

CAPACITY BUILDING FOR FOOD STANDARDS AND REGULATIONS

Submission by Food and Agriculture Organization (FAO) and
the World Health Organization (WHO)

I. INTRODUCTION

1. This paper describes FAO/WHO capacity building activities on food safety and quality issues, including food standards and regulations, which have been implemented since September 2002 and are of interest to members of the WTO Sanitary and Phytosanitary Measures (SPS) Committee.

II. NEED FOR CAPACITY BUILDING

2. As is well known, a new international food and agriculture trade environment has emerged as a result of the Uruguay round of Multilateral Trade Negotiations and subsequent agreements on the application of SPS measures and on Technical Barriers to Trade (TBT).

3. The evolution of the conditions for international trade in relation to food and agriculture affects numerous cross-cutting sectors in every country, including human, animal and plant health, environmental welfare and economic development. The regulatory systems and infrastructure needed to conform to the new international trading environment are weak in many developing countries. This puts these countries at a competitive disadvantage in the international trade arena and constitutes a major limitation to the effective participation of these countries in the discussions and decisions taken at the level of international standardization bodies.

4. Both the SPS Agreement (Article 9) and the TBT Agreement (Article 12) make specific reference to increasing the capacity of developing countries and remaining cognisant of the unique needs of developing country members. Specifically Article 12.3 of the TBT states "Members shall, in the preparation and application of technical regulations, standards and conformity assessment procedures, take account of the special development, financial and trade needs of developing country Members, with a view to ensuring that such technical regulations, standards and conformity assessment procedures do not create unnecessary obstacles to exports from developing country Members". Reinforcing these views, the Executive Heads of FAO, WHO, WTO, WB and the World Organization for Animal Health (OIE), in a joint statement issued at the occasion of the WTO Ministerial Meeting held in Doha in November 2001, expressed their commitment to strengthening the capacity of developing countries to meet the requirements of the SPS Agreement.

5. In keeping with these mandates, FAO and WHO engage in diverse capacity building activities designed to assist developing countries to improve their food safety and plant and animal health systems. Together with international organizations, national governments, international and regional financial institutions and NGOs, various capacity building and technical assistance initiatives have been undertaken. This often involves a review and analysis of the institutional set up for food control: evaluating its effectiveness, identifying main weaknesses, and formulating recommendations and proposals for the establishment of technically sound food control systems which are harmonized with current international standards. Specific activities falling within the realm of capacity building include training of food control officials and technical staff (food control managers, food inspectors,

food analysts) in the form of seminars, workshops and study tours to broaden in-country skills and increase the ability of local governments to implement comprehensive food control systems, enhancement of food control laboratory capabilities, preparation of training manuals and guidelines, support in establishing and strengthening National Codex Committees, policy advice and establishment of regulatory frameworks.

III. RECENT AND ONGOING CAPACITY BUILDING ACTIVITIES AT GLOBAL LEVEL

International Events

6. As a follow-up to the successful first Global Forum of Food Safety Regulators and with the support and approval of the FAO and WHO member countries, the FAO Food Quality and Standards Service (FAO/ESNS) and WHO held the Second Global Forum of Food Safety Regulators (GF-2) in Bangkok, Thailand from 12-14 October 2004, with the main theme of: "Building Effective Food Safety Systems". The forum focused on the two following sub-themes: (i) Strengthening official food control services; and (ii) Epidemio-surveillance of foodborne diseases and food safety rapid alert systems. A number of related side events were also held before, during, and after the Forum, the reports of which are available from the forum website. More information on the First and Second Global Fora, including the final report when available, can be found at:

www.foodsafetyforum.org/index_en.htm

7. FAO/ESNS and the Institute de Recherche pour le Développement (IRD) facilitated a Conference on Food Safety Under Extreme Conditions (Jaen, Spain, 6-8 September 2004) to address the issues of food-borne pathogens, anti-nutritional and toxic factors in fermented foods produced in small-scale producing units. This conference promoted the sharing of information and viewpoints between scientists and experts from Africa, Europe and the Mediterranean countries on progress in scientific and regulatory knowledge of small-scale units. More information is available from:

www.fao.org/es/ESN/food/meetings_fermented_en.stm

8. FAO/ESNS co-sponsored the XI International symposium on mycotoxins and phycotoxins of the International Union of Pure and Applied Chemistry (IUPAC) from 17 to 21 May 2004, in Bethesda, Maryland, United States. The symposium assessed progress or advances made since the previous symposium in 2000 in relation to overall goals of the series and the evolving global perspective of food safety. Topics addressed included: advances in methodology; the value of risk assessment and its regulatory use; laboratory quality assurance and quality control, accreditation and method validation, particularly in developing countries. Advances in genomics for detection and evaluating the impact of mycotoxins and phycotoxins on human and animal health, as well as control strategies were also discussed. More information on the symposium is available from:

www.aoac.org/meetings1/iupac/main.htm

9. FAO/ESNS and WHO, in collaboration with the International Life Sciences Institute (ILSI) facilitated a workshop on 5 March 2004, on the Detection of Protein and/or DNA in Foods Derived from Modern Biotechnology. The workshop was held in the same venue and immediately prior to the 25th Session of the Codex Committee on Methods of Analysis and Sampling (CCMAS) and was attended by 23 participants from 9 countries. The purpose of this workshop was to give an introduction to the tools, information and experiences available to test for protein/DNA from foods derived from modern biotechnology to the CCMAS delegates and other interested parties. Emphasis was placed on similarities and differences among chemical analytical methods available, with particular attention to how biological factors can affect measurement results. Current efforts in methods development, standardization and validation, including those within ISO, were described. The complete workshop programme can be accessed from:

www.fao.org/es/esn/food/capacity_workshops2004_en.stm

10. FAO/ESNS held a Ministerial Round Table on 3 December 2003, on the occasion of the 32nd Session of the FAO Conference, on the Dimension of Food Safety in Food Security. The background document and final report for this round table discussion can be accessed from: www.fao.org/es/ESN/food/meetings_mrt_en.stm

11. FAO/ESNS and the International Atomic Energy Agency (IAEA) jointly facilitated a workshop on the subject of: "Strengthening Capacities for Implementing Codex Standards, Guidelines and the Recommended International Codes of Practice for Control of the Use of Veterinary Drugs" from 20-24 October 2003, in Vienna, Austria. Technical training courses for scientists/ technicians/ laboratory managers to complement these workshops have also been held in various regions of the world. More information on this workshop and training courses can be found at: www.iaea.org/programmes/nafa/d3/index.html

12. FAO is involved in a number of events relating to Good Agricultural Practices and food safety. These include: a Food-Feed Safety Conference held jointly with the International Feed Industry Federation (IFIF) in Rome, from 29-31 October 2004; an International Symposium on Dairy Hygiene and Safety, held jointly with the International Dairy Federation (IDF), in South Africa, 2-5 March 2004; and an International Workshop on Good Practices for the Meat and Livestock Sector held in Windhoek, Namibia from 6-8 April 2004. A workshop related to Echinococcosis was held in Morocco on 19 September 2003, and another on Fascioliosis, diagnostics and control in Egypt on 12 January 2004. A presentation on Cysticercosis: FAO perspectives - FAO support possibilities, was presented at the 19th International Conference of the World Association of Veterinary Parasitology (WAAVP), in the United States on 12 August 2003.

13. FAO/ESNS and WHO jointly facilitated an international seminar on Acrylamide in Food: Current State of Affairs in Arusha, Tanzania on 16 March 2003, held immediately prior to the 35th Session of the Codex Committee on Food Additives and Contaminants. This seminar provided for the exchange of views, an update on ongoing research, and identification of gaps in the area of acrylamide in foods. Presentations were given by representatives of FAO/WHO, the US, the Joint Institute for Food safety and Applied Nutrition (JIFSAN), the EU, Australia, Japan, and Norway and are available for viewing from FAO's website at: www.fao.org/es/ESN/jecfa/acrylamide_en.stm

Global Projects

14. FAO/ESNS- implemented a global project for the Enhancement of Coffee Quality through the Prevention of Mould Formation, which started in December 2000 and is due to end in June 2005. This project is being carried out in Brazil, Colombia, Ivory Coast, India, Indonesia, Kenya, and Uganda, with ongoing collaboration from the Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) and the Institute for Scientific Information on Coffee (ISIC), and earlier collaboration with the University of Surrey, UK. The project is funded by the Common Fund for Commodities and the Dutch Government. An additionally funded component for training and dissemination of best practice in ochratoxin A (OTA) control in Ecuador was incorporated, and completed in 2002.

15. The project approach emphasizes capacity building in coffee-producing countries, with the aim of formulating codes of practice for the coffee industry. Key initial activities under the project involve defining mould formation mechanisms, identifying critical control points, evaluating optimal drying conditions, and developing the necessary tools (e.g. Good Agricultural Practices (GAP), Good Manufacturing Practices (GMP) and Hazard Analysis and Critical Control Point (HACCP)) to control and monitor both mould formation and OTA production. Specifically, the project builds capacity at the national level within the industry and responsible government agencies in the application of internationally-agreed principles of food hygiene and a HACCP-based approach to food safety throughout the coffee production and processing chain. The project also builds the analytical capacity

and capability required to support national programmes for prevention and control of OTA contamination of coffee.

16. FAO/ESNS is involved in a number of capacity building and technical assistance activities to develop food safety policies and to build local capacities for fresh fruits and vegetables (FFV) in developing countries and has recently implemented the global project PFL/857 "Global Inventory, Reference Materials and Food Safety Training Programme for Improving the Safety and Quality of Fresh Fruits and Vegetables", targeting Latin American and Caribbean countries. The project focuses on the application of good practices (GAP, GMP, and Good Hygiene Practice (GHP)) to prevent hazards at appropriate points in the fresh fruits and vegetable chain (production and post-harvest stages-food chain approach "*from farm to table*"). Under the project, approximately 150 national staff professionals have been trained as multipliers through sub-regional workshops "to train the trainers" carried out in: Santiago, Chile (March 2003); Antigua, Guatemala (July 2003); Cochabamba, Bolivia (March 2004); and in Bridgetown, Barbados (May 2004).

17. A training package has been produced by FAO/ESNS to support the national training courses and is available in English, French and Spanish (CD-Rom and hardcopies), and is freely available on the FAO web site. The training package/manual was validated through the sub-regional workshops and contains: power-point presentations, gallery of pictures, complete documents, recommended readings, etc. regarding safety and quality issues for FFV. In January 2004, the Fresh Fruits and Vegetables Safety and Quality Database was launched as part of the FAO/ESNS strategy to improve sharing information amongst the food chain actors.

18. Nineteen countries in Latin America have received FAO financial support to implement National Action Plans, involving 60 national institutions (public and private sector). Through these National Plans, approximately 3,300 food chain actors have been trained by the multipliers through national courses, a total of 1,000 CD-ROM manuals have been distributed to support the national trainers courses, local training materials have been produced and, in some countries, initiatives have led to the creation of national groups (national commissions) to address quality and safety matters in the FFV sector. More information is available from:

www.fao.org/es/ESN/food/foodandfood_fruits_en.stm

Global Initiatives

19. FAO, WHO, OIE, WTO, and the World Bank established a Standards and Trade Development Facility (STDF) in 2003, to coordinate the capacity building efforts of these organizations in the areas of food safety, plant, and animal health and to provide a funding mechanism for countries and stakeholders to improve in meeting WTO SPS standards. The STDF has already and will continue to facilitate or support information exchange, development of databases, tool kits, and learning materials on trade-related SPS issues. It facilitates consultations to better coordinate inter-agency capacity building projects and funding of projects in capacity building in individual countries or through regional initiatives, including activities involving both public and private sectors. The specific projects supported with funding by the Facility are identified by partner institutions in consultation with the developing countries concerned. An FAO (ESNS) /WHO project to assist the low income countries in Developing Food Standards within a Risk Analysis Framework pilot application in Asia and the Pacific was approved for funding from this Facility in 2004, and will be implemented in late 2004. Interested countries and stakeholders are encouraged to propose projects and submit them to the STDF for consideration. More information on the STDF is available from: www.standardsfacility.org

20. In February 2003, FAO and WHO launched a Project and Trust Fund for Enhanced Participation in Codex to increase the participation of developing countries and countries in transition in the vital work of the Codex Alimentarius Commission. The fund provides financial support to

increase their ability to participate in the establishment of global food safety and quality standards, as well as improve their capacity to implement those standards in their own countries. Thanks to the generosity of several donors, the minimum threshold of US\$500,000 was reached at the beginning of March 2004, allowing the Fund to become fully operational. By the end of 2004, about 90 countries will have benefited from the Fund. More information and application forms for 2005 are available from www.who.int/foodsafety/codex/trustfund/en/ in Arabic, Chinese, English, French, Russian and Spanish.

