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CHALLENGES AND TRENDS IN THE MODERNIZATION OF STATISTICAL SYSTEMS

Modern management of national statistical offices

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I. An assessment of the national statistical offices

Although national statistical offices are the governing institutions of countries’ national information systems and are therefore responsible for providing the information that the State requires for the purposes of assessment, formulating objectives, designing strategies and implementing programmes of action through the production or coherent compilation of statistics, they are rarely able to fulfil this task adequately.

Statistics has developed in a heterogenous way. The importance of statistics in providing a basis for decision-making is not recognized to the extent it deserves and the resources assigned for it are rarely adequate. Budgetary limitations primarily affect statistics as a whole, but within the statistical field, social statistics are almost always neglected. The scarce resources available are usually assigned first of all and as a matter of priority to the economic field, mainly under the pressure of reforms and the programmes aiming to regain overall macroeconomic and financial stability.

Social statistics have been particularly affected by this situation, precisely because neither the state institutions, nor the companies or other information users have shown sufficient demand for their adequate development.

The problems that limit the proper development of the national statistical offices can be summarized as follows:

* A low level of co-ordination and articulation: despite the efforts made, there is still a weakness in the interinstitutional dialogue with the other components of the national statistical information systems, which limits their harmonious and integrated development, making it difficult to compare and analyse statistical information from different sources.

* Lack of transparency and utility of statistical information: as there is no co-ordination among the members of the national systems on the methodologies and concepts to be used to measure a particular phenomenon, the statistics generated are not at all coherent, which makes it very difficult to use the statistical information.

* Lack of timely information: the timeliness of dissemination is certainly an essential characteristic of statistical information. However, in important areas of statistical production, information users find the significant lack of timeliness to be an obstacle to the design of short-, medium-, and long-term policies, for the processes of both evaluation and decision-making in the public and private sectors.

* Inadequate coverage of information: there is a critical perception of the levels of geographical disaggregation of statistical information, which makes the information less useful and leaves gaps as far as decision-making is concerned. It is claimed that this lack of information hinders the efforts of public entities to focus on policies to promote production and social development. For its part, the private sector claims that this shortage of information slows down the development of private investment and the creation and growth of new businesses.

* Limitations on statistical diffusion: no statistical diffusion policy or plan has been agreed with users and other producers, and thus no adequate process has been developed to publicize the range of statistical products and services offered.
Lack of articulation between supply and demand for information: communication between the producers and users of statistical information is almost non-existent and thus the information generated does not have the impact and usefulness anticipated by the users.

Scarce resources: a common denominator of the problems mentioned previously is the lack of financial, material, human and technological resources, which has limited the capacity of the national statistical offices to exercise their function as governing entities of the national information systems and consequently has a negative impact on the development of statistical products.

II. Analysis of the environment

The greatest current transformation of the environment is the development of a more educated and demanding society, which on the one hand is demanding opportunities to participate in political and economic spheres and on the other hand, requires a greater level of communication and information; both are component elements of power, democratic life and market transparency.

As a result, a new society referred to as the “information society” is emerging, which has a more revolutionary impact on service institutions than on productive institutions. The information society is an economic, social and cultural system where information generation and distribution are significant elements in the power networks, well-being and competitiveness of countries.

Information in itself has become a key resource for the economic and social development of nations. The future competitiveness of the economies will depend increasingly on their capacity to develop and disseminate knowledge, bringing the processes of innovation and creation, which are today more socialized than ever, to all of the population.

Thus, the interrelation between producers and users of statistical information, via information networks, increases the value placed on the generation of reliable, relevant, timely and up-to-date indicators. The opportunity is emerging, as never before in history, for the distribution of information and knowledge to be shared by all.

In this context, in order to be part of the rapid global movement towards the information society, the national statistical offices have to adapt quickly to the changes brought by the new information and communication technologies.

III. Main trends

The process of adaptation to the changes and institutional modernization must take place within the perspective of the great global trends which can now be perceived and which mark the first decades of this new century: globalization.

This phenomenon is directly related to: (1) the production of services and information and (2) the consumption of large volumes of information which is many times larger than what has been required at other times in history. The combination of these two factors has modified the structure of supply and

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demand for statistical information, and will ultimately lead to the reorganization of the national and international statistical systems.

Modern statistical information systems are not only effective in strengthening the macroeconomic and social management of countries, but are also a support for the processes of decision-making, the consolidation of democracy and the strengthening of governance. In this way, information is an important tool for the strengthening of democratic values, as it leads to a new mobilization and participation of citizens that is more appropriate, reasonable and objective. These characteristics are very important for the democratic life of countries.

