

**CAPACITY BUILDING FOR FOOD STANDARDS AND REGULATIONS**

A report provided by the Secretariat of the Codex Alimentarius Commission  
based on information provided by FAO and WHO<sup>1</sup>

**I. NEED FOR CAPACITY BUILDING IN FOOD STANDARDS**

1. 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 Sanitary and Phytosanitary (SPS) measures and on Technical Barriers to Trade (TBT).
2. Members of the World Trade Organisation (WTO) are required to base their domestic technical regulations or standards on standards developed by international organisations. These organisations include, the Joint FAO/WHO Codex Alimentarius Commission for food safety; the Office International des Epizoöties (OIE) for animal health; and the International Plant Protection Convention (IPPC) for plant health.
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 standardisation bodies.
4. Both the SPS (Article 9) Agreement and the TBT (Article 12) Agreement 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 Agreement 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 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. At the 23<sup>rd</sup> Session of the Codex Commission (July 1999), FAO and WHO were called upon to strengthen capacity building activities, particularly in relation to risk analysis capabilities in developing countries.

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<sup>1</sup> This report is based on information provided by FAO and WHO to the FAO/WHO (Codex) Regional Coordinating Committees meeting in 2002/2003.

6. In keeping with these mandates, FAO and WHO engaged in diverse capacity building activities designed to assist developing countries in improving their food safety and plant and animal health systems. Together with international organisations, national governments, international and regional financial institutions and NGOs, various capacity building and technical assistance initiatives have been undertaken. This report will focus on capacity building activities in the region undertaken in part or in whole by FAO and WHO during the period since the last Regional Codex Co-ordinating Committee meeting. It also provides a brief on regional or national capacity building activities that are in the process of being approved.

7. In order to support countries desiring to harmonise their national standards with those of Codex and comply fully with international trade regulations, FAO and WHO engaged in a variety of capacity building activities. While the activities and strategies differ and are tailored to specific regions and countries, the overall objective is to support and strengthen national food control systems. This is often done by providing technical assistance in reviewing and analysing the institutional set up for food control and evaluating its effectiveness, identifying main weaknesses, and formulating recommendations and proposals for the establishment of technically sound food control systems which are harmonised 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. The remainder of the report will focus on these activities, occurring at global, regional and national level.

## II. GLOBAL ACTIVITIES

### A. INTERNATIONAL WORKSHOPS

8. An *International Workshop on Food Safety Management in Developing Countries* was organised and sponsored jointly by Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) and FAO, with financial support from Languedoc-Roussillon region. The workshop was held in Montpellier, France from 10-14 December 2000. Fifty-one participants (including participants from Asia) representing twenty-two countries benefited from this event. Topics such as the impact of the SPS and TBT agreements in developing countries, and risks of undesired substances in foods and feed were presented and discussed. Working groups met to discuss five food safety and development priority areas: risk assessment, food safety regulatory systems, quality assurance, developmental finance and research needs. The working groups presented a series of recommendations which were then discussed during the plenary session. The report may be obtained from CIRAD on request.

9. FAO and WHO jointly convened a *Global Forum of Food Safety Regulators in Marrakech* from 28-30 January 2002 to bring together food safety regulators from every region of the world to discuss and share experiences on food safety issues that are of global concern. Forum discussions were based on the principle that regulations must be science-based and built on risk assessment as appropriate to circumstance. These discussions demonstrated a global recognition that actions need to be taken throughout the food production chain from farm and fishing boat to the consumer. Participants agreed that actions need to be taken urgently to develop the capacity in particular in developing countries to assure the safety of the food supply to their populations. Building such capacities will also assist in strengthening exports, improving public health and reducing poverty.

10. An *International Workshop on the Application of HACCP Principles in the Prevention and Control of Mycotoxins* was held in Greenwich, UK from 17-28 June, 2002. The workshop was co-sponsored by FAO and the National Resources Institute (NRI). The purpose of the workshop was

to present and train the participants on the use of the Manual and the application of the HAACP system in Mycotoxin prevention and control. The manual was written jointly by FAO and the International Atomic Energy Agency (IAEA) in collaboration with NRI. The manual was published in 2001 by FAO as Food and Nutrition Paper 73. It can be obtained from FAO on request.

