

COORDINATION MEETING ON INTERNATIONAL MIGRATION

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**MEASURING INTERNATIONAL MIGRATION:
MANY QUESTIONS, FEW ANSWERS ***

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International migration, with its intricate web of demographic, social, economic and political determinants and consequences, is a topic that has moved to the forefront of national and international agenda. In the last few years, immigration has been a major issue in the programmes of political parties in a number of countries, and a major factor in electoral campaigns in those countries. More recently, the aftermaths of the events of 11 September 2001 have brought some countries to consider toughening their policies towards immigrants and refugees. However, the many questions arising from growing concerns about international migration have few clear answers, mostly because of the lack of accurate and up-to-date information on international migration levels, trends and policies.

In addition, most of the available information originates from receiving countries in the more developed regions, and very little direct information exist about migrant flows from and to countries in the less developed regions. There is a need to have good international statistics, with information about the sex, age, family situation and education of the migrants, among other aspects of migrants.

Since the International Conference on Population and Development that took place in Cairo in 1994, the question of international migration has been debated a number of times by the General Assembly of the United Nations. Most recently, the General Assembly, in its Resolution 56/203 of 21 December 2001, called "... upon all relevant bodies, agencies, funds and programmes of the United Nations system and other relevant intergovernmental, regional and sub-regional organizations, within their continuing mandated activities, to continue to address the issue of international migration and development and to provide appropriate support for interregional, regional and sub-regional processes and activities on international migration and development...".

In response to this resolution and also to provide further information on international migration and development to the General Assembly, the Population Division of the United Nations Secretariat is organizing this Coordination Meeting on International Migration.

The purpose of the present paper is to discuss some of the challenges faced in gathering and analyzing levels and trends on international migration, and to illustrate some of these challenges with examples from the work of the Population Division in this domain.

As the issue of international migration has gained greater importance as a policy agenda item, the demand for international migration information has increased. In particular, international migration statistics and analyses should serve as solid bases for the formulation and the implementation of policies aiming at managing the phenomenon. However, the data that allow the precise estimation of levels and trends of international population movements and the investigation of its causes and consequences are far from complete. International monitoring and reporting initiatives are seriously hindered by data availability, quality, and comparability, thus calling for improved coordination of data-gathering activities among those who are concerned with global estimates of international migration.

Despite a prevailing view that data on international migration are scarce, statistical sources that can potentially produce information relevant to international migration are quite diverse. Possibly, the sense of scarcity partly stems from the limited access to these data (Zlotnik, 1987). Many existing data-collecting systems are set up to answer the demands of different administrative objectives, and therefore, not necessarily valued as sources of information to measure the volume of international migration. Dissemination of information generated by those systems has been often limited, or has been slow if it is ever released. Hence, one of the fundamental challenges for data-compilation at international level is the identification of appropriate data sources and timely access to the data.

Data sources producing information on international migration can be customarily grouped into the following four types: a) administrative registers, including population registers and registers of foreigners; b) other administrative sources, such as information derived from the issuance of visas, residence permits, work permits and exits clearances; c) border statistics, derived from the collection of information at ports of entry into and departure from a country; and d) household-based inquires, including population censuses and household surveys of different types (United Nations, 1998a). Unfortunately, there is no single source of data that can reflect the growing complexity of the international population movements. A variety of sources produce different types of migration statistics, with its own strengths and limitations.

For example, administrative registers have the potential of producing information on certain groups of persons who change a country of usual residence and thus qualify as international migrants. National population registers, if a country maintains the system, can be a valuable source of data on both inflows and outflows of citizens. However, the identification of international migrants is subject to the rules concerning inscription in or deregistration from the register. Moreover, when individuals do not comply strictly with the rules, the true extend of population mobility tends to be understated. Similar biases affect the data derived from registers of foreigners. While registers of foreigners may capture the influx of foreigners granted the permission to reside in a country, the coverage of those leaving the country is likely to be less complete, because of their reluctance to report the departure.

