recognize these challenges and review and clean or adjust the data to the largest extent possible to ensure the highest quality data is available. Financial and technical capacities may be a constraint in this regard.

B. Robustness of national statistical systems

34. A national strategy for development of statistics is instrumental in providing a framework to plan for data needs and to identify areas for capacity development in order to meet those needs. Encompassing prioritized population and development areas in national strategies for development of statistics can broaden the scope of data collection, analysis and dissemination, including for those indicators in the voluntary monitoring framework to report on progress of implementation of the Programme of Action and the Ministerial Declaration that are not being reported. A national strategy for development of statistics can identify the areas in which data are currently not being collected and outline a long-term plan to build capacity for data collection as well as consider analysis and dissemination in those areas.

35. As of 2022, 86 per cent of ESCAP members and associate members had a national statistical plan under implementation, which could also include the design phase of a plan.\textsuperscript{16} Since 2018, progress on expanding the availability of necessary data sources such as censuses, surveys, administrative data and geospatial data, as well as private sector data/citizen-generated data, has been limited. The region is off-track on indicators related to the use of data and financing statistical development. Funding for development and implementation of national statistical plans (Sustainable Development Goal indicator 17.18.3) has decreased since 2018, when 73 per cent of plans were fully funded, to just 59 per cent of plans being fully funded in 2022.\textsuperscript{17} Thus, there is urgent need for investments in the development and implementation of national statistical plans, also to support the monitoring of the implementation of the Sustainable Development Goals.\textsuperscript{18} Often, statistical offices do not have adequate budget to fulfil the data collection, analysis and dissemination activities listed in their national statistical plans.\textsuperscript{19}

36. There is an opportunity to support countries without national strategies to help them prioritize data collection in the area of population and development. If population and development indicators are prioritized within national strategies, then data collection methods, such as household surveys, may be better advocated for, or additional questions are more likely to be incorporated into existing surveys. Further, the use of other sources, such as administrative data or data from population and housing censuses, can be strengthened in order to meet the data production needs. National strategies for the development of statistics can also provide a framework for regular data collection to ensure data needed to inform policy are timely and reflect the current country context. Moreover, it can ensure that data collection is


\textsuperscript{17} Ibid.

\textsuperscript{18} ESCAP/CST/2022/INF/1.

undertaken in such a way that data can be disaggregated to the appropriate level to ensure no one is left behind.

IV. Innovative data collection techniques

37. In order to meet national and international reporting commitments under the 2030 Agenda, and to have better and more granular data to inform policy and planning, national statistical offices in the region are turning to innovative methodologies to meet their data requirements.

38. One such innovation is data integration, which can be used to provide new official statistics, address new or unmet data needs, reduce the response burden, overcome the effects of declining response rates, and deal with quality and bias issues in surveys. Data integration is the combination of technical and business processes used to combine data from disparate sources into meaningful and valuable information. Data integration is particularly relevant in the context of reducing the need for more costly and resource-heavy household surveys, and it can increase the number of relevant variables for statistical compilation and other research purposes.

39. Data integration can include any or all of the following activities: (a) combining data from multiple sources, as part of the production of integrated statistics, such as national accounts; (b) combining geospatial data with statistical data or other non-statistical data, as is the case with small area estimation, which uses survey and census data and produces more granular estimates through statistical models; (c) data pooling, with the aim of increasing the effective number of observations of some phenomena; (d) matching or record linkage routines, with the objective to link micro or macro data from different data sources; (e) data fusion – integration followed by reduction or replacement; and (f) prioritizing, when two or more data sources contain information on the same variable, with potentially different values.

40. Data integration is being used in Georgia, for example, to link different databases to get a more accurate and complete record of births and deaths that occur in the country. In this way, births or deaths that are recorded in one database but not in the other can be included in the final count of vital events. In Bangladesh, integration of the Demographic and Health Survey was done with recent geo-information from various data providers, including geographic information system data, to enhance understanding about how geo-location impacts social and health indicators. Indonesia leveraged information from the Directorate-General of Population and Civil Registration database to...

---


21 Ibid.


reduce the cost and resource burden for the 2020 population and housing census.24

41. There is potential in improved access to and use of administrative data for official statistics purposes. Because administrative data are not generally collected directly by the national statistical office, a friction point may exist for data sharing and data transfer. Thus, there is a need for improved coordination between government departments and establishing terms for collaboration and data sharing such as memorandums of understanding among all entities comprising the national statistical system. Further, other government departments may need technical support when it comes to data extraction or querying databases for the purpose of data sharing while maintaining data privacy. Integrating administrative data with other sources, such as household surveys and population and housing censuses, can provide a rich source or granular data that is needed to report on population and development indicators.

