## A PROGRAM OF TECHNICAL COOPERATION FOR TRAINING OFFICIAL STATISTICIANS OF LATIN AMERICAN COUNTRIES

## Carmen Arribas National Statistical Institute Spain

At the National Statistical Institute (NSI) a Programme of Technical Cooperation with Spanishspeaking countries of America was started up some twenty years ago (1978). The aim of the programme was to exchange experiences and offer further training to professionals working at National Statistical Offices, Central Banks, Ministries of Planning and Customs, and the main institutions producing the official statistics of the countries in the Region. The training activities consist of courses, seminars and workshops, which are held both in Spain and other countries. These are also supplemented with "étages" in Spain and the sending of "experts" to the countries requiring advice on new projects. The training activities are predominantly practical, although they also have a theoretical module of statistical methodology and a conceptual framework of the different projects. The purpose of this Programme is to train personnel in the production of official statistics, pass on the new technologies from Spain and the European Union, and supply them with the material and documentation used to carry out the different projects.

The Spanish National Statistical Institute (NSI) started off in 1978 a Programme of Technical Cooperation with the Latin American and Caribbean (Spanish-speaking) countries to exchange experiences and offer further training to personnel working at institutions responsible for producing official statistics. These institutions included The National Statistical Offices, the Central Banks, the Planning Ministries and the Customs. The Programme activities include Courses, Seminars and Workshops, which are held in Spain and in the different countries of the Region. They are supplemented with "étages" of American statisticians in Spain along with the sending of Spanish "experts" to the countries that request advice on the feasibility of a new project or on the need to modify one already in progress.

The training activities are primarily of a practical nature. It is a matter of showing in detail how the different statistical projects are carried out, right from their methodological design up to the publication of results. The activities cover the analysis of different stages in depth, examination of their difficulties and a review of the solutions adopted in each case, such as the problems occurring during the data collection, the treatment of non- response, validation of the information collected, editing, and imputation, data processing, etc.

The courses last three weeks, and are usually held in Spain, and they all have a theoretical module, comprising about one third of the teaching hours. Owing to their special interest there are three basic courses, which are held every year: the "Course on Sampling with Applications to Household Surveys"; the "Course on Business Surveys" and the "Introductory Course to National Accounts".

The "Course on Sampling with Applications to Household Surveys" was the first to be delivered, as there was no tradition of conducting Household Surveys in these countries, but there was certainly a growing need for information on Households and the features of their occupants. From the beginning great importance was laid on the theoretical side, in which sampling techniques are explained. It was also stressed from the start how important it is to have a "continuos" Household Survey in these countries. This would enable them to obtain different types of information on the conditions of life of the population, from housing equipment to the situation with regard to employment, health, holidays, social exclusion, etc., and get to know how these change with time.

In the Course on Sampling with Applications to Household Surveys, besides the aforementioned theoretical module, two main Household Surveys are examined in detail: the Labour Force Survey and the Family Budget Survey. Although the socioeconomic problems of the countries of the Region vary from one to another and are different from those of Spain, it was considered appropriate to study these two surveys. The former is an ongoing survey with the problems stemming from the turnaround of the dwellings in the survey, renewal of the sampling units, link-up in the estimations, etc. The Family Budget Survey is extremely complex. It is essential to have detailed knowledge of all its phases as it forms the basis for determining the structure of consumption in National Accounts and calculating the different groups and subgroups of goods and services making up a country's Consumer Price Index.

The scope of both surveys is examined and limitations of budget and human resources are analysed, a factor that always has to be taken into account before undertaking such far-reaching projects. Other aspects studied are type of sampling; sample selection; estimators; problems arising from preparation of the questionnaire, collection of the information, editing, validation and electronic processing of the information, fieldwork incidences, calculation of estimates, etc. Participants are supplied with the necessary documentation used in both surveys as well as the different Classifications and all other material used.

In the "Course on Business Surveys" there is also a theoretical module given over to Sampling Theory and in the practical part Structural Industrial Surveys and the Product Survey are examined. Surveys in the Services Sector are being introduced in gradually. Such important statistical instruments are studied as the "Register of Business and Establishments". Its elaboration and updating is studied, as it is used as a framework for selecting the units to be included in the different Surveys and the Classification of Economic Activities and the Classification of Products, because they are basic elements for classifying the statistical units and for submitting results consistently.