## B. GLOBAL PROJECTS

11. An FAO global project for the *Enhancement of Coffee Quality through Prevention of Mould Formation* was started in December 2000, and is due to end in December 2004. This project is being carried out in Brazil, Colombia, Ivory Coast, India, Indonesia, Kenya, and Uganda, with collaboration from Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) and Institute for Scientific Information on Coffee (ISIC) and the University of Surrey, UK. The project has received funding from 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 has also been incorporated.

12. The project approach emphasises 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. GAP, GMP and HACCP) to control and monitor both mould formation and OTA production. Specifically, the project builds capacity at 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 analytical capacity and capability required to support national programmes for prevention and control of OTA- contamination of coffee.

13. In 1999-2001, FAO formulated and implemented an *Umbrella Programme for Training on Uruguay Round and Future Negotiations on Agriculture*. The first phase of the programme included the implementation of 14 sub-regional training courses conducted in Africa (four courses); Asia (three courses); Near East (two courses); Europe (two courses); and Latin America (three courses). The programme was co-financed by FAO, European Union and several donor countries. It was designed taking into account the complementarities and synergies of the countries involved in the programme, including the more general training on multilateral trade conducted by other international institutions (notably WTO, WB, ITC, UNCTAD, etc). The project aimed at improving understanding of existing WTO agreements to enable countries to more fully participate in the negotiation process and debate issues of special concern to the region. Topics which were covered during training included various UR agreements concerning agriculture, such as SPS measures, Technical Barriers to Trade and Trade related Intellectual Property Rights.

14. A two year project to improve the quality and safety of Fresh Fruits and Vegetables through creation of a Global Inventory, Reference Materials and Food Safety Training Programme for Improving the Quality and Safety of Fresh Fruits and Vegetables) was recently approved. It is funded by FAO's Prevention of Food Losses Fund (PFL) and will be implemented by the Food and Nutrition Division (ESN), in collaboration with Agriculture Support Systems Division (AGS) and Plant Production and Protection Division (AGP). The project's main objective is to improve access and availability of information, through provision of resource materials and training activities, to countries desiring to improve the quality and safety of their fresh produce. The project will create an inventory of all available food safety training materials and develop a database of existing training programs. This information will be developed into an electronic database with information relevant to all aspects of the production chain, from harvest to transport and marketing. Several training activities will be

carried out at regional and national levels, including Latin America and the Caribbean. A series of training materials such as videos, CDs and Manuals will accompany the planned training.

### C. GLOBAL INITIATIVES

15. An *FAO Trust Fund for Food Security and Food Safety* was established by FAO as an important source of demand-driven funding to supplement the present trust funds, which support key components of the Organisation's Field Programme. The initial funding target is of US\$500 million. The projects to be funded from this Trust Fund will assist Member Governments in initiating, strengthening, accelerating and expanding activities in the following two areas: *Food Security and Emergency Prevention of Transboundary Pests and Diseases of Animals and Plants*.

16. Transboundary animal diseases are epizootic diseases that are highly contagious or transmissible with the potential for very serious and rapid spread, irrespective of national borders. These diseases are of serious socio-economic or public health consequence and can be a major constraint to international trade of animals and animal products. This can have an adverse effect on the food security situation in the countries concerned and also on the food safety of consumers around the world. The same is true for locusts and other migratory pests that can fly over great distances and threaten crops hundreds or thousands of kilometres away from their places of origin.

17. The *FAO Integrated Programme for Building Capacity for Biotechnology, Food Quality and Safety, and Phyto- and Zoosanitary Standards* is being developed for consideration by potential donors to address the needs of developing and transition countries in the establishment or enhancement of appropriate policies, institutions and human resources concerned with biotechnology and sanitary measures in the context of food and agriculture, and in connection with trade related and environmental issues. The food safety component of this Programme valued at US\$56.5 million covers such areas as: guidance for decision makers, regulatory and legal aspects, institutional strengthening at regional and national levels, human resource development, improvement of laboratory capabilities, and management of food control programmes.

