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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

CONFERENCE OF EUROPEAN STATISTICIANS

Study Group on Food and Agricultural Statistics in Europe
(Geneva, 3-6 July 1995)

REPORT OF THE TWENTY-SECOND 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-second session in Geneva from 3 to 6 July 1995. Representatives attended from Austria, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Russian Federation, Slovenia, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, United Kingdom, United States of America. Representatives of the Statistical Office of the European Community (Eurostat) and the Organisation for Economic Co-operation and Development also took part in the meeting.

2. The meeting adopted the provisional agenda with some changes in the order of consideration of the items.

3. Mr. K. Hjulsager (Denmark) was elected Chairman and Ms. I. Orešnik (Slovenia) Vice-Chairperson.

4. The following substantive topics were discussed at the meeting on the basis of papers prepared by Albania, Austria, Estonia, Italy, Kyrgyzstan, Moldova, Netherlands, Poland, Russian Federation, Sweden, Turkey, Ukraine, United States, FAO and ECE:

a) Handbook of concepts and definitions used in international collections of food and agriculture statistics;
b) Contribution to the next revision of FAO recommendations for agricultural censuses;
c) Statistical description of the transition process in the agricultural sector;
d) Confidentiality problems in agricultural statistics from conceptual and practical points of view;
e) Quality control of agricultural statistics;
f) Problems of thresholds in agricultural statistics;
g) Remote sensing in agricultural statistics;
h) Statistical issues of agricultural economics;
i) Economic accounts for agriculture.

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 description of the programme element "Agricultural statistics" from the integrated presentation of programmes of international statistical work in the ECE region, 1995/96 and 1996/97, approved by the Conference of European Statisticians at its forty-third plenary session (Geneva, 12-15 June 1995) was made available to participants. The following topics were pointed out as of interest for inclusion in the agenda of the twenty-third session of the Study Group planned for July 1997 in Geneva:

- FAO Programme for the World Census of Agriculture 2000 and countries' experiences;
- revised Handbook of concepts and definitions;
- results of reforming agricultural statistics under transition; new legislation on statistics;
- new developments in agricultural statistics in the UN ECE member countries (update of document FAO/ECE:ESS(95)-21; CES/AC.61/43);
- new developments in remote sensing;
- detailed procedures for collecting and processing agricultural statistics, including new data collection methods CAPI (computer-assisted personal interview) and CATI (computer-assisted telephone interview);
- statistical issues of agricultural economics (micro aspects - bookkeeping; macro aspects - results of work on the Handbook for EAA; problems of the hidden economy in agriculture);
- national practices in classifying different socio-economic types of farming;
- statistics connected with environment-related agriculture problems.

7. The meeting recommended adding to the "activities of ECE" of sub-programme 3 of the integrated presentation of programmes of international statistical work in the ECE region the following: "Twenty-third session of the Joint FAO/ECE Study Group on Food and Agricultural Statistics in Europe in 1997/98" to consider the subjects referred to in para. 6. The meeting recommended not to convene the Seminar on environment-related agriculture statistics envisaged for July 1996, but to consider questions of statistics connected with environment-related agriculture problems at its next session in 1997 (see para. 30 of the Annex).

ANNEX

Other conclusions reached at the meeting of the Study Group on Food and Agricultural Statistics in Europe (Geneva, 3-6 July 1995)

a) Handbook of concepts and definitions used in international collections of food and agriculture statistics

Documentation: Handbook.

1. The Study Group welcomed the publication of the Handbook of concepts and definitions prepared by the Intersecretariat Working Group on Food and Agricultural Statistics (IWG.AGRI). It was regarded as a useful reference document on international concepts, definitions and rules for both traditional market and transition economies. It was suggested that the Handbook should be continuously updated in view of future developments in agricultural statistics methodology in the four international organisations concerned. In addition to links with foreign trade classifications, the FAO commodity list could also be usefully linked with such classifications as PRODCOM and CPC. Although the Handbook does not cover agricultural prices and typology of agricultural holdings, it could benefit from including references to methodological documents existing in these fields. More generally, it was suggested that a list of documents prepared in the past several years for meetings on agricultural statistics at ECE, Eurostat, FAO and OECD be prepared by the IWG.AGRI and put on INTERNET to facilitate the access to and exchange of information.

