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ORGANIZATION OF NATIONAL STATISTICAL SYSTEMS

IN SOUTH ASIAN COUNTRIES1: AN OVERVIEW

Background

The South Asian countries have a long tradition of collecting, compiling, processing and disseminating a wide range of socio-economic statistics. Some of these countries have a history of conducting population censuses for more than hundred years. In India especially the developments of statistics that took place between 1930 and 1960 were quite remarkable. The architect of modern statistical methods in the Indian subcontinent was undoubtedly Professor Mahalanobis who was helped by a group of distinguished scientists that included R.C. Bose, S. N. Roy, S.S. Bose, K. R. Nair, D. B. Lahiri and many others. There were others like P. V. Sukhatme, V. G. Panse who worked independently of Mahalanobis. These outstanding statisticians not only contributed to enhance the official statistical system of India, but also to the methodological development of statistics The Indian Statistical Institute founded in 1931, as well as other Indian universities, have been producing a large number top grade statisticians who have substantially contributed to the development of the Indian statistical system . The Central Statistical Organization of India came into existence in 1951.

The other countries of the region also, except Bhutan and Maldives which started the development of statistics much later, have a long tradition in the production and use of statistics in planning and administration. Afghanistan had a fairly developed statistical system before the civil war and the Central Statistical Organization of Afghanistan is one of the oldest national statistical organizations in the South Asian region. In Bangladesh, the Bangladesh Bureau of Statistics came into existence immediately after its independence in 1971. The Central Bureau of Statistics of Nepal was established in 1958. The Federal Bureau of Pakistan was started in the early 1950s. In Sri Lanka, the Department of Census and Statistics was established in1947 combining the Statistics Department and Census Department established earlier in *1935 and is among the oldest NSOs in the Asia Pacific region.* The collection of population statistics in Sri Lanka dates back to the early 19th century, the census taking in the modern period was first introduced by the British colonial administration in 1825. The program of decennial censuses of population and housing was started in 1871 and the last population census was taken in 2001. In all these countries, universities have been producing significant numbers of statistics graduates annually on a regular basis and have been able to meet the

[1] South Asian countries consist of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka

increasing demand for academically qualified statisticians. In spite of such a long tradition of data collection and universities producing large numbers of statistics graduates, the national statistical systems of the South Asian countries are nevertheless considered to be less developed in terms of quality and timely availability of relevant statistics compared to other countries of the Asia Pacific region. There is a need to understand the underlying factors that have contributed to this relatively slower the development of the statistical systems in these countries.

State of Statistical Systems in South Asian Countries

A review of the statistical systems in the South Asian Countries is complicated because of their diversity and for other reasons. At one end there is India, the world's second most populous country with a very widespread and decentralized statistical system and at the other end there are Bhutan and Maldives with statistical systems that have been installed more recently to meet the needs of their relatively small populations.

As far as the structure of the statistical systems are concerned there are major differences in the form of organization and management adopted by these countries. The statistical organization adopted obviously has to correspond to the unitary or federal form of government of the country. Thus, in India and Pakistan decentralized statistical systems have been adopted to suit the federal systems of governments of these countries. In Bangladesh and Nepal, rather centralized statistical systems are in operation. At the other extreme Sri Lanka has adopted a highly centralized statistical system with specialized divisions at its headquarters and statistical units staffed by its own cadres appointed to them on deputation in Government ministries and Departments that collects and compiles subject matter statistics. The conduct of all socio-economic censuses is, by statute, also vested in the Department of Census and Statistics and no other government agency is authorized to conduct any socio-economic censuses.

On a broad functional basis the statistical set ups in South Asian countries can be classified into two broad categories. The first category consist of those institutions which have been established by the Government with specific purpose of collecting specific data, i.e. the NSOs, the statistical units of the central Banks, ministries of agriculture, education, health, etc. In case of India and Pakistan, which have a federal political set up, similar systems have been developed at the state or provincial levels. The statistical activities are basically organized at the state level and national statistics are built from below. State government departments collect and compile statistics relating to particular fields. However, in some fields, collection and compilation form part of the work of the state statistical offices. The second broad category comprises the statistical offices and cells located in the administrative departments that are engaged in the processing of data which flow in as a by-product of administration.