## III. REGIONAL ACTIVITIES

### A. AFRICA

#### *FAO Regional Projects and Workshops*

18. A project designed to train private small/medium size industries in HACCP/Good Hygiene Practices (GHP) and Good Manufacturing Practices (GMP) covering Benin, Burkina Faso, Côte 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 HACCP and at the national level for industry. In total there will be one regional training course and six national courses. To date three of the seven training sessions have been completed.

19. The Special Regional Program for Food Security covers the UEMOA countries and was initiated in December of 2001 and will continue through December 2003. The project is being implemented by several divisions within FAO. The objectives of the activities which will be undertaken by the Food Control and Consumer protection group under phase one are 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 harmonization, training of food control inspectors and upgrading laboratory facilities. To date the review of existing food legislation should have been completed and regional level proposals for harmonisation should have been elaborated at a regional workshop.

20. A project to reduce post harvest losses and increase the safety of milk and dairy products in sub-Saharan Africa has been approved. 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 and Nutrition Division (ESN). The project aims to increase technical capacity in terms implementation of Good Hygiene and Manufacturing Practices (GHP and GMP) 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 stakeholders workshop will be held.

21. FAO in collaboration with the government of Tanzania held a Training of Trainers Course on Quality and Safety Based on Good Manufacturing Practices and HAACP in September 2000 in Dar es Salaam, Tanzania. Participants were from Zimbabwe, Botswana, Ethiopia, Uganda, Kenya and Tanzania and represented food regulators, food industry, academia and other government agencies. The objective of the course was to develop training skills of food safety and quality control personnel working within the Government and the food processing industries and to improve the awareness among the food industry operators of the need to comply with the international standards. The course included presentations by a team of three consultants, practical working group sessions, where participants developed a HAACP plan for a particular food product and a field visit to two food processing plants. At the end of the course each participant was assigned a topic to present to reinforce their capacity as future trainers.

*WHO Food Safety Activities in the AFRO Region: Issues and challenges*

22. The WHO Regional office for Africa promotes a holistic and integrated approach to addressing food safety issues, hence food safety activities are integrated/included in other areas of work. The "Healthy Settings" concept is one example, the office through the Healthy Market Places initiative promotes the safety and wholesomeness of foods sold and traded at the markets by improving knowledge and behaviours of food vendors in food handling and sanitation. In view of the fact that poverty is largely the cause of food-borne illnesses within the region, the office integrates food safety concepts with poverty reduction activities.

23. The regional office has provided expertise to assess the impact of beverage additives, and supported the training of street vendors in safe food handling practices. Furthermore, the office through the "Healthy Market Places" initiative provided technical support to countries such as Tanzania, Nigeria to improve food safety within the context of the "Buguruni Healthy Market Initiative". Efforts are currently being made to replicate and expand the scope of this initiative to other countries of the region.

24. To obtain more evidence for decision-making on the sources and magnitude of food-borne illness in the African region, the regional office recently undertook a regional situation analysis on food safety and hygiene. Through the orientations of the situation analysis, the office aims to develop strategic interventions and action plans to further strengthen the food safety programs of the countries. In addition, an awareness-raising workshop has been planned, wherein it will also aim to identify strengths and constraints in relation to national food safety programmes, identify regional and country needs.

25. In the near future, more will be done to capitalize on the increasing awareness of food safety and hygiene concerns. Furthermore, the fact that food safety and hygiene is a global priority for WHO will be seized upon to mobilize additional resources and required expertise. However, sensitization efforts will have to be strengthened so as to ensure that decision-makers and populations are fully informed of food related health risks. Countries will have to considerably strengthen their institutions and capacities to address this issue.

26. AFRO will also aim to develop an approach for food-borne disease surveillance system, as an integral part of national epidemiological surveillance systems. Since street-vending of foodstuffs is very widespread in the region, and that this food is consumed by millions of people in African cities, training materials for safe food handling for street vendors will be developed. Finally, advocacy for food safety and hygiene will be constant.

