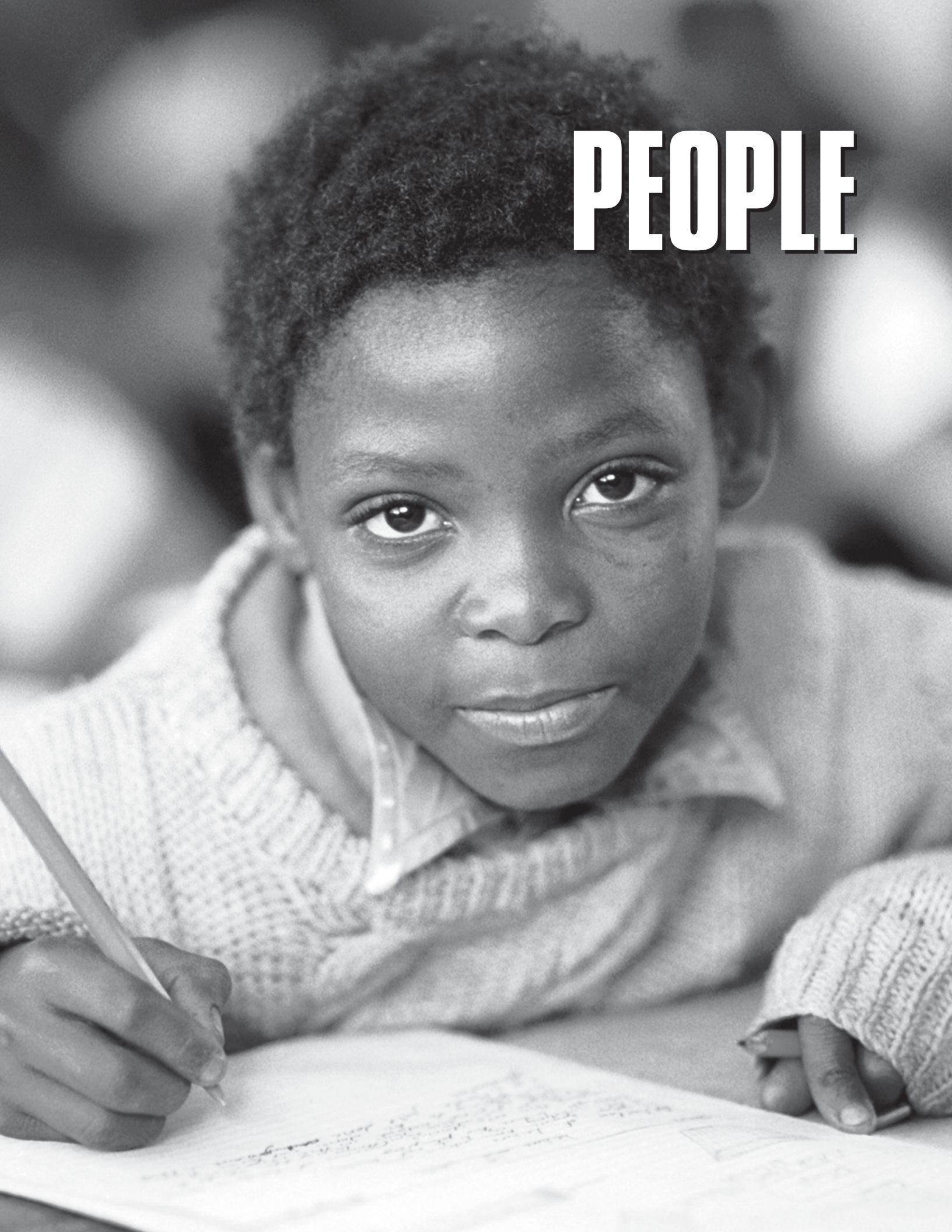


PEOPLE



2

Sustainable development is about improving the quality of peoples' lives and expanding their abilities to shape their futures. This generally calls for higher per capita incomes, but also for human capital development through improvements in health and education. Although developing countries have made large investments in human capital, good health and basic education remain elusive to many. This limits people's ability to take advantage of employment opportunities and work their way out of poverty.

