

Measurement and Data Challenges in Sub-Saharan Africa: Has the DHS Program Helped?

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Background and Introduction

Fifty years ago, the state of knowledge about population dynamics in sub-Saharan Africa (SSA) was rudimentary. Censuses were few and irregular. The ones that were conducted had several flaws since a large proportion of the population did not know their ages or were unwilling for various reasons to report them. Surveys were also patchy and episodic. In a sense, the whole region was nearly a demographic “terra incognita”. However, beginning from 1972 when the World Fertility Survey was launched, the state of demography of the region has improved.

In this paper, we focus on the Demographic and Health Surveys (DHS) program and its contributions to ameliorating the measurement and data challenges in SSA. There are a few reasons for this focus on the DHS. First, begun in 1984 by the US Agency for International Development, it is the largest and the longest-enduring international health data collection program of its type in the developing region. It has provided technical assistance in the implementation of over 280 surveys in more than 90 countries around the world. Its data and approaches are often referred to as the “gold standard” in international health surveys. The reputation of its data is built upon its rigorous data quality assurance procedure, its data are comparable over time and across countries, and its indicator definitions are standardized and conform to internationally agreed guidelines. Second, although DHSs are conducted in practically every region of the developing world including parts of Eastern Europe, SSA has been the region with the largest number of surveys in each 5-year cycle of program since its inception in 1984. In the mid-1990s, about 45% of all surveys under the program were in SSA. Over the last 5 years, the proportion of the 113 surveys conducted in the region remains above 45%. About 40 countries in the region have participated in the program since its inception. Although the region has many countries, part of the reason for its many surveys is absence of credible alternative sources of data.

Third, the DHS program is implemented as part of foreign assistance program of the US Government. As such, it has capacity building and sustainability as a goal. It aims to foster the culture of evidence-based decision-making in participating countries and its data are freely available to legitimate users.

Availability of internationally comparable data help nations see themselves relative to compare other nations, which could thereby generate a healthy competition/rivalry to achieve a goal through policy changes. Easy accessibility and availability of its data make it easy to assess performance and to make a determination of what works and what does not. This is the monitoring and evaluation function of DHS data, and it is important for evidence-based policy formulation and decision making. When pertinent

data are available, they make clear areas of strength and weaknesses in the policy and implementation process.

The DHS program also works with host country statistical agencies to design and implement the surveys and to disseminate the results. This fosters a sense of ownership of data by host country governments. Governments tend to use reliable data that they collect and that they feel belongs to them.

The question that arises is whether the implementation of this large scale survey program has ameliorated or worsened the data and measurement challenges in SSA. This question is particularly important because vital registration system remains weak in many countries; censuses in many of them are irregular and fraught with data quality challenges, and routine health data are under-developed. In other words, is easy data through surveys dampening the determination to build other necessary data infrastructure in participating countries?

The arguments in this paper is that the DHS program has helped in ameliorating measurement and data problems in the region. Ways in which the program has help include the following:

- Adherence to high data quality assurance procedure,
- Enforcing standard definitions,
- Ensuring comparability over time and space,
- Promoting country ownership and
- Boosting survey planning and management capacity.

We can also point to specific programmatic uses of DHS data in SSA. For example, by initiating population-based collection of blood samples for HIV testing in 2001, the DHS program has been helpful in our understanding of the epidemic in the region, and has succeeded in putting to rest doubts expressed by some (including governments) about the reality of HIV/AIDS in the region. Its data have been instrumental in showing where the prevalence are, what the age/sex distribution of the infection is, what the prevalence of sero-discordance couples is, etc. The same is true of the President's Malaria Initiative: by collecting reliable data, including malaria parasitemia, the program has helped in understanding the disease and how households are preventing infection and treating cases among mothers and their children. The same can be said of child immunization program, female genital cutting, domestic violence, nutritional among children and mothers, etc.

While it could be argued that large scale survey programs such as the DHS are diverting funds away from develop other components of the health information system. However, such an argument is not valid because countries that have not participated much in large scale surveys have not invested more in vital registration or routine health management information systems than those who have participated. Similarly, countries with strong information systems also continue to invest in survey data collection as complementary data.

To be continued