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### **Report of the Food and Agriculture Organization of the United Nations**

#### Note by the Secretary-General

In accordance with a request of the Statistical Commission at its thirty-seventh session,\*\* the Secretary-General has the honour to transmit the report of the Food and Agriculture Organization of the United Nations on agricultural statistics, providing an update on the recent developments in agricultural statistics and on future challenges and plans. The report describes the basic features of the modernized corporate statistical database FAOSTAT and its new country version CountrySTAT, the World Programme for the Census of Agriculture 2010, work on agricultural classifications and efforts to improve the coverage, quality and exchange of agricultural statistics. The Commission may wish to review the developments and express its views on the status of agricultural statistics and provide advice on future directions and activities.

<sup>\*\*</sup> See Official Records of the Economic and Social Council 2006, Supplement No. 4 (E/2006/24), chap. 1.B.



<sup>\*</sup> E/CN.3/2007/1.

## Report of the Food and Agriculture Organization of the United Nations on agricultural statistics

#### Contents

		Paragraphs	Page
I.	Introduction	1	3
II.	State of food and agriculture statistics and new challenges	2–4	3
III.	New FAOSTAT and its national version CountrySTAT	5-23	3
	A. New FAOSTAT	5-15	3
	B. CountrySTAT and RegionSTAT	16-23	5
IV.	New classifications for agriculture	24–33	7
	A. Contributing to the revision of the Central Product Classification, the International Standard Industrial Classification of All Economic Activities and the International Standard Classification of Occupations	25–29	7
	B. Reviewing and updating the Food and Agriculture Organization of the United Nations list of agricultural inputs and products	30–31	8
	C. Adopting international classifications in the World Programme for the Census of Agriculture	32–33	8
V.	World Programme for the Census of Agriculture 2010	34–36	8
VI.	Quality in agricultural statistics	37–39	9
VII.	Statistical Data and Metadata Exchange in agricultural statistics	40–44	9
VIII.	Focal points for agricultural statistics in countries: ministries or national statistical offices	45–46	10
IX.	The Food and Agriculture Organization of the United Nations and the monitoring of the Millennium Development Goals	47–49	11
X.	Capacity-building and partnerships in agricultural statistics	50-53	12
XI.	New developments in fishery statistics	54-59	12
XII.	New developments in forestry statistics	60-63	14
XIII.	Resource statistics	64–66	15
XIV.	Statistics on rural development and agriculture household income.	67	15
XV.	International advisory group on agricultural statistics	68-71	16
XVI.	Fourth International Conference on Agricultural Statistics	72–74	17
XVII.	Points for action by the Commission	75	17

#### I. Introduction

1. The present report is submitted in follow-up to the presentation made by the Food and Agriculture Organization of the United Nations (FAO) at the thirty-fourth session of the Statistical Commission in 2003 (E/CN.3/2003/11). It reviews new developments that have occurred in the area of food and agricultural statistics since 2003. The focus is on major changes in the scope, compilation and dissemination of agricultural statistics and on the emerging issues and programmes that are of direct interest to member countries.

#### II. State of food and agriculture statistics and new challenges

- 2. Agriculture continues to be an important economic activity for populations in many countries. Nearly 45 per cent of the world population lives in rural areas and depends on agriculture for a living. Agriculture accounts for nearly 5 per cent of the world's total gross domestic product (GDP) and for about 7 per cent of total world trade. The ratios are much higher in many developing countries.
- 3. Traditionally, agricultural statistics have concentrated on the supply side and the producers and have neglected the demand side and the consumers. Furthermore, agricultural statistics have been isolated from the rest of the statistical system and have been limited to domestic issues. There is a need for realigning agricultural statistics in an environment of changing problems, constraints and opportunities in the agricultural sector. The most important challenges are to integrate statistics related to demand, supply and markets; to integrate agricultural statistics into the rest of the national statistical system; and finally to integrate them into international statistical systems.
- 4. Integration means, on the one hand, the use of common classifications and definitions; the adoption of data and metadata exchange standards; and the employment of integrated conceptual frameworks. On the other hand, it implies expansion in the scope and coverage of agricultural statistics, with linkages between agriculture and rurality; resources and production; production and consumption; primary production and agro-industry; domestic production and trade; and agriculture and the rest of the economy.

#### III. New FAOSTAT and its national version CountrySTAT

#### A. New FAOSTAT

5. In July 2006, the FAO Statistics Division released to the public the new, fully re-engineered version of the FAO corporate statistical database, FAOSTAT (http://faostat.fao.org). The modernization of FAOSTAT was undertaken over the past three years to allow for the continuation of one of the most important FAO corporate systems which contributes to the organization's strategic objective of collecting, analysing, interpreting and disseminating information relating to food, agriculture and nutrition. Additional functionalities and data sets were released in December 2006 as part of the biannual update schedule.

