Country Report- Islamic Republic of Iran

Statistical Centre of Iran

(SCI)

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Managing Statistical Development and
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Introduction

Statistical Centre of Iran (SCI), due to the importance of collecting information through conducting censuses and other types of surveys for discovering the capacities of the Country, has tried to adopt effective measures in production of statistics using the advantages of the information technology (IT)

Regarding the remarkable developments of technologies, we witness that everyday some more precise and modern methods are introduced. In order to benefit from these developments, it was decided in the SCI to use IT Technology such as PDAs in the "Survey on Producer Prices of Manufactured Products".

The SCI is one of a few administrative Organizations which have successfully accomplished a comprehensive study on the local enhancement of ICT.

1) Management Issues of Using ICT for your National Statistical Office

(a) How is ICT changing NSOs functions and how should it react to these changes?

During the last 2-3 years, the Statistical Center of Iran's scope of approaching different types of information and communication technology has been so extensive and remarkable that has caused both local staff and outsiders come to a more positive view of the SCI's performance. It is now among a few government agencies in the country with developed ICT technology. The impact of this policy has been significant on the trainings provided to the staff, speed of data collection and process in censuses and sample surveys, increase in data precision which results in more accurate statistical analyses, applying state-of-the-art methods to administrative affairs and realization of the SCI's commitments.

To effectively manage these extensive changes, the SCI's managers and experts need to learn enough about the SCI's ICT project to be able to develop strategies to coordinate the use of new information technologies by providing required hardware and software, providing proper trainings for all, and removing the hurdles.

(b) What is the NSO's strategy for using ICT to gain and sustain competitive advantage for producing official statistics?

According to the law, the SCI is in charge of conduction of sample surveys, preparing metadata and statistical standards, and endorsement of the results of surveys conducted by other data producing agencies.

The National Statistical Database Project, currently under implementation, calls on all member agencies of the national statistical system to conduct surveys in order to feed the database with information on predetermined statistical items, based on the standards set by the SCI. Considering the architectural standards of the database, all the members can share their produced data and benefit from those shared by other members. As the set up is over, the National Statistical Database may be accessed by the NSO's portal at: www.sci.org.ir.

Moreover, according to the First National Statistical Plan, the SCI is responsible for organizing equipments and human resources as well as developing and defining data collection methods. In this respect, preliminary steps have already been taken.

(c) How do you determine ICT project priorities?

The SCI is one of a few administrative organizations which have successfully prepared and ratified her comprehensive ICT development roadmap. Under this study, 15 large scale IT projects in different fields should be conducted in order for the SCI to turn into an evolving, innovative statistical organization, with approaching state-of-the-art information technologies as a major strategy. Since 2 years ago five projects out of the fifteen have been contracted with the private sector out of which one - the SCI's portal - is now completed. In addition to the results of the study, ICT priorities are determined on a yearly basis according to the SCI's organizational changes and also the assigned tasks and the National Statistical Plan.

(d) As the head of NSO, how do you use ICT to improve your office's intelligence?

Believing in the need for benefiting from all state-of-the-art information technologies available in the country and considering the need for localizing them, the SCI has made some changes in its organizational chart to set up a department of ICT with the major duties of: to create a working environment in complete accordance with modern IT technologies; to develop proper procedures and standards for provision of required hardware and software; and to monitor the processes of providing/developing and utilizing these technologies.

Accordingly, in addition to providing the proper hardware and software for implementation of the last year's national population and housing census conducted utilizing ICR method, the sample survey of Manufactured Products Producer Price in Tehran was conducted by mixed use of PDA, GPS, and GIS (PGG).