2. The ECE secretariat was asked to approach countries for written comments on the Handbook and for proposals on how to improve it. Depending on the replies obtained and on the resources that the IWG.AGRI will be able to have access to this purpose, an updated and revised version of the Handbook could be prepared for the next meeting of the Study Group in 1997. The Study Group asked the ECE secretariat to accelerate the translation of the Handbook into Russian.

3. The Study Group encouraged the secretariats of the four international organisations to look into the possibility of drafting a similar handbook on forestry statistics drawing on the existing international practices in this area. The Intersecretariat Working Group on Forestry Statistics was asked to report to the next meeting of the Study Group on any developments which might take place in this regard.

b) Contribution to the next revision of FAO recommendations for agricultural censuses

Documentation: Paper by FAO.

4. Attention was drawn to a number of changes in the Programme for the World Census of Agriculture 2000 (WCA 2000) as compared with previous FAO

recommendations. They include improvements in the presentation and structure of the document, reflection of recent developments in the information technology (e.g. GPS, GIS, use of satellite imagery), the need to cover adequately the role of women in agricultural activities and to collect some basic data on the relations between agriculture and environment. Basic concepts, definitions and classifications have largely remained unchanged in the new Programme to ensure comparability with previous censuses.

5. It is expected that the Programme in English, French and Spanish would be published by the end of 1995. The preparation of regional (e.g. for Africa) and topical (e.g. on employment in agriculture, on collection of data on the link between agriculture and aquaculture) supplements as well as a new release of the technical publication "Taking agricultural censuses" are also envisaged by FAO. The ECE secretriat and IWG.AGRI were asked to arrange for translation of the Programme into Russian.

6. The Study Group was generally in favour of collecting some agriculture-related environmental information in the framework of the census. In countries with developed statistical systems environmental data could be better obtained by special sample surveys. In those countries where no such data are available from other sources, environment-related questions could be included in the agricultural census questionnaire.

7. The adequate reflection of the role of women in agriculture in the census was regarded as an important issue. Social and demographic statistics and linking agricultural census data with population files were mentioned as additional and particularly useful sources for this purpose.

8. The Study Group agreed that the Programme for WCA 2000 provides a good framework for obtaining internationally comparable agricultural statistics. General recommendations of the Programme should be regarded in the light of specific national conditions, the use of existing data sources and resource constraints.

c) Statistical description of the transition process in the agricultural sector

Documentation: Papers by Albania, Estonia, Kyrgyzstan, Moldova, Russian Federation, Turkey, Ukraine and ECE secretariat.

9. Economic changes at the level of the economy as a whole and in the agricultural sector in transition countries have created the need for transforming agricultural statistics and making them more suitable for policy making purposes. The system of the central planning and centralized supply of goods was dismantled, prices and foreign trade were liberalized, the financial system was reformed, and new market structures and market channels for flows of goods have emerged. The privatization process in agriculture and the break-up of big state and collective farms have led to a significant increase in the number of units of different property types engaged in agricultural production. This triggered the necessity of moving from previously existing exhaustive observation techniques to sample surveys. However, many transition countries will continue to rely on complete coverage methods to collect statistics from at least big agricultural enterprises.

10. Many transition countries are planning to take an agricultural census and to set up (or update) an agricultural register, thus creating a basis for sample surveys. It was argued that the availability of an agricultural register is helpful in preparing and carrying out sample surveys, however the cost related to setting up and maintaining a register should be carefully considered. In some transition countries the already existing agricultural registers, containing a wealth of information on units, are also used for various types of analysis. It was regarded as advantageous to have links between the agricultural and general business register. This offers better opportunities for analysing agriculture as one of the branches of the economy. The creation and maintenance of a statistical register can significantly benefit from the use of data in existing administrative registers. However, data from a statistical register should not normally be used for any administrative purposes.

11. It was pointed out that the existence of an agricultural register is not a precondition for taking sample suveys. Area frame survey techniques allow representative surveys to be carried out at relatively low cost without relying on the register. These techniques were also thought to be effective for data collection under rapid property and structural changes in the agricultural sector. Register (list) - based surveys and area frame surveys are both useful, depending on the purpose. One country's experience showed that area frame surveys could be better for major agricultural crops, while register-based surveys could be better for livestock and special crops.

12. The experience of Austria in dealing with the content, purpose, use and problems associated with maintaining the register of agricultural and forestry holdings was explained.

13. Assistance from international organizations and bilateral assistance programmes were regarded by transition countries as an important contribution to development of national agricultural statistics systems and their harmonization with international standards.