21. In early 2004, FAO and the OIE launched a joint initiative entitled a "Global Framework for the progressive control of Transboundary Animal Diseases" (GF-TADs). Some of the diseases addressed in GF-TADs are of public health interest and the FAO-OIE activities will have a global objective of re-enforcing Veterinary Services.

22. In response to resolutions of the World Health Assembly calling for enhanced communication between WHO and its member states on matters of food safety, WHO, in collaboration with FAO, is now establishing an official International Food Safety Authorities Network (INFOSAN) to be used for targeted and rapid distribution of various information for the protection of public health. One part of INFOSAN will be dedicated to food safety emergency situations (INFOSAN EMERGENCY) where imminent risk of serious injury or death is present.

23. WHO also manages a global network of laboratories and individuals involved in surveillance, isolation, identification and antimicrobial resistance testing of *Salmonella* (Global Salm-Surv). The network, which links around 800 members from nearly 500 institutions in 138 countries, is currently being extended to include other major foodborne pathogens, e.g. *Campylobacter*. The Global Environment Monitoring System/Food Contamination Monitoring and Assessment Programme (GEMS/Food) has now been introduced in 13 francophone countries, mainly from Africa, through the Third International Total Diet Study Workshop and Training Course held in May 2004. The workshop presented the latest developments in methods and technology which continue to make total diet studies the most cost-effective exposure assessment tool available for assessing human exposure to chemicals in food.

Global Tools Available

24. Apart from the direct implementation of activities in the area of food quality and safety in developing countries, FAO and WHO elaborate guidance and technical materials to be used by other implementing agencies working in these areas. This ensures broader and more sustainable impact of the technical assistance provided in the tools. Several tools are also under development. Some of the tools developed on food quality and safety include:

25. FAO, often in collaboration with WHO, convenes ***Expert Consultations/workshops*** to provide guidance and advice to the Codex system and to national governments on specific issues such as: Safety Assessment of Foods from Genetically Modified Animals:

(www.fao.org/es/esn/food/risk_biotech_animal_en.stm);

Non-human Antimicrobial Usage and Resistance:

(www.fao.org/es/ESN/food/meetings_antimicrobial_en.stm);

the use of a Good Agricultural Practice Approach:

(www.fao.org/prods/GAP/gapindex_en.asp); and

Pathogens of concern in powdered infant formula:

(www.fao.org/es/ESN/food/risk_mra_riskassessment_entero_en.stm).

Some of these Expert Consultation reports are available electronically from the FAO website and printed copies of most are available in multiple languages from the FAO publications page:

www.fao.org/es/ESN/publications/publications_en.stm

26. FAO/ESNS and WHO publish a series of guidelines on topics related to ***Microbiological Risk Assessments***. For example, the third publication in this series, Hazard Characterization for Pathogens in Food and Water guidelines, (MRA Series No. 3) endeavours to provide a practical framework and a structured approach for the characterization of microbiological hazards. It is aimed at assisting governmental and research scientists in identifying the points to be addressed, the methodology for incorporating data from different sources, and the methodology of dose-response modeling. These guidelines are available from: www.fao.org/es/esn/food/risk_mra_hazard_en.stm

27. FAO/ESNS and WHO have jointly prepared and published (2003) ***Assuring Food Safety and Quality - Guidelines for Strengthening National Food Control Systems*** to enable national authorities, particularly in developing countries, to improve their food control systems. This publication replaces the previous (1976) guidelines. The guidelines seek to provide advice on strategies to strengthen food control systems to protect public health, prevent fraud and deception, avoid food adulteration and facilitate trade. In addition to national authorities, the guidelines will also be of assistance to a range of other stakeholders including consumer groups, industry and trade organizations, farmer groups and any other groups or associations that influence national policy in this area. The guidelines are now available electronically in:

English (www.fao.org/es/ESN/food/control_FCS_en.stm),

Spanish ([ftp://ftp.fao.org/es/esn/food/guideFCS_es.pdf](http://ftp.fao.org/es/esn/food/guideFCS_es.pdf)) and will soon be available electronically in French and Arabic. Printed copies can be ordered in English, French, Spanish, and Arabic from: www.fao.org/es/ESN/publications/pub_control_en.stm

28. An example of a possible ***structure of a food law*** has been developed by FAO/ESNS and WHO and is based on a number of food laws currently in force in developed and developing countries. Since different countries place responsibility for food control with different Ministries or agencies, the draft has been prepared in a general way so that it can be adapted to local conditions. It has been reviewed and endorsed by Joint FAO/WHO meetings of countries of the Africa and Asia regions and is available from FAO's website at: [ftp://ftp.fao.org/es/esn/food/foodlaw.pdf](http://ftp.fao.org/es/esn/food/foodlaw.pdf)

29. Food Quality and Safety Systems - A FAO/ESNS Training Manual on Food Hygiene and the HACCP System is available electronically in:

English (<http://www.fao.org/docrep/W8088E/W8088E00.htm>);

French ([ftp://ftp.fao.org/es/esn/food/HACCPManual_fr.pdf](http://ftp.fao.org/es/esn/food/HACCPManual_fr.pdf));

Spanish ([ftp://ftp.fao.org/es/esn/food/HACCPManual_es.pdf](http://ftp.fao.org/es/esn/food/HACCPManual_es.pdf)); and

Russian (<http://www.fao.org/DOCREP/006/W8088R/W8088R00.HTM>) or as a printed publication in these four languages from: http://www.fao.org/es/ESN/publications/pub_quality_en.stm

30. ***FAO(ESNS)/IAEA Manual on the Application of the HACCP System in Mycotoxin Prevention and Control*** is available electronically in:

English ([ftp://ftp.fao.org/es/esn/food/mycotoxin_manual.pdf](http://ftp.fao.org/es/esn/food/mycotoxin_manual.pdf));

Spanish ([ftp://ftp.fao.org/es/esn/food/haccp_micotoxinas.pdf](http://ftp.fao.org/es/esn/food/haccp_micotoxinas.pdf)); or as a printed publication (in En, Fr, Es) from: http://www.fao.org/es/ESN/publications/pub_quality_en.stm. The manual will soon be available electronically in French as well.

31. Training manuals and guides on ***food safety in the street food sector*** are also available in multiple languages in publication format from the FAO publications page:

http://www.fao.org/es/ESN/publications/publications_en.stm.

A *Training of Street Food Vendors didactic guide*, materials designed for training courses are available electronically in English and Spanish from:

www.rlc.fao.org/prior/segalim/accalim/Guias/faoguias.html

32. FAO/ESNS has also published many *manuals on food inspection*, including a series of fourteen Manuals on Food Quality Control. Printed copies of these manuals are available in multiple languages from the FAO publications page:

http://www.fao.org/es/ESN/publications/publications_en.stm.

33. FAO/ESNS has developed a **training package and manual** as well as a **database of resources** available in the area of **Improving the Safety and Quality of Fresh Fruits and Vegetables**, which are freely available from FAO web pages or as a CD-ROM in English, French, and Spanish from: http://www.fao.org/es/ESN/food/foodandfood_fruits_en.stm

34. FAO/ESNS and WHO provide a platform for the exchange of current information on the topic of Acrylamide through an electronic **Acrylamide InfoNet**, which is operated by the Joint (United States Food and Drug Administration and the University of Maryland) JIFSAN. The Research Database now lists more than 100 projects and a "Call for Data on Levels of Acrylamide in Food and the Total Diet" was issued in July 2003. The Infonet is available from: www.acrylamide-food.org/

35. FAO has prepared a series of **fact sheets on trade-related issues** for the 2003 WTO Cancun Ministerial Conference. Sheet #14 in this series deals with the prevalence of non-tariff measures, such as food standards, and FAO's activities to assist countries in dealing with these measures. The entire series of fact sheets is available from: www.fao.org/docrep/005/y4852e/y4852e00.htm

36. In January 2004, FAO, jointly with IDF, published a **Guide to Good Dairy Farming Practice**. FAO is finalizing the publication of a "**Manual on Good Practices for the Meat Industry**", with funding from the private sector. The manual will provide practical guidelines for primary producers and is also intended to guide managers of abattoirs and the meat industry. The manual takes a risk analysis approach and will be of value to veterinarians, with their supervisory roles in meat hygiene. The book covers topics such as application of risk management principles to the meat sector, meat hygiene applying to primary production, animals transport, handling, stunning, traceability and control of processing operations.

37. In an effort to allow users to access complete information on international standards, national regulations, scientific evaluations, and other supporting official information on sanitary and phytosanitary measures from a single source, FAO is leading an interagency initiative to develop and maintain an internet-based portal - **the International Portal on Food Safety, Animal and Plant Health**. This portal allows users to by-pass secondary (interpreted) information, as well as material which may be out of date - both of which can be found using typical internet search tools - and focus on the definitive official sources across the three main disciplines of food safety, animal health and plant health.

38. As of November 2004, the portal contains references to over 15,000 items, drawn from the three SPS-recognized standard setting bodies, as well as from the Convention on Biological Diversity (CBD), FAO, WHO, and WTO. It also includes demonstration 'nodes' of nearly 400 items each from the US and the EU, and smaller data sets from selected developing countries. Version 1.0 of the portal was formally launched on 25 May 2004, on the occasion of the FAO/WHO Regional Conference on Food Safety for Asia and the Pacific in Seremban, Malaysia. It is now freely accessible from the FAO Biosecurity Priority Area for Interdisciplinary Action (PAIA) webpage (www.fao.org/biosecurity) or directly from www.ipfsaph.org. Interested users are invited to utilise the portal, share the link with other users, and provide feedback to the FAO project team on the portal content and usability. Work is now underway to include more detailed information from the current sources, including from Codex, the Joint Expert Committee on Food Additives (JECFA) and the Joint FAO/WHO Meeting on Pesticide Residues (JMPR), as well as data from additional countries. A

capacity building programme related to the portal is also planned. More information on the portal project is available as CAC27/INF/4.

39. In an effort to improve information exchange and communication with stakeholders in food safety and quality, FAO/ESNS distributes a monthly electronic newsletter, the ***Food Safety and Quality Update***, to over 2,500 subscribers to provide information on recent developments and upcoming activities of FAO and Codex that are related to food safety and quality. Other parties interested in receiving the newsletter can also subscribe by following the simple instructions listed in the newsletter itself. The current newsletter and an archive of past newsletters are available from: http://www.fao.org/es/ESN/fsqu_en.stm. WHO also periodically sends an electronic newsletter, the ***Food Safety News***, to interested parties regarding the activities of WHO in food safety, available from: <http://www.who.int/foodsafety/publications/newsletter/en/>

Global Tools Under Development

40. FAO/ESNS is involved in the work which has commenced with the newly created IDF/ISO/AOAC lactic bacteria action team on **methods for the assessment of probiotic microorganisms** as a follow-up of the recommendations of the FAO/WHO Expert Consultation on Health and Nutritional Properties of Powder Milk with Live Lactic Acid Bacteria, held in Cordoba, Argentina 2001.

41. FAO/ESNS and WHO are in the process of finalising a CD-ROM training package on **Food Safety Risk Analysis**, which includes a framework and overview manual, a training module presentation, case studies in risk analysis, and access to FAO/WHO resources related to food safety risk analysis. An FAO(ESNS)/WHO workshop was held in Bali, Indonesia on 4 March 2004, to introduce the package to some potential users and to provide participants with practical tools for risk analysis. The workshop report is available from: ftp://ftp.fao.org/es/esn/food/meetings/bali_report_mar04.pdf

42. In order to assist countries in **Evaluating Capacity Building Needs for Food Control**, FAO/ESNS and WHO are preparing a joint publication on the subject to assist countries to identify and prioritise the areas where capacity building is needed. This publication is in the final stages of approval and printing.

43. FAO/ESNS and WHO are currently developing a training manual on **Improving Participation in the Work of Codex**, designed to strengthen national food safety and quality systems through enhanced participation in the Codex process. It has been field-tested in Africa and the Pacific and it is expected to be available in final form in late 2004. The manual provides information on the Codex process and the development of national Codex programmes. It should serve both as a reference document for those involved in national Codex activities and as a training tool for national/regional training courses on Codex. In addition, the manual is an important capacity building tool within the ongoing FAO and WHO programmes to increase effective participation in Codex activities, and it is anticipated that it will be of great support when used in conjunction with direct participation in Codex meetings of increasing numbers of countries through the funds of the FAO/WHO Codex Trust Fund.