- 6. The new FAOSTAT system provides updated tools for compiling, validating, estimating and analysing data, with an integrated centralized statistical metadata system. It is based on revised statistical methodologies that ensure data quality standards are applied consistently. The system also provides an enhanced mechanism for improved user access to data. During the redevelopment of FAOSTAT, considerable attention was paid to the adoption of a technical environment that was sustainable in the medium term and in harmony with those existing at the international level.
- 7. **Structure.** The new FAOSTAT system architecture introduces the concept of a core database that contains a fully consistent and coherent data set in addition to detailed thematic areas or modules. The core represents a complete, integrated statistical data set, across all themes and all countries, providing a time series of standardized commodities from 1990 onwards.
- 8. The core database and the new FAO *Statistical Yearbook* share the same conceptual framework in that a standard list of countries or commodities can be extracted and combined for all domains. Furthermore, the different dimensions of the data set are symmetrical and hence can be overlaid, allowing for the construction of numerous composite indicators.
- 9. This also means that the core data set should have complete coverage, hence the list of commodities is slightly smaller (aggregated) than the list of commodities outside the core. To allow for a complete data set, such advanced estimation techniques as maximum entropy and Bayesian posterior density estimators are used. The satellite databases contain the historic, long-term time series from 1961, albeit converted to the new classification based on the Harmonized Commodity Description and Coding System ("Harmonized System").
- 10. **Conceptual framework.** The integrated statistical frameworks constitute the core of FAOSTAT and consist of the following:
  - Supply utilization accounts and food balance sheets (production, trade, non-food utilization and consumption)
  - Resources (input availability, input trade and input use)
  - Prices (input prices, producer prices, consumer prices and trade prices)
  - Trade (trade quantities, trade values and trade unit prices)
  - Value added (inputs, production, input prices and producer prices)
  - Food security (food supply and food demand).
- 11. **Metadata.** Structured, comprehensive and centralized metadata is a major new feature of FAOSTAT. The metadata system provides a framework for managing FAOSTAT, thus providing procedures and mechanisms to avoid redundant collection and maintenance of metadata, resolve inconsistencies and allow for easy user access to many layers of metadata for each data item. A central repository and standardized methods and modules for documenting metadata have been developed. FAOSTAT actively collaborates with the Statistical Data and Metadata Exchange (SDMX) initiative and has mapped terminology in the FAOSTAT metadata system with the Metadata Common Vocabulary (MCV). Those efforts draw on substantial work dedicated to building the FAO Agricultural Bulletin Board on Data Collection,

Dissemination and Quality of Statistics (ABCDQ) and on efforts in the international statistical metadata community.

- 12. Classification. FAOSTAT traditionally used a list of commodities that served the specific needs of agricultural production statistics. The list was inspired by the Standard International Trade Classification (SITC) and adapted by FAO where needed, in most cases by the addition of detail. FAO held an expert group meeting on classifications in agriculture in August 2004 in which it was recommended that the new FAOSTAT commodities be reclassified according to commonly used international classifications. Following the recommendations of the meeting, an approach based on the Harmonized System was employed for the FAOSTAT commodities list. Since the Harmonized System, Central Product Classification (CPC), Standard International Trade Classification and FAOSTAT lists are related, comparison of the CPC and the FAOSTAT list through the Harmonized System, which provides the building blocks of the CPC, is now made possible.
- 13. **Dissemination.** FAOSTAT system products are reviewed according to the FAOSTAT dissemination strategy focusing on the following: (a) the needs of FAO information users; (b) the new functionality of the complete statistical system; and (c) new technologies and global trends in the dissemination of information. Enhancing the functionality of the FAOSTAT portal gives users additional possibilities in performing substantive analytical work.
- 14. Users of the FAOSTAT portal are now able to select statistical data and metadata and subsequently to display and visualize the selected information using the function provided by the portal, or they may download the information. Functions to display metadata and data (including sorting, aggregating and filtering options) and to visualize selected data in different formats (tabular format, charts or maps) are also provided.
- 15. Furthermore, the FAOSTAT portal aims to be a gateway to all food and agriculture statistics and indicators produced by FAO as well as by other international and national organizations through a rich system of references and links.

#### **B.** CountrySTAT and RegionSTAT

- 16. Member States have been requesting assistance from FAO in developing their nationally owned statistical information systems on food and agriculture to facilitate the compilation, processing and dissemination of high quality statistics using sound statistical methodology. FAO is responding to that demand with a regional and national version of FAOSTAT called CountrySTAT, which is designed to help countries harmonize and organize statistical information on food and agriculture at the national and subnational levels across various data domains.
- 17. **Structure.** The core statistical module described above is common to CountrySTAT and FAOSTAT and offers the users of both systems the possibility of comparing statistical information across countries and across domains on an annual basis. A series of thematic CountrySTAT modules offer exhaustive coverage of the countries' specific statistical needs at disaggregated levels of commodities. The modules, also called "satellite modules", offer detailed information, disaggregated

over space and time dimensions. Conceptual linkages for aggregating data to higher thematic levels are a standard feature of the CountrySTAT framework.