14. The Study Group found the secretariat's summary paper, on developments in agricultural statistics collection systems in UN/ECE member countries, useful and very informative. The secretariat was asked to update and amend this document, in view of changes in the forthcoming two years, for the next session of the Group.

d) Confidentiality problems in agricultural statistics from conceptual and practical points of view

Documentation: Paper by United States.

15. Procedures which ensure the confidentiality of individual agricultural data sets in traditional market economies are based on the principle which precludes the possibility of calculating individual units' output from publicly accessible data. Generally, the minimum number of units in any grouping should not be less than three. In addition, output of one or several units in any grouping should not exceed a certain percentage. For example, in the United States the output of the biggest unit should not exceed 60 per cent of the total output in any product. In France, the

combined output of the three biggest units should not exceed 80 per cent of the total output. In sectors with a limited number of dominating producers the minimum number of units may be increased to five and more. In some countries names and addresses of agricultural producers are protected from disclosure, in other countries these can be provided to companies and individuals for payment.

16. Ad-hoc analytical data are provided by some national statistical offices on requests for a fee. The final users do not have access to basic data; the requests are processed by statisticians who ensure the application of the confidentiality rules. To satisfy potential needs in analytical data, some statistical offices prepare standard tables at national and various regional levels which are open to the general public.

17. Confidentiality rules in Eurostat are established by the Council Regulation on Confidentiality. The Regulation allows transfer of confidential data from countries to Eurostat. Eurostat's Eurofarm database consists of two data sets. One contains anonymous individual data accessible by Eurostat statisticians only, the other containing standard tables with quantitative data is open to public.

18. Growing attention is paid to confidentiality issues in transition economies, although the problem of confidentiality often has a different connotation. In some of them information from registers, which is not considered commercially confidential, is open to public use; other information can be made available to the public only in an aggregated form. There may also be a gap between the emerging legal basis and current practice with regard to ensuring data confidentiality.

e) Quality control of agricultural statistics

Documentation: Papers by Italy and Sweden.

19. The meeting stressed the importance of ensuring high quality in agricultural statistics. Quality control procedures aim at obtaining accurate data on observed variables. It is important to engineer quality into the formulation of questions in questionnaires and data collection procedures during preparatory steps for censuses and surveys (quality assurance). The quality of published statistics can also be improved by using data editing and checking procedures and special methods and techniques for assessing the level of quality of final data. The readiness of agricultural producers to cooperate with the statistical office is extremely important, however it may take the statistical office many years (even decades) to build confidence with them. The use of independent statistical sources and administrative files for cross-checking results of surveys may also improve the quality of statistics.

20. Socio-economic changes in transition economies create great difficulties in obtaining accurate statistics on the agricultural sector. Moreover, in some countries and for various reasons output of certain groups of agricultural producers is not accounted for. New types of agriculture-related activities appear, for which there are no established statistical data collection procedures. Indirect methods of agricultural statistics

compilation may be more effective under new conditions. The use of balancing methods which compare data from various statistical systems (agricultural statistics, statistics on export and import of agricultural products, consumption by households, retail and wholesale trade statistics and others) have proved to be useful for estimating agricultural output for major agricultural products. Some transition countries carry out small-scale pilot studies with rigorous checks for observed variables to assess the quality of existing agricultural statistics and to decide on data collection and quality assessment procedures for future censuses and surveys.

f) Problems of thresholds in agricultural statistics

Documentation: Paper by the Netherlands.

21. Thresholds in agricultural statistics differ from country to country, depending on specific conditions in the agricultural sector and the purposes of statistical observation. The European Union's legislation allows, as one of the possibilities, the establishment of a threshold at such a level which ensures 99 per cent coverage of the total agricultural production in a given country. This is very high coverage compared with the coverage generally achieved for other branches of the economy.

22. The establishment of thresholds should be regarded in the framework of the overall purposes of agricultural statistics. If agriculture is regarded as a branch of economic activity like other branches, higher thresholds are more appropriate. Such thresholds would not affect negatively the quality and usefulness of collected information for agricultural policy making purposes and at the same time would significantly reduce the cost of data collection. Establishment of a threshold ensuring similar coverage of agricultural production across countries could make international comparisons easier.

23. However, the choice of thresholds is not made on the basis of considering agriculture as an economic activity only. Social, demographic, land use, rural development and other aspects are usually taken into account. Countries may also need to adopt different thresholds for different regions with a different structure of agriculture. Covering these aspects represents an overproportionate burden for agricultural statistics as compared to other statistical systems and requires additional resources for agricultural statistics.