44. As part of a field project on the safety of street foods, FAO/ESNS is in the process of preparing a **Training of Trainers Manual in Street Food Safety** to assist countries in improving the safety of this important source of nutrition for many cultures.

45. FAO is finalizing publications on the following topics:
- A manual on the **Prudent Use of Antimicrobials**;
 - An FAO/ESNS manual on **Marine Biotoxins**; and
 - **Worldwide Regulations for Mycotoxins in Food and Feed in 2003** (FAO/ESNS).
46. In recent years, WHO has elaborated rules to promote the production and handling of safe food, the **Five Keys to Safer Food**: keep clean, separate raw and cooked food, cook food thoroughly, keep food at safe temperatures and use safe water and raw material. WHO is now developing a food safety training manual based on the Five Keys to Safer Food. The purpose of this manual is to facilitate implementation of the Five Keys at country level. The manual will provide relevant food safety information when disseminated.
47. All these materials, once finalized, will be issued in multi-lingual form for wider use by member countries.

IV. RECENT AND ONGOING CAPACITY BUILDING ACTIVITIES AT REGIONAL LEVEL

A. CAPACITY BUILDING ACTIVITIES IN AFRICA

REGIONAL ACTIVITIES

Regional Workshops

48. A workshop on Food Control Systems: Practical Approaches for the Southern African Region was implemented on 1 September 2003, by FAO(ESNS)/WHO, in collaboration with the International Life Sciences Institute (ILSI). The workshop was held in Pretoria, South Africa, immediately prior to the South African Association of Food Science and Technology (SAAFoST) Congress and Exhibition held in the same location from 2-4 September 2003. Participants from each of the 14 countries of the Southern African Development Community (SADC), as well as local delegates, participated in the workshop. Presentations were given by representatives of FAO, WHO, the Food Safety Authority of Ireland, South African Department of Health, the Tanzanian Bureau of Standards, the Mauritius Ministry of Agriculture, and the World Bank Programme for Capacity Building on Trade, Standards and Food Safety. More information on the workshop is available from:
http://www.fao.org/es/ESN/food/capacity_workshops2003_en.stm

49. FAO also held a seminar on Feed Safety in Africa, in connection with the Animal Feed Manufacturers Association Forum (AFMA), on 9 March 2004, in South Africa.

FAO Regional Projects

50. An FAO/ESNS project designed to train private small/medium size industries in HAACP/Good Hygiene Practices (GHP) and Good Manufacturing Practices (GMP) covering Benin, Burkina Faso, Cote d'Ivoire, Mali, Niger and Senegal began in September, 2001. The main objective of the project is to support the member states in their efforts to improve food quality to protect consumers and facilitate access to international markets. This objective will be supported through training courses at the regional level for Training of Trainers in GHP and HAACP and at the national level for industry. One regional training course and six national courses were implemented, the last of which took place from 10-19 June 2003, in Dakar, Sénégal. More information is available at:
http://www.fao.org/es/ESN/food/capacity_projects_africa_en.stm

51. A Special Regional Program for Food Security covering the Union Economique et Monetaire Oest Africaine (UEMOA) countries, was initiated in December of 2001, and will continue through December 2004. The project was implemented by several divisions within FAO. The objectives of the activities undertaken by the Food Control and Consumer protection group under phase one were to

improve harmonization of regulation and upgrade the institutional capacity of food control institutions. The activities of the project include review of existing food legislation and regional harmonisation, training of food control inspectors and upgrading laboratory facilities. The review of the existing food control systems (including legal and regulatory texts, inspection procedures, and analytical techniques and capacities) has been completed and regional proposals for short, medium, and long-term improvements were presented in a technical meeting in Ouagadougou, Burkina Faso from 16-18 June 2003. Pilot activities of training and provision of analytical equipment followed this meeting.

52. In early 2004, FAO launched a project to improve the quality and quantity of acacia gum (used in making Gum Arabic, a natural multi-functional food additive) to help the rural poor who live in the semi-arid zones of six African countries bordering the Sahara to achieve self-sufficiency.

53. A project to reduce post harvest losses and increase the safety of milk and dairy products in sub-Saharan Africa has been approved and is in the initial stages of activities. The overall objective of the project is to increase the supply and marketing of safe milk and dairy products with emphasis on the informal dairy sector and street vendors. The project will be implemented by the Animal Production and Health Division (AGA) with technical assistance provided by the Food Control and Consumer Protection Group (of ESNS). The project aims to increase technical capacity in terms implementation of Good Hygiene and Manufacturing Practices and improved inspection techniques. Consumer awareness will be heightened through relevant communication channels using a variety of media to promote appropriate messages. At the end of the project, a stakeholder's workshop will be held.

54. FAO implemented a project in March 2004, to assist the countries which are members of the African Union in the establishment of a Common Market for basic food products. The project is scheduled to conclude in September 2005, and is implemented jointly by the Basic Foodstuffs Service and the Food Quality and Standards Service of FAO.

WHO Regional Projects

55. In the African Region there is concern about campylobacteriosis, salmonellosis, shigellosis, brucellosis, hepatitis; food poisoning due to *Staphylococcus aureus* and *Bacillus cereus*; infections due to *Escherichia coli* and rotavirus. Cholera, which has been shown to be often foodborne, is also endemic in the Region. Other food safety problems include pesticide residues, mycotoxins, other naturally occurring toxins and physical contaminants in foods.

56. The WHO Regional Office conducted a survey on food safety, which analysed the health risks associated with food handling. An awareness-raising workshop was organized in Bamako for food safety focal points. The results of the regional survey were discussed at this workshop. There were 60 participants from 30 countries.

57. Botswana conducted workshops in six communities. Kenya and Gambia were supported to develop tools for foodborne disease surveillance; and food inspectors and other relevant officers were trained in Algeria, Botswana, Kenya and Zimbabwe. Nigeria and Chad conducted a situation analysis of their national programme. The Gambia reviewed its Draft National Food Act and Madagascar carried out a number of advocacy activities.

58. The WHO Regional Office participated in the Joint FAO/WHO workshop on Food Control Systems - Practical Approaches by SADC and presented a paper entitled 'Foodborne disease surveillance - a tool for priority setting in food control programmes'. Others were the establishment of a healthy market place in Mozambique and WHO Global Salm-Surv International Training Course for Francophone countries held in Yaoundé, Cameroon.

59. The WHO Regional Office created an information series on the Codex which summarised important decisions by the Codex Committees. A training guide for the informal food trade on the causes of foodborne disease and safe food handling was developed and will be finalised in 2004. It will be used in training activities aimed at improving street food safety in the Region.

60. The 53rd Regional Committee, held in Johannesburg South Africa in September 2003, adopted a resolution on Food Safety after discussion of a paper entitled 'Food Safety and Health - Situation Analysis and Perspectives'.

61. The resolution urged member states to: (i) develop or update food safety policies and legislation that are based on scientific risk assessment and prevention along the entire food chain; (ii) ensure the harmonization of food safety regulations with international food standards and norms, including active participation in the work of the Codex Alimentarius Commission and its committees; (iii) incorporate or strengthen food safety education and information into training programmes for food handlers at all levels, consumers, producers, and farmers; (iv) integrate or strengthen food safety matters in the curricula from the primary school level to higher learning institutions; (v) provide functional laboratory facilities, adequate resources and networks as part of the national surveillance system ensuring the preparedness and response of countries to food hazards; and (vi) ensure national, inter-country and regional coordination and networking among the various stakeholders, including the private sector.

62. It requested the Regional Director to: (i) continue to advocate for inclusion of food safety in the overall national development goals and strategies; (ii) to provide technical support for the development and implementation of food safety policies and legislation; (iii) to promote food safety research and surveillance; and (iv) to strengthen collaboration with other international partners and relevant bodies to make scientific decisions on food safety and health issues relating to new technologies, including genetically modified foods.

National Activities

FAO Field Projects

63. Under its Technical Cooperation Programme (TCP), the FAO Food Quality and Standards Service has implemented numerous projects on critical aspects of food control in many countries. FAO/TCP is designed to assist Member Nations in solving their most pressing development needs. In the field of food safety these include strengthening of national food control systems, enhancing laboratory facilities and analysis capacities and improving the ability of member countries to comply with new trade regulations. TCP projects are generally of one to two year duration, with the possibility for a second phase of funding if warranted. Some of the projects are conducted with other groups within FAO, as indicated.

64. A project to assure the quality of food products in Benin was approved in September 2003, and will continue until June 2005. The project will support the implementation of a system of management and quality assurance of agricultural products.

65. FAO has also begun a project to improve the quality of street foods in Benin. The expected project outputs are mainly to reduce the negative impact of urban pollution on consumer health and to improve the food safety at all the production-to-consumption levels. This project contains an important training component to horticulture producers, wholesale and retail food vendors and to food inspectors. A national strategy will be drawn to define the actions to be taken by the relevant governmental institutions to ensure the sustainability of the project outcomes. The project was approved in September 2003, and is scheduled to continue until February 2005.

66. The first phase of a project to improve the Quality of Street foods in Bobo Dioulasso, Burkina Faso began in September of 2002, and continued through December 2003. The second phase of the project is being implemented from January to December 2004. The main activities of the project are to undertake a survey on the quality and safety of street foods, provide training on Good Hygiene Practices to street food vendors and on food control techniques to the inspectors; and to formulate a municipal strategy for further improving the safety of street foods.

67. An FAO TCP project was approved in May 2004, to support the implementation of a strategy to control and monitor the quality and safety of food products in the Democratic Republic of Congo. The project is scheduled to continue until October 2005.

68. A project to strengthen the National Food Control System of Gabon began in October 2003, and is scheduled to continue through late 2004. The objective of the project is to help the country to develop the efficiency of the control of commercialized foodstuffs by the training of food inspectors and laboratory staff. Another objective is to define the necessary strategies to ameliorate the quality of prepared street food.

69. A project to improve the quality and safety of street foods in Guinea Bissau was funded in October 2002, and will continue through November 2004. The project objectives are to identify practical actions to ensure the quality and safety of street foods and protect consumers and to better integrate the street food sector into the socio-economic context of the city's urbanization. These objectives will be met through the conducting of diagnostic studies of street food sector in terms of prevalent hygienic practices, sanitary infrastructures, legal framework and socio-economic aspects to develop a plan of action for improving the environmental conditions where street foods are sold and ensure hygienic preparation of the food. A series of workshops will be conducted to improve control of the sector. Vendors and others will be engaged in training to improve environmental and hygienic practices and educational campaign will be conducted to increase the awareness of consumers to street food safety issues.

70. A project to Support the Informal Food Sector in Guinea began in June 2003, and is scheduled to continue through January 2005. The objective of the assistance is to help the Government to define the strategies necessary to improve the quality of food prepared and sold on the street. The project will carry out research and pre-test feasible actions to improve the safety and quality of food sold on the street. Consumers will receive information on associations and other institutions working to protect the safety and quality of food and learn where further information on the subject can be found.

71. A project to provide capacity building and assistance in the review of sanitary and phytosanitary legislation in Namibia was funded in May 2004, and is scheduled to continue until November 2005. The project is being implemented by the FAO Legal Service and the Food Quality and Standards Service.

72. A project to implement a National Integrated Food Sanitation Program in Nigeria has been approved in September 2004. The project was proposed following a field mission to that country.

73. An FAO staff member went on mission to Rwanda in May 2004, to advise on the preparation of legislation covering the safety of foods of animal origin under Phase 2 of a TCP project on veterinary drug legislation.

74. A project has been approved to assist in the control of pesticide residues in fruit and vegetable products for export in Senegal. The project, funded in May 2003, is led by FAO's Plant Production Division, in collaboration with FAO's Food Quality and Standards Service.

75. A project to Strengthen the National Food Control System and National Codex Organisation began in Tanzania in February 2003, and is scheduled to continue through late 2004. The objective of the project is to improve the quality, safety and nutritional value of food produced in Tanzania and to ensure the acceptability of food imports/exports into/from the country. In particular, it aims at reviewing and improving the current food control administration; upgrading food inspection and food analysis through training programmes; and improving the capabilities of the Tanzania Codex Contact Point within the Tanzania Bureau of Standards.

Other Activities

76. A Training Manual for *Hygienic Practices in Street Food Production and Sale* is being prepared by FAO in collaboration with the University of Benin.

77. A Cooperative programme between FAO and the World Bank is being undertaken in the region to develop a conceptual framework for improving regional food control systems. Two missions were undertaken, one to Ghana and another to Senegal.