- 18. **Technology.** The underlying information technology for CountrySTAT is based on, but not limited to, a software suite called the PC-Axis software family. This software suite has been developed and is in use by five Nordic countries plus 21 other national and international statistical offices around the world. CountrySTAT has applied and enriched the software suite with its statistical framework for the food and agriculture domain and adapted it to the needs of developing countries. The users of this information technology compose the PC-Axis reference group, which has a worldwide support and feedback mechanism in addition to its annual meetings. PC-Axis software is open for further development and affordable, especially for developing countries.
- 19. With an international network of CountrySTAT systems, FAO aims to gather and synchronize statistical information on food and agriculture at the national and subnational levels together with the introduction and promotion of such international statistical standards as the extended Harmonized System, the Statistical Data and Metadata Exchange Standard (SDMX-ML, version 2.0) and the Global Administrative Unit Layers (GAUL), and build institutional capacities to sustain them.
- 20. **Feasibility.** FAO CountrySTAT has carried out three feasibility studies in 2005 in partnership with the National Statistical Committee of Kyrgyzstan, the Central Bureau of Statistics of Kenya and the Ghana Statistical Services. FAO has trained over 30 country experts and has launched CountrySTAT projects with 15 national statistical offices. The national CountrySTATs will provide statistical information on food and agriculture, primarily for policymakers but also for researchers, international organizations and other users.
- 21. **RegionSTAT.** FAO has also elaborated RegionSTAT, an intermediate version between CountrySTAT and FAOSTAT, which shares the same core framework and parts of the detailed country modules that are of interest to a homogenous group of Member States within a region. Currently, three RegionSTAT projects are being implemented.
- 22. **SDMX.** For CountrySTAT, the FAO Statistics Division has adapted SDMX-ML, version 2, by developing a data definition structure (or key family) for the domain of food and agriculture. The adaptation has been tested for semi-automated data and metadata exchange between CountrySTAT and RegionSTAT. During the pilot project, the concept of a FAO CountrySTAT model of SDMX was elaborated. Additional information is provided in section VII of the present report.
- 23. The FAO CountrySTAT programme is seeking partnerships and strategic alliances to move towards the development and implementation of its new sectoral approach to food and agriculture statistics. If the effort is successful and the demand from the countries is forthcoming, the CountrySTAT programme of work for 2007-2008 can be enriched with new analytical modules for sectoral policy analysis and monitoring and the geographical coverage widened to cover more countries. Such an extended CountrySTAT programme would be based on the same principles for resource needs and expanded work plans. Sources for funding are being sought in the form of multilateral funds from leading international development agencies.

#### IV. New classifications for agriculture

24. The thirty-fifth session of the Statistical Commission proposed that FAO take the lead in the work on classifications for agriculture. The efforts of FAO in establishing new classifications for agricultural activities and products have been carried out in parallel on three fronts: contributing FAO proposals for the Central Product Classification, the International Standard Industrial Classification of All Economic Activities (ISIC), and the International Standard Classification of Occupations (ISCO); updating the FAO list of agricultural inputs and products; and applying international classifications to the World Programme for the Census of Agriculture.

# A. Contributing to the revision of the Central Product Classification, the International Standard Industrial Classification of All Economic Activities and the International Standard Classification of Occupations

- 25. In recognition of the long-standing request that the structures of the Central Product Classification and the International Standard Industrial Classification of All Economic Activities be more responsive to the needs of agricultural statistics, FAO contributed its proposals for both classifications, developed through close cooperation and consultation with the Expert Group on International Economic and Social Classifications and its Technical Subgroup and with other international and regional organizations and member countries.
- 26. The FAO proposals were based on careful study and wide consultation among experts and specialists in various departments and divisions. The items in the FAO proposals for the CPC, for example, were those that have been compiled and disseminated in FAOSTAT and used by the agricultural research and policymaking community for more than 45 years.
- 27. As a result of the adoption of the FAO proposal for the CPC, supplemented by comments from countries, the new version of the CPC now better reflects the reality and needs of agricultural statistics. Compared with the previous version, about 200 new items have been added in the new CPC in the areas of agriculture, forestry, fisheries and food, with better structures and clarified concepts and definitions as well as the necessary details to be implemented in the CPC. The new items are the agricultural products that are important in production, distribution, consumption and nutrition in the context of the fight against hunger and the alleviation of undernourishment.
- 28. Similarly, the new ISIC meets the request by many countries to have a more detailed breakdown for the production of crops and the farming of animals; to recognize the importance of production of seeds and seedlings plants; and to clarify the content of "seed processing" and the related production of seeds for flowers, fruit and vegetables.
- 29. In early 2005, a proposal by FAO for the International Standard Classification of Occupations was submitted to the Bureau of Statistics of the International Labour Organization (ILO) suggesting some specific recommendations to improve the classification of occupations in the areas of agriculture, forestry and fisheries in

ISCO-88. Currently, FAO is working closely with ILO to review the final draft of the structure and to make it more applicable in the areas of agriculture, fisheries and forestry.