24. For the agricultural census, no uniform lower limits for production factors such as area, number of trees, livestock, volume or value of output are suggested in the FAO Programme for WCA 2000. Countries which exclude small holdings from their agricultural censuses are strongly urged in the Programme to set the minimum size limit as low as possible and to take steps to collect data through special sample surveys from excluded holdings.

g) Remote sensing in agricultural statistics

Documentation: Papers by France and Poland.

25. The difference between remote sensing and area frame surveys was

clarified. Remote sensing techniques consist in computer-aided processing of aerial or satellite images and do not necessarily suggest going into the field. However, on-the-ground observations are carried out for checking the results and for improving the image processing software. Remote sensing is used for crop yield forecasts, for stratifying agricultural samples, for geographical information systems, and for other applications. Information obtained from remote sensing should be used with data from other sources. Satellite images are well suited to use in combination with area frame survey techniques.

26. The area frame survey techniques mean drawing a sample of areas or points within the territory in question. The area frame survey can be used to obtain area estimates directly. It can also be a basis for studying variables associated with the sampled areas or the farms to which these areas belong. The area frame survey technique may also be regarded as a tool for building a sub-register of farms which can then be used as a frame for sample surveys.

h) Statistical issues of agricultural economics

Documentation: Paper by the Russian Federation.

27. Policy making needs in mixed and changing economies call for mixed and changing statistics. The system of agricultural statistics should aim at describing adequately the behaviour of the old and newly appearing units, structures and flows. Particular attention in developing and introducing new statistics could perhaps be given to statistics characterizing structural changes in agriculture, agricultural price statistics, agricultural output in real terms and the impact of agriculture on the balance of payments, agricultural labour force and statistics on standard of living in rural areas. Agricultural statistics should evolve and develop as a part of the overall statistical system.

i) Economic accounts for agriculture

Documentation: Paper by FAO. Copies of draft Handbook on EAA were made available in the meeting room.

28. FAO introduced the draft of the Handbook on Economic Accounts for Agriculture (EAA). It was explained that after four decades of detailed work on economic accounts for agriculture and creation of data bases relating to food and agriculture, it was thought appropriate to make a comprehensive system to cover all the areas in which FAO is generally interested. The new system is based on 1993 SNA and is basically following the Social Accounting Matrix type framework. It consists of accounts on selected activities which are supported by statements to give detailed data. The system has been designed to meet requirements of decision makers dealing with food and agriculture. The system aims at inlcuding information on agriculture, forestry, fishery, food, nutrition, etc. The Handbook is proposed to be published by the end of 1995 in four languages including Arabic.

29. The Study Group generally agreed that the Handbook has been drawn up using 1993 SNA concepts and is very comprehensive. The similar system, being

developed by Eurostat and planned for use by EU has somewhat different objectives than taken into account by FAO. Eurostat's version of the EAA is expected to be published towards the end of 1996. OECD which so far has based its agricultural accounts on Eurostat's methodology so far, will adopt the system most suitable for OECD requirements. Some of the countries thought that they may face a difficult situation in adopting these systems if there are differences between them. The meeting asked the four secretariats to ensure full consistency of the two systems and with the 1993 SNA and to report to the next session of the Study Group on the efforts made and results achieved in this regard.

j) Other business

Documentation: Report of the October 1994 Joint ECE/EUROSTAT/FAO/OECD Work Session on Statistics Connected with Environment-related Agriculture Problems (CES/1995/R.6).

30. The Study Group discussed the suggestions of the above work session to change the name of the Group and to convene a seminar of agricultural and environmental statisticians in 1996. The Study Group concluded that its name should not be changed. It was also decided not to organize the seminar in 1996, but to extend the next Study Group meeting to five days from which some time could be reserved for a session on statistics connected with environment-related agriculture problems.

31. The Study Group was informed about the preparation of the fourth IWG.AGRI workshop on agricultural statistics for Central and Eastern European countries (Brdo, Slovenia, 11-15 October 1995).

32. The Study Group took note of the seminar on crop forecasting which took place in France. The proceedings of the seminar will become available at Eurostat.

k) Future work

33. The meetings's suggestions on future work are given in para. 6 and 7 of the body of this report.

34. The Study Group adopted this report before it adjourned.