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**AN INTEGRATED REGIONAL TRAINING PROGRAMME
NEEDS AND FEASIBILITY */**

***/ This document was prepared by Mr. Jacob Ryten, former Assistant Director of Statistics Canada. The opinions expressed in this document are the sole responsibility of the author and do not necessarily reflect those of the Organization. It has been reproduced without formal editing.**

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A. Training programmes: background

A surplus demand exists for training courses in all aspects of collection, analysis and dissemination of official statistics relative to the pool of resources available for meeting that demand. These resources have not kept pace with the overall growth in the production capacity of national statistical offices (NSOs). Some countries that used to provide training programmes have ceased to do so while others have recently been obliged to set up their own programmes and are still acquiring the know-how and experience which are essential for the creation of an integrated programme. At the worldwide level, a topic of interest to all NSOs is how to bridge the gaps caused by insufficient capacity for the creation of human capital.

There have also been changes in what is expected of a training programme. Two decades ago, the areas of greatest interest, especially to less privileged NSOs, were related to data processing techniques (programming, systems design and analysis); sampling; and management of major statistical operations such as population censuses and agricultural censuses. Although these issues are still part of what a general programme is expected to cover, higher priority is now given to other matters relating to user satisfaction; treatment of respondents; and techniques for data analysis, the presentation of results, quality measurement, etc.

Clearly, there is a great deal of complementarity between the trends of 20 years ago and today's objectives. For the future director of an NSO to have the necessary technical background, he or she should be familiar with fundamental statistical techniques (sampling, time series analysis, statistical inference, experimental design), the basics of the three major accounting systems (business, government and national), and present-day know-how regarding the most productive ways of dealing with respondents and users.

There are also new types of demand now, and relatively little experience is available to satisfy them. These new segment of demand have to do with the integration of all the subject areas that have been covered by such programmes in the past. This need is due in part to the fact that NSOs have observed a considerable increase in the proportion of official statistics included in their area of responsibility. It is also due to the fact that the proper functioning of an NSO requires close coordination among all the elements of its programme.

For reasons that need not be discussed in detail here, the institutions which formerly took care of statistical training in the Latin American region will presently cease to exist. The main factors undergoing their disappearance will not be a lack of demand, but rather a chronic shortage of resources and perhaps a certain inability to adapt to new needs.

B. Training programmes: recent experiences in Canada

If I refer mostly to experiences in Canada, this is not because I consider them to be superior in some way but simply because I am more familiar with them. However, we should not forget that NSOs in Brazil, Spain and Mexico, for example, have major training centres as well as training programmes at various levels, covering a very broad range of subjects.

The fact that Statistics Canada has relatively little training experience has both advantages and disadvantages. While it has not yet succeeded in reaching a balance in its efforts, on the other hand it has the enthusiasm of the beginner and a basic concern with fulfilling the main requirements of an NSO in the late 1990s.

Statistics Canada has obtained sufficient resources to create a training centre and has been confronted with the need to move swiftly to recruit and deploy about 200 trained statisticians. It has therefore had to set up a comprehensive course that will equip university graduates to begin working productively and integrate successfully into a highly centralized office. One of the goals of its new training activities is to remove barriers to the type of "lateral movement" which is generally more necessary in the case of recent recruits, either because their initial preferences change or because management constantly has to readjust its workload calculations.

The creators of the course were guided by two main objectives:

- The need to develop a critical approach, so that any activities for which there is no clearly identifiable demand will be called into question;
- The need to develop an overall vision so that new members of the institution will know that they will be involved in cross-disciplinary activities in which everything is interrelated, including both thematic and functional activities.

The curriculum designed on the basis of these two objectives corresponds to nearly a full academic semester. Its structure is as follows:

1. Main concerns of the public sector, and how they are reflected in the demand for statistical information;
2. Structure of the summary tables of a country's economy (national accounts, input-output matrices, balance of payments, public-sector finances, financial flows etc.);
3. Relationship between basic statistics and summary tables;
4. Statistical infrastructure (classifications, standards, organization of the computation system, introduction to statistical methods);
5. Functional organization of an ideal NSO;

6. Different ways of organizing an NSO;
7. Role of statistical offices in international bodies;
8. Response of the NSO to demand, and how that response is reflected in the organization of Statistics Canada.

C. Possibilities for the region

In the absence of horizontal cooperation, the existence of half a dozen different training centres is a questionable model in a situation where there are difficulties with meeting overall demand. It is quite likely that the different centres would become a source of duplication and contradictions. Also, without coordination among the centres, there would be little opportunity for constructively exploiting the individual characteristics of each one.

There are various possible types of cooperation. One model which could be considered is the one used by German-speaking universities before the First World War. In this model, the universities belonged to a single system; upon joining the system they accepted a number of standards which ensured a minimum level of educational quality. The existence of this system enabled students to move from one academic establishment to another, thereby maximizing the number of distinguished professors they had the privilege to hear. The system included universities in Germany, Austria (including the present-day Czech Republic) and Switzerland. The academic year was divided into semesters, and the only obligation was to complete each semester in a single university.

If we accept the two parts of the initial analysis, i.e., that:

- There is a considerable gap between the capacity to provide training and the growing demand for professional and technical training from the NSOs of the region; and
- The effectiveness of the service provided is proportional to the effectiveness of coordination among its components, then a model similar to the German system can be proposed (and discussed). Such a system would involve the following elements:
 - A standard training programme accepted as such in the region;
 - A list of training centres in the region which are designated as members of the system;
 - A distribution of tasks among the various centres which would take into account the comparative advantages of each one;
 - The opportunity to take the same course in any one of the centres in the system, provided that it is in fact offered by various centres;

- The possibility of obtaining a certificate issued by a central authority following satisfactory completion of a specified number of courses.

The following are some of the elements required to enable such a system to function properly:

- A commission responsible for defining the curriculum;
- An academic director who can visit the various centres to verify conformity with agreed quality standards;
- A minimum guarantee of continuity in the courses and maintenance of established standards of quality.

The financial aspects of this proposal should not be ignored; neither should they be exaggerated. The idea would be to use existing institutions, not to create new ones. Rather than inventing new courses, existing ones would be used (perhaps adapting them to new realities, but without major changes). Students' financial needs would be met by their respective NSOs, either directly or using resources from multilateral bodies wishing to strengthen the technical level of official statistics in a given country. There would be no need to wait until the system had been fully defined before beginning. However, the following would be needed:

- A critical mass of participating institutions;
- A critical mass of students for a first wave of training courses;
- A commission (made up of volunteers) with the ability to define an integrated curriculum (this might be done, for example, by refining the existing Canadian programme).