

ECONOMIC COMMISSION FOR EUROPE

FOOD AND AGRICULTURE ORGANIZATION  
OF THE UNITED NATIONS

CONFERENCE OF EUROPEAN STATISTICIANS

Study Group on Food and  
Agricultural Statistics in Europe  
(Geneva, 30 June-3 July 1997)

REPORT OF THE TWENTY-THIRD SESSION

1. The Study Group on Food and Agricultural Statistics in Europe, convened jointly by FAO and the Conference of European Statisticians, held its twenty-third session in Geneva from 30 June to 3 July 1997. Representatives attended from Albania, Austria, Belgium, Canada, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Poland, Russian Federation, Slovak Republic, Sweden, Switzerland, Turkey, United Kingdom and United States of America. Representatives of the European Commission (Eurostat) attended. Representatives of Japan and Korea attended the meeting under Article XI of the Terms of Reference of the UN/ECE. The Organisation for Economic Co-operation and Development (OECD) and United Nations Food and Agriculture Organisation (FAO) also took part in the meeting.

2. The meeting adopted the provisional agenda.

3. Mr. R. Allen (United States) was elected Chairperson and Ms. E. Laczka (Hungary) Vice-Chairperson.

4. The following substantive topics were discussed at the meeting on the basis of papers prepared by Austria, Belgium, Bulgaria, Canada (3), France, Italy (2), Lithuania, Moldova, Netherlands (2), Poland, Romania, Russian Federation, Sweden, Switzerland, Turkey, Ukraine (3), United Kingdom, United States (2), FAO (2), OECD (3), Eurostat (6) and ECE (2):

- (a) Organization of workshops to assist transition countries in establishing new agricultural and food statistics;
- (b) Revision of the Handbook of concepts and definitions used in international collections of food and agriculture statistics;

GE.97-

- (c) FAO Programme for the World Census of Agriculture 2000 and countries' experiences;
- (d) Results of reforming agricultural statistics under transition; new legislation on statistics;
- (e) New developments in agricultural statistics;
- (f) Detailed procedures for collecting and processing agricultural statistics;

- (g) Statistical issues of agricultural economics;
- (h) National practices in classifying different socio economic types of farming;
- (i) Statistics connected with environment-related agriculture problems - Seminar organized by Eurostat;

5. Recommendations for future work are given below. Other conclusions which the participants reached at the meeting on each of the above topics are reproduced in the Annex to this note.

6. The participants took note of the decision of the 1997 session of the Conference of European Statisticians to convert the ECE/FAO Study Group on Food and Agricultural Statistics in Europe into an ad-hoc ECE/FAO expert group of food and agricultural statistics.

7. The participants recommended that a further joint meeting on food and agricultural statistics in Europe be organized in 1998/99 to consider the following topics:

- Development and improvement of economic statistics for food and agriculture;
- Methodological applications and recurring methodological issues;
- Maintaining agricultural data collection systems;
- Joint data collection by international organizations and exchange of data.

The detailed list of items for each of the topics for future work is given in the Annex to this note (see para. 36 of the Annex).

#### ANNEX

Other conclusions reached at the meeting of the Study Group on Food and Agricultural Statistics in Europe (Geneva, 30 June - 3 July 1997)

**(a) Organization of workshops to assist transition countries in establishing new agricultural and food statistics**

1. The representatives of the Eurostat and the Hungarian Statistical office informed the group about preparations for the joint Eurostat/OECD/FAO/ECE Seminar scheduled to take place in Budapest from 12 to

14 November 1997. The 5th Seminar on Agricultural Statistics for Central European Countries hosted by Central Statistical Office of the Republic of Hungary is aimed at assisting Central European transition countries in evaluating and establishing new methodologies for primary agricultural data collection programmes to better meet statistical needs in their new economic environment. The seminar will have a Plenary session and two working groups. The first will deal with basic tools used to provide agricultural statistical information (agricultural census, farm registers, surveys, etc.) and the second will deal with monetary agricultural statistics. 13 Central European countries and the Russian Federation are expected to attend the Seminar. Several participants regretted that there will be no interpretation from English into Hungarian during the Seminar. It was felt that organizers of international seminars and workshops should make an effort to provide interpretation into several languages in order to ensure wider participation.