FAO UPCOMING ACTIVITIES

78. FAO has received many requests by national governments for future projects.

79. At the request of the National Food Research Institute of Botswana for FAO assistance in strengthening its national food safety system, a project proposal has been prepared. This project is in the approval phase.

80. A request has been received from the government of Cote d'Ivoire to formulate a project to strengthen the food control system. This project is in the formulation stage.

81. A draft proposal has been prepared to assist the Government of Rwanda in the Hygienic handling of foods of animal origin. The project is being developed by the Animal Production service and the Food Quality and Standards Service of FAO.

82. The Government of Senegal has requested assistance in strengthening and supporting Quality Assurance Systems in Food Safety Laboratories. The request is currently in the approval process.

83. Funding is currently being sought for a sub-regional programme proposal developed by FAO to facilitate trade in the Southern African Development Community (SADC) member states through food standards and food safety management.

84. As a follow-up to the recommendations of the first Global Forum of Food Safety Regulators and in line with the 123rd FAO Council's instructions, FAO and WHO have sought the views of the countries of each region on the interest in convening other regional food safety conferences. At the request of the Codex Coordinating Committee for Africa, preparations are underway for an FAO/WHO Regional Conference on Food Safety for Africa. A briefing meeting with the delegates of the region to the 27th Codex Alimentarius Commission Meeting was held on 29 June 2004, to further discuss the themes of the conference and specific papers to be presented. Further planning and the establishment of the date and location will occur in the upcoming months.

WHO future activities

85. The resolution by the Regional Committee forms the basis for future food safety activities in the region. The Regional Office promotes a holistic and integrated approach to reducing the high burden of foodborne diseases and associated economic consequences.

86. Member countries will be provided assistance to strengthen foodborne disease surveillance, food control systems and to enhance their participation in the health-related committees of the Codex Alimentarius.

87. Other planned activities include a: (i) Pilot Project to improve food safety in schools; and (ii) project for strengthening of food law and implementation of Codex Standards in selected countries.

88. The following workshops/consultations are also planned: (i) Scientific Consultation on Health Impact of aflatoxins in foods; (ii) Expert workshop on Codex Procedures and risk analysis; (iii) Training of trainers in food safety for the informal food; and (iv) Workshop on foodborne disease surveillance and laboratory monitoring of foodborne pathogens.

B. CAPACITY BUILDING ACTIVITIES IN ASIA

REGIONAL ACTIVITIES

89. FAO and WHO jointly organized a workshop on "Functional Foods: Safety and Regulatory Aspects" on 6 September 2004, in Jeju-do, Republic of Korea, immediately prior to the 14th Session of the Codex Coordinating Committee for Asia. The workshop was held to: (i) provide information on the characteristics and use of functional foods throughout the world, including information on consumer perceptions, safety evaluation and regulatory control of functional foods; and (ii) provide a venue to exchange information on the status of functional foods in selected countries in the Asia region. The workshop was not intended to make recommendations to FAO/WHO, Codex, or the member countries regarding functional foods or to propose definitions of functional foods, but to provide information and identify specific areas that require further attention and that could be addressed in the future. The complete report of the workshop is available from: www.fao.org/es/ESN/food/capacity_workshops2004_en.stm

90. An FAO regional workshop on Food and Feed Safety was held from 19 to 22 July 2004 in Bangkok, Thailand. The Workshop was held in collaboration with OIE, DLD (Department of Livestock Development, Thailand) and JLTA (Japan Livestock Technology Association). The Workshop was organized in order to review the current situation of Food and Feed Safety in Member Countries in the region and to set directions for food and feed safety programmes and concurrently to define priority areas for capacity building. In addition to the OIE/FAO representatives, the workshop was attended by participants from 15 countries as well as by representatives of private sector companies related to activities of food and feed safety. As follow-up, Member Countries in the Region are planning to develop a Food and Feed Safety Network, using FAO and OIE expertise, to improve food and feed safety, through coordinated surveillance and risk analysis activities, laboratory procedures and information sharing. Also, FAO and OIE committed to identifying national institutes in the Region as Regional Collaborating Centres for food and feed safety in each of the identified disciplinary areas to improve regional capacity.

91. In an effort to facilitate the discussion of practical actions and capacity building recommendations to promote food safety in the countries of the Asian and Pacific region, FAO/ESNS and WHO convened a Regional Conference on Food Safety for Asia and the Pacific in Seremban, Malaysia from 24-27 May 2004. This Conference is the second in a series of regional meetings, the first of which was held in European Region in February 2002, that FAO and WHO are convening at the request of member countries to meet their needs for policy guidance and capacity building in food safety. The Conference also included side events on the topics of the Safety of Street-vended Foods and *Enterobacter sakazakii* in infant formula. The discussion papers and background information on the Conference, in addition to the final report are available from the Conference website:

http://www.foodsafetyforum.org/asian/index_en.asp and will be available as a bound publication and in Chinese in due course.

92. A FAO (ESNS)/WHO workshop, in collaboration with ILSI, was held in Bali, Indonesia on 4 March 2004 to introduce an FAO/WHO CD-ROM training package on Food Safety Risk Analysis to some potential users and to provide participants with practical tools for risk analysis. FAO/WHO are in the process of finalizing the package, which includes an overview and framework manual, a power point presentation, case studies on risk analysis, and valuable annexes. The workshop report is available from: ftp://ftp.fao.org/es/esn/food/meetings/bali_report_mar04.pdf

93. The fourth in the series of conferences organized for the South Asian region under the global FAO (ESNS)/ILSI Cooperative Framework was held in Kathmandu, Nepal 10-11 December 2002. This Regional Meeting on Modernising Food Control Systems in the South Asian Association for Regional Cooperation (SAARC) Region was held to: (i) examine critical issues in food safety in SAARC region (microbiology, food additives, biotechnology, nutraceuticals and micronutrient fortification of foods); (ii) provide the latest updates on food safety tools (Risk Analysis, HACCP, GMP); (iii) sensitize policy makers and management to institute mechanisms for risk assessment; (iv) recommend strategy for modernizing food control systems; (v) review existing food laws and regulations in SAARC countries with a view to identify main differences and diversions from international standards and understand the implications of using Codex as the reference point; and (vi) identify ways for fostering stronger regional cooperation for capacity building. The full programme for the conference can be accessed at: <ftp://ftp.fao.org/es/esn/food/meetings/10Dec2002agenda.pdf>

94. The fifth in the series of conferences organized for the South Asian region under the global FAO / ILSI Cooperative Framework was held in Goa, India from 21-23 September, 2003. This Regional Meeting on Modernising Food Control Systems in the SAARC Region was held to: (i) examine critical issues in food safety in the SAARC region (microbiology, food additives, biotechnology, nutraceuticals and micronutrient fortification of foods); (ii) provide the latest updates on food safety tools (Risk Analysis, HACCP, GMP); (iii) sensitize policy makers and management to institute mechanisms for risk assessment; (iv) recommend strategy for modernizing food control systems; (v) review existing food laws and regulations in SAARC countries with a view to identify main differences and diversions from international standards and understand the implications of using Codex as the reference point; and (vi) identify ways for fostering stronger regional cooperation for capacity building. The full programme for the conference can be accessed at: ftp://ftp.fao.org/es/esn/food/meetings/Goa_report_2003.pdf

95. As part of the IX Asian Congress of Nutrition held in New Delhi, India, FAO/ESNS held a symposium on Food Safety and Quality: Issues for Developing Countries on 25 February 2003. Speakers from Asia and the Pacific gave presentations on general considerations for food safety risk analysis, a case study on food safety risk analysis from India, components and infrastructure needed for effective food control systems, safety risks and nutrition potentials of street foods, and safety risks and nutrition potentials of genetically modified foods.

96. An FAO(ESNS)/WHO Workshop on Applying Food Safety Risk Analysis in Asia – Practical Approaches was held in Kuala Lumpur, Malaysia on 16 September 2002, in collaboration with ILSI-South East Asia, the financial support of ILSI International and the kind hospitality of the Ministry of Health, Government of Malaysia. The workshop was held to raise awareness of the countries of the Region about risk analysis in food safety, and to contribute to increased participation of developing countries in Codex Regional Coordinating Committee meetings. A total of ninety-two participants representing nineteen countries from the Asian region, three observer countries, ILSI, Consumers International, and the FAO/ WHO/ Codex secretariats participated at the workshop. Of these participants, twenty-one food safety officials from the Asian region were financially supported by

FAO/ILSI, most of whom remained for at least part of the 13th Session of the Codex Coordinating Committee for Asia. The full report of the workshop is available from:

ftp://ftp.fao.org/es/esn/food/meetings/workshop_sep2002.pdf

97. The Seventh Meeting of the Expert Working Group (EWG) on the Harmonization of Maximum Residue Limits (MRLs) of Pesticides Among ASEAN Countries was held in Hanoi from 30 October-1 November 2002. The Eighth annual meeting was held in Brunei in December 2003. These meetings aim at the establishment of MRLs that could be acceptable for commodities moving within the ASEAN regions, taking into consideration Codex MRLs.

WHO WPRO Regional Perspectives in Asia

98. The importance of national food safety programmes founded on risk assessment or its elements (hazard identification, hazard characterization, exposure assessment and risk characterization) is clearly identified in both the WHO global and regional food safety strategies. Consequently, the World Health Organization Regional Office for the Western Pacific (WHO WPRO) strengthened the capacity of its member states through support for targeted contaminant monitoring in Lao People's Democratic Republic and Viet Nam while, in the Philippines, a review was undertaken to determine what information was available on the contamination of the food supply in the Philippines.

99. WHO WPRO also advanced efforts that had been initiated earlier in collaboration with the Asian Development Bank, to strengthen foodborne disease surveillance in Viet Nam. In support of the programme of active surveillance, case-control studies, household survey, and clinical laboratory-practice survey, WHO and the Centres for Disease Control and Prevention (CDC) reviewed progress made by the Food Administration of Viet Nam and provided technical expertise to enhance data collation and interpretation.

100. As stated in the endorsed¹ Western Pacific Regional Strategy for Food Safety, policies, plans of action and legislation are key elements of any effective national food safety programme. WHO collaborated with Cambodia, China and Lao People's Democratic Republic to review the current food safety situation and to further develop national food safety policies and/or plans of action. At the request of the Ministry of Health in China, the WHO organized several missions that reviewed the organization of the food safety system and identified strategies and actions to enhance the food safety control structures; identified how the newly formed State Food and Drug Administration (SFDA) will coordinate action on food safety with the Ministry of Health; collaborated with the Development Research Center (DRC) on how a farm to table approach could be applied to food safety in China; and prepared a proposal for possible European Union (EU), WHO and FAO collaborative action to strengthen food safety systems in China. In Cambodia, Lao People's Democratic Republic and Viet Nam, food laws and/or regulations were reviewed and in Lao People's Democratic Republic and Viet Nam new food laws were approved. Support was also provided to enable the Food and Drug Department of Lao People's Democratic Republic to disseminate information regarding its legislation.

101. Risk communication is integral to effective operation of national food safety programmes. Advocacy and awareness-raising are also both important catalysts that increase government, industry and consumer action aimed at achieving safer food. A joint FAO/WHO technical mission to Cambodia aimed to increase political awareness of the need for farm-to-table protection of the food supply. Additional advocacy efforts included the development and distribution of a video on the need for governments to address food safety along the food chain; collaborative action with the Philippines' Food Safety Committee of the Department of Health and Consumers International to enhance

¹ Resolution WPR/RC52.R2, 52nd session of the Regional Committee.

consumer representative access to information on food safety and Codex; and the local development of advocacy materials in Lao People's Democratic Republic.

102. A web-based network of trainers of food safety regulators was finalized (<http://www.wpro.who.int/fsiguide/index.asp>) and a forum initiated to identify core competencies that need to be addressed in the training of food inspectors. In Viet Nam, food safety training materials were developed and applied to the training of food managers and handlers in canteens; training courses were conducted in a number of key locations for food producers and food traders; and training was provided in relation to laboratory techniques, laboratory quality assurance and laboratory environmental management. Supplies were provided for food hygiene information management and information sharing in China. Also, in order to enhance access of school children to key food safety messages, WHO WPRO developed and trialed food safety information for teenagers and food safety instructional activities for school children in the Philippines.