### B. Reviewing and updating the Food and Agriculture Organization of the United Nations list of agricultural inputs and products

- 30. As part of the project to modernize FAOSTAT, the FAO list of agricultural products has been carefully reviewed and revised. Through the table of correspondences between the FAOSTAT list of commodities, the CPC and the Harmonized System, every effort has been made to ensure not only the continuity of the statistical time series of FAOSTAT but also the consistency of its structure with that of international classifications. From among them, a list of 200 aggregated primary food items has been identified for the purpose of compiling food balance sheets and supply utilization accounts, statistics and indicators that play an important role in the monitoring of the progress of the Millennium Development Goals. The items have been selected on the basis of their importance in terms of nutritional content, quantities and prices, and defined by the same definitions, contents and titles as in the Harmonized System.
- 31. The list has been expanded to such areas as agricultural inputs, including agricultural machinery, fertilizers and pesticides, and agricultural labourers and workers, reflecting the emerging and enlarged agricultural statistical domains.

### C. Adopting international classifications in the World Programme for the Census of Agriculture

- 32. The inclusion of FAO proposals for the ISIC and the CPC in the new versions of the classifications has effectively facilitated the application of those proposals to the next World Programme for the Census of Agriculture.
- 33. In the design of the World Programme for the Census of Agriculture 2010, the concepts and principles of the System of National Accounts and the ISIC have been used to define the agricultural census units, agricultural activities and the scope of the agricultural census. For the first time in its history, a new crop list has been constructed on the basis of the principles and structures of the CPC and the ISIC. The Indicative Crop Classification, the Classification of Livestock and the Classification of Machinery and Equipment recommended in the World Programme for the Census of Agriculture 2010 are now fully compatible with the ISIC and the CPC.

#### V. World Programme for the Census of Agriculture 2010

- 34. The census of agriculture lies at the heart of the national food and agricultural statistics system, yet it is often conducted in isolation without due regard for its proper integration into the national statistical system.
- 35. The World Programme prepared by FAO for the current round of agricultural censuses (2006-2015) seeks to address that issue and places emphasis on the census of agriculture as a benchmark for the current agricultural statistics system and as a

frame for agricultural sample surveys. It also recognizes that some countries may wish to combine the agricultural census with the aquaculture census. In addition, it acknowledges that some countries may wish to expand the scope of the agricultural census to collect additional agricultural data for households that are not agricultural producers when socio-economic data on a particular population subset, such as the rural population, is required.

36. The programme also explores the relationship of the census of agriculture to the population census and other censuses and recommends that countries should actively explore ways in which the various national census activities can be coordinated to create greater synergy, efficiency and value added between those large statistical exercises. That approach is also echoed in Revision 2 of *Principles and Recommendation for Population and Housing Censuses* (forthcoming).

#### VI. Quality in agricultural statistics

- 37. The ongoing work of FAO on data quality frameworks, monitoring and reporting has been presented to various international meetings and to the data quality conferences of the Committee for the Coordination of Statistical Activities. The work has focused on the development of data quality frameworks that show the dependence of data quality on data suppliers and users in the statistical chain as well as on monitoring and reporting on data quality at various stages in the process. FAO is actively collecting, monitoring and reporting on data quality in agricultural statistics in FAOSTAT.
- 38. The Food and Agriculture Organization of the United Nations has found that the basic concepts and tools for monitoring and reporting on data quality in agricultural statistics are neither well known nor widely used. To address the issue, FAO will continue to (a) further develop the tools to monitor and report on data quality in all aspects of the agricultural statistical process, and (b) actively monitor and report on data quality in agricultural statistics and integrate data quality concepts and monitoring at the country level through technical cooperation and the CountrySTAT programme.
- 39. FAO was one of the first international organizations officially to endorse the principles governing international statistical activities (E/CN.3/2006/13, annex) developed by the Committee for the Coordination of Statistical Activities, and FAOSTAT is fully compliant with the principles of good practice governing international statistics.

### VII. Statistical Data and Metadata Exchange in agricultural statistics

40. The Bank for International Settlements, the European Central Bank, the Statistical Office of the European Commission (Eurostat), the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD), the United Nations and the World Bank have joined together to focus on business practices in the field of statistical information that would allow more efficient processes for the exchange and sharing of data and metadata among

06-67464 **9** 

international organizations, their member countries, the data providers and the users of statistics, and have sponsored the SDMX Initiative.