Other administrative sources, especially those generated from the operations designed to control international migration, can produce information about specific subsets of international migrants. Thus, the data on work permits issued to foreign nationals can be a proxy for the influx of economically active foreigners. The number of applications for asylum filed by the national authority can be an indirect evidence of the inflow of asylum-seekers. Similarly, the number of deportations in a year can refer to a segment of undocumented migrants. A common drawback of many administrative sources is that, because data are collected to satisfy specific administrative

needs, they do not reflect the full volume of migration, and are thus subject to incompleteness. The adequacy of these data as international migration statistics also depends on the degree of effectiveness with which such administrative procedures are implemented (Athuskorala, 1993).

Border statistics can be considered the most appropriate for the direct measurement of international migration flows. However, in practice, because the coverage is invariably influenced by the geography of a country, only an island country or country that has a few well-controlled ports of entry and departure is likely to gather useful border statistics. Moreover, countries often apply different degrees of control depending upon citizenship of passengers and mode of transport. In general, greater control is exercised upon arrivals than upon departures.

Population censuses or household surveys can yield an estimate of international migration stock at a country level, when appropriate questions are included in the census questionnaire. If a question on place of birth, or nationality, is included in a census, the number of migrants can be estimated as the size of the foreign-born, or foreign, population. In contrast with the limited availability of flow statistics, data on migrant stock are available from a large number of countries that conduct a census. A major limitation of census data is that the information cannot be updated easily, as a census usually take place with an interval of ten years in many countries. Policy formulation may require data on changes in key variables in shorter intervals. Census data also fail to capture the circulatory nature of international migration such as temporary labour migration.

The attempts to characterize the international population mobility have been also hampered by different concepts used to define international migration. Who is an international migrant? The lack of uniformity among countries in defining a migrant has been a key source of inconsistency in international migration statistics. Countries gather data according to their own definitions and hardly make adjustments to make them internationally comparable. In fact, the international efforts to achieve greater homogeneity in the concepts underlying flow statistics on international migration started as early as in the 1920s (United Nations, 1998a). Since then, however, limited progress has been achieved.

Basic criteria customarily used to identify international migrants are citizenship, residence, time or duration of stay, purpose of stay and place of birth (Bilsborrow and others, 1997). Perhaps, the most widely used, yet loosely defined concept is that of residence. Countries may define immigrants as non-residents who enter the country with a view of establishing residence, or emigrants as those currently not residing in a country. However, there has been no legal consensus on the term “residence” among countries. Often, the definition of international migrants has no reference to any minimum period of presence in the country or absence from the country.

Many countries also use legal nationality as an identifying factor for international migrants, because citizenship is a decisive factor determining a person’s rights in a country and has traditionally been used to determine who is subject to control when crossing international boundaries. States usually exert minimal controls on their own citizens, but use a variety of means to restrict the admission of foreigners.

Most recently, taking into account the “time” aspect of population mobility, the United Nations (1998a) recommended to define a long-term migrant as a person who moves to a country

other than his or her usual residence for a period of at least a year and short-term migrants as a person who moves for at least three months but less than a year. To date, only a few countries have implemented strictly these definitions in their reporting.

In summary, the variety of data sources and definitions used by different countries to produce international migration statistics results in a lack of international comparability of statistics, and in turn, poses a difficulty in characterizing the international population mobility with accuracy. While efforts to enhance the comparability of data are vital, greater availability of data and proper understanding of strengths and limitations of major data on international migration will contribute to better illustrating international population mobility.

The following part of this paper presents recent studies on levels and trends of international migration carried out by the United Nations Population Division. Policy studies on international migration are discussed in the other background paper presented by the Population Division.

AN OVERVIEW OF LEVELS AND TRENDS OF INTERNATIONAL MIGRATION FROM EXAMPLES OF THE WORK OF THE POPULATION DIVISION

1. Trends in Total Migrant Stock by Sex

Using data on the number of foreign-born or foreign residents enumerated by population censuses, together with information on the number of refugees in developing countries, estimates of the migrant stock in each country, classified by sex, have been derived for the beginning of the years 1965, 1975, 1985 and 1990 (United Nations, 1998b). Estimates for 1995 and 2000 are being added on an ad-hoc basis, as information from the 2000 round of censuses becomes available. Estimation methods, currently based on straightforward interpolation and extrapolation for countries with more than one data point and on assumptions of minor changes for most countries with only one data point in the past, are being re-examined in order to improve the goodness of the fit with recent trends.