UPCOMING ACTIVITIES/PROJECTS

103. With the goal of reducing the risk of emerging zoonotic diseases by strengthening risk-based regulatory frameworks and their enforcement in relation to the marketing of live birds and animals for food, WHO WPRO is proposing a number of key actions. These include identifying the current information and information gaps regarding emerging and ongoing zoonoses of public health significance; identifying current regulatory frameworks and enforcement strategies applied to marketing of birds and animals to prevent and control zoonoses; conducting cost-benefit analysis of market regulations applied in Hong Kong; and conducting a joint WHO/FAO/OIE meeting in November 2004, to identify what steps need to be taken to develop and apply evidence-based risk management strategies related to human health and the strengthening of regulatory control in the marketing of live birds and animals for food. Possible terms of reference for such a joint meeting are being put forward as:

- share experiences on emerging diseases which appear to be zoonotic in origin;
- learn from each other regarding current policy, regulatory and enforcement environments related to the marketing of live birds and animals for food;
- identify the potential human health risks posed by current practices in the marketing of live birds and animals for food;
- assess the evidence base for current regulatory control measures applicable in the marketing of animals and food from animals;
- provide guidance applicable in the developing country situation regarding possible regulatory controls to be applied in marketplaces to reduce the risk to human health posed by zoonotic diseases; and
- identify research that needs to be undertaken to strengthen the evidence base for such regulatory controls in marketplaces and put forward a programme of work to address these needs.

104. FAO will be holding the sixth in a series of conferences for the South Asia region under the Global FAO/ILSI Cooperative framework in Colombo, Sri Lanka from 25-27 November 2004. This Regional Meeting on Modernising Food Control Systems in the SAARC region will be held to review existing food laws and regulations in SAARC countries and to discuss further steps required towards the integration of science-based food control among SAARC countries.

V. CAPACITY BUILDING ACTIVITIES AT NATIONAL LEVEL

Field Projects

105. An FAO Technical Cooperation Programme (TCP) project on Strengthening Food Control in Bangladesh was approved in May 2003, and is scheduled for completion in May 2005. The project objective is to strengthen the regulatory food control system in order to improve consumer protection by ensuring the safety and quality of both the domestic and imported food supplies. The project objective will be achieved through improving local food control capacity by providing on-site training in food control administration and management including review of legislation and development of food quality and food safety standards and regulations. Training will be provided to laboratory analytical staff, laboratory management, food inspectors and others involved in food quality control.

106. A TCP project on Strengthening Food Control and Codex began in Bhutan in June 2000, with funding for Phase 2 of this project approved in February 2004. The project is oriented toward the re-organization of the food control administration in the country. A new food act has been proposed and the inspection service has been centralised. Some activities are still ongoing for upgrading the chemical and microbiological food laboratories.

107. A TCP project on Strengthening Testing Capability for Food Safety was requested by the Chinese Government which is planned to start in October 2004. The project aims at strengthening the analytical capabilities and capacities of the Food Quality Supervision and Testing Centre in Wuhan in order to meet requirements of the international and domestic market concerning pesticide residues. Further activities will be the training of farmers on use and application of pesticides and chemical fertilizers and raising the awareness of food control experts of food hygiene and food safety.

108. An FAO TCP project in India was initiated in November 2000, and was completed in mid 2003. The objective of the project was to strengthen the National Codex Committee and the National Codex Contact Point to ensure the effective conduct of Codex work at a national level and enhanced participation at international level. Activities included a series of training programmes for government professionals, industry and consumer groups on strengthening food safety and quality systems in India through the National Codex Committee. A prioritised action plan for harmonization of national food standards and regulations with CAC recommendations has been produced as an output of the project.

109. An FAO TCP project for Mongolia to Strengthen Food Import Control commenced in June 2002, and is scheduled for completion in October 2004. The objectives of the project are to establish and strengthen the national system of control of food import quality and safety. This is extremely important for Mongolia as 90 per cent of the food consumed in Mongolia is imported. Specifically, the project will improve the institutional set-up for the control of food import in Mongolia, provide training to food inspectors, strengthen laboratory facilities and train analytical staff associated with border food control. It will also raise awareness of national authorities of the work of Codex internationally, the relevance of this work nationally and the importance of full stakeholder participation in food control matters.

110. FAO has implemented a TCP project to provide assistance to Nepal in the review of agricultural policy and legislation. The FAO legal department is the lead unit for this activity, with the Food Quality and Standards Service providing technical support.

111. An FAO TCP project on strengthening SPS compliance for fresh fruits and vegetables commenced in Thailand in December 2003, and will continue through October 2005. The project has been requested by the Government of Thailand given the great potential in Thailand for exporting fresh and processed fruits and vegetables. Project activities will focus on management of programmes for the prevention and control of microbiological hazards in these products, technical capabilities of

food producers, training on food safety and quality assurance systems for producers, processors and government officers responsible for the implementation of these systems. In addition, the overall export inspection and certification system of fruits and vegetables will be improved.

112. An FAO TCP project to improve coffee quality in Thailand was approved in March 2004. Activities under this project include training in good hygiene practice along the coffee chain to reduce mould growth and mycotoxin formation in green coffee. It provides training in monitoring and analysis of ochratoxin-A.

113. An FAO TCP project to improve coffee quality and prevent ochratoxin A (OTA) contamination in Vietnam began in September 2002 and is scheduled to be completed in late 2004. The project involves defining mould formation mechanisms, identifying critical control points, evaluating optimal drying conditions, and developing the necessary tools (e.g. GAP, GMP and HACCP) to control and monitor OTA production.

114. Under a 2001-2002 Technical Assistance Agreement funded by the Asian Development Bank, the Ministry of Health and WHO undertook a collaborative programme that involved a four-pronged approach addressing: (i) policy and legislation; (ii) laboratory facilities and operations; (iii) food-borne disease surveillance; and (iv) information, education, communication and training. The main objective of the Technical Assistance Agreement was to strengthen the capacity of the Ministry of Health to promote food safety and reduce the incidence of foodborne disease. The work included: reviews of existing legislative arrangements; audits of laboratory facilities and analytical capability; assessment of surveillance needs; and the development of an information, education and training centre for food safety. The overriding theme was that attempts to improve food safety should address all steps along the food chain, in the *farm-to-plate* continuum.

115. All components of the Technical Assistance Agreement were completed, with significant outputs and outcomes. The highlights include the following:

- Extensive evaluation of existing legislative arrangements for the control of food safety and technical input into the draft Food Hygiene and Safety Ordinance;
- Inventory of food safety analytical facilities, training of analysts, and guidance for the creation of a network of regional food safety laboratories;
- Development of a pilot programme for the creation of sentinel sites for the active surveillance of foodborne disease, including the training of surveillance personnel; and
- Establishment of the Food Safety Communication and Education Centre and the development of relevant education and training materials.

UPCOMING ACTIVITIES/PROJECTS

116. FAO/WHO conducted a joint mission to Cambodia from 23-27 February 2004, to review their food safety systems and prepare a project to strengthen the national food control structure and services. The mission also considered the formulation of a regional action plan on food safety covering several Southeast Asian countries. A project on this subject was proposed and is waiting for final approval from the funding agency.

117. The Government of Pakistan has requested assistance from FAO for building national capacity for Food Quality and Safety. Specifically, the Ministry for Food, Agriculture and Livestock (MINFAL) is seeking assistance in reviewing and revising national SPS laws, remodelling animal and plant quarantine services, enhancing the capabilities of reference laboratories, forging technical

linkages and fostering cooperation with developed economies. The request is still in the initial formulation phase.

118. An FAO/ WHO project to Develop Food Standards within a Risk Analysis Framework with pilot application in the low income countries of Asia and the Pacific has been funded by the Standards and Trade Development Facility (STDF) in early 2004. Following final logistics for implementing the project, the project will be implemented with the assistance of Food Standards Australia New Zealand (FSANZ).

119. Funding has been sought from the FAO/ Government of Japan Cooperative Framework to implement two projects to assist the low income countries of Asia and the Pacific. The first proposal is to strengthen the availability of data from developing countries of the Asian region be utilized in conducting international food safety risk assessments. The second project is to implement improved institutional frameworks for food safety management and control in the Least Developed Countries of Asia.

120. A project has been proposed by FAO to assist Asian countries in the Quality Improvement of Pepper. The project is currently in the review phase.

121. WHO will focus its future efforts on enhancing food safety through a number of key strategies. WHO will facilitate coordinated international action and extend its partnership activities in food safety in the Region. Key partners in this respect include national food safety authorities, FAO, SPC, ASEAN, Consumers International, development banks and aid agencies, as well as universities. Particular attention will be given to supporting sub-regional approaches to food safety (eg ASEAN) and to strengthening the national capacity particularly in countries such as Cambodia, China, Lao PDR, Mongolia, Philippines and Viet Nam. Attention will continue to be paid to strengthening national capacity to develop policies, plans of action and legislation, to empowering member states to more effectively participate in the Codex standards development process and enabling them to establish national standards consistent with Codex guidance.

122. As surveillance is the basis for the formulation of national strategies to reduce food-related risks, WHO will collaborate with member states to strengthen their capacity to obtain, utilize and share reliable data on: (i) foodborne diseases; and (ii) food contamination. This information will be used to apply to risk profiles and assessments and to enhancing the capacity of countries to make risk-based decisions regarding food safety. Such data and assessments will further serve as the basis for setting international standards and guidelines, and for national food regulations or other initiatives. WHO will also work to ensure that health authorities contribute effectively in the work of the Codex Alimentarius Commission in order to ensure that consumer health concerns are reflected in the priorities of the Commission. To ensure that all those with due responsibility for food safety (including governments, industry and consumers) are able to effectively participate in efforts to ensure the safety of food and are able to respond appropriately to outbreaks, emergencies and disasters, WHO will build risk communication capability in its member states. The Organization will encourage governments to review training of food inspectors and encourage member states to empower their enforcement officers through better training. member states will also be encouraged to work more collaboratively with both industry and consumers and health authorities will be supported so they can provide the public accurate and timely information in outbreaks and emergencies.

A. CAPACITY BUILDING ACTIVITIES IN EUROPE

REGIONAL ACTIVITIES

Regional Workshops

123. FAO and the Slovak Agricultural University jointly held a workshop for delegates from Eastern and Central European countries on Internet Portal on Food Safety- Communication Systems to Strengthen Food Safety and Build Consumer Confidence in Nitra, Slovakia on 23-26 March 2003. The workshop discussed the following systems to facilitate communication in food safety: (i) International Portal for Food Safety, Animal and Plant Health; (ii) Rapid Alert System of the EU; (iii) Emerging Risk Identification System developed by the Netherlands; and (iv) Agroweb Information System for Central and Eastern Europe. The workshop report is available from: www.nitranet.org/conference/papers/nitrafinalreport.pdf

124. FAO and WHO jointly held a sub-regional workshop for the Development of National Food Safety Strategies in South Eastern Europe (SEE) in Brijuni, Croatia from 5-7 July 2004. This workshop was organized as part of the Food Safety Project of the SEE countries within the framework of the Stability Pact Initiative for social cohesion in the Balkans. The main objectives of the workshop included: (a) discussing the needs assessment for the development of a national food safety strategy; (b) drawing up of guidelines to support national authorities in developing their respective food safety strategies, incorporating new approaches in Food Safety within FAO/WHO and the European Commission; (c) strengthening intersectoral collaboration between the Ministries of Health and Agriculture to promote food safety; and (d) providing a platform for discussion on how to better coordinate current capacity building initiatives in food safety with other international agencies.

125. FAO and the Hungarian Food Safety Office in cooperation with the Ministry of Agriculture and Regional Development of Hungary held an "International Workshop on the Development of National Food Safety Strategies" in Budapest, Hungary, from 6-8 September 2004. The workshop was held to: (a) review responses to the Food Strategy Evaluation Questionnaire to provide information on country experiences, obstacles and progress related to the development of their national food safety strategies; (b) provide guidance to participants through expert lecturers, technical material and discussions on the development of food safety strategies regarding accessibility requirements; the role of food technology in food safety; how the HACCP system works in practice; the role of Codex standards and National Codex Committees in strengthening food safety; in a Food Safety Office; risk assessment; the EU Rapid Alert System; approaches to food safety such as the whole food chain approach; and, an update on the development of the World Food Safety Internet Portal; (c) provide on-site demonstrations of the HACCP system in food processing plants and retail establishments; the daily operation of HFSO and approaches to improve involvement of consumer organizations in food safety issues; (d) identify activities in which Central and Eastern European countries, FAO and the expert community can cooperate in ensuring that the recommendations of the Pan-European Conference on Food Safety (PEC) and Quality, endorsed by the 23rd and 24th FAO Regional Conference for Europe, are followed-up/implemented.