- 41. In 2004, the SDMX Initiative published SDMX 1.0 as an ISO Standard (ISO/TS 17369:2005), which covered, among other topics, the framework, the model and the Extensible Markup Language (XML) schema. Version 2.0 was published in 2005 and includes support for enhanced metadata, for metadata registries, for mapping between data and metadata structures and related code lists and taxonomies and for data validation.
- 42. FAO has explored the preceding e-standard in version 2.0 through FAOSTAT and CountrySTAT standardization activities in the domain of food and agriculture by means of an SDMX pilot project. The pilot project covers two national CountrySTAT systems utilizing the FAO SDMX registry in cooperation with the RegionSTAT developed for the West African Economic and Monetary Union (UEMOA).
- 43. The standardization activity was based on the elaboration of a core version of a data structure definition, also known as a key family, for the food and agriculture domain. The FAO SDMX registry, hosted by the Open Data Foundation, enabled the publication on demand of data and metadata. The registry also provided a generic and integrated approach to CountrySTAT data warehouse architecture based on the self-describing data structure definition and delivered aggregated data at the upper level of RegionSTAT, which is linked not only to metadata but also to the primary data from which it is formed.
- 44. For the international audience the FAO SDMX pilot network was demonstrated at the eighth session of the Committee for the Coordination of Statistical Activities (Montreal, 4-5 September 2006) and the Eurostat SDMX Open Data Interchange (SODI) Task Force Meeting (Luxembourg, 13-14 November 2006), and will be presented at the SDMX meeting in Washington, D.C., from 9-11 January 2007. The demonstrations raise awareness of the potential benefits of applied exchange standards and the understanding of the potential role of SDMX standard in this process.

### VIII. Focal points for agricultural statistics in countries: ministries or national statistical offices

- 45. During 2006, the FAO Statistics Division revised its major annual questionnaires on agricultural production, prices and land use irrigation and fertilizers. During the process it was decided that data requests would be consolidated for each country, with four questionnaires sent in one correspondence, and that the data request would be directed to the national statistical offices for completion or for transmittal by those offices to the appropriate national authorities. The national statistical offices were requested to take follow-up action on the questionnaires by facilitating their prompt completion and timely return. Previously, the FAO Statistics Division had sent individual questionnaires for each subject domain to multiple focal points in countries, including national statistical offices and sections within ministries.
- 46. The change in procedure and the new reliance on the national statistical office as the country focal point for statistics has been positively received in most cases.

Furthermore, the questionnaire response rate and the quantity and quality of information compiled have improved significantly. Only a few countries have requested that FAO continue to send communications via FAO protocol offices or directly to national ministries.

# IX. The Food and Agriculture Organization of the United Nations and the monitoring of the Millennium Development Goals

- 47. The Statistics Division of the Food and Agriculture Organization of the United Nations has participated in the preparation of the United Nations Millennium Development Goal reports for 2005 and 2006 in response to the request by the General Assembly and will contribute to the preparation of the midterm report on the Goals for 2007. The Division has been monitoring and reporting on progress towards the Millennium Development Goals on two indicators: the first is the proportion of population below the minimum level of dietary energy consumption (prevalence of undernourishment), and the second, on environmental sustainability, is the proportion of forest cover. In addition, based on a recent review of the Millennium Development Goal indicators conducted by the Inter-agency and Expert Group on Millennium Development Goal indicators, as requested by the Statistical Commission and coordinated by the United Nations Statistics Division, FAO will be reporting on two new indicators related to environmental sustainability.
- 48. In follow-up to the International Scientific Symposium on Measurement and Assessment of Food Deprivation and Undernutrition held in Rome, Italy in June 2002, FAO has made methodological and data improvements on the indicator on the proportion of population below the minimum level of dietary energy consumption; it will also update its estimation procedures for food consumption levels, food needs, food wastage and inequality of access to food due to income and biological factors, for global monitoring. The improvements will be reported in the *State of Food Insecurity in the World 2007* and will be disseminated in the food security statistics module of the new FAOSTAT.
- 49. The household survey programme of the FAO Statistics Division has been contributing to the strengthening of country capacity in deriving estimates of the proportion of population below the minimum level of dietary energy consumption (prevalence of undernourishment) and of other useful food insecurity statistics at subnational levels, utilizing existing data on food consumption from household income and expenditure surveys and other types of household surveys. Those activities are being carried out through three different initiatives: (a) national demonstration centres on food consumption statistics derived from Household Income and Expenditure Surveys, which are regional training workshops implemented in Asia, Africa, Eastern Europe and Western Asia for 58 countries; (b) technical assistance by means of on-the-job training in more than 10 countries in Asia, Africa and the Commonwealth of Independent States, with country training workshops supported financially by donors such as the European Commission (EC) through the project EC-FAO Food Security Information for Action Programme; and (c) the International Demonstration Centre on Food Security and Consumption Statistics at FAO headquarters in Rome, for countries that are not supported by

specific projects or not participating in the national demonstration centres in the regions.

#### X. Capacity-building and partnerships in agricultural statistics

- 50. The Food and Agriculture Organization of the United Nations has four statutory bodies on agricultural statistics at the regional level, which meet on a biennial basis. Those meetings provide a forum for the presentation of new and emerging methodologies and also provide an opportunity to discuss developments at the global level.
- 51. In addition, regional or subregional workshops are organized on topics of primary interest in the development of national agricultural statistics systems. Recent workshops have included the World Programme for the Census of Agriculture 2010, the integration of agricultural statistics in the national statistical system, the CountrySTAT framework, metadata for national agricultural statistical systems and food consumption statistics derived from the Household Income and Expenditure Surveys.
- 52. Training is also provided through country projects, especially on-the-job training of national counterpart staff for the organization of censuses and surveys and for the preparation of food balance sheets.
- 53. The FAO capacity-building programme is designed to integrate with, and complement, other capacity-building programmes in statistics of the United Nations and its organizations and agencies. It also fits within the broader context of the Partnership in statistics for development in the twenty-first century (PARIS21). The extent to which FAO can deliver such capacity-building is increasingly dependent on the resources available and on the availability of extrabudgetary resources.