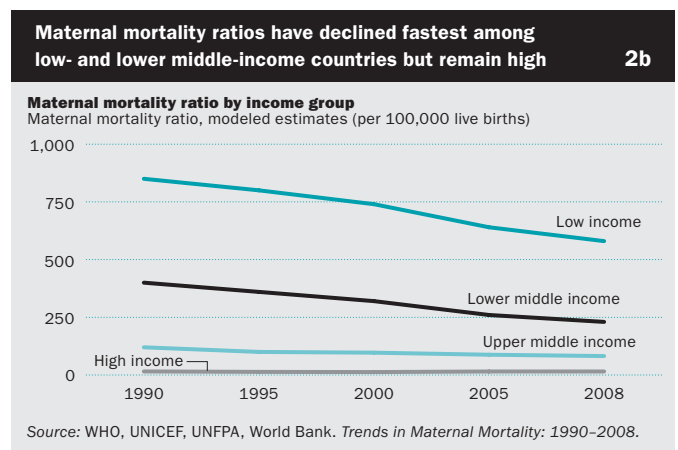
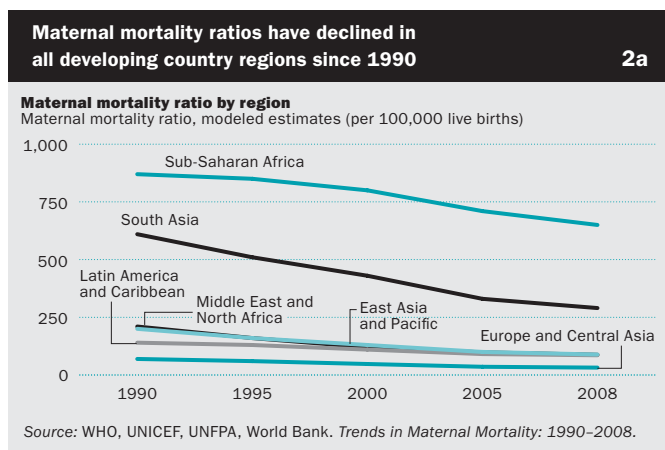
The tables in this section review the achievements countries have made in improving the welfare of their people. They show the levels of poverty prevalent in countries, the distribution of income, and the prevalence of child labour—which while it reduces household poverty, is always at the expense of children's education and future human capital. The section also looks at investments in health and education and their impact on the worst aspects of nonincome poverty by reducing hunger and malnutrition, lowering mortality rates, and improving education outcomes.

This year's national and international poverty estimates were prepared by the World Bank's Global Poverty Working Group, recently established by the Poverty Board. The results of their work are evident in tables 2.7–2.9. The baseline database, with estimates for 231 data points (country and year combinations) covering 104 countries, was updated to include estimates for 577 data points covering 115 countries. Because of space restrictions in the printed edition, this report cannot include estimates for all countries. Thus, it includes only countries

for which estimates are available since 2000. But the full range of these poverty estimates can be accessed through the Bank's Open Data Initiative (data.worldbank.org), and the entire database of \$1.25 and \$2 a day purchasing power parity poverty rate and poverty gap estimates will also be available through PovcalNet.

In addition, several new indicators have been added to existing tables. Data on children's learning assessment, from the Programme for International Student Assessment, have been added to table 2.14, and the lifetime risk of maternal death has been added to table 2.19. The new maternal mortality ratio, estimated by the Inter-Agency group, is now available in a consistent time series for the first time, and data for 1990 and the most recent year are presented in table 2.19. The entire time series can be accessed through data.worldbank.org; regional and income group aggregates for maternal mortality ratios are in figures 2a and 2b.