Regional Projects

126. An FAO project on Sub-regional Training on Meat Inspection and Meat Technology for Albania, Croatia, Czech Republic, Slovakia and Slovenia was approved in October 2000. The overall objective of this project is to enable increased market access for the participating countries to lucrative meat and meat product markets. This will be accomplished by improving national capacities for the production of higher quality and quantity meat and meat products, which meet European Union standards. A core of 30 persons trained as trainers will carry out national training in meat inspection and relevant technology including the HACCP system. Each country will develop a training programme and plan of action for improving the standards of the meat sector. A final workshop will

provide both a forum and a mechanism for discussing a co-ordinated regional approach for access to the broader European Market.

127. The WHO Food Safety Programme in Europe has been assisting member states in the development of National Food Safety Strategies within the framework of the development of the Food and Nutrition Policy and Action Plans in Europe, which integrates a food safety strategy, a nutrition strategy and a sustainable food supply strategy.

128. The WHO Food Safety Strategy in Europe aims to develop and strengthen National Food Safety Programmes through the development of modern food legislation, strengthening of surveillance of foodborne disease and monitoring of food contamination for the provision of data for risk assessment, and the promotion of risk based food control systems.

129. The WHO Nutrition, Food Security and Food Safety European Programmes have prepared the book "*Food and Health a Basis for Action in Europe*" which promotes the development of food and nutrition policies which protect and promote health and reduce the burden of food related diseases, while contributing to socioeconomic development and a sustainable environment <http://www.euro.who.int/eprise/main/WHO/Progs/FOS/Home>.

130. The WHO Regional Office for Europe is implementing a project to "Strengthen Food Safety and Nutrition Services in South Eastern Europe (SEE)" in the framework of the Stability Pact Initiative for Social Cohesion in the Balkans. Beneficiary countries include Albania, Bosnia & Hercegovina, Bulgaria, Croatia, the Former Yugoslav Republic of Macedonia, Romania, Moldova & Serbia and Montenegro. A sub-regional workshop for the development of Food Safety Policy and Legislation for the SEE was organized by the WHO Food Safety Programme in Europe in collaboration with FAO and the Food Safety Authority of Ireland (FSAI) among others in Belgrade, Serbia and Montenegro 2003. As a follow up there have been organized several activities for the countries in SEE in collaboration with the FSAI such a study tour to the Authority in 2003, and the organization of a satellite panel for SEE within the Conference on Food Control organized by FSAI in Dublin 2004.

131. The WHO Food Safety Programme in Europe completed in 2003 a multi-country public health initiative for *training Food Safety Officers of the Central Asiatic Republics* in collaboration with the Kazakhstan School of Public Health and other international organizations and agencies including FAO and CDC among others. Five training modules have been organized on this project: food policy and legislation, surveillance and epidemiology of foodborne diseases, microbiological and chemical contamination monitoring on foods and HACCP as a tool for risk management. Basic texts and standards of the FAO/WHO Codex Alimentarius Commission are being translated into Russian in order to enhance regional food safety legislation.

132. The WHO Surveillance Programme for Control of Foodborne Diseases in Europe published, in 2003, the web version of 8th Report of the Surveillance Programme in Europe: http://www.euro.who.int/eprise/main/WHO/Progs/FOS/Surveillance/20031127_1. The WHO Surveillance Programme has been publishing quarterly Newsletters in English and Russian which are distributed to more than 1500 institutions. The FAO/WHO Collaborating Center for Research and Training in Food Hygiene and Zoonoses in Berlin has organized the 5th World Congress Foodborne Infections and Intoxications. A first-level course of the WHO Global Salmonella Surveillance (GSS) network was organized for ten Russian speaking countries in the Russian Federation in 2003, and the third-level course of the WHO GSS was organized for eighteen Central, Eastern and South Eastern countries in Poland in 2004. A second-level course is being organized for these countries in Saint Petersburg this year.

133. The Global Environmental Monitoring Systems for Food Contamination Programme in Europe organized a training for the Baltic countries in 2003, on the preparation of databases on food contaminants and specific training on the Operational Programmes for Analytical Laboratories for electronic submission of data to GEMS/Food. European data on exposure and intake of chemical food contaminants have been published online at the Summary Information on Global Health Trends (SIGHT) database: www.euro.who.int/eprise/main/WHO/Progs/FOS/Chemical/20040728_1

134. The WHO Food Safety Programme in Europe has been collaborating with the Joint Research Centre (JRC) of the European Commission in the organization of courses on the detection of Genetically modified organisms (GMOs) in food and in the publication of a manual for the Analysis of Food Samples for the Presence of Genetically Modified Organisms:
http://www.euro.who.int/eprise/main/WHO/Progs/FOS/Assistance/20020417_1

NATIONAL ACTIVITIES

Field Projects

135. An FAO TCP project to improve the diversification of value-added production and certification in environmental farming systems in Croatia was approved in April 2003, and is scheduled for completion in late 2004. The project is being jointly facilitated by the Food Quality and Standards Service and the Environment and Natural Resources Service of FAO.

136. An FAO TCP project to strengthen the Food Quality and Safety System of Turkey was approved in April 2003, and is scheduled to be completed in late 2004.

137. The WHO Food Safety Programme in Europe provided technical assistance to Tajikistan on the prevention of major foodborne diseases and on microbiological contamination monitoring of food and water.

UPCOMING ACTIVITIES/PROJECTS

138. There are a number of projects currently in the formulation and approval phases:

139. The government of Azerbaijan has requested technical assistance from FAO in the area of food safety. A proposal is now under consideration.

140. The government of Bulgaria has requested to the Ministry of Agriculture of the Netherlands to establish a food safety training centre for food inspectors, laboratory staff and food industry experts. This project may be implemented by FAO and funded by the government of the Netherlands.

141. A regional project to improve food safety in Armenia and Georgia is being developed by FAO at the request of these two national governments.

142. The government of Croatia has requested FAO assistance in strengthening Codex activities in that country. A project formulation mission is planned for 2004.

143. Requests for technical assistance have been received by FAO from the governments of Albania, Bulgaria, Croatia, Macedonia, Moldova and Romania. A project with the title "Strengthening food safety in South East European countries – a regional approach to food legislation and control" is being prepared. The project plans to convene several workshops to assist in the development of national food safety policies, including inspection, control and legislation. Additionally, two training courses are planned to train food inspectors in modern approaches to food inspection and food industry experts in food hygiene (HACCP, GMP).

144. The government of Serbia and Montenegro requested technical assistance from FAO to assess the food safety situation in this country. After the initial project formulation mission, substantial changes in the governmental and institutional structure of the country took place, which has made follow-up activities very difficult to undertake as the relevant persons had changed positions or employment. A project proposal has been prepared, but needs to be endorsed by the present government.

145. After becoming a member of FAO in December 2003, the government of the Ukraine requested in technical assistance from FAO to improve the laboratories of safety and quality of food and agricultural products. A project formulation mission to the Ukraine was undertaken in July 2004, and a project proposal is in the final stages of approval.

146. In September 2003, an informal request by a food control laboratory in Hungary near the border to Romania and Serbia has been sent to the FAO for technical assistance to enlarge the existing Hungarian lab to service Romania and Serbia as well. The food safety officer of the sub-regional FAO Office in Budapest, Hungary will consider this request with the Hungarian authorities.

147. Biannual Collaborative Agreements to develop National Food Safety Strategies have been signed between the WHO Regional Office for Europe and the Ministries of Health of Albania, Bulgaria, Bosnia and Herzegovina, Croatia, Former Yugoslavian Republic of Macedonia, Georgia, Russian Federation, Serbia and Montenegro, Russian Federation and Uzbekistan for the period 2004-2005.

148. The WHO Food Safety Programme in Europe will continue the implementation of the project to "Strengthen Food Safety and Nutrition Services in South Eastern Europe (SEE)" in the framework of the Stability Pact Initiative for Social Cohesion in the Balkans.

B. CAPACITY BUILDING ACTIVITIES IN LATIN AMERICA AND THE CARIBBEAN

REGIONAL ACTIVITIES

Regional Workshops

149. FAO/ESNS and the Pan-American Health Organization (PAHO) implemented a workshop on Food Control Systems immediately prior to the 14th CCLAC meeting on 28 November 2004 in Buenos Aires, Argentina. More information on the workshop can be found at: www.fao.org/es/ESN/food/capacity_workshops2004_en.stm

150. FAO, along with PAHO and the Instituto Panamericano de Protección de Alimentos (INPPAZ), the Caribbean Epidemiology Centre (CAREC), and the Caribbean Community (CARICOM) implemented a Regional Inter-Agency Workshop for Strengthening and Co-ordination of Food-borne Disease Surveillance in Support of Food Safety Programmes in the Caribbean in Port of Spain, Trinidad & Tobago from 20 to 23 June, 2004.

151. A workshop on Food Control Systems: Practical Approaches for the Andean region was implemented in March 2004 by FAO(ESNS)/WHO, in collaboration with ILSI. Thirty-two participants attended the workshop held in Quito, Ecuador. Presentations were given by representatives of FAO, PAHO, the Food Safety Authority of Ireland, and local examples of food control systems. More information on the workshop is available from: www.fao.org/es/ESN/food/capacity_workshops2004_en.stm

152. FAO and PAHO implemented a workshop on Food Labelling in February 2004, in collaboration with the National Nutrition Centre of Barbados and the Barbados National Bureau of

Standards, with forty-two persons participating. Presentations were given by representatives of FAO and PAHO.

153. FAO/ESNS, in collaboration with the Centro Nacional de Sanidad Agropecuaria (CENSA), facilitated a workshop on the application of the HACCP system for mycotoxin prevention and control for Latin American and Caribbean countries from 22-23 September, 2003, in Havana, Cuba. The workshop was held immediately prior to the IV Latin American Society for Mycotoxicology (SLAM) Congress. More information on the workshop is available from:

www.fao.org/es/ESN/food/capacity_workshops2003_en.stm

FAO Regional Projects

154. An FAO regional project (TCP/RLA/2904) to strengthen the management of National Codex Committees and Application of the Codex Alimentarius standards of the Andean Countries was initiated in September of 2002, and will continue until December 2004. Bolivia, Colombia, Ecuador, Peru and Venezuela are participating in this project. The main objectives are to strengthen the management of the National Codex Committees; to develop a national and sub-regional training programme and to promote the harmonisation of the national standards to Codex. At present, the objectives are being met through 13 National Seminars on Codex (2 per country), 7 sub-regional workshops and 35 national workshops (7 per country) have been carried out with 983 persons trained and 148 established as trainers. The web sites of the 5 national Codex Committees will be created in each country to disseminate relevant information to governments and to other stakeholders. A comparative analysis between the national regulations and Codex standards was carried out in each country with the purpose of promoting their harmonization or equivalence. The complete project, including objectives and activities with the corresponding reports and documents, is available at: www.rlc.fao.org/prior/comagric/codex/rla2904/default.htm

155. An FAO regional project (TCP/RLA/0177) to evaluate and strengthen the prevention systems for Bovine Spongiform Encephalopathy (BSE) and the feed quality control system began in January 2002 and finished in May 2004 in the countries of Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Paraguay, Peru and Uruguay. The project promotes capacity building in food quality and safety at regional level in South America. The activities of the project were designed to help ensure the quality and safety of the bovine meat produced both for national consumption and for international trade, ensuring that all beef produced is free from BSE. The project covered the organization of study tours on laboratory diagnosis, epidemiological surveillance, and three regional courses related to legal aspects, development of media communications and elaboration of the Manual on Quality Control on Animal Feeding, as well as a publication with all the scientific-technological information carried out by the Project. More information on the project is available at:

<http://www.rlc.fao.org/prior/segalim/animal/eeb/>

156. An FAO regional project (TCP/RLA/2914) to promote the development and good use of South American camelids breeding in Argentina, Bolivia, Chile, Ecuador and Peru. The project began on October 2003, and will end March 2005. It promotes capacity building in food quality and safety at regional level in South America. One of the main components of the project is the establishment of the elaboration of meat products at a low cost and under adequate sanitary conditions with camelids meat and consumption promotion.

157. An FAO project to assist countries with trade was initiated in September 2001, as part of the Regional Special Programme for Food Security (RSPFS) for the Caribbean. The specific objective of this TCP assistance is to formulate a trade facilitation project as a component of the Regional Special Programme for Food Security (RSPFS) for the Caribbean. Particular attention will be given to food quality and safety standards; trade and commodity development programmes; transitory and compensatory measures relating to the present trading environment, and capacity building required for

effective participation in multilateral trade negotiations. Specific elements of trade facilitation within the overall framework of RSPFS include, upgrading Food Quality and Safety Standards, promoting intra-regional trade in agriculture, raising the competitiveness of agricultural commodities (both import and export) and increasing national capacity to participate effectively in multilateral trade negotiations on agriculture.