#### XI. New developments in fishery statistics<sup>1</sup>

- 54. FAO collects, maintains and analyses data on the national production of capture and aquaculture fisheries, commodity and trade of fishery products, disposition and human food consumption of fishery products, and the number of fishers and the fleet. The databases are maintained and regularly disseminated through the publication of yearbooks and through the website. In addition, FAO has conducted and/or coordinated the following activities to (a) improve fishery data collection and dissemination systems at the national, regional and global levels; and (b) develop guidelines, standardization and harmonization among relevant groups.
- 55. Coordinating Working Party on Fishery Statistics. The Coordinating Working Party on Fishery Statistics was established to provide a mechanism to coordinate fishery statistical programmes of regional fishery bodies and other intergovernmental organizations with a remit for fishery statistics. The number of member organizations is currently 15 and expanding every year. The Working Party has continually reviewed requirements in fishery statistics for research, policymaking and management and has discussed and agreed on standard concepts, definitions, classifications and methodologies for the collection and collation of

12 06-67464

<sup>&</sup>lt;sup>1</sup> Contributed by the office responsible for fishery statistics in the FAO Fisheries Department.

fishery statistics. It has also made proposals for coordinating and streamlining statistical activities between relevant intergovernmental organizations. Its agenda for the forthcoming twenty-second session includes integration and harmonization between different organizational databases, aquaculture statistics, the trade/catch documentation system, vessel and port classification, and fishery data quality indicators.

- 56. **Fishery Resources Monitoring System.** The Fishery Resources Monitoring System (FIRMS) disseminates the information held at regional fishery management organizations in a harmonized way. The programme was launched in February 2004, and the website was released to the public during a side event of the Review Conference on the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, held in New York from 22 to 26 May 2006. On that date, the FIRMS website contained fact sheets for about 500 marine resources and stocks, including, to the extent possible, information on their status and trends. The review conference, under cluster 1 on the conservation and management of stocks, recommended that States, individually and collectively through the regional fishery management organizations, cooperate with FAO in the implementation and further development of the Fishery Resources Monitoring System initiative.
- 57. For FIRMS to succeed, the key issue is the regular updating of the information it contains. The FIRMS content management system proposes various mechanisms for updating content, ranging from a simple online editor to a set of tools to convert Microsoft Excel or Microsoft Word documents (e.g. stock assessment reports) into FIRMS format. The system was designed to grant the FIRMS partner, as data owner, full responsibility for the information disseminated in a flexible way through the FIRMS website. FAO, through the FIRMS Secretariat, organizes training sessions for FIRMS partners to develop their technical skills in utilizing FIRMS web-based information systems. Further improvements in multilingual capacity and implementation of a user-friendly workflow management system are planned by the end of 2006.
- 58. **FishCode-STF Project.** Knowledge of the status and trends of capture fisheries, including socio-economic aspects, is key to sound policy development, better decision-making and responsible fishery management. Concerned with persistent deficiencies in fishery data and information collection systems worldwide, FAO introduced the Strategy for Improving Information on Status and Trends of Capture Fisheries<sup>2</sup> in order to provide a practical framework to improve the knowledge and understanding of fishery status and trends. To accomplish that objective, the FishCode-STF project was established in November 2004. Actions under the project include development of a global inventory of fish stocks and fisheries; data-collection systems for small-scale and multispecies fisheries; criteria and methods for ensuring information quality and security; arrangements for the provision and exchange of information; and capacity-building in developing countries.

<sup>&</sup>lt;sup>2</sup> Food and Agriculture Organization of the United Nations, Report of the twenty-fifth session of the Committee on Fisheries, Rome, 24-28 February 2003, FAO Fisheries Report No. 702 (FIPL/R702(En)), appendix H.

59. Since its inception in November 2004, the FishCode-STF project has organized a regional workshop in South-East Asia in collaboration with the Southeast Asian Fisheries Development Centre, a regional workshop in Central America in collaboration with OSPESCA (Organización del Sector Pesquero y Acuícola del Istmo Centroamericano), a regional workshop in the Pacific region in collaboration with the Secretariat of the Pacific Community, a regional workshop in China in collaboration with the Bureau of Fisheries of the Ministry of Agriculture of China and the Chinese Fisheries Society. Improvement of fishery monitoring systems and actions to be undertaken were the major topics of the workshops.

