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Managing Issues addressing the Challenges of Using
Administrative Data for Statistical Purposes

COUNTRY PAPER OF THE ISLAMIC REPUBLIC OF IRAN

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Q1: In your country, what are the main uses of administrative data for statistical purposes? Although the main emphasis is on statistical outputs that include other uses such as providing sample frames.

A1: The production of administrative data in our country, which has so far been on an ad hoc basis and as demanded by the ministries, organizations and financial institutions, dates back to a long time ago. But it was just as late as 1994 that an effort was made to develop an administrative data system based on statistical items. It was followed by another endeavor in 2005 to shift the method of administrative data production from an items-centered approach to an approach relying on informational-operational systems – still an ongoing process. The Statistical Center of Iran (SCI) also uses the administrative registers for production of some parts of the Statistical Yearbook and computation of the output value of a number of economic sectors. The main uses of administrative data in Iran are as follows:

1. Computation of some economic activities outputs under production of national and regional accounts

In Iran, there is a rather wide experience of using administrative data for production of national accounts. To increase the extent of administrative data use is among targets of the fifth national development plan. On the following there are some examples of using administrative data for computation of output in some economic sectors: in agriculture sector, for production value of "flowers, ornamental plants, medicinal herbs and edible mushrooms" and partly for production value of fishing; in petroleum sector, for output value of petroleum and natural gas as well as refining and distribution of natural gas at both national and regional levels. In electricity and water sectors, administrative data have specific uses. The data are used also for rail transportation, output value and intermediate consumption and petroleum transportation by pipe. They are also widely used for computation of value added of the financial intermediations (in banks, insurance companies, etc.). For the intermediate, vocational and higher education, administrative data are available and used. For calculations of imports and exports, administrative data are used in an extensive proportion.

2. Updating the 2002 Establishments Frame by the help of the administrative data from the Ministry of Industries and Mines, Ministry of Commerce, the Office of Public Places.

3. Using the administrative date produced by some administrative organizations as the sampling frame

In the year 2007, the administrative data were used as the sampling frame in three statistical projects:

Survey of establishments for releasing commodities from customs,

Survey of internet services establishments, and,

Survey of cell phone service centers.

4. Using the administrative data for preparation of the statistical yearbook.

Generally, the ongoing process of establishing informational-operational systems for the purpose of developing register systems in recent years and the experiences from establishing register systems in a number of ministries and organizations promise new horizons for production and application of administrative data in coming years. Moreover the fifth economic, cultural and social plan of the Islamic Republic of Iran stipulates that the share of administrative data in the total data needed by the national statistical database should grow from the current 55% to at least 70% by the end of the plan and that an average of 100 statistical items or more should be qualitatively evaluated every year.

Q2: What are the main management issues from using administrative data for statistical purposes, e.g.

- a) Do concepts and definitions not confirm to international standards?
- b) Are incomplete or inaccurate records a serious problem?
- c) Can the data be disaggregated to provide data for regions and other subpopulations?

A2.a: The SCI's Law bounds all the administrative organizations to draw on the concepts and definitions provided by the SCI. Moreover, the SCI has the mission to develop the national statistical plan as noted in the fourth economic, social and cultural development plan of Iran and stipulated by the article 6 of the national statistical plan concerning the process of organizing the administrative data. Accordingly, preparation of the concepts and definitions, and international standards and classifications, which is currently on a growing and expanding trend, has been among issues hardly worked on in the last decade. So, at the moment the concepts, definitions and classifications mostly correspond with the international standards, though some organizations have not yet endeavored as expected to apply them. As to the classifications, we may name ISIC, CPC, ISCO, and In this regard, in 1994, the SCI launched a campaign in two fields of definitions and concepts and statistical classifications. As regards definitions and concepts, the SCI primarily managed to aggregate all the definitions and concepts used by some 27 major data producer ministries and organizations and revealed them in a 10 volume collection. In the second stage, with regard to the concerning laws and international definitions, the SCI began to standardize the key statistical definitions and concepts through a large number of joint sessions with the representatives from different economic sectors. The results are to be released in a Dictionary of Statistical Definitions and Concepts.

As to the administrative data, in addition to what mentioned above, in recent years the SCI has prepared and distributed an instruction for design and establishment of administrative data systems in public departments and another instruction for monitoring the process. Also an instruction on standards of production and dissemination of statistical data based on GDDS and SDDS has been prepared for the administrative departments - in the framework of the national plan of Iran - in 10 articles and 4 notes.

A2.b: The data banks designed till the year 2005 were mainly prepared disregarding the activities of the concerning organizations, so there were no a meaningful relation between the producer of data and the user. So there have been many problems as to recognizing and meeting statistical needs of users. In addition, far from enough number of knowledgeable and experienced manpower in the field of register systems

and lagging back in automation of data production have caused the data produced by some departments to be of low accuracy or include a high number of no-responses.

In order to remove the mentioned problems, at the beginning of the fourth development plan in 2005, the SCI was given the mission to prepare a collection of laws and approvals under the title of National Statistical Plan according to the article 56 of the law of the plan. In the article 6 of the national statistical plan there are provisions for establishing informational-operational systems and the monitoring approach. Enforcing the above approvals has already brought about improvement of registers and removal of shortcomings in a number of departments. We do expect that in coming years the shortcomings get to the lowest possible level following the complete establishment of the system.

A2.c: Since production of administrative data takes place as immediate registering of the events as they occur, a large part of the administrative data are in provincial size (30 provinces) and even sometimes they are prepared as seasonal or monthly data. Such data are mainly used for preparing the national and provincial yearbooks and production of regional accounts – annual and seasonal – for 72 main activities.