As documentation, participants receive the manuals that are produced at the National Statistical Institute for carrying out the different surveys, a revised copy of the Project, the Methodological Manual that accompanies any statistical inquiry, Manuals for training the Interviewers and Supervisors, Manuals with the instructions for coding, editing and imputation etc. as well as the National Classifications of Economic Activities and the Classification of Products, which are adaptations, in Spanish, of the United Nations and European Union Classifications.

In the Introductory Course to National Accounts the conceptual framework of the System of National Accounts (SNA) and European System of Accounts (ESA) are examined. The meaning of the different aggregates of the Systems is explained and special importance is attached to the covenants adopted in the SNA. The participants are national accountants in their countries working at the National Statistical Offices or at Central Banks. They are therefore, able to discuss all the conceptual doubts that may arise from studying the Manual and in connection with the problems they encounter on making estimations in their countries when there are significant gaps in information in certain sectors or branches of activity.

An in-depth review is carried out of the different sources of information, of the way basic statistics have to be prepared and processed for integration in the System. Study of the Input-Output Table assists in the understanding of the System and in pinpointing the information gaps in important sectors of economic activity. Special emphasis is laid on the advisability of using the same concepts, definitions, classifications, statistical units, etc. in the production of basic statistics, as the SNA is a framework for integrating economic statistics. Some small-scale practical projects are carried out so that the participants may undertake adjustment and estimation operations in the different System Tables and Accounts.

The teachers who deliver the theoretical modules are National Statistical Institute officers attached on a part-time basis to some University Department of Statistics or Economics, while the rest of the teachers are NSI statisticians responsible for the working areas involved in the different courses. The Seminars and Workshops are devoted to a single subject and these subjects are chosen after prior consultation with the National Statistical Offices and other Institutions collaborating on the Programme. Every year the subjects are selected from those of greatest interest put forward by the countries and the different topics go on rotating in time in accordance with the requests and suggestions made every year.

The subjects of the Seminars and Workshops are extremely varied and comprise such organisational aspects as "Organisation and Functioning of National Statistical Offices ";" Organisation and Management of Statistical Projects. Time is also devoted to a more in-depth study of such topics included in the Course on National Accounts such as: "Regional Accounts"; "Quarterly Accounts"; "Financial Accounts" (this seminar is delivered by Bank of Spain experts).

Statistics that are not produced regularly in some countries such as: "Science and Technology Statistics"; "Environment Statistics"; "Wages and Salaries Statistics"; "Labour Market Statistics"; "Tourism Statistics"; "Services Statistics", and so on are also covered. Seminars are also devoted to analysing the best way of arranging and utilising the statistics available in the countries produced by different institutions and which are awkward to handle through being very disperse: "Statistics and Social Indicators"; "Statistics of Poverty"... Statistical Indicators are also requested as the subjects of seminars; "Consumer Price Index"; "Manufacturing Price Index"; "Industrial Production Index"... The countries often show interest in subjects relating to the study and handling of such statistical instruments as: "Registers of Business and Establishments", "Classifications and Nomenclatures and Statistical Units"; "Statistical Data Editing and Imputation", etc.

Great interest lies in the Seminars or Workshops on Foreign Trade Statistics, in which the participants are customs officers and statisticians working at the National Statistical Offices and at the Central Banks, as the Foreign Trade Statistics are produced by these three Institutions in many countries. In this field the Seminars or Workshops are held at subregional level, differentiating the Central American, Mercosur and Andean Community countries. These groups of countries form part of different integration movements that need to have comparable statistics at their disposal. Statistics produced according to the same statistical methodology and using the same statistical units, definitions, concepts and classifications so that the results may be integrated at subregional level and compared at international level.

At the Seminars and Workshops given over to Foreign Trade Statistics a considerable proportion is devoted to the detailed study of questionnaires. Every single one of the boxes, codes, etc. is evaluated so that data entry is harmonised and the comparison and study of "mirror" statistics are facilitated. Special attention is also devoted to the handling and adaptation of the International Classifications relating to Foreign Trade.

The Seminars differ from the Workshops in their organisation. At the Seminars the statistical methods used for preparing the statistics under consideration are examined. The Teachers explain the methods and the way in which the process of conducting each project is carried out. The participants confine themselves to asking questions and resolving the problems and doubts arising in relation to the methodology and process explained.