The next sections look at civil registration, highlighting the problems countries face in planning for





the welfare of their people. Countries need to know, at a minimum, how many people are born and die each year. In most developing countries this is not easy. The discussion highlights the obstacles countries must surmount in recording births and deaths and the interim measures they have adopted, and it indicates the way forward for countries and their development partners.

Civil registration, the missing pillar

In 2009 the births of 50 million children went unrecorded. They entered the world with no proof of age, citizenship, or parentage. That same year 40 million people died unnoted except by family or friends. There are no records of where they died, when they died, and more importantly how they died.

In most high-income countries these vital events (births and deaths) are recorded by civil registration systems, which also record marriages, adoptions, and divorces. But in many developing countries registration systems are incomplete or absent. In South Asia only 1 percent of the population is covered by complete vital registration records (at least 90 percent coverage for births and deaths), and in Sub-Saharan Africa only 2 percent (UN, *Population and Vital Statistics Report*, 2011). Lacking effective registration systems, countries must rely on infrequent and expensive censuses and surveys to estimate the vital statistics needed to support the core functions of government and to plan for the future.

A state-of-the-art statistical system has three pillars: censuses and surveys, administrative records, and civil registration, each with an important and complementary role. Censuses give benchmark estimates that provide a base for and a check on vital statistics, and surveys

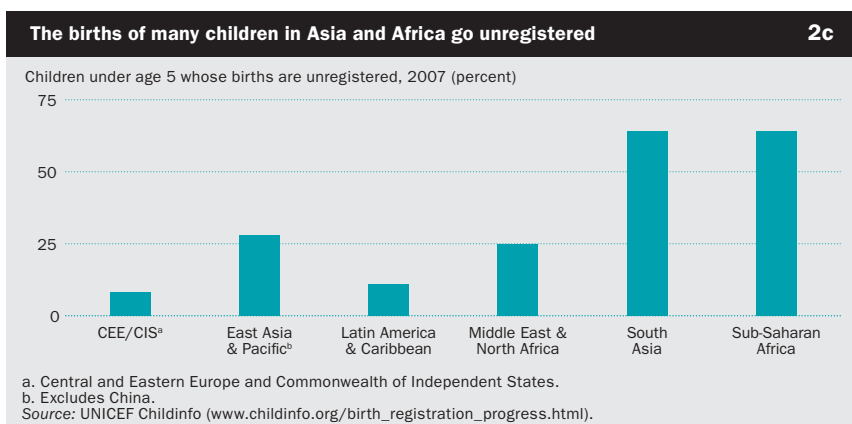
provide detailed characteristics of the population recorded by censuses and civil registration systems. Administrative records from health and education systems add further information to manage those services and—combined with census, survey, and vital statistics—are used to plan for future needs.

Civil registration has two functions: administrative—providing legal documentation that protects identities, citizenship, property, and other economic, social, and human rights—and statistical—providing regular, frequent, and timely information on the dynamics of population growth, size, and distribution and on records of births and deaths by age, sex, and cause at the national and subnational levels. Vital statistics from civil registration systems are essential for planning basic social services and infrastructure development and for understanding and monitoring health status and health issues in the country.

A complete civil registration system has three strengths: it costs less than conducting a census or survey, data are based on a record of events rather than recall, and information can be made available at low cost. In a well functioning civil registration system a family member or caretaker reports births and deaths at the registration office in the local area and receives appropriate legal documentation. Medical certification of death from a health care provider identifies the cause of death.

To be considered complete, civil registration systems must collect information on at least 90 percent of vital events. Systems in most developing country regions fall well short of that standard. So today, most people in Africa and South Asia are born and die without a trace in any legal record or official statistic (figure 2c), causing a vicious cycle. These are the regions where most premature deaths occur and where the need for robust information for planning is most critical. Roughly half the countries claim to have complete registration of births and deaths (UN, *Population and Vital Statistics Report*, 2011), leaving nearly 40 percent of births and 70 percent of deaths unregistered (WHO 2007).

