Statistical Commission   Background document
Fiftieth session   Available in English only
5 – 8 March 2019
Item 3(n) of the provisional agenda
Items for discussion and decision: international migration statistics

National migration data infrastructure – a comprehensive framework for capacity development on international migration statistics

<u>Prepared by United Nations Statistics Division</u>

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Introduction

International migration continues to increase in scope, scale and complexity. Today, most countries in the world are impacted by international migration, often simultaneously as a country of origin, destination and transit. Despite the contributions migrants make to development in countries of origin, transit and destination, they often face specific challenges during their journeys, at destination or upon return. Hence, migrants can be considered a group with specific needs for support to overcome vulnerabilities. In recognition of these realities, global initiatives such as the 2030 Agenda for Sustainable Development (A/70/1) and the New York Declaration for Refugees and Migrants (A/71/1) have pointed to the need to strengthen national capacities to collect and use migration statistics and data to guide evidence-based migration policies and to integrate migration into national development planning.

Collecting and utilizing accurate and aggregated data as a basis for evidence-based migration policies is also called upon by the global compact for safe, orderly and regular migration (GCM) that was finalised in July 2018. An initial assessment of the 23 objectives in the current draft showed that follow-up and review of the global compact are closely linked to (a) the goals and targets of the 2030 Agenda for Sustainable Development if data for the monitoring indicators are disaggregated by migratory status, age and sex; and (b) the needs for basic migration statistics such as migration stocks and flows disaggregated by migratory status and/or reason for migration.

Despite the manifest need for statistics on international migration, availability of such data remains inadequate. For instance, within the period of 2005 and 2014, only about half of the countries or areas of the world have data on immigrant stock, i.e. the number of foreign-born or foreign population in a country. Data on the size and characteristics of emigrants, which is of particular relevance to countries experiencing high levels of emigration, are almost non-existent. Data on migration flows are even scarcer.[1]

The work on data for migration-relevant SDG indicators has also been slow. Out of the 32 indicators that are considered relevant for migration[2], 7 are still classified as Tier-III, requiring further methodological work; and 12 indicators are classified as Tier-II meaning capacity building efforts are needed to improve data availability at the country level. While remaining 13 indicators fall in the category of Tier-I where indicator is conceptually clear and data are regularly available, data disaggregation of many indicators by migratory status is lagging behind.[3]

[1] Information obtained from the United Nations Demographic Yearbook data collection

[2] Recommended by the United Nations Expert Group Meeting on Improving Migration Data in the Context of the 2030 Agenda for Sustainable Development, 20-22 June 2017, New York. Recommendations available at https://unstats.un.org/unsd/demographic-social/meetings/2017/new-york--egm-migration-data/EGM%20Recommendations_FINAL.pdf

[3] It should be noted that, according to the latest set of SDG indicators, data disaggregation by migratory status has been explicitly required for only one indicator, i.e., 8.8.2 on occupation injury and disaggregated data are only available for 4 countries as of May 2018.

National migration data infrastructure – a framework for capacity development

The present section describes key components of a national migration data infrastructure that will be used as a framework for capacity development. A national migration data infrastructure is a platform that brings together key stakeholders in a country, including the main users of migration data, such as policymakers, the private sector, academia, civil society and data producers from the national statistical offices and the statistical units of other relevant ministries (see figure).

