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UN Room Paper

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Executive Summary

- The publication of reports by multilateral bodies such as the one by the Human Development Report in 2004, and the State of the World Population Report published in 2004 by the UNFPA prompted this room paper.
- This room paper outlines the conditions within which information is disseminated as well as the discourse around knowledge creation as pertains to official statistics agencies.
- The paper argues that reports by multilateral bodies should:
 - Clearly identify and describe data sources, methodologies selected, and the limitations of the data used for knowledge generation;
 - Explain the context within which results are presented, explained and interpreted, as well as explain the context of the data sources used, their validity and reliability;
 - Indicators reported are often based on sources whose dates do not coincide with nationally representative datasets from the statistical agency.
 - Reflect the assumptions underlying country-level social, economic and demographic statistics.
- The paper provides specific examples of estimates and assumptions made about the South African population in recent times.
- The issue, however, is not simply whether estimates about social, economic, and demographic profiles and assumptions about the future pace of these indices, are valid. Rather, it is the way in which these assertions shape the debate concerning social and economic development priorities.

Introduction

The late 20th and early 21st centuries have seen much more of the world moving from one set of institutions, processes and procedures by which daily life is carried on to a wholly different configuration of arrangement by which societies function. The general thrust of these changes has been towards the opening up of societies, politically and economically. This is true whether the move was from colonial status to independence, from state socialism to a market economy or from one set of political institutions to another. Understanding the fundamental conditions which spawned these changes, contexts in which they have taken place and the outcomes resulting from these developments give rise to questions that are of interest to both those responsible for governance and researchers.

Those concerned with managing these societal changes face a special set of challenges. A critical consideration is the location of immediately available and accessible means of conducting the needed evaluations. Involved are the design of measurement tools and the identification of social and development indicators by which the appropriate analyses may be carried out.

The source, nature and quality of the data that are immediately available are crucial factors in this activity. Existing databases in many instances may not be appropriate to this need, requiring modifying the tools and indicators to be used. Under these circumstances, the choice of measures and indicators will be dictated by the immediate requirements of the policy process. The particular measurement tools and the social indicators used in any given situation therefore may reflect the need to fit the tools and indicators to a particular situation.

Selection of the measures and indicators to assess both the degree and the nature of the changes that may have transpired involve matters of research methodology. The decision to use a particular set of measures and indicators is highly dependent on a number of factors. One is an understanding of the cause-effect relationships relating to the policy or program area under examination. The public policy concerns of the society where the transition is occurring are also a consideration. A further factor, similar to that in the development of policy, is the types and quality of the data that are available. The reasonableness of the values of the indicators is also important. Often International agencies ignore official statistics in favor of other sources, which are perceived to be more accurate and reliable. While this strategy of choosing

measurement tools and indicator values from non-official/academic sources may be appropriate in some settings, it may not be in settings such as South Africa. In South Africa there are often polarized views based on ideology rather than empirical evidence on issues related to population growth, fertility, and mortality.

Rationale for the room paper

This room paper has been prompted firstly by the Human Development Report published on South Africa shortly after the 2004 General Election but secondly by a related report of the UNFPA on the State of the World Population. Further reports have followed and one by the US based Heritage Foundation. What I have sketched is the type of environment within which information is disseminated and thereby discourse takes place leading to the possibility of knowledge creation. In order to frame my argument, I would like to draw from Spinner's keynote address to the European Conference of official Statisticians of 2000. In his paper he classifies knowledge into three categories and locates or associates official statistics with one of these categories. These categories define (i) knowledge as information, (ii) knowledge as understanding, and (iii) knowledge as insight, competence and authority.