Most of the South Asian countries except Afghanistan, Bhutan and Maldives have statistical legislations which play important role in developing the statistical systems in these countries. In addition there is separate legislation for the conduct of population and housing censuses in some of these countries. Even the countries, which do not have statistical acts at the moment, are in the process of having them in the near future. Some of the countries have a

national statistical council or equivalent, which are responsible for overseeing the statistical program and priorities. India has a number of statistical training institutes which offer both short term and long term training programs in various fields of statistics such as population and demography, national accounts, agriculture statistics, etc. for national as well as international participants. Pakistan has established an in-house training institute within FBS, which organizes regular short term training programs in various aspects of statistics on a regular basis for the staff of FBS, state statistical units as well as the staff from other line ministries. The NSOs of Bangladesh, Nepal and Sri Lanka have small training units which conduct in-house training courses in different areas of statistics for their staff on a regular basis. However, these training units are not capable of meeting the country's increased training needs on various types of statistics. In Sri Lanka, the universities have been used to meet some of these needs through the introduction of courses in different statistical specialization such as agriculture, demography and economic statistics at undergraduate and post graduate levels to meet the staffing needs of the statistical system. In Bangladesh and Nepal, even though the universities there run graduate courses in theoretical statistics, they do not have any courses on official statistics. The rest of the countries namely Afghanistan, Bhutan and Maldives do not seem to have any such in-house training facilities and hence depend fully on the availability of external training.

There are several yardsticks that can be used in assessing, evaluating and ranking national statistical systems. These assessments should directly or indirectly be indicative of the supply of statistical data, statistics indices and indicators to meet the demand of the users. It is difficult to measure the user demand for statistics and therefore the supply of statistics will have to be taken as a proxy for the user demand. The supply is basically derived through the conduct of population housing and economic censuses, well designed large and small sample surveys covering the subject matter of interest and processing of administrative data sources. Thus these indicators can be:

- censuses of population , agriculture, industry, etc conducted on a regular basis
- large, medium and small multi- subject and other specialized surveys conducted on an ongoing basis
- sampling frames compiled and updated to design household and establishment based surveys
- Statistics from vital registration, education, health, environment processed and indicators compiled
- quality and coverage of national accounts and adherence to IMF SDDS
- MDG and other indicators recommended by international organizations compiled and released
- Adequate government budget allocated to statistics programs

Information on these characteristics of the systems are not readily available and will have to be collected and compiled with the assistance of the NSOs. In the absence of this information,

some printed material and that accessed from websites were used in this preliminary assessment.

The levels of statistical developments in South Asian countries are highly heterogeneous. Following the broad criterion discussed above they can be grouped into three categories based on the state of their statistical systems: India, Pakistan and Sri Lanka seem to be relatively better off than the rest of the countries. Afghanistan, Bhutan and Maldives may be classified as relatively undeveloped, where as Bangladesh, and Nepal will possibly lie in-between these two groups. There are a number of factors that affect the pace of national statistical development in these countries. These would include the leadership and management of the national statistical system, organization of the statistical system, existence of a feasible long-term statistical development program, the share of statistical system in the national budget and the domestic demand for the outputs of the statistical system.

Notwithstanding the overwhelming acknowledgement of the role of statistics in an information-dependent globalized world, the cause of concern is that the national statistical systems of the region are unable to cope with the demands for the provision of relevant, reliable and timely statistics for policy making, development planning and program/project evaluation. The statistical problems exist in all South Asian countries with differing degrees of severity and with emphasis on different causes and effects. The smaller countries of the region are not able to produce even basic statistics such as quarterly gross domestic product estimates, rural and urban consumer price indices, and unemployment rates. Social indicators in particular are even weaker. Most of the countries continue to utilize traditional means of data collection, validation, and processing as they cannot afford to modernize their statistical systems due to limited availability of infrastructure and financial resources. They are also unable to implement standard international frameworks and classifications. For example, majority of South Asian countries have been finding it difficult to implement the 1993 Systems of National Accounts, which is a fundamental basis for the latest international method for national accounts compilation.