The Iranian NPHC2007 was conducted with over 30 innovations and completely new approaches. One of the innovations was drawing on new methods of data extraction and data preparation based on available information and communication technologies. According to a study it was decided to use ICR method in NPHC2007. In this regard the design and customization of all the software, database management, the connection between images database and information database, listing and procuring quality hardware, etc. took place in co-operation between the experts from the SCI and some from the private sector. These arrangements proved very efficient after going through some changes following the 2006 pilot census so that the accuracy of the NPHC2007 stood at 99.60 percent. Moreover, implementation of two sample (pilot) surveys of Manufactured Products Producer Price in Tehran in February and March, 2007, with the help of PDA with capability of mobile phone and equipped with GPS and GIS maps showed on the one hand that the method is so efficient in promoting quality reducing the execution time statistical surveys and on the other, it is so effective in giving rise to data confidentiality and elimination of paper questionnaires which would result in reduction in

lost, distorted and manipulated data by enumerators. The comparative advantages of these two pilot surveys over paper questionnaire surveys could be listed as follows:

1. Improving the preparation and dissemination of statistical data in addition to being more cost- and time-effective,
2. Eliminating data preparation stage and edits during and after surveys,
3. By providing the complementary facilities, transferring data on a daily basis and regular monitoring on enumerators activities,
4. Improving the quality of data collected,
5. Provoking more attention to preparing statistical maps for statistical surveys (maps completion, geo-referencing, updating, etc.).

In addition, at the moment, all administrative, financial, logistic, and correspondences in the SCI are carried out (as paperless) either in secure government network – for public sector users – or in the LAN – for other users – in the framework of an integrated system.

2) How do you manage ICT effectively and efficiently?

(a) How do you evaluate the effectiveness of NSOs ICT investment and expenses?

Massive investment has been made during the last 2-3 years in provision of hardware and software infrastructure, data security, and ICDL trainings for all personnel of ICT Department and specialized trainings for the personnel of subject matter departments, System Design and Software Services Department and Network and Computer Services Department. Considering the impact of these arrangements in the output of the SCI, these investments are estimated effective.

(b) How are your ICT resources organized and managed to respond effectively and efficiently to growing demand for official statistics?

Considering the contents of (1.b) this goal is achieved through legal and government supports for organizing and managing all data producing administrative departments.

3) What is the link between government support for technology use and your NSOs ICT strategy?

Considering SCI's specialized nature and the afore-mentioned legal instruments, and also its pioneering role in approaching new ICT-based methods, the government has so far sufficiently supported SCI's strategy of expanding ICT. Besides the SCI's Law which requires all administrative departments to apply the statistical concepts, definitions and standards provided by the SCI, the President's decree at the commencement of national censuses, his direct orders to administrative departments to follow the SCI's recommendations in production of official statistics, and the related approvals by the Council of Ministers are all examples of the government's support of developing ICT in the SCI. At present, the SCI is known as the top authority for data production and endorsement of all domestic statistical activities; and adopting IT approaches by this center persuades other statistical systems' member organizations to draw on them.

(a) What training is already available in your country for ICT personnel?

During the last 2-3 years, all ICT Department's personnel have been going through general and special training courses as proper to their official tasks. The following training courses have already been hold for all offices of the ICT Department:

- ICDL, training course,
- Specialized training courses on system programming based on new facilities: Web, XML, RUP and Internet,
- Security Network training course for staff of bureau of Network and Computer Services.
- Specialized and general training courses on GIS, GPS for computerized filing of statistical maps in the bureau of Spatial Information,
- Training course on Portlet Programming and Internet Management for bureau of and Information Dissemination and Publications.

(b) Is the available training well suited to the needs of the ICT in NSO?

Yes, because all courses required by the SCI's ICT Project and those required by the government have so far been held.

4) What are major obstacles in the use of ICT in your NSO?

Main existing obstacles blocking extensive use of IT could be summarized as follows:

- Due to rapid and extensive alterations and advancements in ICT, it is difficult for executives and users to adapt themselves with the changes pace,

- The need for establishing and developing international standards of an efficient environment for ideal use of ICT in NSOs and generalizing and expanding them in a defined period of time along with providing consultation services to the nations in need.