In many countries vital events are unreported or only partially reported for certain areas, ages, or populations for a variety of reasons. People may not know their responsibility to register events or where to register. They may choose not to register because of the distance to the registration offices or for cultural reasons.



Or they cannot afford the registration costs. Data from Nigeria show that most unregistered births are found among the rural poor, for whom a significant barrier may be the distance to the nearest registration facility, and among poorly educated mothers (figures 2d–2f).

Where many infants die young, parents may be reluctant to go through the formalities of registration until they have some confidence in the child's survival or need a birth certificate for administrative purposes. In many cultures, especially in Western Africa, a child's death before age 2 is generally not registered. In Burkina Faso, for example, there are different words to express or describe death. The word for infant death among the Mossi is *lebame*, which translates literally to "s/he went back," which is different from *kiime*, which is used for a teenager or adult who has died (private conversation). Reporting is lower for deaths than for births because people perceive death as a private, sad event and because there are fewer incentives associated with registering a death, especially where formal inheritance is rare.

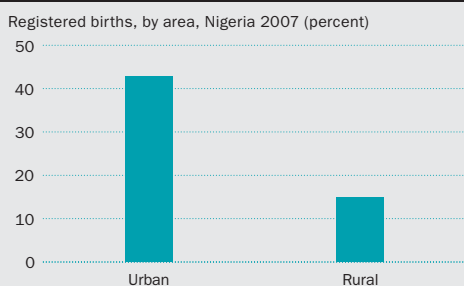
Such recording lapses have consequences for data quality. Even where there is complete registration, births and deaths may be recorded as need arises, rather than when they occur, reducing the timeliness and relevance of data. Not all administrative levels have the same capacity to maintain registers, resulting in omissions that may be difficult to quantify and therefore rectify, since underregistration cannot be assumed to be uniform across the population.

Correct information on cause of death is critical for guiding policies and priorities for the health system. Routine data from civil registration in the United Kingdom helped identify the causal association between smoking and lung cancer in the 1950s. But even when deaths are recorded, age or cause of death may be misreported or miscoded. Correct reporting of cause of death is particularly difficult in developing countries, where many deaths occur at home without medical care or certification. In Myanmar only 10 percent of deaths occur in the hospital (Mahar 2010). More than two-thirds of people live in countries where cause of death statistics are partially reported and therefore of limited use or where deaths are not reported at all (table 2g; Mahapatra and others 2007).

Because of the lack of reliable vital statistics from civil registration systems, the long-term social, economic, and demographic

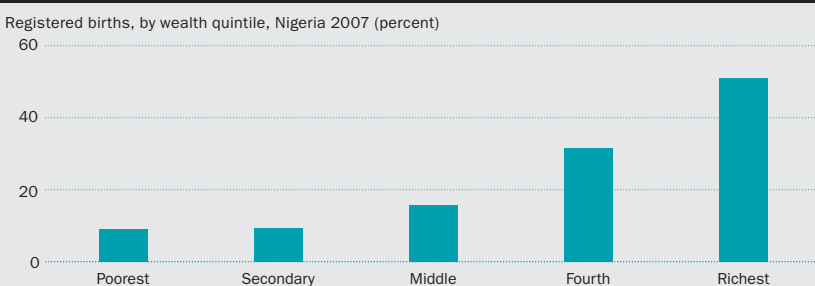
impact of major diseases in developing countries can be estimated using only models or intuition and educated guesses rather than facts (Cooper and others 1998). Without data on the cause of death, verbal autopsy (an interview with caregivers or family members after a death to establish probable cause of death) can be used. In Tanzania several districts implemented sentinel demographic surveillance systems that provided routine monitoring of vital events and data for cause of death derived from a validated set of core verbal autopsy procedures. District councils used this information

In Nigeria, children's births are more likely to be unregistered in rural areas . . . 2d