The aforementioned statistical situation resulted basically from the low priority accorded to statistics and chronic under-funding of statistical activities with severe budget constraints and competing priorities in some of these developing countries. In general, the level of statistical development in most South Asian countries is characterized mainly by lack of professional and trained core staff, negligence of international standards and principles, under-investment in statistical infrastructure, inadequate budgetary resource, and a lack of sound management practices. Even administrative reporting systems of various government agencies, a major source of data for the national statistical systems, are flawed because of the non-awareness of the importance of information derived from administrative reports, overall weaknesses in organizational structures, and a lack of capacity in processing administrative forms and maintaining effective coordination among various ministries. Some keen observers of statistical developments and users of official statistics in South Asian countries are of the opinion that the situation has not improved appreciably, and in some cases have even deteriorated during the past several years.

Donor Assistance for Improving Statistical System

A number of international and multilateral agencies have been actively assisting the NSOs of the South Asian countries to strengthen their statistical systems. Asian Development Bank (ADB), International Monetary Fund (IMF), United Nations Economic and Social Commission for Asia and Pacific (UN-ESCAP), United Nations Statistical Institute for Asia and Pacific (UN-SIAP), and the World Bank have been actively assisting these countries over the years. Besides, other United Nations agencies such as UNDP, FAO, ILO, UNICEF, UNESCO and WHO have also been helping some of these countries to improve sectoral statistics in their respective specialized areas. The assistance provided by these organizations has contributed to create a pool of skilled manpower, expand data coverage and improve the statistical system of these countries to a large extent, but sustaining these activities beyond the project period has become serious problem in most of them.

The current process of the multilateral technical assistance does not however involve in-depth examination and systematic evaluation of the needs and relevance of the statistical capacity building technical assistance within the context of the countries' medium and long term statistical development strategy. In other words most technical assistance projects is selected based on ad hoc individual requests of the developing countries rather than on any strategic considerations.

The donors especially the multilateral agencies seem to be competing with each other to provide technical assistance due to lack of appropriate coordination mechanism. Since the resources available for statistical capacity building are limited in all multilateral agencies, there is an urgent need for these agencies to coordinate their technical assistance on more effective manner. More frequent and inclusive donor coordination meetings are needed to reduce unhealthy competition on the one hand, and that no serious gaps in the capacity building requirements of the recipient country are left unattended on the other. Donors should refrain, where possible, from herding themselves towards the flavor of time and neglect the countries' other priority concerns for statistics capacity building.

There is also the issue that these countries have not had the benefit of technical assistance to finance some of the major statistical operations such as the censuses of population and housing and large sample surveys any more. UNFPA, UNDP and other international organizations had supported the conduct of the censuses of population and housing in the 1980's and 1990's but this assistance was not available to them for the 2000 series of population censuses. In a number countries, the National Household Survey Capability Program (NHSCP) of the United Nations Statistics Division (UNSD) and the living standards measurement surveys (LSMS) sponsored by the World Bank had supported the conduct of some large multi-subject surveys in earlier years. There is the feeling that the phasing out of large scale technical assistance that was granted to these countries through these programs have not been replaced and in fact the volume of assistance provided had in fact declined although the number of agencies providing assistance had increased over the years. In the absence of assistance from international sources, countries such as India and Sri Lanka have conducted these census and survey programs with government budgetary support

At the time the Millennium Development Goal monitoring initiative was operationalised, the NSO's had expected donor support to implement data collection and compilation and for the preparation of monitoring indicators. The production of statistical data for the compilation of MDG indicators has become an added responsibility of NSO's. However, the donor contributions to develop new data sources and also improve the coverage and reliability of the sources that were being undertaken had not materialized as expected. The inputs that had become available had also been more for data analysis and report preparation rather than for data production.