2. The representative of OECD informed the participants about preparations for the St. Petersburg (Russian Federation) Seminar which will be held from 29 June to 3 July 1998. All 15 CIS countries are expected to participate. Preparations for the seminar are under way, and the agenda is being drafted.

3. Information on the conference "Agricultural Statistics 2000" and its agenda was distributed to participants. The conference will take place from 18-20 March 1998 in Washington D.C. (United States of America). The conference is sponsored by the International Statistical Institute (ISI) and organised in cooperation with the National Agricultural Statistics Service of the U.S. Department of Agriculture (USDA/NASS), the FAO and Eurostat.

4. The members of the Intersecretariat Working Group on Agriculture (IWG.AGRI) (FAO, OECD, Eurostat and UN/ECE), informed the group about progress in joint data collection. A review of FAO, OECD and Eurostat data collection procedures will be carried out and further plans on coordination of joint data collection will be elaborated on the basis of these findings. The Minutes of the 12th meeting of the Inter-Secretariat Working Group on Agricultural Statistics were available to participants.

**(b) Revision of the Handbook of concepts and definitions used in international collection of food and agricultural statistics**

5. The group noted that the ECE secretariat has not received any amendments from member countries to the Handbook prepared by the IWG.AGRI and first published in 1995. The meeting agreed to ask the ECE secretariat to make a rerun of both English and Russian versions of the Handbook and to also make it available on the ECE World Wide Web site.

**(c) FAO Programme for the World Census of Agriculture 2000**

Documentation : FAO, United States of America

6. The FAO informed the meeting about the supporting activities undertaken in order to encourage countries to carry out the 2000 Census of Agriculture during the 1996-2005 decade. FAO has prepared a series of methodological

publications covering definitions, technologies for conducting specific surveys and employment in agriculture and is working through a series of technical training programmes assisting countries in their Census preparations. The results of the 1990 census of agriculture round are now available on the FAO World Wide Web site. The difficulty in comparing the 1990 Round of national census results on a world wide scale was discussed.

7. The document by National Agricultural Statistics Service (NASS) of the United States described the changes in procedures being planned for the 1997 Census of Agriculture in the United States. Unlike the previous censuses carried out by the Bureau of the Census (BOC), the 1997 census will be carried out by the NASS. However, NASS will receive BOC cooperation in the mailing and handling phases.

8. In the ensuing discussion, it was pointed out that definitions of an agricultural holding as used by countries vary significantly. In the United States an increase in the threshold value from \$1,000 to \$10,000, which had been proposed by BOC, would have implied that about 50 per cent of all agricultural holdings (and up to 80 per cent in some states) would have been excluded from the Census. It was agreed that setting a high threshold value would imply a serious loss in the coverage of many important socio-economic aspects of rural life. Threshold issues in other countries were discussed.

9. The experience of the United States in transferring the responsibility for the census to a decentralized agency (NASS) was viewed as particularly relevant for the European Union member countries. It was pointed out that, in member countries, the ministry of agriculture and/or the national statistical institution might be responsible for the census of agriculture. Their coordination and cooperation in preparation of the census is very important for the overall success.

**(d) Results of reforming agricultural statistics under transition**

Documentation : Bulgaria, Ukraine, Russian Federation, Romania and Lithuania

10. Rapid changes in economies of countries in transition are particularly evident in the agricultural sector. Agricultural statistical services in these countries are facing similar difficulties in attempting to adjust to the constantly changing environment. The lack of appropriate legislation, large scale restitution of land to prior owners and a large share of informal economy in the sector were among common problems hampering collection of agricultural statistics in transition countries. The necessity of improving the quality of registers in the period of transition, particularly if much production comes from agricultural households, was also pointed out. It was mentioned that area surveys may be more effective in measuring the agricultural sector during the period of dynamic changes.