In this context, the reality facing the countries of the region, which are experiencing decentralization and public participation, not only requires greater resources and new responsibilities for local governments and departmental administrations but also allows new actors and decision-makers to appear on the political scene.

These new political, economic and social groups are establishing themselves as permanent users of statistical information. This fact leads the specialized institutions such as the national statistical offices to modernize their technology, and the procedures for generating and disseminating statistical information.

IV. Challenges in the environment of the national statistical offices

The information society and the scarcity of public resources create the need for decision-makers to have timely and reliable information that will allow them to allocate physical, human and technological resources efficiently. This emerging need in the environment creates the following challenges for the national statistical offices:

To generate a statistical culture in the users and producers: to ensure that statistical information is considered as a key input for efficient and effective management, and that the resources allocated for the production of statistical information are viewed as an investment rather than an expense.

To produce and provide statistical information for the public and for decision-makers: to ensure that decision-making results in specific solutions to the problems identified, thereby enhancing the impact of public policies.

To institutionalize the production of statistical information: in order to have a policy framework that guarantees the sustainability and continuity in the production and dissemination of statistical information.

To define the internal procedures needed to generate useful information: to ensure that regular, reliable, timely, consistent and fundamentally useful information is produced to meet the demand for information.

These challenges, which are shared to a greater or lesser degree, mean that a process of modernization or change has to be initiated in the national statistical offices, which can be understood as an institutional redefinition to help them adapt and modernize. This process should take place in accordance with the challenges and objectives identified in the course of the strategic planning carried out
in order to determine the activities that would transform the national statistical offices into: organizations with flexible structures, able to adapt and respond in a timely manner to the challenges of their environment; efficient and effective in providing public services; and with a participatory public service, meaning that it allows a network of more democratic relations to be established between the providers of public services and the citizen clients.

The whole process of change should be contained within a coherent plan and be as realistic as possible, with great care being taken in establishing goals and commitments in order to avoid setting unattainable goals which can only weaken motivation, which is an essential prerequisite for the process of change.

V. How to begin to modernize the national statistical offices

The process of change may be motivated by: a desire for survival in response to a crisis, a need to adapt to changes in the environment or striving for excellence. In each case the main efforts take on a different hue. In the first, flexible processes are needed with autocratic leadership; in the second, the characteristic features are the participatory processes and consensus-seeking in order to identify the best way of adapting to the new situation. Finally the third example requires a process of continuous learning which helps to build a learning organization.

Defining the institutional mission and vision: in all cases, this is the starting point, where the aligning of both with the interests of the civil servants is essential in order to gain their commitment to the change. Leaders who have a personal vision stimulate others and create the necessary environment for constructing a shared vision, maintaining the motivation and incentives which ensure continuity and commitment to the process, thus creating an environment conducive to a transparent and objective analysis of the situation experienced by the institution.

The change should take two levels into account:

“Hard” Level: structure, strategy, systems and processes, namely:

- Modern infrastructure (office, furniture, equipment, communications, management and information systems, etc.);
- Reorganization (organizational structure, redesign of processes, operational decentralization, institutional co-ordination, etc.);
- Automation (statistical production, administrative management, etc.);
- Information systems for decision-making;
- Standards, methodologies, processes, procedures and instruments;
- (Statistical Law, inter-institutional agreements, specific regulations of the systems of Law 1178, Estatuto de Funcionario Público, methodological documents, internal rules, manuals);
- Sustainable financial resources for statistical work.

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“Soft” Level: culture, styles of leadership, values, organizational climate, namely:

- A leadership style based on principles, focusing on management of the change and on innovation and continuous learning with a systemic approach;
- An organizational culture based on the following principles:
  - Responsibility for the civil service;
  - Commitment to the vision;
  - A proactive, participatory, collaborative, honest and interdependent attitude, which favours teamwork;
  - Performance that is focused on results, in a transparent and efficient manner;
  - A vocation for public service oriented to the user, and offering excellent service.

- Organizational climate:
  - Generates work security;
  - Recognizes employees’ performance;
  - Equity policies;
  - Encourages constructive criticism and creativity at every level of the organization;
  - Credibility at the management and technical level;
  - Pride in being part of the entity.

The following elements should be considered —the past: where we came from; the present: where we are; and the future: where we wish to go.