There is the issue of a paucity of information on the technical assistance provided to these countries by multilateral and bilateral agencies. While assistance given to NSOs by theses agencies are documented and available at the country level the assistance provided to government departments administering subject matter censuses and surveys and other statistical programs are often not readily available. The donor coordination has also not developed as expected and there is no single agency that is monitoring this information to ascertain the volume of technical assistance provided to support statistical development programs.

The statistical units of some of the multilateral agencies are populated by generalists who tend to hire consultants who are generalists. Some multilateral agencies do not even have statistics units, but may have few staff with statistics in their titles that on closer scrutiny may reveal backgrounds in statistical data use rather than statistical data production. However, the primary aim of statistical capacity building is strengthening the key data producing agencies' ability to update and improve the national statistical database; strengthening analytic use of that database is only a secondary aim. Thus to improve the quality and effectiveness of their statistical aid programs, the multilateral agencies themselves may need to bolster their own internal statistical capacity , particularly on the supply side or data production aspects of statistics. While it is true that the consultants can be hired to help the countries, similar specialists are also needed in the in-house formulation and administration of technical assistance.

In situations where the statistics program managers are generalists, there is often a tendency of fully depending on the consultant who are likely to be more interested in completing their assignments rather than transferring the skill and technical knowledge to their national counterparts. Moreover, most of these consultants happen to come from developed countries and do not necessarily have much experience of working in developing countries. Since some of the less developing countries have very low level of statistical infrastructure and absorptive capacity, the technical assistance could be more effective if the multilateral agencies recruit consultants from a statistically more developed neighboring countries who might be able to better understand these statistical problems and conditions of the less developing countries of the region compared to their counterparts from the developed countries.

It has been observed in some South Asian Countries that the statistical activities do not get continuation beyond project period. This happens as the governments do not allocate adequate resources to sustain the activities accomplished during the project period. There is no

point in providing technical assistance to any country if the government does not own the project and commit itself to sustain the activities which were accomplished during the project period.

Major Issues and Problems in the National Statistical Systems

The last two decades have witnessed unprecedented advances in information technology and communications. The IT hardware and software price reductions have permitted the developing countries to acquire modest amounts of IT hardware. In some countries of the region however, due to limited government resources and budget, timely maintenance and replacement of IT equipments is still a major problem. As a consequence, many of the South Asian countries are still forced to operate with traditional means of data compilation and processing at a time when most advanced countries are rapidly adopting IT in the collection, compilation and dissemination of official statistics. Thus most South Asian countries continue to be constrained in data processing and storage and dissemination of results. If this digital divide is not addressed in an urgent manner, this ever widening gap is likely to further disadvantage the South Asian developing countries in their pursuit of rapid economic development.

The two main sources of financing of official statistics are appropriations through the government budget and the revenue the NSOs collect by selling statistical products at market prices. Few statistical offices generate more than 10 percent of their incomes from sales, where as many others cannot even utilize their sales income as they are pooled in central budget. The budgetary constraints of DMCs have resulted in severe cut backs in the budgetary allocations for NSOs for their current and capital development programs. For instance, the government statistical activities in Nepal accounted for about 0.05 percent of the total government budget in 1998/1999. Other countries in the region, with some exceptions, may not be very much different from that of Nepal. The low share of total budget allocated to statistical activities is a fairly good indicator of the low government priority.

As discussed above, the developing countries' NSOs are poorly funded to mount surveys, collect new types of data or even process administrative based data which are rich, yet cheap sources of data. The potential of using administrative based data as a major source of social statistics/indicators has often been overlooked specially in the South Asian countries. Rather, emphasis has often been on the conduct of new surveys as the best way to fill data gaps. Furthermore, many data collection activities are donor driven rather than demand driven, thus leading to non-sustainability of some statistical activities. In allmost all countries in the region, except probably with the exception of India, the national statistical services also face severe skill shortages arising partly from the loss of staff to other sectors and overseas where compensation packages are often more attractive.