Other Regional Activities

158. The Inter American Network of Food Analysis Laboratories (INFAL), with secretariat *ex officio* by (PAHO/INPPAZ) and the FAO Regional Office for Latin America and the Caribbean, is conducting a survey of laboratories. INFAL's Second Assembly was carried out in Cancun, Mexico (11-13 June 2003). During the meeting some modifications of bylaws were approved; members of the Executive Committee were elected; the evaluation of the laboratories' survey and the results of the inter-laboratory tests were presented; and the Plan of Action for the period 2003-2005 was also established.

159. With FAO's support, the Latin American Food Composition Network (LATINFOODS) continued working on the update of the Regional Food Composition Table which is available from: www.fao.org/Regional/LAmerica/bases/alimento/default.htm. A CD-ROM with this Table was published and distributed. An FAO/SLAN/LATINFOODS workshop on the Importance of Food Composition in Food Security and Trade and a FAO/ LATINFOODS Meeting was held in Acapulco, Mexico, on 10 November, during the 13th Latin American Congress of Nutrition. In this meeting, the Regional Work Plan on Food Composition was approved. This report is available at: http://www.inta.cl/latinfoods/informes_y_publicaciones.html. The Second Electronic Conference on Food Data Quality Evaluation for Data Base and Food Chemical Composition Table was carried in October 2004, (<http://www.rlc.fao.org/foro/latinfoods/default.htm>)

NATIONAL ACTIVITIES

Workshops and Seminars

160. FAO provided assistance to the Government of Chile, General Secretariat of the Presidency and the Dirección Multilateral, Ministry of Foreign Affairs, in modernizing their food control system. A seminar and working sessions were held with local authorities from the ministries and institutes responsible for food control activities in the country in relation to the reform process currently being undertaken to update and unify the food and agricultural sectors. Over 30 participants attended the Seminar from the Presidency, the Ministry of Foreign Affairs, the National Codex Committee, Ministries of Agriculture, Health, Trade, Industry, Consumer organizations, and Universities. The main topics of the discussions were key issues in the transition to a modern food control system, including legislation, management, inspection, laboratories, co-ordination of activities and policies, economic feasibility and trade impact. The FAO/WHO recently updated Guidelines for Food Control Systems were discussed. Presentations were also given on modern food control systems with practical examples and case studies from countries with similar agriculture-based economies in the process of modernising into a unified system.

161. The FAO Sub-Regional Office for the Caribbean has provided technical assistance to the Ministry of Agriculture and Rural Development of Barbados through the Government Analytical Service (GAS). The technical support assisted in developing a comprehensive quality assurance system for food analysis laboratories, which will contribute to increased export of food and ensuring safety of the domestic supply.

162. In addition, numerous conferences were given by FAO's technical officers at regional and national meetings.

Field Projects

163. An FAO TCP project was recently approved to provide training for prevention of OTA in coffee in Ecuador. The project will be implemented in the upcoming months with ESNS as the lead technical unit.

164. An FAO TCP project to improve the quality and safety of spices produced in Grenada was approved in March 2004, with initial activities currently on-going.

165. An FAO project designed to strengthen the Food Control System in Guyana began in May 2002, and will continue through 2004. The project assists the Government in upgrading the food law and harmonizing national food standards with international standards. Efficiency of the food inspection system will be improved in order to facilitate compliance with the WTO Agreements on SPS and TBT. The analytical capabilities of the Government food control laboratory will be upgraded, to ensure the monitoring of food contaminants and permit the certification of exported products. The capability of the Guyana National Bureau of Standards (GNBS) and the National Codex Committee will be strengthened, facilitating more active and effective national participation in Codex work. The successful accomplishment of the project should produce a coherent food control system with efficient utilisation of resources and operations compliant with international requirements. The laboratory will be upgraded and personnel trained to expedite product testing and certification. Codex contact point will be strengthened to allow for improved involvement in Codex work, with national interests protected and adequate representation in the international arena. The National Legal Consultant will be trained in legislative drafting and will therefore be able to assist in later preparation of regulations and standards.

166. An FAO/ESNS project to strengthen the food control system of Haiti began in July 2002, and was completed in 2003. This was a second phase project following up on an 18 month project to reinforce national food control capacity. The main activities of this project included drafting of food law and basic regulations in accordance with Codex Guidelines, creation of a National Codex Committee, training of food inspector trainers, training of laboratory personnel and provision of basic laboratory equipment.

167. FAO/SLAC has been assisting in the Establishment of a National Codex Committee in Jamaica and will assist the Jamaica Bureau of Standards in preparing its Plan of Action for the Codex National Committee.

168. An FAO project to strengthen the National Codex Committee in Paraguay (TCP/PAR/2801) began operations in October 2002, and was completed in July 2004. The main objectives of the project were to support the work of the National Codex Committee and Codex focal point, to establish linkages between government sectors, industry and consumers, develop an action plan to update national food standards in harmony with Codex guidelines and to establish a web site for exchange of information on Codex. The project achieved these objectives through 6 National Seminars on Codex and 6 national workshops that have been carried out with 182 persons trained. A Work Plan 2004-2005 for the Focal Point and National Codex Committee was prepared as follow-up of the project, as well as plans of actions to harmonize the national food standards with Codex, to establish a national system for chemicals contaminants in foods, and to modernize the national food control system. More information can be obtained from:

<http://www.rlc.fao.org/prior/comagric/codex/par2801/default.htm>

169. An eighteen-month FAO project to strengthen the food control system of Suriname began in May 2002 and is continued through early 2004. The main objective of the project was to strengthen the National Food Control System through providing training, upgrading laboratory facilities and supporting the functioning of the National Codex Committee and its Working Groups. The expected

project outputs were amended national food laws, regulations and standards which comply with international guidelines, improved food inspection service which applies modern quality assurance and HACCP principles, improved laboratory facilities capable of contamination monitoring in primary agricultural products and processed foods and a plan of action on food safety, conforming to Codex Commission recommendations.

170. An FAO project designed to strengthen the National Codex Committee of Uruguay began in 2001 and was completed in early 2003. The main objective of this project was to improve national and local capacity of the Codex Committee, by enhancing the decision making structure and encouraging greater participation from government officials, industry and other stakeholders in National Codex activities. The outcome of this project is a stronger Codex Committee able to inform and advise the state and civil society in matters related to Codex.

171. An FAO/ESNS project was funded to provide emergency technical assistance to the Government of Uruguay in evaluating *Fusarium* contamination of grains. A large part of the 2002 wheat crop was infected with *Fusarium*, a mould species that produces the mycotoxin deoxynivalenol (DON) which can have both short term and long term detrimental effects on human and animal health. Immediate assistance was provided by FAO and emergency legislation was passed limiting the DON content in human foods and animal feed. The project was expanded into longer-term technical assistance (mid 2002-early 2004) which established adequate controls in the supply chain and formulated future prevention and control strategies. It included a study mission, extensive training activities in GAP, GMP and HACCP for mycotoxin prevention and control, an integrated national action plan, rapid detection methods and laboratory strengthening, the establishment of a DON rapid alert forecasting system and a crop information network.

UPCOMING ACTIVITIES/PROJECTS

Field Projects

172. Two FAO sub-regional projects requesting assistance for strengthening the analytical activities, laboratory quality assurance and capacity building of the Interamerican Network of Food Analytical Laboratories (INFAL/ RILAA) have been re-drafted and are in the final stages of approval.

173. The Government of Argentina has requested assistance from FAO for an Integrated Program for Mycotoxin Prevention and Control. The project is in the formulation phase.

174. A regional project for capacity building in Latin American consumer organizations is being prepared by FAO and Consumers International- Latin American Regional Office.

175. As a follow-up to the recommendations of the first Global Forum of Food Safety Regulators and in line with the 123rd FAO Council's instructions, FAO/ESNS and WHO have sought the views of the countries of each region on the interest in convening other regional food safety conferences. At the request of the Codex Coordinating Committee for Latin America and the Caribbean, preparations are underway for a Regional Conference on Food Safety for Latin America and the Caribbean. A preliminary meeting with the delegates of the region to the 27th Codex Alimentarius Commission Meeting was held on 2 July 2004, to initiate discussions on the themes of the conference and other logistical and technical details. Further planning will occur in the upcoming months.

C. CAPACITY BUILDING ACTIVITIES IN THE NEAR EAST

REGIONAL ACTIVITIES

176. The agenda for 2004 FAO Regional Conference for the Near East (Doha, Qatar, 13-17 March 2004) included an item on Food Safety and International Trade. The discussion paper for

this item was reviewed by a group of experts from the Near East Region and includes a plan of action for enhancing food safety and trade in the region. The document is available from the ESNS website at: www.fao.org/es/ESN/food/meetings_neareast_en.stm

Regional Workshops

177. FAO held a regional workshop on Food and Feed Safety in Tunis, Tunisia on 20 September 2004, which focused on Good Practices for the Poultry Sector in Northern Africa and addressed issues such as the application of good practices in the production of poultry feed. A similar workshop is being planned to be held in Cairo in 2004/2005.

178. FAO implemented a workshop for countries of the Gulf Cooperation Council (GCC) from 14-15 September 2004 in Rome, Italy, on modern biotechnology and its application in food and agriculture. The focus of the workshop was on food safety and related regulations in the area of foods derived from modern biotechnology. The workshop was intended to provide a platform for the member states of the GCC to discuss a common regulatory framework for genetically modified foods within the GCC region. More information on the workshop is available from: www.fao.org/es/ESN/food/capacity_workshops2004_en.stm

179. In July 2003, FAO and WHO organised a Regional Training Workshop on Microbiological Risk Assessment (MRA) in Cairo for the countries of Near East. The objectives of the training Workshop were to: introduce MRA and its benefits to various stakeholders (government, academia, industry) and its use as a tool to improve risk management; and to identify challenges to the implementation of MRA and risk management in the participating member states. More information on this workshop is available from: www.fao.org/es/ESN/food/capacity_workshops2003_en.stm

WHO Regional Plan of Action

180. The Regional Plan of Action, which was adopted by the Regional Committee in October 1999, was subsequently launched in the WHO Regional Workshop on *New Challenges in Food Safety: The Regional Action Plan*, Dubai, United Arab Emirates, 5-7 December 1999. The plan stipulates that all food safety efforts should be based upon a thorough review of the food safety situation, and most member states have actually initiated this review, either as part of the implementation of the joint work plan with EMRO or independently thereof.

181. Food safety country profiles have been prepared, based on the EMR Food safety questionnaire, for most of the countries. This questionnaire, which has been circulated to all member states, collects information on all aspects pertaining to food safety, be they directly or indirectly. A completed profile will be a strong tool to define gaps and areas for increased collaboration between all involved partners and to set strategies for the future. One other important factor mentioned in the Regional Action plan is the (re-) establishment of national food safety committees, in the light of the fact that food safety is a multisectoral, inter-ministerial area of work that requires strong collaboration, co-ordination and communication.

182. A WHO inter-country meeting on '*Promotion of Food Safety: Regional Food Safety Network*' was organised in Jordan, on 31 October and 1 November 2001. In this meeting, 12 countries presented a country paper based on the food safety questionnaire. All the presentations were unanimous in the recommendations that there is an urgent need for a network in the region that can provide a forum for informal peer discussion on food safety related issues such as: outbreaks; rejected and recalled foods; harmonisation of procedures (import and export, sampling and testing methods, inspection and training); exchange of information on development of food safety programmes and research; risk analysis data and tools; food control systems, programmes, and events; global events of importance to the forum.

183. This network was subsequently established by WHO/EMRO under the title '*Regional Food Safety Network*' in November 2001. The meeting also observed that with the data presently available, the calculation of food-borne burden of disease is not feasible. Ongoing WHO research on the burden of disease should incorporate food borne diseases as a determinant for the global burden of disease. Furthermore, systems of (food borne) disease surveillance in the Region were discussed and it was stated that a thorough assessment of surveillance systems as well as existing data was urgently required.

184. A WHO/EMRO *Regional Consultation on Food Borne Disease Surveillance* was convened in EMRO, from 18-20 December 2001. Within the framework of the WHO Global Salmonella Surveillance Program, in short GSS or Global Salm-Surv, WHO/EMRO collaborated with WHO/HQ, CDC Atlanta and the Danish Veterinary Institute in order to organise a regional training course on Surveillance of Salmonella and Anti-microbial Resistance in food borne Pathogens.