42. Other innovative techniques may also include methods such as harnessing information from big data. The COVID-19 pandemic highlighted the need for timely and granular data to inform policy, while uncovering limitations of the existing statistical systems. As daily life, such as work, healthcare and education, occurs more frequently online, there is a wealth of data collected by governments and the private sector that can contribute to the production of official statistics when used in a privacy-preserving manner.25 There are 16 voluntary monitoring framework indicators that could be potentially supported by big data.26 The Philippines determined that citizen-generated data could be used to produce 81 Sustainable Development Goal indicators. Citizen-generated data are data produced by non-governmental organizations in the Philippines, sourced from citizens as respondents, primarily for nonstatistical purposes, such as monitoring, tracking interventions and/or project monitoring.27 China used satellite imagery to monitor implementation of Sustainable Development Goal indicators. The Chinese Academy of Science developed pilots and methodologies for monitoring 12 Sustainable Development Goal indicators using Earth Observation data. At the local level, Deqing county, Guangdong, China, integrated geospatial data into 14 Sustainable Development Goal indicators.28


As more countries provide concrete examples and innovative methods to satisfy reporting needs for Sustainable Development Goal indicators through big data collection, data collected from this source may become more prevalent in the future.

V. Conclusions and recommendations

43. Tracking progress in implementation of any development agenda, such as the 2030 Agenda and its 17 Sustainable Development Goals is dependent on the availability of reliable, timely and disaggregated data. Since 2017, the availability of Sustainable Development Goal data in the Asia-Pacific region has increased from 63 to 128 sufficient indicators. However, the rate of increase in data availability and sufficiency has slowed from 32 to only 4 per cent considering 2017 and 2022, respectively.29 Regarding voluntary monitoring framework indicators, this paper found that on average, ESCAP members and associate members have sufficient data to report on 56 to 60 per cent of indicators. However, for indicators not classified as having “sufficient” data, the majority of countries and territories have no data at all. Further, for the majority of indicators requiring data disaggregation, data are insufficient to meet the disaggregation requirements.

44. Members and associate members are encouraged to improve national data collection and pursue regional cooperation to harmonize the collection and analysis of population and development data and statistics for evidence-informed policymaking. This includes taking advantage of advances in methodologies and technologies for data collection and analysis, and regular collaboration in the collection, processing, exchange and analysis of population and development data.

45. The following recommendations are put forward to improve data availability for the voluntary monitoring framework:

(a) Strengthen coordination among different data collection actors to leverage existing data and ensure national data are reflected in regional and global Sustainable Development Goal databases. National statistical systems should be well-represented at regional and global forums, and actively contribute to the development of statistical standards and guidance. Ministries producing administrative data are encouraged to collaborate directly with the national statistical office and coordinate data collection in order to produce more robust and richer sources of data, and to leverage existing data;

(b) Establish and maintain appropriate national frameworks that allow sharing of data, while ensuring confidentiality of personal data;

(c) Strengthen administrative data systems: Ministries are encouraged to investigate which data are already being collected for administrative or other bureaucratic purposes and can be used for statistical purposes;

(d) Explore and leverage integration of different data sources, such as household surveys, censuses and administrative data;

(e) Advocate for improved disaggregation of data. Collaboration between line ministries, national statistical offices and administrative data collectors would be required to outline the necessary dimensions of data disaggregation. A plan for the collection of such data should be developed and

included in relevant policy documents, such as a national strategy for development of statistics or a national statistical plan;

(f) Contribute to and apply statistical standards for household surveys. Collaboration between line ministries and the national statistical office will be important to consider how data gaps can be met by including standard modules or additional questions to improve quality and reduce overload with surveys;

(g) Consider cost sharing among survey producers to integrate different data sources to reduce the cost of producing data;

(h) Investigate the feasibility of innovative data collection methods, such as harnessing the power of big data. In this context, sharing of knowledge and experience in harnessing innovative data collection methods would be vital. Moreover, it is important for national statistical offices to also work with the private sector, which is often collecting big data.

46. Overall statistical development would be crucial to improve data availability. To this end, the following actions are recommended:

(a) Strengthen the capacity of national statistical offices and relevant national institutions and mechanisms to employ holistic approaches to generate, analyse and disseminate reliable population data, disaggregated by sex, age, disability and other categories as needed, and increase the use of data for the formulation, implementation, monitoring and evaluation of population and development policies by relevant national authorities;

(b) Strengthen national statistical systems at all levels to produce reliable, disaggregated and internationally comparable statistics on population, social and economic development in a timely manner to help monitor subnational, national, regional and international development;

(c) Support the development and implementation of a National Strategy for Development of Statistics. Such strategies can serve as a framework for cooperation between data collection entities and with data users which strengthens the entirety of that national system, laying the foundation for data integration;

(d) Advocate to policymakers to recognize official statistics as a national priority by fully funding national statistical plans.

47. ESCAP, the United Nations Population Fund and other United Nations system organizations may continue to support further strengthening of the demographic evidence base on population and development issues by:

(a) Continuing to provide technical support for data production, analysis and dissemination to ensure data are of high quality for policy use;

(b) Designing and implementing complementary and sustainable approaches to national capacity development that are aligned with regional data priorities;

(c) Providing a platform for the sharing of experience and building of capacity on innovative methodologies in data collection and data integration;

(d) Advocating for inclusion of missing indicators into existing household surveys and for expanded sample design for better disaggregation or specific strategies to obtain increased disaggregation, such as small area estimation.
48. The present document is intended to inform deliberations during the Seventh Asian and Pacific Population Conference to be held in Bangkok and online from 15 to 17 November 2023.