Q3: How do you manage the quality of statistics derived from administrative data effectively and efficiently? e.g.

- a) How do you evaluate the quality of statistics from administrative data used for statistical purposes in the NSO?
- b) Are there any cross checks available from survey data?

A3.a: A major challenge in establishing the administrative data system is to evaluate data quality. The main problems seem to be as follows:

There is not a proper system for evaluating and continuous improving of data quality as a part of data production procedure in most government agencies,

There is no consensus on using a certain methodology in organizing administrative records and designing and constructing information systems,

There is not enough experienced manpower for evaluation and improving the quality of data.

To eliminate the above shortcomings, the review of production process and quality evaluation of 60 items of administrative data in 13 public departments were put in the SCI's Office of Administrative Registers' agenda in 2007 under the national statistical plan. The checking process takes place in five areas of registers including recognition, registration, transfer, processing, and supply. The process also takes in different quality aspects. Similarly, for the year 2008, a total of 68 register items have been earmarked to be checked and evaluated.

A3.b: In preparation of national accounts and more intensively of provincial accounts, there usually are statistical discrepancies for some indexes which leave no choice but to compare the data from surveys with the administrative registers. Following there are three examples of such a comparison by the SCI:

- 1. Comparing the Ministry of Agriculture's registers and the data from the Agricultural Census 2002,
- 2. Comparing the data from the Census of Population and Housing and registers from the Civil Registration Office,

3. The current comparison between the fresh data from the Census of Households Economic Conditions (2008) and the registers available in such departments as the Civil Registration Office and the Notary Public. For this purpose the individual's national code and postal code are used as the search codes. Correction of the information on the fuel cards of individuals according to the results of the census is among the priorities of the comparison process.

Q4: How do you manage the relationship with the administrative departments collecting data used in compiling important indicators and other statistics? e.g.

- a) What training is already available in your country for the ministries personnel?
- b) Is the available training well suited to ensure the quality of statistics generated?
- c) Do you have formal agreements with the administrative departments?

A4.a: The low number of knowledgeable and experienced manpower in the area of developing administrative data systems has been a major obstacle for establishing such systems in Iran. To remove the shortage, the SCI has been continuously holding different training courses on the issue for the personnel of the administrative departments' statistical offices as well as the statistical experts of the provincial offices of the Management org. during the last decade.

A4.b: The training courses are hold for the statistical personnel of the ministries and administrative departments. Moreover, the topics of the syllabus are exactly in relation with the administrative data issues, administrative data system and concerning methodology, and design and establishment of administrative data systems in departments.

A4.c: According to the Council of Ministers' approval in the early 2000, all the administrative departments and government agencies are bound to co-operate with the SCI as needed. This has given a legal support to holding training courses in public departments. The first training course on registers was launched in the late 1999.Till the early 2005 there had been 13 such courses. The Statistical Research and Training Center (SRTC) which is affiliated to the SCI, is mainly responsible for holding training courses. With the expansion of researches on the trainings concerning administrative registers, the quality and effectiveness of the trainings have been on a growing trend. In the framework of the national statistical plan and during the fourth development plan (2005-08) there have been a number of training contracts between the SCI and other government agencies. Also, according to the national statistical plan, the SRTC is required to carry out scientific researches in the area of administrative registers besides holding training courses and seminars with the purpose of promoting the knowledge of managers and employees of the public agencies concerning the administrative data. The following table presents a summary of training courses hold in the area of administrative data besides the training providers and the training receivers. It is noteworthy that in the current year the SCI has held a seminar on the administrative registers.

Course title	Year	No. of	Training	Training receivers
		courses	provider org.	
Introduction of adm. data system	2005	1	SCI	SCI's staff
Introduction of adm. data system	2005	15	Provincial	Provincial adm.
			branches of	departments' staff
			Management org.	
Application of different methods	2005	2	SCI	SCI & adm. departments'
of designing informational-				staff
operational systems				
Quality management of adm. Data	2005	1	SCI	SCI's staff
projects				
Application of adm. data in	2006	1	SCI-SIAP	SCI & adm. departments'
production of social, cultural and				staff
economic statistics				
Seminar on the Statistical	2006	1	SCI	Staff of provincial
Yearbook				branches of Management
				& Planning Org.
Introduction of design and	2007	2	SCI	SCI & adm. departments'
establishing adm. data systems in				staff
adm. departments (workshop)				
Introduction of design and	2008	3	SCI	SCI & adm. departments'
establishing adm. data systems in				staff
adm. departments (workshop)				
Seminar on the Statistical	2008	1	SCI	Staff of statistics bureaus
Yearbook				in governor offices
Seminar on developing adm. data	2008	3	SCI	Adm. departments
systems				managers
Seminar on the selected	2008	1	SCI	Staff of statistics bureaus
publication on the economic,				in governor offices
social and cultural indexes and				
indicators				

Q5: What are major obstacles/weaknesses faced in your country on the use of administrative data for statistical purposes?

A5: A major obstacle is that the establishment of informational-operational systems in all administrative departments is yet to be completed. Though the legal supports and the required budget for launching or completion of such projects have been provided in the fifth budget law, only a small number of organizations produce registers systematically at the time being. It means that the remaining organizations are not completely automated in production of administrative data. Moreover, in some departments the databanks have been designed without considering their organizational activities, which causes low accuracy of data in some cases. Also, the existing telecommunication weaknesses, which affects the exchange of data, is another obstacle which should be removed in the coming years. Still another obstacle is the rather low level of technical know-how of the administrative departments' and the SCI's staff in the field of developing administrative data systems. We do hope it will be removed in near future by giving rise to the number of knowledgeable manpower as well as encouraging and providing more training in this area.