## B. ASIA

### *Regional Workshops*

27. The *South Asian Conference on Food Safety* was organised jointly by FAO and ILSI and took place from 11-13 December 2000 in Delhi. This was the third conference in the series on food safety issues for the South Asian region. Ninety delegates attended the conference from seven member countries of SAARC. The overall objectives of the conference were to review the current food safety and food trade environment in the SAARC region, to review progress toward harmonisation of food regulations with international standards, to identify challenges faced in the support of food safety activities, and to discuss issues related to risk analysis. Conference participants agreed upon several concrete recommendations, including, nomination of a focal point on food control matters among SAARC countries and harmonisation of food safety measures and food control and import inspection and certification procedures using the Codex standards, guidelines and recommendations. Responsibility for reviewing existing food laws and regulations and identifying deviations from international standards was divided into different food commodities, with each country taking responsibility for a certain set of commodities.

28. A sub-regional *Food Safety Seminar for Central Asian Republics* was held in 2001 in Tashkent, Uzbekistan. The seminar, sponsored by FAO, WHO and ILSI was attended by over 30 participants from Central Asia. The main objective of the training was to provide participants with a framework for understanding food safety including, food safety systems and risk analysis principles; and to discuss regional aspects of legislation, enforcement, management and inter-ministerial co-operation.

29. A *Workshop on Microbiological Risk Analysis (MRA)* was held in Beijing 10-11 May 2002. The workshop was jointly sponsored by FAO and ILSI and organised locally by the ILSI focal point in China and the Ministry of Health. A total of one hundred and fifty participants from Asia attended the workshop. WHO sponsored the participation of eleven participants from Asian countries. The objective of the workshop was to familiarise participants with the process of microbiological risk assessment and its use within the risk analysis framework. The conclusions of the workshop were that the workshop had provided a good introduction to microbiological risk assessment, however participants expressed the need for further training, including capacity building in the area of data collection useful for MRA. Participants took advantage of the opportunity to discuss ideas with others working in the field of food safety and felt that this was a good opportunity to increase collaboration between different sectors.

30. FAO and the National Food Processors Association (NFPA) jointly organised a *Workshop on Food Safety* in Bangkok, Thailand in 2002. Ninety participants attended the workshop. The overall objective of the workshop was to strengthen country level initiatives and partnership with food processing industries. The seminar emphasised the use of science as the foundation of effective food control programmes. Aspects of successful national food control programmes were discussed using operational examples from selected countries of the Asian region, to provide practical insight to participants who are involved in upgrading their own national food safety programmes. The seminar also analysed key food safety issues that are currently in international focus, with presentations from leading international experts. The topics reviewed were highly relevant to all countries, with a particular focus on issues of concern to developing countries.

31. A FAO/ILSI/ILSI India *Regional Meeting on Modernising Food Control Systems in the SAARC Region*, will be held 10-11 December 2002 in Kathmandu, Nepal. The meeting will cover aspects related to food safety (microbiology, food additives, biotechnology, nutraceuticals and micronutrient fortification of foods) food safety tools (Risk Analysis, HACCP, GMP), harmonisation of food regulations and modernising food control systems. This meeting is a direct follow-up to the third FAO/ILSI/ILSI India South Asian Conference on Food Safety held in Delhi in December 2000.

#### C. EUROPE

##### *WHO Food and Nutrition Policy and Action Plans*

32. 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.

33. The 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 food-borne disease and monitoring of food contamination for the provision of data for risk assessment, and the promotion of risk based food control systems.

34. 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 socio-economic development and a sustainable environment.

35. Several workshops have been held in the European Region during the last two years including: the first and second Workshops on Intersectoral Development of Food and Nutrition Action Plans in South East Europe in Malta 2000 and in Bulgaria 2001 respectively; the second workshop for development of the Food and nutrition Action Plan for the Nordic and Baltic countries in Latvia, June 2001; and the first workshop WHO/FAO to develop Food and Nutrition Action Plans for countries in southern Europe, Rome 2002.

##### *Regional Workshops*

36. The WHO Food Safety Programme in Europe in collaboration with the EU-Joint Research Centre of Ispra organised three training courses on detection techniques for Genetically Modified Organisms in foods in October, November and December 2000. Almost 100 technicians from 34 different countries have been trained. The electronic version of the manual will be posted on a joint WHO/JRC website.