Figure. Comprehensive national migration data infrastructure
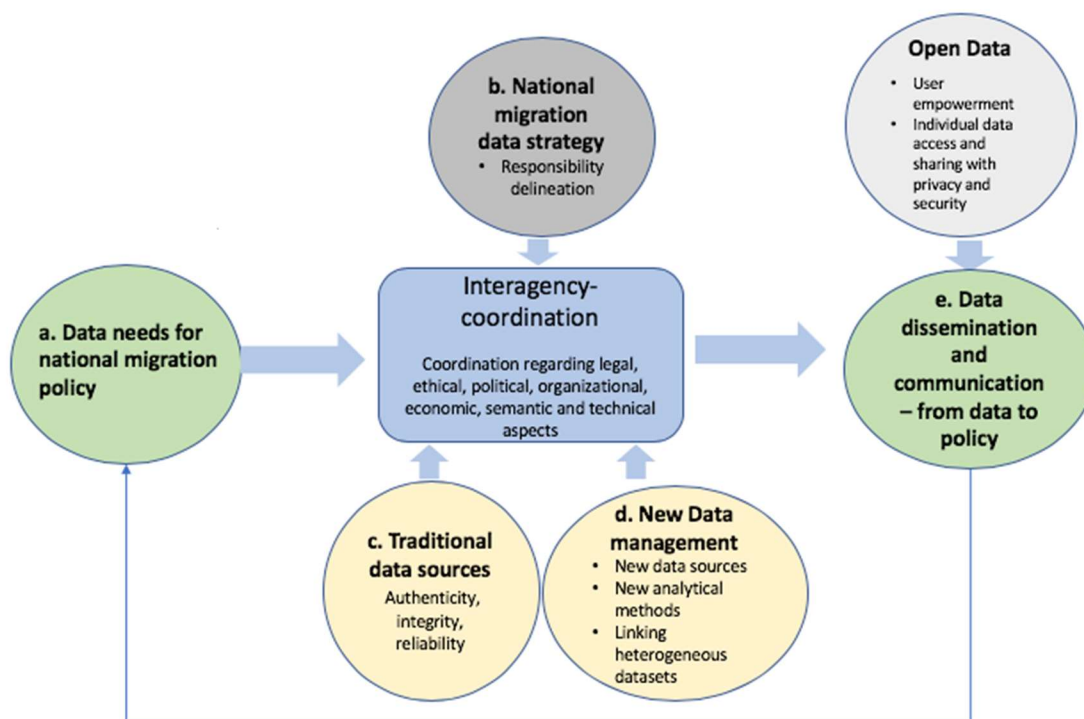
In accordance with the country-specific situation, the national migration data infrastructure should be led by an interagency coordination body that would coordinate efforts among all entities within the infrastructure.[4] The data infrastructure would start with an assessment of data

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[4] Activities to be covered by the interagency coordination body may include: (a) assessing gaps in migration data with a view to effective policymaking; (b) facilitating the integration of migration into other development policy areas; (c) enhancing data flows within the national statistical system, including by establishing the legal framework necessary for data sharing; (d) improving synergy with respect to concepts, definitions and data collection and dissemination methods; and (e) coordinating methodological developments in producing timely, reliable and policy-relevant statistics on international migration.

needs for national migration policy and end with the proper dissemination and use of data for policy purposes. Guided by national migration data policy and the open data principle, the data infrastructure should have an agreed architecture for interrelated databases for migration data that could be used by policymakers, databases that would be robust, consistent, of high quality and interoperable. This network of databases would form the core of data support to drive policymaking on migration.

Key databases within the migration data infrastructure consists of two main types, classified by their sources: (a) traditional data sources, including censuses, surveys and administrative sources; and (b) non-traditional data sources, such as geospatial information, including satellite images, and other types of unstructured data generated from business transactions, mobile phone tracking and social media.

A. Data needs for national migration policy

Demands for official statistics by policymakers to support their work have been on the rise. For example, countries with a big influx of immigrants are interested in the number and characteristics of immigrants, as well as the smaller geographic units in which they reside in order to determine how well integrated migrant are into society, how migrants contribute to the national and local economy, and whether public services are prepared to accommodate the needs of immigrants. For countries with large-scale emigration, a major policy interest is in better understanding aspects of their citizens living abroad, including the total number, their characteristics and the countries to which they have moved. The data needed to answer those policy questions should be clearly articulated.

B. National migration data strategy

Establishing a national migration data strategy is an important step in building a migration data infrastructure. The strategy needs to elaborate on or stipulate the responsibilities of different government institutions and private sector entities in collecting and producing migration statistics. Data integration should be a core element of the national migration data strategy and the sharing of data among producers should be encouraged, or better yet, required, by statistical legislation.

C. Traditional data sources

Traditional data sources for international migration include population censuses, sample surveys and administrative sources. There is a need to ensure that timely and high-quality migration statistics are collected, processed and disseminated from all traditional data sources.

For example, key migration questions such as country of birth and country of citizenship should be asked in censuses and surveys, and the information collected should be disseminated in a timely manner and be of high quality. For in-depth analysis of the impact of migration on a society, surveys need to be planned carefully so that they ask not only the right questions but also adopt the appropriate sampling strategy.