At the Workshops the presentations are given by Spanish experts of the National Statistical Institute and by representatives of the different countries of the Region. It is a round table where orderly but open discussion takes place. The stages making up the conduct of a Project are examined, where every one of the participants explains how the jobs are tackled in his or her country, and the advantages and drawbacks of each *modus operandi* are studied. In this way, the participants are forced to give deeper consideration to the methods used in their countries to carry out a Project, and the weak points of the process are examined collectively. The Workshops help us to know what is being done in other countries and to evaluate the quality of the projects as a whole and in relation to others.

The Programme of Technical Cooperation also offers the possibility of "étages" at the National Statistical Office in Spain. Occasionally, in some countries, before a new project is undertaken, the statistical authorities consider it beneficial that the person or persons responsible for it should get in-depth knowledge of another country. In this way, they ask to send one or more representatives so that they may spend time at the NSI and pass through the different departments that cooperate in the process of producing those particular statistics. Thus, these representatives of the applicant country have the chance of obtaining direct knowledge of the specific aspects in the depth they consider most appropriate. This method of training is highly suited to very special situations and it is recommended when there are doubts in the countries about the feasibility of a new project.

The other complementary type considered in the Programme of Technical Cooperation is the sending of Experts. This also has to comply with very special circumstances, namely the starting of a new project or a comprehensive review of one in progress. In the countries there are often differences on important matters between the specialists of the different Institutions involved in the conduct of a statistical project, and in those cases the national statistical authorities consider that it may be of great benefit to discuss these discrepancies with an expert from another country. The experts receive the Project, prepare their suggestions and travel to the country, where they hold meetings with all the representatives of the different Institutions or departments collaborating on the project. In this way, the Project and its feasibility are examined carefully, paying special attention to such delicate aspects as the timetable, the availability of human and financial resources, training of the personnel that are going to take part at the different phases of data collection, editing and electronic data processing, scheduling the publication of results, and so on and so forth.

## CONCLUSION

The National Statistical Institute is trying to implement a flexible and efficient Programme of Technical Cooperation for the further training of personnel engaged in the production of official statistics of the Spanish-speaking countries of the Latin American and Caribbean Region.

The Programme is very austere, as the amount of financial resources available is very low compared with other well-known programmes. The airfares and living allowances of the participants are the largest item of expenditure; the teachers conform to the limitations of the Programme in terms of remuneration, usually below the levels of their Institutions, so that their fees are merely token. No specific documentation is produced, which would increase the cost of the Programme since, as mentioned above, the documents that are distributed are already in existence and are used for the different statistical operations conducted by the National Statistical Institute. The countries participate by sending their representatives and they often offer their headquarters for the holding of Regional Seminars or Workshops. The Offices of the participants usually don't give them any special allowance.

The National Statistical Institute and the European Union provide the financial and human resources needed for the development of the Programme. Sometimes this Programme may supplement other European activity in this region. The further training of personnel working on the production of official statistics has given rise to an improvement in the quality of the statistics produced by the National Statistical Offices and Central Banks of the countries. Governments have become aware of the need to possess more and better statistical information and they have gradually increased the financial resources allocated to new projects and improved the working conditions and remuneration of the staff working at these Institutions.

The Institutions working on this Programme consider that it is an essential factor that the professional statisticians of the countries in the Region should be familiar with the latest statistical techniques being applied in the European Union. Statisticians and their Institutions should have at their disposal publications, manuals and statistical methodologies for handling software packages for utilising statistical information, as well as other documents and instruments that will enable the staff to study and make use of them in the different projects.

In the forthcoming Programme of Technical Cooperation, which will be implemented for the period 2002-2007, an attempt will be made to achieve even greater involvement on the part of the National Statistical Offices and the other Institutions responsible for the official statistics of the countries in the Region. The participants will be required to contribute a short document to every training activity describing the methodology used in their country, along with the experiences of their office and any problems or difficulties that may exist. In this way, we hope to motivate participants and give them the opportunity, when they return to their respective national offices, to be able to show their departmental colleagues and others whom they may deem fit the experiences of the other countries in the Region, along with Spain's and the European Union's, in relation to the activity in which they have participated, besides placing the documentation received at the disposal of the Institution.