37. The WHO Mediterranean Zoonosis Control Programme jointly with the WHO Food Safety Programme in Europe organized a regional training workshop on food safety risk management tools (e.g. HACCP) in Teramo, in December 2000.

##### *Regional Projects*

38. 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 program

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.

39. The WHO Food Safety Programme in Europe initiated a multi-country public health initiative for training Food Safety Officers of the Central Asiatic Republics at the Kazakhstan School of Public Health. Five training modules will be organized on this project: food legislation, epidemiology, food microbiology, chemical analyses on foods and risk analyses. The basic texts and standards of the FAO/WHO Codex Alimentarius Commission are being translated into Russian in order to enhance regional food safety legislation.

#### D. LATIN AMERICA AND THE CARIBBEAN

##### *Regional Workshops*

40. Last session's FAO/WHO/ILSI pre-codex meeting was on the subject of Risk Analysis and Exposure Assessment and was held in Santo Domingo, Dominican Republic from 13-16 February 2001. Sixty-two participants representing government institutions involved in food control, university technical experts and senior administrators and researchers were in attendance. The overall objectives of this workshop were to: familiarise participants with the principles of risk analysis and in particular the methodologies for the assessment of exposure to food-borne hazards; to raise the awareness of participants of the region in risk assessment; to provide guidelines to participants on the data required to assess exposure and to encourage participants to apply expertise acquired on risk analysis of food-borne hazards in food legislation.

41. A FAO/AOAC Latin America and the Caribbean Section Workshop on Risk Analysis/Assessment Methodology was held in Montevideo, Uruguay on 18 November 2001. The workshop was attended by seventy participants from the region. The overall objective of the workshop was to further update participants on the requirements for risk analysis and in particular to exemplify its application through practical case studies. The workshop included presentations on the methods and models used in risk assessment, in particular exposure assessment, with case studies on contaminants, microbiology and GMO's.

42. FAO/ILSI and INTI organised a Risk Analysis Workshop for the Southern Cone Countries in Buenos Aires from 12-13 August 2002. Forty participants from the region attended the workshop. The main objectives of the workshop were to: familiarise participants with the principles of risk analysis and the methodologies for its qualitative and quantitative risk assessment for food contaminants and additives, provide information on the data required for risk assessment and promote the application of this data in formulating managerial decisions. The workshop was organised with a practical approach and presented real case studies. The programme included risk analysis principles followed by each lecturer's presentation of risk assessment examples and their own institution's approach to solving them. Practical group exercises were conducted on case studies from real scenarios on chemical and microbiological contaminants, food additives, veterinary drug residues, and pesticides, where the risk assessment approach was used to come to a management decision by the participants government to solve a food safety issue. The presentations included scientific as well as policy and regulatory aspects.

##### *FAO Regional Projects*

43. A project to modernise the food control systems of Andean countries was funded in August of 1999 and ran through December 2001. The project was implemented in Bolivia, Colombia, Ecuador, Peru, and Venezuela. The main objective of the project was to facilitate the design of a plan of action for each participating country for modernising food control systems and to formulate national projects to harmonise food control. These objectives were met through a series of regional level workshops to

design, present and revise National Plans of Action for food control. Five national consultants, one for each country, supported by international experts, reviewed the current food control regulations and implementation of the food control system in each country, current problems were defined followed by a plan listing necessary steps to be taken to achieve the goals set out in the national plan of action. National workshops were held to co-ordinate the work set out in the national plan(s) of action.

44. A regional project to strengthen National Codex Committees in Central America began in March 2001 and is scheduled to be completed in December 2002. The project is being implemented in Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Dominican Republic. The main objective of the project is to create and/or strengthen National Codex Committees in each country and facilitate the application of Codex guidelines and recommendations. The objectives will be met through a series of regional and national workshops to establish and strengthen National Codex Committees and review the structure and responsibilities of subsidiary Codex bodies. A Codex information system will be created in each country to disseminate to government and other stakeholders relevant information including new guidelines and regulations established by Codex.