Administrative data are extremely important for migration measurement. For example, border control entities either collect embarkation and disembarkation cards or have information from passport and visa scanning, ministries of labour possess data on work permits granted to foreigners, ministries of education have information on foreign students attending school in the country, and population registers or registers of foreigners maintain data on people residing in the country. Such information cannot be readily obtained through censuses or surveys. To make migration data relevant and timely, the use of administrative data should be encouraged. This means that more information should be captured, compiled and shared within the migration data infrastructure.

D. New data management

Information on migration is usually captured through multiple data sources. For a comprehensive picture, it is necessary to integrate information from different data sources, including censuses, surveys and administrative data, within the country and among countries.

Mobile phones, Internet-based tools and platforms, such as social media and online payment services, and digital sensors and measures such as satellite imagery represent potential innovative or "new data" sources of migration data. Existing migration studies based on those new data sources attest to their potential. Bringing together private data producers, analysts, data scientists and technologists to conduct additional research and experiments in this area would be essential. Furthermore, connecting the latest research and technology with the community of official statistics is crucial to fully integrating new data into the migration data infrastructure.

Innovative approaches to the integration of multiple data sources should be promoted. The use of new data should be explored to enhance the availability and timeliness of migration statistics, while ensuring that privacy, ethical and human rights issues are adequately addressed and while taking the quality of data into consideration.

E. Data dissemination and communication – from data to policies

An important post-data production step, which is often overlooked, is to ensure that data are disseminated and well communicated to policymakers and the general public and that such data are properly used. Statistical offices need to communicate effectively to help policymakers, the media and the general public to identify, understand and make full use of trusted sources of data and statistics, in order to support the planning, implementation and monitoring of development efforts at all levels of decision-making.

This element is particularly important to promoting fact-based public discourse to shape perceptions of migration, as stated in objective 17 of the Global Compact for Safe, Orderly and Regular Migration.

Data dissemination in a country should be guided by the open data principle. That is, data that is disseminated should be of high quality, well documented, respect data privacy concerns, free,

easily accessible and usable.[5] The embrace of the open data principle by national statistical offices and other government agencies will enable users to take advantage of data that are complete, timely and adhere to standards.

Open data are crucial to yet challenging for migration statistics. Many countries would need guidance in implementing open data principles, with respect to, inter alia: (a) establishing communications and outreach programmes to engage all stakeholders; (b) revising laws or legal frameworks to allow for provisions that are necessary to ensure that data are open and accessible, while fully respecting data privacy concerns; and (c) developing data interoperability principles and tools, given that data interoperability is an important tool for ensuring that open data are usable (see E/CN.3/2018/6).

National statistical offices have an important role to play in introducing open data principles. Their experience and technical skill in setting standards for data collection and dissemination are key in issuing guidelines on metadata, data anonymization and data privacy in the context of open data.

Modality of capacity development to improve statistics on international migration in countries

    A. Innovative trainings through eLearning materials

eLearning training courses for migration practitioners could play an important role in enhancing national expertise in collecting and using migration data for development. Developing eLearning materials and have them widely distributed and used can be beneficial in that: (a) training materials are standardized; and (b) once developed, resource can be diverted to more in-depth face-to-face training.

Introductory eLearning trainings should be combined with the traditional face-to-face training to maximize their impact.[6] For example, trainings on basic concepts, definitions and methods can be offered through self-paced eLearning courses while more in-depth materials that require interactions could be trained through the traditional face-to-face workshops. These two modes of training can be combined, but only those successfully completed the online training will be called upon for a face-to-face workshop. Regular online meeting sessions could be arranged for eLearning users for questions and answers. Successful mix-mode training has been developed for the statistics on the System of Environmental Economic Accounting (SEEA).[7]

    B. Regional and sub-regional training infrastructure for capacity development

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[5] The open data principle was thus defined during an international seminar on open data for the Sustainable Development Goals, held in Seoul from 25 to 27 September 2017.

[6] A compendium of Q&A would be helpful to accompany the eLearning training courses. The compendium should cover common questions from trainees and should be expanded and updated regularly. Such compendium is likely to increase efficiency of capacity building and maintain consistency across different stakeholders providing such training.

