Integrated data for integrated policies

This Stats Brief is based on the Statistical Yearbook 2014, released on 9 December, 2014. It highlights some of the social issues and policy challenges in Asia and the Pacific, some of the links between these issues, and the role of data in making better decisions in future to ensure no one is left behind.

Population developments

Many countries in the Asian and Pacific region are in the middle or advanced stages of a demographic transition from high fertility levels and high mortality levels to low fertility and low mortality levels.

Lower mortality levels are partly a result of decreases in infant mortality. From 1990 to 2012 the infant mortality for the region declined by over 52 per cent from 64 to 31 deaths per 1,000 live births. And improvements to health care mean these children can expect to live longer than ever.

At the same time fertility rates are decreasing, mainly due to better access to reproductive health services, primary contraception, and women being older when they marry for the first time. Women in the region now give birth on average to 2.1 children by the end of their childbearing years, a considerable decline from 3.1 children in 1990.

As a result of decreasing fertility and increasing longevity, the age structure of the population in the region is changing. In 1970 the percentage of the population of Asia and the Pacific in the most economically productive age band between 15 and 64 was 56 per cent. By 2014 that had increased to 68 per cent. This “demographic dividend” in countries where a high percentage of the population are economically active presents an opportunity for accelerated and long-term economic growth, provided that good social policies are in place to provide a quality education, adequate health care and decent jobs.

The opportunity is however short-lived. As the demographic transition continues, economically active adults will become less economically active older people, who typically consume greater social and economic services. Over the next 40 years or so the number of people over 65 years of age will nearly treble from approximately 330 million in 2014, to 900 million in 2050, and their share of the total population will increase from 7.6 per cent to 18 per cent. Thus the demographic transition represents both an opportunity and a looming challenge.

Urbanization

The share of the population living in urban areas is increasing. This increase, known as “Urbanization”, is partly a result of the “employment transition” taking place in most developing countries as more and more people seek non-agricultural work. In 2012, 1.98 billion people – an estimated 46 per cent of the region’s population lived in urban areas, compared with 40 per cent 10 years earlier. By 2020 the urban population is expected to exceed 50 per cent, an absolute growth in numbers of approximately 360 million people.

The pace of Urbanization in Asia and the Pacific has varied due to many factors, particularly income level, and has been greatest for countries now in the upper-middle-income group. In lower-middle-income and low-income economies the pace of urbanization was initially slower, but the percentage of the population living in urban areas is expected to increase at a rate similar to that of upper-middle-income economies.

Proportion of the population living in urban areas in Asia and the Pacific by income grouping, 1980 to 2050

Urbanization provides many benefits to a country – primarily the result of economies of scale, which allow for more cost-effective delivery of critical services, such as transport, health and education. But the combination of a demographic transition and an employment transition can result in the urban working-age population growing faster than new, gainful employment opportunities are created. This is a particular problem for the urban poor who, due to a lack of savings and an absence of social security, literally cannot afford to be unemployed.

Rapid Urbanization also poses considerable planning challenges. In 2009, over half a billion people in Asia and the Pacific were living in slums and did not have access to at least one of the following basic necessities: security of tenure, structural quality and durability of dwelling, safe water, sanitation facilities, and sufficient living area. This problem is particularly acute in low-income economies in the region and in 2005 nearly two thirds of urban dwellers lived in slums. No data are available after 2005, but this fraction is very likely to have fallen since then.

Young people in slums are also more likely to work in the informal sector than their other urban peers and become trapped in perpetual poverty.

Urban slum population, Asia and the Pacific by income grouping, 2005 and 2009

Crime

A lack of decent, sustainable jobs; poor standards of housing; overcrowding; and low standards of education and social amenities are partly responsible for higher rates of homicide and other types of violent crime in urban areas. And rapid urbanization can put additional strain on already tense relationships between people.

A high number and high density of unemployed, displaced young people can also result in gangs and organized criminal groups. Organised criminal activity such as the trafficking of women and children for sex causes incalculable misery and suffering to the victims of these crimes and their loves ones. They also hamper economic development and the sense of peace and security people need in order to invest in their communities and businesses. The economic cost worldwide of international organised crime is estimated to be US$870 billion, six times the amount of official development assistance, and is comparable to 1.5 per cent of the global domestic product.

Despite the major challenges of rapid Urbanization and inequality in Asia and the Pacific, rates of violent crime
like homicide are among the lowest in the world. The homicide rates in both developed and developing countries in Asia and the Pacific have generally been falling, but in 2010 were more than five times higher in developing countries than they were in developed countries.

The need for an integrated evidence base

The issues touched upon in the short descriptive analysis above include population demographics, inequality, poverty, housing, health care, education, employment, social security and crime. These issues are interlinked in numerous ways and cannot effectively be addressed in isolation.