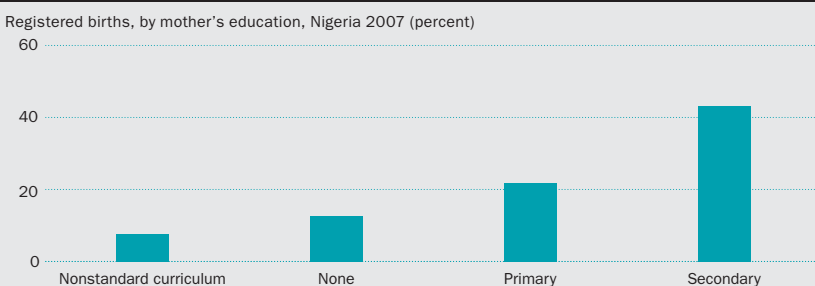
Source: Multiple Indicator Cluster Survey 2007.

. . . in poor households . . . 2e



Source: Multiple Indicator Cluster Survey 2007.

. . . and where the mother has a lower education level 2f



Source: Multiple Indicator Cluster Survey 2007.



Most people live in countries with low-quality cause of death statistics

2g

Classification of countries based on the quality of cause of death statistics reported to the World Health Organization, 2007

Quality	Number of countries	Percent of global population
High	31	13
Medium	50	15
Low	26	7
Limited use	17	41
No report	68	24
Total	192	100

Source: Mahapatra and others 2007.

to identify disease burdens, set priorities, and allocate resources (Setel 2007). But verbal autopsy is often limited to small areas, such as sample vital registration and demographic surveillance systems, because it is expensive, and accuracy depends on family members' knowledge of events leading to the death, the skill of interviewers, and the competence of physicians who do the diagnosis and coding.

Why civil registration fails to develop

Good civil registration systems require long-term political commitment, a supportive legal framework, allocation of roles and responsibilities among stakeholders, mobilization of financial and human resources, and most critically, the trust of citizens (AbouZahr and others 2007). Although establishing civil registration systems takes time, there is no substitute in the long run. But when civil registration systems lack a sponsor or key stakeholder, or citizens lack incentives to participate, and when high initial costs deter investments, civil registration fails to take root.

No single blueprint for establishing and maintaining civil registration systems ensures the availability of timely and sound vital statistics. Each country faces different challenges, and strategies must be tailored accordingly. Some obstacles to a viable civil registration system can be removed only through long-term social and economic development. These generally relate to geography and population distribution, with widely dispersed populations requiring transportation to registration centers. And a largely illiterate population may be unaware of the need to comply with the law or be unmotivated to do so.

Other obstacles relate to the need for human and physical infrastructure to set up and maintain a civil registration system. While technical assistance and development grants can finance fixed costs and provide initial staff training, countries need to finance recurring costs to run a civil registration system efficiently. Because many developing countries have enormous economic and social development needs, this would claim low priority. A first and inexpensive step is adequate legislation. But while most countries have legislation requiring registration of vital events, many have not established organizational arrangements to direct, coordinate, and supervise the operation.

Interim approaches

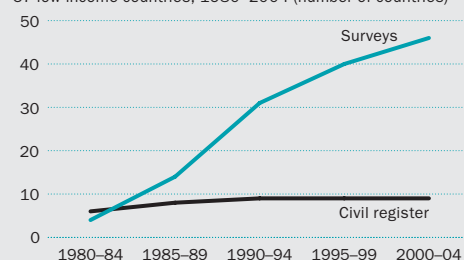
Because of the time and expense of building complete civil registration systems, many countries have adopted alternative approaches to measure and monitor vital events and related sociodemographic information. But as dependence on these measures (often intended as interim) grows, national authorities have fewer incentives to invest in complete civil registration systems (figure 2h; Setel and others 2007).