45. Fourteen National Seminars on Codex (two per country), seven sub-regional workshops and 49 national workshops (seven per country) have been carried out with 700 persons trained and 125 formed as trainers. A Codex information system which will include the web sites of the seven national Codex Committees will be created in each country to disseminate relevant information to governments and to other stakeholders. A comparative analysis between the local regulations and Codex standards was carried out in each country with the purpose of promoting their harmonisation or equivalence. During this project international and regional organisations such as INPPAZ/PAHO, INCAP/PAHO and OIRSA participated. The complete project, including objective and activities with the corresponding reports and documents, is available at the website<sup>2</sup> of FAO's Regional Office for Latin America and the Caribbean.

46. A project to strengthen Phytosanitary Capabilities in the CARICOM region began in 2000 and is scheduled for completion in 2002. The main objective of the project is to strengthen the phytosanitary capabilities of the CARICOM member countries, with particular emphasis on pest exclusion, and to ensure that legal frameworks are consistent with new international trade agreements. These objectives will be met by drafting instructions for plant protection legislation, training phytosanitary officers at both the policy and operational level and creating an information sharing and exchange network for the region.

47. A 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.

48. A project to evaluate and strengthen the prevention systems for Bovine Spongiform Encephalopathy (BSE) and the feed quality control system began in Argentina, Brazil, Chile, Colombia, Mexico, Paraguay, Peru and Uruguay. (TCP/RAL/0017 Evaluación y Reforzamiento del Sistema de Prevención de la Encefalopatía Espongiforme Bovina (EEB) y el Sistema de Control de

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<sup>2</sup> <<http://www.fao.org/Regional/LAmerica/prior/comagric/codex/rla0065/0065.htm>>.

Calidad de Piensos). The project promotes capacity building in food quality and safety at regional level in South America. The activities of the project are to help ensure the quality and safety of the bovine meat produced both for internal consumption and for international trade, ensuring that all beef produced is free from BSE. The project involves the organisation of two study trips and three regional courses in risk analysis, epidemiological surveillance and laboratory diagnosis.

#### *Other FAO regional activities*

49. FAO published in 2001 the "Guide for the municipal management of food security and nutrition", in Spanish, which includes chapters on food supply and implementation of a municipal system on food control and Codex information. This publication is available at the website<sup>3</sup> of FAO's Regional Office for Latin America and the Caribbean

50. The Inter American Network of Food Analysis Laboratories (INFAL), which secretariat *ex officio* by the Pan American Institute of Food Protection and Zoonosis (INPPAZ/PAHO) and FAO Regional Office for Latin America and the Caribbean, is starting the survey of laboratories<sup>4</sup>. INFAL's First Assembly was carried out in Aruba (June 11-13, 2001). During the meeting by-laws were approved; members of the Executive Committee were elected; four technical groups were created (food microbiology, laboratory quality assurance, residues of veterinary drugs in foods, and food additives, contaminants and pesticide residues); and the Plan of Action for the period 2001-2003 was also established.

51. With FAO's support, the Latin American Food Composition Network (LATINFOODS) continued working on the update of the Regional Food Composition Table which is located at the website<sup>5</sup> of FAO Regional Office for Latin America and the Caribbean. In addition the first electronic conference on "Data compilation for food composition tables and databases" was carried out (6-24 May 2002) with the participation of 101 professionals from 17 countries and INCAP/PAHO and FAO.

#### E. NEAR EAST/EASTERN MEDITERRANEAN

##### *WHO Regional Plan of Action*

52. 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. 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, and 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, coordination and communication.

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<sup>3</sup> <<http://www.rlc.fao.org/pubs/document.htm>>.

<sup>4</sup> This is a joint PAHO/FAO activity

<sup>5</sup> <http://www.fao.org/Regional/LAmerica/bases/alimento/default.htm>>.

*Regional Workshops*

53. A FAO/ILSI Training workshop on Risk analysis in Food Control for Middle East countries, took place on October 16-18, 2000 in Amman, Jordan. Forty participants representing government ministries, academia and industry participated. The objectives of the meeting were to increase the awareness of food control officials of the concepts and application of risk analysis in national food control systems; to identify specific problems and challenges to risk assessment priorities in the region, to raise awareness of Food Control officials regarding international work, to promote technical co-operation in the area of food safety, in particular by providing appropriate inputs into the work of Codex Alimentarius Commission and other regulatory bodies.