11. The participants noted that agricultural statistical systems also need to be reorganized in order to capture changes in the agricultural sector. In the Russian Federation for example, the reform in the economy has made it

essential for statisticians to take a systematic approach to all changes. Agricultural statistics will be improved through changes in the methods used for data collection, establishment of a new household sampling network, development of a method for assessing the size of the hidden economy in farming and in the design of the agricultural census according to FAO recommendations.

**(e) New developments in agricultural statistics in the ECE member countries**

Documentation: Eurostat (2), ECE secretariat, OECD

12. Eurostat's target methodology for the compilation of statistics on the volume of agricultural labour has been drafted as a guide to further harmonization of the concepts, methods and definitions to be used by member countries. The main objective for collecting the agricultural labour input (ALI) statistics is to help derive Eurostat's EAA income indicators. The revision of concepts in EAA will however have a consequence for ALI statistics, most notably the coverage of the agricultural branch, the measurement of output, the choice of the basic statistical unit and the definition of income.

13. The issue of whether to and how to classify forestry, fish-farms, Christmas tree producing holdings, etc. was discussed even if the holdings do not include agricultural activities. At present, FAO excludes such holdings but is evaluating this issue. It was felt that the best approach in labour force surveys is to look at the overall farm structure and then work downwards. It was noted that agriculture is more and more associated with other activities. The opinion was expressed that forestry should be included in the surveys although this might create conceptual problems. It was also observed that difficulties to collect labour data could be overcome by using sub-samples with interviews. Another issue discussed was that account should be taken of "intra-agriculture trade".

14. The meeting agreed that the ECE paper on "New developments in agricultural statistics in UN/ECE member countries" represents a useful source of information and that it should be regularly updated before each meeting of the group. Countries are asked to review the paper and send their comments to the ECE secretariat before the 15 September 1997. ECE secretariat will then finalize the document.

15. The OECD document on Statistics in Transition is based on information presented at the Roundtable Expert Meeting on Statistical Needs in Agriculture in Transition Economies held in June 1996 in Paris. In response to a suggestion from participants in that meeting, the information on the development of statistical laws, the institutional organisation of statistics and the current agricultural system in place in eleven transition countries was made available through the document to a wider audience. The document contains updated information in the form of country statements and has been elaborated in close cooperation with each of the countries. The participants noted the usefulness of the document when working with the data from countries participating in this project and in particular for analytical purposes.

16. Another document by Eurostat on Farm Structure and Methodology of Community Surveys emphasized that structure survey represent the pillar of the agricultural data collection in the European Union. The legal basis for surveys on agricultural holdings are provided by the appropriate Regulations. All elements of the survey, units, survey periods, organisation of the survey and production of tabular results are well elaborated. The structure surveys will be conducted in the established way until 2009. The manner of making available online (on the Internet) the Eurofarm databanks - a system of modules containing individual data from member countries - is being studied. Through seminars and other forms of technical assistance, Eurostat intends to assist Central and Eastern European countries in adopting the structure survey methodology and in conducting surveys.

**(f) New developments in remote sensing for agricultural statistics**

Documentation : Eurostat, Italy

17. The MARS (Monitoring Agriculture by Remote Sensing) programme of the European Union was introduced as a dominant activity with two main actions: (I) support for activities of member states and (ii) live determination of pre-harvest estimates of acreages and potential production of main crops at the European level. Another project, MERA, which combines the experience of MARS and related applications, is going to be implemented in 1997 in 11 central European countries. The activities include vegetation condition monitoring and yield forecasting as well as the adapted sample design for national area frame sampling and for rapid estimation of inter-annual changes in agricultural land cover at regional levels. The group recommended that this project be implemented as soon as possible.