These alternative approaches—notably censuses, demographic household surveys, sample registration systems with verbal autopsies, demographic surveillance sites, and facility-based information—effectively fill data gaps with up-to-date information in many developing countries. Figure 2i illustrates the high underreporting of deaths in the civil registration system in the Philippines, based on calculations by the Inter-agency Group for Child Mortality Estimation, using surveys and other sources of mortality data.

More countries used surveys for mortality statistics, but civil registration did not expand

2h

Collection and reporting of data for mortality by sources in 57 low-income countries, 1980–2004 (number of countries)

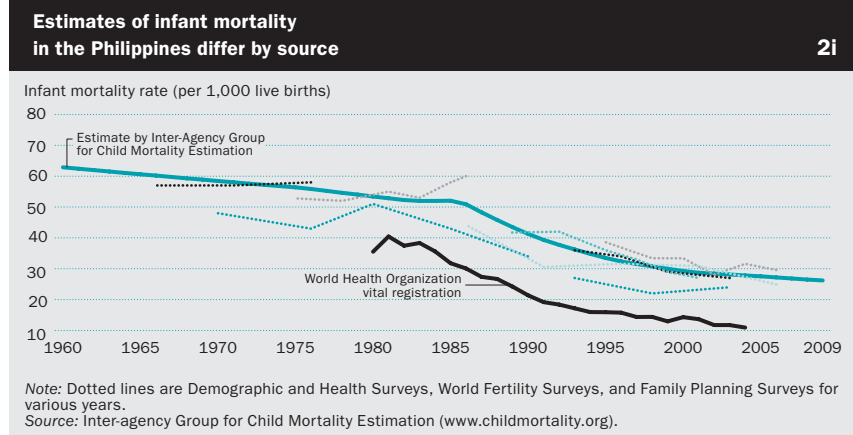


Source: Boerma and Stansfield 2007.

These interim approaches also produce supplemental information that is not collected through civil registration, such as socioeconomic information, risk factors, and health status. But these approaches are not a complete or permanent solution. Censuses and surveys are expensive, and developing countries often require international technical and financial assistance. They must be repeated regularly to yield useful data. And they must be supplemented or adjusted to produce satisfactory estimates. Burkina Faso, which has partial coverage of civil registration (birth registration coverage is 60 percent), has conducted four censuses (1975, 1985, 1996, 2006), five Demographic and Health Surveys (1991, 1993, 1998, 2003, 2010), two Multiple Indicator Cluster Surveys (1996, 2006), and a migration and urbanization survey (1993).

How to build a good civil registration system

Over the years, international and development agencies have tried to identify the strengths and weaknesses of national civil registration systems and assess the quality of the data they produce. In 2001 the United Nations updated the *Principles and Recommendations for a Vital Statistics System*, first published in 1973, to offer best practice guidelines for establishing a civil registration system and producing timely, complete, and accurate statistics. Regional initiatives by the United Nations include the 1994 African Workshop on Strategies for Accelerating the Improvement of Civil Registration and Vital Statistics Systems. In 2005 the World Health Organization (WHO) established the Health Metrics Network, which recommends an integrated approach for developing health information systems, including civil registration. Some 85 countries have used the network's Framework and Standards for Country Health Information Systems, which



aims to ensure consistency and comparability of statistics across countries and over time. Used correctly, these principles and guidelines improve data quality, as in Chile and Tanzania (Setel and others 2007), but in reality few countries have pursued or attained most recommendations.

The WHO's *International Classification of Diseases and Related Health Problems* has improved the comparability of cause of death data. Still, there are substantial differences in interpretation and application of these codes. In 2007 only 31 of 192 WHO member countries (13 percent of the world's population) reported reliable cause-of-death statistics to the WHO, most of them high-income countries (WHO 2007).

International support

The international community can continue its strong supportive role by setting standards and guidelines for collecting and validating systems and data, publicizing the importance of civil registration, and providing comprehensive and integrated technical and financial assistance. Since no single UN agency has a clear mandate for guidance and technical support for civil registration, good coordination is key.