## EXTRACT FROM EVOLUTION OF NATIONAL STATISTICAL SYSTEMS (Author – Dennis Trewin)

## 2.5 National Statistical Systems

Many statistical systems were redesigned after the Second World War partly in response to the challenges of reconstruction. Some countries opted for centralized systems whereas others opted for decentralized systems. The relative merits of both approaches have been debated elsewhere. It makes sense that these may vary by country and their particular circumstances.

But the trend has been for the two approaches to come closer. For those countries with decentralized systems there has been a tendency to exert greater coordination to improve the reliability and cohesion of the overall statistical system. In some countries, statistical activities have even been transferred to the NSO. But in centralized systems the trend has been for greater provision of statistics by agencies other than the NSO. These statistics are often based on administrative systems managed by the agency. They can provide a rich source of detailed data so there may be strong pay offs from NSO involvement in ensuring good statistical practice to be followed in the use of these systems for statistical purposes.

In a National Statistical System, the NSO has important statistical leadership responsibilities. The bulk of the statistical expertise exists in the NSOs. And the trend will be for statistical leadership to become a more important activity as users seek cohesiveness across all statistics irrespective of the source. But implementing a NSS approach is not easy. Not all agencies will want to participate or commit to the degree desirable. Some countries have been able to strengthen their coordination arrangements and have developed agreed protocols for the participants in the National Statistical System.

The desire for greater cohesion has been driven somewhat by technology developments. It is easier to access data from different agencies and to compare and contrast. On the other hand, technology can be a great enabler of different approaches. In particular, it facilitates a federated approach to national statistics where a data network can be established across the different data providers in a field of interest although custodianship of the data remains with the respective agencies. This National Data Network approach is being implemented within Australia for example. It does require agreement on data standards particularly those that relate to meta data.

What are some of the activities NSOs have been engaged in, or could be engaged in, to facilitate a sound national statistical system?

 Developing standard classifications and making them available to other providers of statistics together with appropriate support

resources (eg automatic coding systems, coding manuals)

- Developing and promulgating statistical frameworks, standards and definitions for use by all providers of statistics
- (iii) Disseminating manuals of good practice and providing training programs to support them
- (iv) Developing agreed protocols for the National Statistical System
- (v) particularly the quality of statistics derived from these collections
- (vi) Developing directories of statistical sources.

As to the future, it could be expected that statistical leadership will become an even more important activity for NSOs. This requires a different skill set to more traditional NSO activity. For example, it requires good relationship management skills to truly engage with other statistical producers and to persuade them to adopt sound practices and participate fully in a (federated) national statistical system.

The issue is also very important for developing countries. It is perhaps even more important, given resource shortages, to have a cohesive National Statistical System.

SECOND EXTRACT

(b) The NSO as a Statistical Leader

Most NSOs have a responsibility for the coordination of official statistics across government agencies. But it has not been done well by most NSOs. Not surprisingly, this has become most apparent at the same time as the amount of statistical activity outside the NSO has increased.

Why should the NSO take a leadership role in the development of national statistics?

- Government agencies increasingly need to work in a "connected" way. This will only happen if they are prepared to share information, including statistical information which can be easily accessed.
- It is important that this information can be related that is, we are using the same concepts and definitions to the extent possible. This requires leadership on standards and classifications, a role which the NSOs should be well suited to play.
- It is important that the range of statistics be of good quality sound statistical methods should be used. Again the NSO has a constructive role to play.

What is meant by statistical leadership? Some of the possible activities are described in section 2.5. It is also important to

maintain active networks among the key personnel involved in statistical activities through newsletters, seminars, social gatherings, etc.

Statistical centres of expertise for particular subject matters that have good knowledge of all statistics produced in particular fields, not just those produced by the NSO might be another way of providing greater statistical leadership. For example, a statistical centre for agriculture would be familiar with agriculture statistics produced by the NSO, the Ministry for Agriculture, and research institutes involved in agriculture. The statistical centre should also be interested in links with other fields of statistics (eg agriculture and the environment, agriculture and the household sector). One of their important activities would be the production of Information Development Plans, in collaboration with key stakeholders, that describe the availability of existing statistics, the major gaps in these statistics or the major improvements required, and a plan for further development in the field of statistics.

There are other ways of showing statistical leadership. Examples are Australian Bureau of Statistics' (ABS) National Data Network initiative or the US Census Bureau's Data Ferret initiative. The ABS Network will create a distributed library of data holdings relevant to policy analysis and research. These data holdings will remain held and controlled by their custodian organisations. Whilst data will be held by each custodian, the National Data Network will provide a complete catalogue of available data sources to allow users to easily search for, and access data holdings which have been published. In effect, it will provide a portal to official statistics.

The National Data Network could also provide access to a range of services to support the creation, management, integration and analysis of data.

Statistical leadership work is particularly challenging because it is different and requires the support of other agencies where statistics is often not part of their core business. Part of the challenge will be to work towards agreed arrangements for co-ordination across the National Statistical System. These will work much more effectively if they have the support of government.