18. The experience so far has shown that surveys based on remote sensing are still rather costly because of the high costs of data collected by satellite imagery. At the same time, conditions offered by distributors of remote sensing technology are not adapted to the needs of statisticians. Another problem mentioned was that statisticians are usually not in control of the scientific process of remote sensing application. Therefore, statisticians have to take part in development of the technology in order to put it under their control and ensure that remote sensing has real statistical base.

19. It was felt that optimal results, both in terms of quality and resources involved are obtained if there is simultaneous use of remote sensing and field surveys. It has been shown that the latter usually requires at least twice as many sample units as the former to get comparable level of results. Experiences of several other countries also confirm that costs of remote sensing should be evaluated against costs of results obtained through traditional survey techniques. There is a number of advantages in using remote sensing in a specific situations, but this technique still requires ground data which are sometimes costly to collect. The general model of remote sensing acceptable for all countries still does not exist. Therefore, when making decision about use of remote sensing for agricultural

data collection, statisticians have to be selective and careful in choosing the appropriate model which will satisfy their particular needs.

20. The participants noted the positive and constructive experience of Italy in remote sensing. The system of organization of work, methods of practical utilization of remote sensing data, techniques of their comparison with alternative statistical data represent practical and theoretical interest for statisticians. It was suggested that the report about experience with remote sensing in Italy should be disseminated among the participants in the meeting. The same was suggested for the state-of-the art document submitted by France to the 1995 meeting (CES/AC.61.40).

**(g) Detailed procedures for collecting and processing agricultural statistics, including new data collection methods CAPI and CATI**

Documentation : ECE secretariat

21. The countries were asked to review the document, supply new information and return their comments to the ECE secretariat. The document will then be finalized and prepared for the next session of the study group.

**(h) Statistical issues of agricultural economics**

Documentation : Ukraine, FAO, OECD, Eurostat (2) and Italy

22. FAO introduced the revised Handbook of the System of Economic Accounts for Food and Agriculture (SEAFA) which is entirely based on the 1993 SNA. This manual was written to include institutional units such as agricultural establishments and agricultural households as well as agricultural products (goods and services) in the agricultural accounts. The manual is available in English, French and Spanish and thought to be appropriate to allow data collection from a large number of diverse member countries. Supplemental manuals on forestry and fisheries are being prepared to assist countries in the incorporation of such data in the form of satellite accounts to the core economic accounts. Both Eurostat and OECD are involved in further development of economic accounts for agriculture. The OECD is working to include information on capital stock and net worth measures into the accounts for agriculture. Eurostat is primarily focused on the income of agricultural production and forestry and not directly on income of agricultural households.

23. The manual and results of a study on total income of agricultural households prepared, on a trial basis, by Eurostat raised some questions related to differences among various manuals by international organizations and varieties of approaches (micro-up versus macro-down) in collecting economic data from the agricultural sector.

24. Although it was made clear that international organizations coordinate their work on economic accounts for agriculture, it was pointed out that each organization has to take into account the specificities of their members and their particular availability of data and their data needs. The participants

generally supported the view that further and closer cooperation between international organizations in developing manuals for economic accounts for agriculture has to be maintained in order to ensure the full compatibility between manuals. It was further suggested that a paper illustrating differences between various manuals be drafted.

25. It was noted that experiences in countries vary with the approaches used in collection of statistics for EAA. Some countries make use of farm surveys and collect farm income at the micro level while others are more in favour of the macro approach and use of income statistics and other macro economic data.

**(i) National practices in classifying different socio-economic types of farming**

Documentation: Poland, Ukraine, Turkey and Croatia

26. Various methods used for classification of farms by type of activity and size were presented. The experience varies among countries, but it was felt that the direct application of the Eurostat typology of farms to non European Union countries may show some weaknesses of the system. It was suggested that instead of the concept of the Standard Gross Margin which reflects price movements too strongly, other criteria (labour input was mentioned) may better reflect reality in particular country. To overcome deviation of conversions due to exchange rate fluctuations, it was suggested that countries should use Purchasing Power Parities.