#### XII. New developments in forestry statistics<sup>3</sup>

- 60. **FAO Yearbook of Forest Products.** The yearbook contains annual data on the production, consumption and trade of forest products for five years and the direction of trade for two years. The most recent yearbook, published in 2006, covers the period 2000-2004; it was made possible through the cooperation of Governments, which supply most of the data in the form of replies to standardized questionnaires. The collection and analysis of data is a collaborative effort by FAO, the Economic Commission for Europe, Eurostat and the International Tropical Timber Organization. The information is also available online, where data are updated on a regular basis. FAO synthesized the information on forest products and in 2005 produced a publication outlining the key trends in production, consumption and trade for the period 1960-2003. The information on forest products clearly indicated the rapid growth of production and consumption of forest products in the Asia-Pacific Region.
- 61. Forest Resource Assessment Programme. At the request of the member nations and the world community, FAO regularly monitors the world's forests through the forest resource assessment programme. The most recent assessment, the global forest resources assessment, 2005, has been completed, and the results were published in 2006. This is a very comprehensive assessment that was broader than the one carried out in 2000, and outlines the changes in the extent of forest resources, biological diversity, forest health and vitality, productive functions of forest resources, protective functions of forest resources and socio-economic functions. FAO has already initiated the process of undertaking the forest resource assessment 2010, and initial discussions of concepts, approaches and the implementation process have been undertaken.
- 62. In 2004, FAO compiled statistics on the trends and current status of the contribution of the forestry sector to national economies (specifically GDP and employment) for the period 1990-2000. Those statistics provide a clear picture of the changes in the role of the forestry sector, including regional shifts, and are currently being updated to the year 2005.
- 63. During its twenty-first session, held in India in April 2006, the Asia-Pacific Forestry Commission endorsed the proposal for updating the "Asia-Pacific forestry sector outlook study" (FAO Working Paper No. APFSOS/WP/08). The earlier study, completed in 1998, assessed trends and projected changes to the year 2010. The update will extend the time horizon of analysis to 2020 and will analyse the

<sup>&</sup>lt;sup>3</sup> Contributed by the office responsible for forestry statistics in the FAO Forestry Department.

probable scenarios of development in the forest sector in the context of the larger changes within and outside the region. The study will commence in October 2006 and is expected to be completed in two years.

#### XIII. Resource statistics

- 64. Data collection on resource statistics was suspended in 2003/04 in order to redevelop the methodology and statistical frameworks and integrate international classifications, such as the Central Product Classification and the Harmonized Commodity Description and Coding System, as well as data from other international sources and country questionnaires. The work was finalized in 2006 with new integrated resource questionnaires being sent to countries for the fertilizer and land domains. The redevelopment of the methodology and statistical frameworks for the agricultural machinery and agro-chemical domains is ongoing and is expected to be finalized in 2007.
- 65. **Fertilizer statistics.** The revised fertilizer domain uses the resource utility accounts framework (input-output) and covers the following: production, domestic availability, utilization, trade, prices and metadata. Data collection at the country level is on a product basis, as is the fertilizer data, which is also included from other international sources (United Nations Statistics Division, International Fertilizer Industry Association) with conversion to a nutrient basis for dissemination and analysis. The above structure allows construction of fertilizer resource accounts at the various levels of aggregation, in physical and monetary terms.
- 66. Land statistics. The revised land domain covers the following: land use and irrigation, and land use (plantations, land prices and metadata). The revised approach provides a multiple-level aggregation for land use based on the Land Cover Classification System developed by FAO and the United Nations Environment Programme (UNEP) in 2005. Land Cover Classification System concepts in land cover were adopted and used for country data collection in 2006 and will provide the structure for production of land resource accounts.

### XIV. Statistics on rural development and agriculture household income

67. The "Handbook on rural household's livelihood and well-being: statistics on rural development and agriculture household income" was prepared by the Task Force on Rural Development Statistics and Agriculture Household Income of the Inter-Secretariat Working Group on Agricultural Statistics, and was published in 2006 by the Economic Commission for Europe. Since the current version contains mostly the experiences of and case studies from developed countries, the work on a supplement to cover issues relevant to developing countries is in progress. FAO is taking the lead in preparing the supplement in collaboration with the World Bank and within the framework of the Task Force.