For example, policies aimed at reducing crime and improving community safety would benefit from better understanding of the relationship between individuals’ criminal activity and their age, sex, gender, ethnicity, education history, employment circumstances, housing conditions and health status. Such integrated information could similarly provide deeper insight into the impact of Urbanization on access to services and the presence of systematic inequalities. And by understanding how a person’s circumstances, experiences and actions change over time, policy-makers would have much richer information about the causes and potential solutions to chronic social, economic and political challenges such as poverty and inequality.

Effectively targeted policies that address the people most in need must therefore take account of a range of issues, the relationships between them, and how these relationships change in time and across vulnerable groups. This requirement features in the dialogue emerging from development agenda beyond 2015.

The Report of the High-Level Panel of Eminent Persons for the Post-2015 Development Agenda, for example, recognised that the

“new agenda must tackle the causes of poverty, exclusion and inequality”

And noted that

“many people living in poverty have not had a fair chance in life because they are victims of illness or poor healthcare, unemployment, a natural disaster, climate change, local conflict, instability, poor local leadership, or low-quality education.”

The potential of integrated administrative data

Traditionally large-scale, cross-sectional surveys, and surveys repeatedly collecting information from the same people over a period of time, have been used to provide integrated data and statistics to address linked policy questions. Such surveys however have many drawbacks. Small sample sizes mean that small populations of interest, including the most vulnerable in society, cannot be identified with sufficient precision; infrequent data collection and lengthy periods of analysis mean that information is often provided too late; while lengthy survey questionnaires that tackle a range of issues increase both the time taken for respondents to complete them and the number of people sampled that do not respond.

A more cost-effective source of timely, detailed and cross-cutting data may be the administrative data held by governments. By linking the data routinely collected in administrative systems maintained by departments such as education, health, labour, finance and social services; a rich and detailed picture of the lives and priority issues of different groups within a population would emerge. Making use of these existing resources in a secure and confidential way has tremendous potential for better policy-making and policy evaluation.

This potential was highlighted in the recent report of the United Nations Secretary-General’s Independent Expert Advisory Group on a Data Revolution for Sustainable Development (IEAG) which referred to

“the huge loss in terms of the benefits that could be gained from more open data and from being able to link data across different sectors.”
The barriers to better integrated administrative data

Integrated administrative data may have the potential to provide timely, cost-effective and detailed information to policy-makers, but there are substantial barriers to realising those benefits.

Most governments do not have the infrastructure or institutions in place that would support sharing, much less linking, of the data collected by their departments.

A number of challenges need to be addressed within the national statistical system and wider government, some of which are outlined below.

Statistics and data protection legislation

There are critical legislative and procedural components of governments and national statistical systems that need to be in place to enable data integration. These include: a) data protection legislation on the collection and storage of data to ensure the privacy of individuals and the confidentiality of their information; b) statistical legislation mandating the national statistical office to collect and use data for statistical purposes only; and c) trusted methods and process for removing personal information from datasets that are to be linked.

Building public trust

Many societies do not trust their governments to collect and link data in an impartial way to deliver better social services. For some segments of the population there is strong resistance to political leaders knowing “too much” about their lives and concerns about how any information and knowledge may be used. This is particularly true of health data information. But many of the benefits of linked data are improvements in health information, for example identification of the socio economic profile of groups prone to different health problems and the lifestyle habits associated with those problems.

Preventing unintended disclosure

Providing open access to integrated datasets further increases the potential value of those data, but also the risk that personal details may be inadvertently disclosed. Robust methods need to be developed for maximising the potential of published data, while ensuring the privacy of individuals and maintaining the trust of the general public.

Realising the potential of administrative data

Overcoming these barriers and transforming the national statistical systems of Asia and the Pacific into information and knowledge providers is a focus of the development strategies devised by the leaders of national statistics offices who comprise the ESCAP Committee on Statistics. The Committee will provide guidance on these strategies in the context of the emerging development agenda beyond 2015 at the fourth session of the Committee taking place in Bangkok from 25 to 27 March, 2015: http://www.unescap.org/events/committee-statistics-fourth-session.

The Committee’s development strategies are broad and ambitious in scope and cover a range of issues relevant to the capacity of the national statistical system including: engagement with users, legislative frameworks, resource allocation, improved data sources, staff skills, statistical infrastructure and training.

Of particular relevance to the more efficient and effective use of existing administrative data is the formulation and implementation of strategies and programmes advocating for better statistics and data legislation; strengthening technical support and research for providing metadata to users; the formulation of microdata dissemination policies and protocols; and creating best practice guidelines and frameworks for enabling data sharing and linking.

But the statistical community cannot realise the potential of administrative data without cross-government support. Visible commitments from governments are needed to public transparency, including through information sharing and open data policies; complementary data protection legislation safeguarding and guaranteeing people’s privacy; and strong support to impartial, professional and empowered national statistics offices.

For information regarding ESCAP’s work in statistics development please visit: http://www.unescap.org/our-work/statistics

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