[7] https://elearning-cms.unstats.un.org/

Taking advantage of existing regional and sub-regional statistical training centres is critical to ensure that training services are available as close as possible to the point of delivery and to minimize cost. These centres, observatories or institutes should combine the functions of education and training, data analysis and policy research.[8] Such centres may be embedded within existing universities and statistical training institutes[9] and should be part of the newly established Global Network of Institutes for Statistical Training (GIST), to avoid duplication of efforts[10].

C. Customized one-on-one capacity development activities

Every country faces its own challenges in producing statistics on international migration. More targeted and focused capacity development should be carried out with the assistance of migration statistics experts. The one-on-one capacity development should start with a standard capacity development assessment framework, based on the framework outlined earlier and identify areas that need additional assistance.[11] This would help with more harmonized approach across all national capacity development activities.

Once a systematic assessment of the national migration information system is concluded, priorities should be discussed with each country on shorter- and longer-term objectives. For example countries regularly compile and disseminate data on basic migration stock and flow through census, surveys and administrative sources should start working on an integrated migration information system. For countries that still lack basic data from those traditional sources, the first step would be to compile and disseminate already existed migration data from traditional data sources.

D. A network of migration data experts

A network of migration data experts should be established. The experts can help countries and carry out capacity development activities when required. Experts should have basic knowledge with the setup of an overall migration data infrastructure and with strong expertise for at least one of the components. Their expertise should be clearly documented so appropriate experts can be dispatched in national capacity development.

E. Global knowledge-sharing and data-exchange alliance

Countries are at a different level of statistical development. Lessons learnt and experience gained in one country could be shared with other countries. A global knowledge-sharing platform could be established to facilitate the exchange of information and to share good practices. Similar

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[8] The call for regional migration observatories, contained in the draft GCM, is consistent with recent proposals and initiatives, including the African Institute for Remittances, created by the African Union, and the Continuous Reporting System on International Migration in the Americas, developed by the Organization of American States.

[9] Training of population specialists for Africa's needs: past, current and future by James P.M. Ntozi (African Population Studies Vol 25, 2 (Dec 2011)

[10] In the context of the 2030 Agenda for Sustainable Development and the demand from countries for statistical capacity building, the Statistical Commission at its 49th session supported the establishment of the Global Network of Institutions for Statistical Training (GIST). The overall objective of the network is to facilitate collaboration among its members in the delivery of training on statistics in a more harmonized and standardized manner and to improve the effectiveness of such training by maximizing its outreach.

[11] A common tool to assess national migration data capacity, United Nations Statistics Division, 2018

knowledge-sharing platforms such as the knowledge base for population censuses and vital statistics have been useful.[12]

Another component of the global alliance is data exchange. As migration is a phenomenon that involves multiple countries – countries of origin, transit and destination – exchange of data among countries - taking into account the data protection – is of paramount importance.[13] In particular, data exchange among countries will help in obtaining statistics on emigrants that are rarely available at this time, and allow assessing the quality of statistics. There have been regional initiatives on fostering data exchange, including the Programme on international migration in Latin America (IMILA) led by the Latin American and Caribbean Demographic Centre (CELADE) in ECLAC, as well as the OECD Database on Immigrants in OECD and non-OECD countries.

The data exchange should be standards-driven with well-documented metadata and in full adherence with international agreed standards. The Data Exchange should also follow the recommendation of the Open Data practices[14]. Output of the Data Exchange initiative can be shared and made available through an integrated network of national and global data hubs, following the good practice of the federated system of national and global data hubs for the SDGs initiative launched at the 49th Session of the Statistical Commission in March 2018.[15]

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[12] https://unstats.un.org/unsd/censuskb20/Knowledgebase.aspx and https://unstats.un.org/unsd/vitalstatkb/Knowledgebase.aspx
[13] Referring to aggregated data here. Microdata could also be exchanged between countries, subject to privacy and confidentiality concerns.
[14] United Nations Statistical Commission, E/2018/24-E/CN.3/2018/37, Decision 49/105
[15] United Nations Statistical Commission, E/2018/24-E/CN.3/2018/37, Decision 49/102, Open SDG Data Hub can be viewed at https://unstats-undesa.opendata.arcgis.com/