The estimates obtained indicate that the number of international migrants in the world rose from 75 million in 1965 to 120 million in 1990, thus growing at an average rate of 1.9 per cent during the period 1965-1990. Estimates for intermediate years show that the growth rate of foreign-born or of foreign residents has been increasing steadily, from 1.2 per cent per year in 1965-1975 to 2.6 per cent per year in 1985-1990. The proportion of international migrants within the total population of the world did not change significantly between 1965 and 1990, remaining close to 2.3 per cent. However, migrants are not distributed evenly across countries or regions. Thus, in 1990, they constituted 4.5 per cent of the population in developed countries, while they accounted only for just 1.6 per cent of the population in developing countries. In the first group, the United States, followed by Germany, Canada, Australia and France hosted the largest number of international migrants in 1990. Information from recent censuses suggests that the number of foreign-born persons kept on growing at an accelerating pace in all these countries except France during the 1990s. In the developing world, India, followed by Pakistan and Saudi Arabia, hosted the largest number of foreign-born persons in 1990.

The estimates of migrant stocks are widely used by individuals and institutions working on international migration. Given the dearth of flow data, particularly in developing regions, stock

information is often the only available indication of the residual effects of inflows and outflows at a given time. However, even stock information has to be imputed for some countries. Out of the 216 countries or territories that constituted the world in 1990, 183 (85 per cent) had at least one source of information on the international migrant stock. For 143 of them, the data used as the basis for estimation were the number of foreign-born persons enumerated by censuses; for a further 40 countries or areas, data referred to the number of foreigners; for 8 developing countries, only refugee data could be used; no relevant data could be found for the 25 countries remaining.

2. Database: South-to-North International Migration

The database contains time series data on the flows of international migrants with particular attention to migration streams between developing and developed countries. Given the fact that most developing countries lack adequate statistics on the flows of international migrants, attempts have been made to compile data sets available for key receiving countries in the developed world. The database comprises the annual statistics on international flows of people, classified by country of origin or destination, recorded by eight developed countries, namely, Australia, Belgium, Canada, Germany, the Netherlands, Sweden, the United Kingdom and the United States. In most cases, the data cover the period 1960 to 2000. These countries were selected because they were major recipients countries of international migrants, and long time series of data were available for these countries.

These data aim to equally capture the number of persons who enter or leave a country in a given year. However, statistical sources which yield the data vary among eight countries and, therefore, they are subject to biases pertinent to each statistical source. The data are derived from border statistics (Australia), population registers (Belgium, Germany, the Netherlands, Sweden), administrative records on the number of permission granted to reside in the country (Canada, the United States), and passenger survey (the United Kingdom).

The cross-national comparison of the flow statistics also raises some comparability problems. First, in order to classify migrants, the eight countries that could furnish the data use different criterion: place of birth, citizenship, place of previous/intended residence, etc. Second, the classification of migrants by countries of origin or destination is of particular importance for the estimation of flows between developing and developed countries. However, the reporting practices differ significantly from country to country. Some countries tabulate the data only for selected countries of origin or destination, making the classification of migrants by standard region of origin or destination difficult. Third, given the long time span that the data sets cover, dissolutions or emergences of nations over time need to be properly accommodated. However, there is a lack of uniformity among the eight countries in respect of the timing to incorporate such changes as well as the way they reclassify the data. Lastly, both Canada and the United States do not produce statistics on outflows of migrants, because they do not monitor the departures of people from the country. Thus, the estimation of net flows of migrants is not possible for these two countries.

3. International Migration from Countries with Economies in Transition, 1980-2000

Despite the apparent increase in migration flows in and from Eastern Europe, the former Union of Soviet Socialist Republics (USSR), Albania and the former Yugoslavia since the end of the cold war, there have been few attempts to gather all information available in a comprehensive manner. The Population Division compiled time series data on flows and stocks of international migrants to and from countries with economies in transition, as recorded by these countries as well as countries with established market economies (United Nations, 2001a) and prepared a report based on these data (United Nations, forthcoming).