27. More flexible application of farm typologies may be necessary for countries that have a large number of small holdings. It was suggested that countries can still use Eurostat typology, but may need to use the classification by farms types and size in a manner which will reflect their particular situation in the agricultural sector. Stability in stratifying farm classes should be maintained over the years of observation and only changed in longer intervals (5 to 10 years) to provide for comparability of results and meaningful time series.

**(j) Seminar on statistics connected with environment-related agricultural problems**

Documentation: Papers by Austria (2), Canada (2), France, Netherlands (2), Belgium, Switzerland, United Kingdom, United States, Eurostat, OECD, Japan.

28. Mr. Terence McRae (Canada) was elected chairman of the seminar. The provisional agenda of the seminar was adopted.

29. The work underway in various countries on agri-environmental indicators depends not only on scientific understanding of the nature and functioning of agroecosystems, but also on the availability of sound agriculture statistics.

30. The wealth of data currently on agriculture has made it possible to look in depth at some aspects of agriculture and environment. Areas reasonably well covered include crop and livestock production and distribution. However the impacts of other sectors, perhaps less well covered statistically, should not be ignored.

31. On nutrient balances, work is well in hand, but it is important to be able to make a good estimation of the amount of grass consumed by livestock, as grassland represents a large percentage of the nitrogen uptake by crops.

32. For pesticides, it is not possible to construct a single synthetic indicator which brings together all the risk factors associated with pesticide use. Therefore, work should look at the risks to the different environmental compartments, starting with the risk to water.

33. The proposals for biodiversity indicators were interesting and the extent to which they can be calculated from existing data could be further explored. Other, non-agricultural, data is needed, especially on land use/cover.

34. More comprehensive and detailed information on agroecosystems is required to support agri-environmental analysis and decision making. The seminar identified and discussed the following priority areas:

- Farm management practices : a clear message emerged on the need for data on farm management practices, as this is an important factor influencing environmental performance;
- Land use, and in particular clarification of definitions of agricultural land;
- Livestock feed balances;
- Cropping patterns/rotation;
- Grassland.

35. Information collected via incentive schemes could be better utilized. It was also suggested that some simple questions could be added to the agricultural census of 2000.

**(k) Future work**

36. The meeting's suggestions on future work are given in para. 6 and 7 of the body of this report. The following issues were proposed to be discussed at greater detail in the future:

- (i) Development and improvement of economic statistics for food and agriculture (macro level: developments in the area of economic accounts for agriculture versus micro level - total income of agricultural households and to what extent they are dependent on agricultural activities; how to integrate economic aspects of agriculture with other economic activities of households farm plus non-farm income; food statistics including foreign trade; statistics on quality of food production and methods of production; type of agricultural statistics needed in the next 10 years - from the point of view of National Statistical Offices, Ministries of Agriculture and other major users of agricultural statistics; the adaptation of potential new member countries to the EU system.
- (ii) Methodology applications and re-occurring methodological issues (thresholds and coverage implication of agricultural surveys and censuses; classification of farms and households; registers of agricultural holdings and structural surveys);
- (iii) Maintaining agricultural data collection system (decentralized versus centralized system of data collection; parallel responsibilities of international and national statistical offices and ministries of agriculture, their cooperation and problems; special surveys on animal and crop production; the use of new technologies for data collection, e.g. remote sensing; methods of collection of statistics under budgetary constraints - the same quality for less costs);
- (iv) Joint data collection by international organizations and exchange of data (comparability across countries and between organizations - definitions and classifications used; new information technologies, e.g. Internet, and opportunities created for data storage, exchange and dissemination).

37. In discussing this agenda item the meeting welcomed the close cooperation between ECE, Eurostat, FAO and OECD and considered it as a prerequisite for the success of future work in this area. The participants also agreed that a biennial frequency of meetings provides a very good opportunity for exchange of information on new developments and research in agricultural statistics.

**(l) Other business**

38. The World Wide Web site of the IWG.AGRI was demonstrated.
  39. The meeting adopted its report.
-