Knowledge as information according to Spinner constitutes that form of knowledge which is of a "semantic" form and may lack empirical validity or pragmatic relevance. The second form of knowledge defined as understanding is described as scientific knowledge as opposed to trivia in entertainment even amateur epistemology and public relations maneuvers. The third form of knowledge is referred to as insight, competence and authority and here Spinner argues that such knowledge is selected, activated and applied through specific rules of preference and thereby creating added value. The question to be posed is with what form of knowledge is official statistics associated? As we convene in this august and professional meeting to develop a programme for statistical development with other multilateral bodies, the answer should not be hard to find. We produce that knowledge which is scientific. The second question is what should the protocols that govern the management, dissemination and utilization of the knowledge we have created be? What is the voice of official statistics? What strength does it muster? I pose these questions in the context of this multilateral body, and believing that participants in this body at least, are sufficiently informed to observe and

respect the basis of the knowledge we create. That is, in the manner we disseminate and utilise the knowledge, informed users in the arena of policy select, activate and apply this knowledge using specific rules of preference and create value add. Let me table the findings of the reports from the multilateral bodies some of whom are here with us today. We should recall that a function of official statistics is a knowledge base to counter misinformation.

Estimates and assumptions made about the South African population in recent times

Early in January, the US-based Heritage Foundation released a report on South Africa, which identified unemployment 'estimated to be as high as 40%' as a weakness of our country. As statistician-general, I pointed out that the Foundation was not using the internationally-accepted and official definition for reporting unemployment, but an expanded definition, and that this rendered its finding on the labour market questionable.

In much the same way, I queried the use of statistics in a United Nations report, which failed to use the internationally-accepted basis for comparing unemployment across different countries. This same report was also criticised for using life-expectancy figures which differed from the official estimates, without providing reasons for this choice. This erratic approach was seen again, when a UN agency reported that South Africa's population was 45,2-million, as against the official figure of 46,6-million.

The 2004 Report suggests that life expectancy at birth for South African males in 2004 is 45.1 years while the life expectancy for females is reported as 50.7 years. The total population is estimated to decline from 45.2 million in 2004 to 40.2 million in 2050. HIV prevalence rates for the sexually active population were estimated at 18.1 for males and 23.5 for females. With regard to estimates of life expectancy, the official figure released by Stats SA in July 2004 estimated male life expectancy in South Africa for 2004 as 50 years and female life expectancy at 53 years.

Other examples include estimates by the United Nations Development Program (2002) of life expectancy at birth in 2000 of 52 years for South Africa. While for the year 2000 the World

Health Organization estimates life expectancy at birth of 49 years for South Africa, the official estimates gave a life expectancy at birth of 54 years for the same year.

Mortality has much less effect on population growth. So, for example, when a person dies after the reproductive ages, her lifetime fertility is unaffected, or slightly somewhat affected if she dies during the reproductive ages. Neonatal and peri-natal mortality has no effect on population growth. In addition, as has been pointed out by demographers (Anderson 2002) that in virtually all populations, even very high mortality populations, the probability of dying between age 10 and age 20 is very low. It is the range of the fertility assumptions used in population estimates that are likely to be the most important element of the future size of the South African population. In this regard, Heuveline (1997) suggested that in projecting the size of a population that are affected by HIV, determining what is likely to happen to fertility, including the impact of HIV/AIDS on fertility, plays a larger role than any particular assumption about the spread of the HIV epidemic.

Data from the 2001/2002 Zambian DHS suggest that adult HIV prevalence rates based on ANC data may overestimate prevalence rates by as much as 20 per cent. Stats SA have estimated the HIV prevalence rate at 15,6% for 2002. This figure is based on the Nelson Mandela/HSRC study on HIV. Many demographers accept this study as providing reasonable estimates of HIV prevalence rates at the national level.

While there remains uncertainty about the level and age pattern of mortality, including non-AIDS mortality in South Africa, the estimated proportion of registered deaths is substantially higher now than at the beginning of Democracy. For 1996 Stats SA estimated the level of completeness of death registration at 67%. This has increased to about 90% (Stats SA 2005). These substantial improvements in death registration greatly reduce uncertainty in the levels and age patterns of non-AIDS mortality.