The modernization of the national statistical offices should result in the management of public resources within a framework of absolute transparency; it should generate useful, timely and reliable information for decision-making; it should ensure that public management is carried out economically, efficiently and effectively, taking into account the fact that at all times the achievement of these objectives will require total adherence to the commitment to change, and an awareness of the conflicts which will arise in this process, which have to be resolved by means of an open and honest dialogue as a basic tool, while maintaining at all times a systemic vision, in other words, not losing sight of the whole.

The construction of learning organizations is the ultimate aim of the process of change, and, according to some authors, they have four characteristic features:

1. There is always an opportunity for people’s individual and collective capacities to grow, with the aim of producing excellent results.
2. New and more complex patterns of organizational thinking are cultivated.
3. Collective aspirations are included within the objectives of the company.
4. Everybody is continuously learning new skills and learning to generate knowledge.

This is the main thrust of the argument for the importance of identifying a vision where personal interests are aligned with those of the organization, where the premise of the learning is that this takes place (i) before, (ii) during and (iii) after the carrying out of tasks and activities, making it clear that training and technology are basic inputs, as are the generation and socialization of internal and external knowledge, that is, what is achieved on the basis of the institute’s own experience and from the experience of other institutions not necessarily in the same area, for their later application in programming
efforts and actions focused on a process of continuous improvement through specific activities and the use of technology and specialized tools.

Another important characteristic of a continuous learning organization is the application of process engineering, in a systemic approach with results-based management which requires the application of the principles of responsibility for public service and empowerment, the latter being understood as the transfer of the decision-making capacity to all levels of the organizations, complementarity and organizational competition.

In this context, special emphasis should be given to the training of human resources. The guiding principles should be the generation of: ethics and values in the civil service; management abilities and skills; and specific technical abilities and skills. This is all for the purpose of influencing the organizational climate and performance.

The aim is to ensure that all civil servants make a valuable contribution, with their own knowledge and the information that they can provide, on the assumption that the investment in knowledge, its management and its use is a prerequisite for organizational success in this era of information and knowledge.

The training requires the intensive use of technology, as technological progress currently determines the level of competitiveness of service and other organizations. This is the case for the national statistical offices which should focus on their clients: the state, civil society, the private sector, international legal entities and others.

Technological change means achieving more rapid and efficient communication, as well as the possibility of making processes more efficient, shortening the time needed and facilitating access to the statistical information produced.

The following factors are fundamental for achieving change and modernization:

- Leadership that establishes a direction, which means developing a vision of the future by identifying strategies to produce the changes needed to achieve that vision. It is here that the commitment of the highest executive authority determines the success or failure of the change.
- To align the interests of the civil servants with those of the institution, by transmitting the direction in oral and practical form to all those whose cooperation is needed and/or could influence the formation of teams and coalitions which understand the vision and strategies and accept their validity.
- To motivate and inspire the civil servants by transmitting energy to help them overcome political, bureaucratic and resource barriers.

In order to achieve this, management leadership is needed, which is understood as the capacity to achieve order and an ability to predict situations, with the potential to produce the institutional results expected in the short term in a consistent manner. Leadership is thus the ability to mobilize public service employees to carry out some specific objective or aim, generating change, frequently to a significant degree, and with the potential to produce extremely useful changes.

The organizational climate should also be considered from the point of view of the physical space and infrastructure needed to make the working environment not only a place which is convenient for the employees, but meets the necessary requirements for housing the technology used. It should bring the
employees together in the same building, providing them with all the necessary means for carrying out their work in optimal conditions: rooms distribution according to needs; furniture according to the concept of work stations; a ratio of one computer for each member of the technical and managerial staff; a fibre-optic switching system that offers video-conferencing services, corporate collaboration systems, corporate data bases and information policies, and so on.

**Important lessons:**

It should not come as a surprise that public service employees, during the process of change, will express or hold on to feelings of nostalgia, fears of the new and the unknown, concerns about employment security and other expressions of dissatisfaction with the process of change. When such feelings arise, the leaders will need to:

- Identify difficult questions;
- Raise awareness of the trends, opportunities and threats, in order to encourage change;
- Ask questions in order to create new relationships; and
- Maintain a dialogue and constructive confrontations.

These attitudes should be channelled to manage the resistance to change, in the following way:

- Identify such resistance;
- Tackle it openly;
- Concentrate on those persons who support the change and are allowing it to take place; and
- Initiate short-term high-impact actions, without forgetting the longer term.

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3 Inter. Cultural Management Associates.