The data compiled show the historical rise of international migration from and within the region during the first years of the transition. Between 1990 and 1994, countries with established market economies recorded more than 1 million arrivals per year from the group of countries with economies in transition. Between 1.5 and 2 million people migrated yearly within these countries, particularly from former Soviet republics to the Russian Federation. Long-term migration leveled off in the second half of the 1990s, as the main armed conflicts subsided and the main receiving countries tightened their immigration and asylum policies. The average net out-migration rates recorded for Bosnia and Herzegovina, Yugoslavia, Kyrgyzstan and Kazakhstan in 1990-1995 are among the world's highest out-migration rates observed during the period. Five countries in the region had an overall positive net migration balance during the 1990s: Croatia, the Czech Republic, the Russian Federation, Slovakia and Slovenia.

The limitations intrinsic to most international migration studies, namely those imposed by data availability, quality and comparability are particularly relevant in this case. In general, statistics from countries with economies in transition are not complete. There are significant information gaps and a significant proportion of flows are undocumented. As it becomes necessary to rely on more than one source in order to obtain complete data series, issues of quality and comparability arise. The data sources used in the report include, among other, population registers, registers of foreigners, issuance of residence permits, border statistics and censuses. While a majority of countries included in the study classify migrants by country of previous/intended residence, some classify them by citizenship or by country of birth. In addition, a significant number of countries with established market economies include both short-term and long-term migrants in their statistics. Countries with economies in transition, in contrast, have until recently recorded long-term or permanent migrants only. The increase in various forms of short-term migration reported in recent studies and surveys cannot be systematically confirmed with the existing data.

4. *Asia on the Move: Levels and Trends of International Migration in Asia*

The study *Asia on the Move: Levels and Trends of International Migration in Asia* (United Nations, forthcoming) analyses the new and complex patterns of international migration in the Asian region, focusing primarily on changes that have occurred in the region since 1970s. It shows the growth of cross-border movements of people within Asia and some important shifts in the direction and nature of the movements. More specifically, the region has experienced a burgeoning of labour migration, centering in the oil-producing countries of Western Asia and the newly industrialized and industrializing economies of Eastern and South-eastern Asia. Permanent settlement of immigrants occurred mostly in Israel, and involved a substantial number of people originating in Eastern Europe in the 1990s. In addition, prolonged conflicts, increased occurrences

of civil unrest, and political instability in some areas of Asia also led to an unprecedented rise in refugee populations during the 1980s and early 1990s.

In order to assess the quantitative aspects of the population movements, efforts have been made to gather statistics on international migration from a wide range of available sources. The data sources employed in the study include, among others, population censuses, registers of foreigners, border statistics, issuance of visa or work permits, recodes on clearance of overseas employment maintained by the Governments of labour-sending countries and records from regularization drives.

The study shows that, while each data source on international migration has its own strength and limitations, use of information from a variety of sources can help illustrating the phenomenon more accurately. For example, the comprehensive assessment of foreign workforce has been still hampered by a paucity of information in several major recipient countries of labour migration, including the oil-producing countries of the Arabian Peninsula and the high-income economies in South-eastern Asia. The records maintained by labour administration offices of sending countries, albeit with their own limitations in coverage, have been a useful supplement to investigate the changing volumes and directions of migration flows.

Asia is one of the regions where feminization of labour migration has been relatively well documented, primarily based on the data concerning official clearance of departing migrant workers. Much remains unknown, however, about other socio-economic and demographic characteristics of migrants, from which important policy implications might have been derived. Lastly, the most serious statistical challenge in the region has been the estimation of scale of undocumented migrants. While the number of deported or regularized migrants provides information about a segment of undocumented migration, no other existing data can reveal the scale of undocumented migration close to the reality.

5. *Net international migration flows for 1990-2000, from World Population Prospects: The 2000 Revision*

The report *World Population Prospects: The 2000 Revision* (United Nations, 2001b) incorporated newly available data on long-term trends in the flows of refugees and a systematic use of direct information on international migration flows to assess other indirect evidence available. All this evidence was used to estimate past trends and assess prospects for the future of international migration at the country level.