#### XV. International advisory group on agricultural statistics

- 68. Following a thorough evaluation of FAO activities in statistics in 2001, the establishment of an international panel on agricultural statistics was recommended. The Statistical Commission supported the proposal at its thirty-fourth session in 2003, and since then an international advisory group on agricultural statistics has been established by FAO and has met twice, in 2003 and 2005. The next meeting of the group is planned for 2007.
- 69. The advisory group is composed of permanent members from five international organizations (the Directors of Statistics of Eurostat, ILO, OECD, the United Nations and the World Bank), PARIS21, four Directors-General of statistics of developed countries and five Directors-General of statistics of developing countries, with the countries represented rotating every 2 to 4 years. Hungary, India, Italy, Japan, Kenya, the Philippines, Mexico, Turkey and the United States of America are currently represented in the advisory group. This body is instrumental in setting priorities for FAO statistical activities. Advice provided by the advisory group has been highly appreciated by all parties concerned with agricultural statistics.
- 70. Another coordinating body for agricultural statistics in Europe is the Inter-Secretariat Working Group on Agricultural Statistics (IWG.AGRI), comprising representatives of the four principal organizations, namely, the Statistical Office of the European Communities, the Economic Commission for Europe, the Food and Agriculture Organization of the United Nations and the Organization for Economic Cooperation and Development. After the political and economic changes in the early 1990s in Eastern Europe and in the countries of the former Soviet Union, the main concern of international bodies operating in the field of agricultural statistics was to find an appropriate way to adapt efficiently to the new situation. It was clear from the outset that a well-structured, non-duplicative reinforcement of their cooperation was the only possible way to provide a tailor-made support programme to those economies in transition to smooth their integration into existing statistical systems being used in other countries in the region. The Working Group was established in response to that need.
- 71. In 2005, following a review of the achievements of the Working Group, it was agreed that its scope should be expanded to include rural indicators. A task force on rural development statistics and agriculture household income was also established. The last meeting of the Task Force in Paris identified important areas where it could continue its activities, however, the question of the proper institutional framework for the Task Force was raised. In that connection, since agricultural statistics have recently been accorded lower priority at OECD and the Economic Commission for Europe, to carry on the work in this area, two options are put forward for the consideration of the Statistical Commission:
- (a) Place the activities of the above-mentioned Task Force under the aegis of the FAO international advisory group on agricultural statistics, which includes the World Bank, ILO, Eurostat, OECD and the United Nations Statistics Division in its membership;
- (b) Create a city group on statistics on rural development and agriculture household income.

#### XVI. Fourth International Conference on Agricultural Statistics

- 72. The Fourth International Conference on Agricultural Statistics (ICAS-4) will take place from 22 to 24 October 2007 in Beijing, China. The Conference will be hosted by the National Bureau of Statistics of China and sponsored by Eurostat, FAO, the International Statistical Institute (ISI), the United Nations Statistics Division, and the World Bank, with the Scientific Programme Committee chaired by FAO. It is part of the series of international conferences in agricultural statistics conducted under the framework evolved by the ISI Committee on Agricultural Statistics.
- 73. The main theme of the Conference is "Advancing statistical integration and analysis". A draft programme has been developed by the Scientific Programme Committee. It will be finalized in early 2007 for wide dissemination. The Conference will focus on the fundamental issues relating to the development of agricultural statistics within an integrated national statistical system. Through discussion and debate, the Conference will provide a forum to facilitate a better understanding of the relationships between economic, social, political and geographic issues related to rural development and the reduction of poverty; and will seek ultimately to identify, maintain and establish the core indicators needed for policy and decision-making. To promote wide use of agricultural statistics, the Conference will, in particular, stress the importance of statistical harmonization and the need for comparability between countries. Information regarding the Fourth International Conference is posted on a website maintained by the National Bureau of Statistics of China (http://www.stats.gov.cn/english/icas).
- 74. The previous international conference on the subject was held in Cancun, Mexico in November 2004. The main theme of the third Conference was "Measuring sustainable agriculture indicators", with an emphasis on rural development. Some 300 participants attended that event.

#### XVII. Points for action by the Commission

#### 75. The Commission may wish to:

- 1. Discuss the new challenges facing agricultural statistics and provide its guidance regarding future directions and activities.
- 2. Review the efforts of the Statistics Division of the Food and Agriculture Organization of the United Nations in improving the global database on food and agricultural statistics through FAOSTAT and its efforts to build a bridge between national, regional and global statistics through RegionSTAT and CountrySTAT. The Commission may also wish to comment and make suggestions on the way forward in those and similar attempts contributing to cross-country comparable, quality statistics serving the needs of national and international communities.
- 3. Acknowledge the contribution of FAO to the revision and updating of international classifications and endorse its efforts to align its own classifications to the international ones.

- 4. Endorse the FAO approach to integration of agricultural censuses with other census and surveys and, in particular, with the population and housing census.
- 5. Express its views on the importance of establishing quality standards and monitoring them. In addition, the Commission may wish to acknowledge and encourage the efforts of FAO and the other international organizations working with the Committee for the Coordination of Statistical Activities to improve data quality.
- 6. Acknowledge the efforts and contribution of FAO to the development and adoption of international standards for data and metadata exchange in general and the Statistical Data and Metadata Exchange Initiative in particular.
- 7. Reiterate the importance of keeping national statistical offices informed and involved in the compilation of statistics by international organizations, and endorse FAO in its efforts to move towards national statistical offices as the principal focal points for national statistical activities. The Commission may wish to remind the national statistical offices of their responsibility in accommodating that task, although it may involve an additional burden for them.
- 8. Note the contribution by FAO to the global monitoring of hunger within the framework of the Millennium Development Goals and as a follow-up to the World Food Summit. The Commission may wish also to note and endorse FAO support of capacity-building in countries for estimating Millennium Development Goal and World Food Summit indicators on hunger and other relevant food insecurity indicators at subnational levels through regional training workshops (national demonstration centres), technical assistance, on-the-job training and country participation in the International Demonstration Centre in Rome.
- 9. Consider the need to maintain the Inter-Secretariat Working Group on Agricultural Statistics and review the advantages and disadvantages of the above-mentioned two options as an alternative institutional framework for the Task Force.