185. A WHO training course on Food Borne Disease Surveillance was held from 23-27 June 2002 in the Jordan University of Science and Technology in Irbid, Jordan. WHO/FAO training workshop on Microbiological Risk Assessment was held In Cairo-Egypt from 23-25 July 2003.

186. As a direct result of both the consultation and the training course, a special study into the *burden of food borne diseases* will be undertaken in Jordan with the assistance of WHO, CDC, the Jordanian authorities and some possible other partners. The first preparatory meeting was organized in Jordan in October 2002.

187. A manual on '*Developing food legislation, guidelines for developing food legislation for food control systems in countries of the Eastern Mediterranean*' is being prepared, in order to serve as a guiding document. WHO/EMRO Centre for Environmental Health Activities (CEHA) had implemented three WHO/AGFUND Regional Projects on HACCP, Food irradiation and lead poisoning in nine countries of the Region in 2002. The Capacity building of private agencies for implementing HACCP in Food Safety, and food irradiation training programme will continue 2003/04.

NATIONAL ACTIVITIES

Field Projects

188. Through continuous feedback and support, various WHO member states have been assisted in their efforts to improve the national food control systems. Country profiles and food safety strategies have been prepared, or are being prepared, in a number of countries, and revision of existing or drafting of new food legislation is under way either independently of this process or as a component thereof. For example one member state, through a consensus building exercise of jointly drafting food legislation, the health and agricultural authorities have finalised the draft legislation that is now ready for presentation to the Cabinet. One other member state published its new legislation, which became effective in early 2002.

189. An FAO project to assist the Government of Algeria in the strengthening of a national Codex Committee was approved in May 2004 and is scheduled to be completed in April 2005.

190. An FAO project to support the Management and Control of Pesticides, Animal Drug and Chemical Residues in Foodstuffs was initiated in Iran, in August 2000, with a second phase started in 2002. The objective of the project is to promote the application of Good Agricultural Practices in the use of pesticides and Good Animal Husbandry Practices (GAHP) in the use of prescribed animal drugs and to enhance the government's capabilities in the monitoring and control of residues (pesticides, animal drugs and other chemical residues) in foodstuffs. The project aims to ensure maximum consumer protection and promote international trade in foodstuffs. The objectives of the

project are met through a series of training activities concerning GAHP for livestock extension officers and Good Agricultural Practices for agricultural extension officers, improvements in the capability of national laboratories to detect pesticide and veterinary drug residues in foods and establishment of National Maximum Residue Limits which take into account Codex recommendations on these matters. A framework for a national monitoring and control programme of pesticide and drug residues in foodstuffs will also be established.

191. An FAO TCP project to assist in the Analysis, Control and Management of Mycotoxins in Foodstuffs was initiated in Iran in April 2003, and is scheduled to be completed in September 2004.

192. An FAO project to support the creation of a harmonised food control system based on risk analysis principles began in Morocco in January 2002 and was completed in February 2004. The overall goal of the project was to improve the food control system through enhanced quality control measures and harmonisation of tasks between the different Moroccan agencies involved in food control. The objectives of the project was met through visits to Morocco by international consultants working with local authorities that drew up a proposal to reorganise the food control system, study tours for Moroccan officials who visited countries with strong food control systems and workshops for government officials, research institutions and consumer groups responsible for food control.

193. An FAO project to strengthen the National Codex Committee and update/harmonize food standards and regulations began in Syria in November 2002, and will continue through late 2004. The objective of the assistance is to strengthen the capacity of the Syrian National Codex Committee to effectively serve as an advisory body to the government on national food control matters and, in the process, harmonise Syrian food standards and regulations with the CAC requirements as well as update and consolidate older food regulations. The ultimate aim is to enhance the Government capacity to improve the level of national standards in conformity with international trade requirements

194. An FAO project to Strengthen National Food Inspection Systems and Establish a National Codex Committee in Yemen was approved in early 2004, and will continue through 2005.

UPCOMING ACTIVITIES/PROJECTS

195. There are many FAO projects in the both the formulation and approval phases.

196. The Government of Afghanistan has requested advice on food control activities. The project is currently in the formulation stage.

197. 197. The Government of Egypt has requested assistance in Strengthening Quality Control Systems for Cereals and Groundnuts. The request is in the review stage.

198. 198. The Gulf Cooperation Council (GCC) Countries have requested assistance from FAO in establishing a regional risk assessment body and in reorganizing the food control system. The projects are currently in the formulation stage.

199. The Government of Morocco has requested assistance in the area of consumer affairs and food safety. The project is currently in the review phase.

200. The Government of Qatar has requested assistance in improving Quality Control and Standards. The project is in the final formulation stages.

D. CAPACITY BUILDING ACTIVITIES IN THE SOUTH WEST PACIFIC

201. In an effort to facilitate the discussion of practical actions and capacity building recommendations to promote food safety in the countries of the Asian and Pacific region, FAO and WHO convened a Regional Conference on Food Safety for Asia and the Pacific in Seremban, Malaysia from 24-27 May 2004. This Conference is the second in a series of regional meetings, the first of which was held in European Region in February 2002, that FAO and WHO are convening at the request of member countries to meet their needs for policy guidance and capacity building in food safety. The discussion papers and background information on the Conference, in addition to the final report are available from the Conference website: www.foodsafetyforum.org/asian/index_en.asp and will be available in bound copies in due course.

202. In an effort to strengthen food safety in the Pacific, the "Future Action on Food Safety in the Pacific: a WHO/FAO/SPC Meeting" was conducted from 28-31 May 2004 in Seremban, Malaysia with 21 temporary advisers drawn from many of the Pacific island countries as well as experts from elsewhere. This meeting developed guidance to Pacific island countries on mechanisms, based upon a sharing of resources and expertise, that can be applied to: (i) develop food safety laws, regulations and standards suitable to the Pacific and based on Codex; (ii) obtain data on the contamination of food in the Pacific; (iii) obtain data regarding foodborne diseases in the Pacific; and (iv) strengthen the competency of food inspectors in the Pacific. The meeting was held in conjunction with the FAO/WHO Food Safety Conference for Asia and the Pacific.

WHO WPRO REGIONAL ACTIVITIES

203. The importance of national food safety programmes founded on risk assessment or its elements (hazard identification, hazard characterization, exposure assessment and risk characterization) is clearly identified in both the WHO global and regional food safety strategies. Consequently, WHO WPRO strengthened the capacity of its member states through support for targeted contaminant monitoring in Fiji on mercury in tuna; arsenic in drinking water, cadmium in taro and *Salmonella* in eggs and poultry products. In addition, Papua New Guinea was provided technical expertise and other support to enable it to plan a food consumption survey as the basis for determining dietary exposure to hazards in food, and a trial survey period was initiated. Also, in collaboration, with CDC, the Fiji School of Medicine and the Ministry of Health, initial steps towards foodborne disease surveillance were taken in Fiji.

204. As stated in the endorsed² Western Pacific Regional Strategy for Food Safety, policies, plans of action and legislation are key elements of any effective national food safety programme. WHO collaborated with Fiji on food legislation and as a consequence the Food Safety Act was approved by parliament in that country.

205. As part of the process of enhancing the sharing of food legislation information in the Western Pacific, the legislation of several Pacific island countries has been collected and collated on the website <http://fsi.wpro.who.int>. To facilitate more effective enforcement, 16 import inspection and health personnel from eight Pacific island countries (Cook Islands, Fiji, the Federated States of Micronesia, Kiribati, Palau, Papua New Guinea, Solomon Islands and Vanuatu) were trained in the use of the WHO web-based database and on import inspection planning and practices. Countries, including Federated States of Micronesia and Tonga, were provided technical advice and supplies and equipment to strengthen their participation in the work of Codex; and WHO WPRO finalized and distributed a reference manual on the Codex process for Pacific island countries.

² Resolution WPR/RC52.R2, 52nd session of the Regional Committee.

206. Also WHO supported the training of inspectors in the Solomon Islands in order that they would be able to more effectively apply Hazard Analysis and Critical Control Point (HACCP) principles in their inspections. A web-based network of trainers of food safety regulators was finalized and a forum initiated to identify core competencies that need to be addressed in the training of food inspectors (<http://www.wpro.who.int/fsiguide/index.asp>). In cooperation with the New Zealand Food Safety Authority, inspectors from Fiji were trained in various aspects of food safety including Codex, HACCP and import inspection. The competency of regulators was also enhanced through undergraduate training of Fiji regulators in New Zealand; training of inspectors from Kiribati at the Fiji School of Medicine; training of Fiji inspectors in relation to the new food legislation; and training of inspectors in the Commonwealth of the Northern Mariana Islands and the Republic of the Marshall Islands.

FAO-SAPA/RAP REGIONAL ACTIVITIES

207. Based upon a request from the Government of Tonga, FAO SAPA organized an international consultancy to review the existing food control set up and make proposals for appropriate alternative organizational structures for a "Food Division".

208. The FAO sub-regional project for Strengthening Capacity Building in Codex, Food Regulation and International Food Standards Harmonisation involving the Cook Islands, Fiji, Samoa, Tonga and Vanuatu has conducted a 3-week training course on Food Regulation and Standards - Food Control and Quality Assurance and a 2-week course on Food Import and Export Inspection and Certification.

209. The FAO sub-regional project on Strengthening Food Analytical Capabilities in the Pacific Region conducted two 1-week training courses on basic food analysis and food contaminants for delegates from the project member countries Fiji, Samoa, Solomon Islands, Tonga and Vanuatu.

UPCOMING ACTIVITIES/PROJECTS

210. The Government of Malaysia has requested FAO assistance to facilitate a Regional Training Programme on Strengthening National Capacities on Risk Assessment and Traceability in the Seafood Trade for the South West Pacific Region. The project is currently in the formulation stage. The Government of Tonga has requested FAO assistance for a project to develop an integrated National Food Control & Quality Assurance System for Tonga in accordance with Codex, with emphasis on drafting appropriate Food Legislation, Regulations and Food Standards and training government officers to ensure proper implementation and enforcement. The project is in the formulation stage.

211. The FAO project on Strengthening Capacity Building in Codex is organising a sub-regional training course on Codex Information System and Management of Codex Contact Point due to be held in Apia, Samoa in the second half of 2004. The project is also providing/upgrading essential equipment needed for information retrieval and distribution as well as the production of training material for the offices of the codex contact points to enable their effective operation.

212. An FAO/ WHO project to Develop Food Standards within a Risk Analysis Framework with pilot application in the low income countries of Asia and the Pacific has been funded by the Standards and Trade Development Facility (STDF) in early 2004. Following final logistical for implementing the project, the project will be implemented with the assistance of Food Standards Australia New Zealand (FSANZ).

213. Funding has been sought from the FAO/ Government of Japan Cooperative Framework to implement 2 projects to assist the low income countries of Asia and the Pacific. The first proposal is to strengthen the availability of data from developing countries of the Asian region be utilized in conducting international food safety risk assessments. The second project is to implement improved

institutional frameworks for food safety management and control in the Least Developed Countries of Asia.

214. WHO will focus its future efforts on enhancing food safety through a number of key strategies. WHO will facilitate coordinated international action and extend its partnership activities in food safety in the Region. Key partners in this respect include national food safety authorities, FAO, SPC, Consumers International, development banks and aid agencies, as well as universities. Attention will continue to be paid to strengthening national capacity to develop policies, plans of action and legislation, to empowering member states to more effectively participate in the Codex standards development process and enabling them to establish national standards consistent with Codex guidance.

215. As surveillance is the basis for the formulation of national strategies to reduce food-related risks, WHO will collaborate with member states to strengthen their capacity to obtain, utilize and share reliable data on: (i) foodborne diseases; and (ii) food contamination. This information will be used to apply to risk profiles and assessments and to enhancing the capacity of countries to make risk-based decisions regarding food safety. Such data and assessments will further serve as the basis for setting international standards and guidelines, and for national food regulations or other initiatives. WHO will also work to ensure that health authorities contribute effectively in the work of the Codex Alimentarius Commission in order to ensure that consumer health concerns are reflected in the priorities of the Commission. To ensure that all those with due responsibility for food safety (including governments, industry and consumers) are able to effectively participate in efforts to ensure the safety of food and are able to respond appropriately to outbreaks, emergencies and disasters, WHO will build risk communication capability in its member states. The Organization will encourage governments to review training of food inspectors and encourage member states to empower their enforcement officers through better training. member states will also be encouraged to work more collaboratively with both industry and consumers and health authorities will be supported so they can provide the public accurate and timely information in outbreaks and emergencies.