Based on empirical evidence, the Stats SA estimates of HIV prevalence rates, are therefore approximately 6,5% lower than some International agencies such as WHO, and the United Nations. As the national statistical agency, the organization focuses on issues in an unbiased way. At present, there is no compelling empirical evidence to suggest that the Stats SA assumption of HIV prevalence should be revised.

Some international estimates suggest a depopulation of South Africa. It is estimated that the population will decline from 45.2 million in 2004 (approximately 1,4 million less than the official estimate from Stats) to 40.2 million in 2050 (presumably as a result of HIV mortality).

It should also be pointed out that the future course of fertility in South Africa is extremely important. Variation in fertility assumptions makes much more difference in estimates and projections than does variation in mortality assumptions. Fertility is important because every person is born at age zero and contributes directly to population size. Furthermore, each birth adds to the base population, which in turn contributes to population momentum and has the opportunity to pass through the reproductive ages (15-49) and have children. Extensive analyses by demographers of the 1998 DHS and the 1996, and 2001 censuses suggest that the TFR for 2001 was between 2.84 and 3.0. On the basis of this analysis Stats SA has estimated the TFR for 2004 at 2.8.

Some international agencies have linked the proportion of the population that is HIV positive to declines in GDP. Some have estimated that if 15% of the population is HIV positive, GDP declines by 1% per year. Based on this assumption, it is argued that South Africa's GDP is expected to decline by 17% by 2010. Thus, assumptions are made about the age structure of the South African labor market and the composition of those affected by HIV and implies a causal connection between the GDP growth and proportion HIV positive population. It also implies that 15% of the population contributes to 1% of the GDP. It is often unclear how this relationship is derived at and how a 15% HIV prevalence rate translates to a 1% reduction in GDP. Analyzing GDP and the economy must be done in the context of the different factors and sectors of the economy's contribution to GDP. Clearly it is implausible to assume that all HIV positive persons in the workforce will fall sick at one.

Some of this can be seen as part of the ordinary contestation over statistics and their use. The link between statistics and the promotion of interests will always be strong, and in our modern information age, this is reflected in an increasing mobilisation of statistical data to support and strengthen particular interests.

Conclusion

Extreme assumptions are often made with regard to life expectancy and mortality by International agencies. It is the position of Stats SA that these are not accurate and that they

seriously distort the demographic and economic indicators of the country. However, not only are these indicators at variance with the official estimates, they are often deemed implausible. A compounding consideration for South Africa as it faces the continuing need for additional investment in sustainable economic and social development is the presence of HIV and AIDS. Much has been made in estimates by International agencies of the rapidity with which the epidemic has spread and the implications for the future South African society. Projections of the potential future impact of the epidemic on the country have a doomsday quality. The issue, however, is not simply whether these estimates about life expectancy, mortality and HIV, and assumptions about the future pace of these indices, some of which suggest a complete decimation of the prime working age population, are valid. Rather, it is the way in which these assertions have shaped the debate concerning social and economic development priorities. It may mean that providing a particular view of the future of the population of South Africa that is not consistent with the evidence of the official statistical agency will lead to an increase in the impatience on the part of some with what may be erroneously viewed as a lack of sufficient progress towards a more equitable society.

In today's global information order, statistics (quantitative facts) are accepted as providing an almost-definitive profile of a country. When these statistics are not correct, they mislead. When they are erratic, they misinform. When they contain mistakes and are not corrected, they create an environment of doubt and mistrust. That is why the statistician-general is obliged to engage with statistical practices that mislead, rather than inform.

Recommendations

- That the UN agencies adhere to official sources of statistics;
- Should the UN agencies so desire to deviate from official sources, then an account of such preference be stated consistent with best practice;
- That countries organize their statistics system for better management of results and to counter misinformation;
- That a system of accreditation be put in place in order to distinguish information peddlers from those with good practice;
- Coherent peer review systems for statistical agencies be considered in order for members to have a level of confidence in the systems; and

- Finally a friends of the chair team work out modalities to deal with the matters raised above and report on progress in the next commission.