The rapid growth of population and expansion of economic activities have raised the cost of population and economic censuses and that of the large household and establishment surveys. The cost of preparing and maintaining sampling frames have also increased. The increased costs of these statistical projects have to be borne by the Government budgets. These increase in costs have a bearing on the number and frequency of statistical surveys and studies that NSO's can launch under tight budgetary restraints.

The political will to provide better statistics for improved analysis could enable necessary changes to take place within the NSOs. Given the limited budget resources available for data collection, the NSOs cannot afford to collect all kinds of data, which are traditionally being collected without knowing whether they are being meaningfully used by the policy makers and other users. It is apparent that there exists wide varieties of views and requirements that must be met more or less effectively by the NSOs. Then again, data produced are frequently little used since they are unreliable, unworkable and out of date. While on one hand, the data produced are scarcely usable, on the other hand users suffer from a lack of relevant data to satisfy their basic requirements. There is certainly a need for them to move towards a policy and user driven statistical system.

Most NSOs of the region have, thus, been caught in a vicious circle where inadequate resources constrain output and undermine quality of statistics, and in turn, the poor quality of statistics produce lower demand and hence the provision of fewer resources for statistical agencies. Sustainable improvement in the statistical systems of developing countries accompanied by capacity building requires national statistical systems (NSSs) to anticipate the data needs of their users and to be able to respond to these needs. Countries must be supported and encouraged to develop their capacity for compiling relevant, timely and accurate statistics, taking into consideration best practices in other countries. The new demands for statistical data, for instance the preparation of poverty reduction strategies, monitoring progress towards achieving the MDGs, the recent emphasis on implementation and results, etc. have further necessitated immediate action for strengthening their statistical capacities especially that of poorly performing developing countries.

There is a critical need to mobilize national and international efforts towards statistical capacity building. While donors and development agencies have invested in statistical activities for many years, much of this investment has been piecemeal, uncoordinated and short term. Technical assistance has tended to focus more on immediate demands of key users rather than sustained statistical capacity building. For the donors it is easier to support a survey or census and to achieve success than it is to strengthen an institution. One issue that needs to be emphasized is that there is a tendency of individual donors to pay particular attention to the data needed by the development programs they support. Clearly this concern is legitimate and there is nothing wrong with it, provided that it does not unduly distort the work of statistical offices, or detract from their capacity to carry out their priorities.

Conclusions

The key to informed decision making is the availability of timely and reliable data. The national statistical systems are the primary source of the relevant socio-economic data. These systems are in varying stages of their evolution. While they are key to development management, many are under-funded, understaffed and require organizational re-structuring to meet current and emerging data needs. What emerges is a challenging situation. The demand for better quality data on a wider range of topics is likely to increase in the short term against the

backdrop of significant under-funding for satisfying them. The national governments with the assistance of the international community need to strengthen the national statistical system.

As stated earlier, for a proper evaluation of the national statistical systems, it is essential to have information on the resources, both staff and funds, that are provided by the governments. The distribution of these resources in decentralized systems under several organizations that are responsible for undertaking censuses and subject matter surveys and operationalizing administrative data sources makes it difficult to make a complete assessment of the resources provided for the production of statistics. NSO's should strive to compile this information as this information is essential to negotiate budgetary support and technical assistance for its own programs.

This present UNSD project on South Asia is very timely as it aims to address the above highlighted problems by raising awareness among policy makers on the importance of reliable and timely statistics, as well as provide necessary training to the concerned staff of NSOs in statistical organization and management with particular emphasis on marketing tools necessary to attract funding from government and other sources and generate revenues from statistical product. It intends to improve the regional cooperation and coordination in statistical operation among the countries of the region, through facilitating the exchange of knowledge and experiences, and the sharing of good practices on key strategic areas, including statistical organization and management. It also aims to effectively improve the coordination among donor agencies involved in providing assistance, and to avoid duplication of scarce resources for the statistical capacity building of the South Asian countries.