The net migration estimates used for 1990-2000 confirm the trends depicted in other regional studies: Increased emigration from a number of countries in sub-Saharan Africa to developed countries, together with new outflows of North African workers to Kuwait and Saudi Arabia, contributed to a raise in net migration out of Africa during the 1990s. In Asia, the disintegration of the former Soviet Union contributed to increase the net emigration balance for the region. Net emigration from Latin America and the Caribbean had been rising steadily until the late 1980s; in the 1990s, it was still high by historical standards. Among the major areas of destination, Northern America has recorded the largest net gains from international migration during the 1990s. The breakup of the former Soviet Union led to an increase in net migration to Europe, which nearly doubled between the 1980s and the 1990s.

Globally, the annual average between 1990 and 2000 was 2.4 millions net migrants from the less developed regions to the more developed regions. These migrants represented 3 per cent of the overall population growth of the less developed regions, but they represented 56 per cent of the overall population increase in the more developed regions during the same period. Net immigrants represented 89 per cent of the population increase of Europe between 1990 and 2000.

Despite their worth for the depiction of regional trends, these estimates should be interpreted with caution, particularly at the national level. Adequate statistics allowing the accurate measurement of international migration remain rare. They often need to be revised or complemented in light of a better assessment of past trends in fertility, mortality and population growth. However, indirect evidence is often insufficient to capture the instability of migration trends. In addition, these diverse estimates must often be revised in order to obtain a zero net migration balance at the world level. Namely, information on net inflows of international migrants to more developed regions or, most frequently, net outflows of international migrants from less developed regions, is adjusted *ex post facto* if flows to one group do not cancel out flows from the other.

6. *Replacement migration*

The Population Division published in September 2001 a report entitled "Replacement Migration: Is it a Solution to Declining and Ageing Populations?" (United Nations, 2001c). Replacement migration refers to the international migration that a country would need to prevent the population decline and the population ageing resulting from low fertility and mortality rates.

The report examines in detail the case of eight low-fertility countries (France, Germany, Italy, Japan, Republic of Korea, Russian Federation, United Kingdom and United States) and two regions (Europe and the European Union). Estimates and projections published by the Population Division in *World Population Prospects: the 1998 Revision* (United Nations, 1999) provided the population base. In each case, alternative scenarios of international migration for the period 1995-2000 are considered, corresponding to specific objectives in terms of the size or the age structure of the populations, highlighting the impact that immigration could have on population size and population ageing.

Major findings of this report include the following:

During the first half of the twenty-first century, the populations of all developed countries are projected to become smaller and older as a result of below-replacement fertility and increased longevity, in the absence of migration.

While some immigration is needed to prevent population decline in all countries and regions examined in the report, the level of immigration in relation to past experience varies greatly. For the European Union, a continuation of the immigration levels observed in the 1990s would roughly suffice to prevent total population from declining, while for Europe as a whole immigration would need to double.

The numbers of immigrants needed to prevent declines in the working-age population are larger than those needed to prevent declines in total population. If such flows were to occur, post-1995 immigrants and their descendants would represent a strikingly large share of the total population in 2050.

The levels of migration needed to prevent population ageing are many times larger than the migration streams needed to prevent population decline. Maintaining potential support ratios (ratio of people in working-age to people past working-age) at the 1995 level would in all cases entail extremely large volumes of immigration, entirely out of line with reasonable expectations.

CONCLUDING REMARKS

As illustrated in this brief report, the challenges faced in gathering, assessing and analyzing information on international migration and development are manifold. Adding on to questions about data availability, quality and comparability are issues related to implementation and coordination of data-gathering activities.

A major purpose of this meeting is to improve the knowledge about the information that institutions collect and the purposes for which they do it. Information on current efforts is frequently incomplete. In particular it is desirable to further assess to what extent these efforts are concurring, and what overlapping may exist and how to improve by filling the gaps.

Regarding implementation, ways should be found to ensure that the data received and used by international organizations are the most recent and accurate. Of particular importance is the issue of choice between, on the one hand, quality and completeness, and, on the other hand, timeliness.

These are some of the issues that the participants at the Coordination Meeting will address. In the field of international migration, there are currently many questions, but few answers. As a result of this coordination meeting, perhaps there will be fewer questions and more answers in the future.

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