54. A FAO/WHO/ILSI Regional Workshop on Risk Analysis: Exposure Assessment took place from 27-28 January, 2001. The participants were introduced to the principles and implementation of exposure assessment. Important reflections at the end of the workshop were that for most of the countries of the EMR, dietary intake and exposure data are not available, thus making it impossible to conduct a complete and comprehensive risk assessment of major contaminants. Furthermore, most countries in the region lack the necessary skills to carry out risk assessment, and they require specialised training in this area. The necessity to sensitise decision makers to the importance of risk assessment in developing food safety legislation was also observed. The workshop therefore recommended that regional expert consultations be convened on the subject of risk analysis, that regional training centres be identified, that Member States should consider the benefits of adopting Codex Standards, guidelines and other recommendations in relation to the conformity of their food legislation with WTO requirements, and that research institutes and relevant academic institutions should collaborate in generating data and information necessary to carry out exposure assessment and risk analysis.

55. An AFC/WHO/FAO Intercountry Workshop on Emerging Food Safety Issues and Consumer Protection, was held in Jordan, from 28 to 30 October 2001. The meeting discussed various issues pertaining to the role of consumer organisations in the field of food safety and how this role can be enhanced to promote consumer protection at the national and regional level. Participants agreed that this role should not be seen as antagonistic to official food control authorities but rather complementary, in the interest of the consumer. Among other important issues, the meeting underlined the need for consumer organisations to be self-reliant and independent, in order to avoid conflicts of interest and build credibility among consumers. The meeting highlighted the importance of active participation by consumer societies in risk management and risk communication activities as they pertain to food safety. Finally, participants at the meeting discussed the possible involvement of international organisations in supporting the work of consumer organisations. It identified in particular the area of technical support by FAO and WHO and other international organisations in the form of provision of information on food-borne outbreak management and emerging food safety issues, as well as up-to-date scientific information, scientific reference material, expert advice, consumer education material, and training in the areas of food safety and risk analysis.

56. An FAO/IAEA/WHO Regional Training Workshop on Development of Quality Assurance for Mycotoxin Analysis was organised in Cairo, Egypt, from 1 to 6 December 2001. Participants from sixteen countries in from the Near East and Africa participated. The objective of the workshop was to discuss the establishment of quality assurance systems for mycotoxin analysis following international guidelines. The participants were introduced to the concepts of quality assurance and specifications necessary for accreditation for mycotoxin analysis in laboratories. Current scientific knowledge of mycotoxins was discussed with particular emphasis on how this relates to new regulations and barriers to trade. The general consensus as reflected in the evaluation forms was that this was a highly useful training course, to be repeated for other subject areas or general laboratory quality assurance.

57. 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 were represented, all of which presented a country paper based on the food safety questionnaire, and all of which were unanimous in the recommendations, which stipulated 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 programs and research; risk analysis data and tools; food control systems, programs, and events; global events of importance to the forum. 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.

58. A WHO/EMRO Regional Consultation on Food-borne Disease Surveillance was convened in EMRO, from 18 to 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.

59. A WHO training course on Food-borne Disease Surveillance was held from 23 to 27 June 2002 in the Jordan University of Science and Technology in Irbid, Jordan.

60. 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 will be organised in Jordan in October 2002.

#### *Workshops*

61. A FAO/WHO workshop on 'Risk management and communication and links between risk assessment and risk management' is being planned, immediately preceding the second session of the Codex Coordinating Committee for the Near East, which is scheduled from 20 - 23 January 2003, and will be held in EMRO, Cairo, Egypt.

#### F. WESTERN PACIFIC/SOUTH-WEST PACIFIC REGIONS

##### *FAO Regional Workshops*

62. The fourth FAO Round Table Meeting for Pacific Island Countries on WTO Agreement Provisions was held in Wellington on 2-6 April 2001. The meeting was jointly sponsored by FAO, New Zealand and the Trade and Investment Access Facility of the Commonwealth Secretariat (TIAF) as the follow-up to three earlier meetings held in Auckland in September 1998, March 1999 and April 2000 respectively. More than 50 people (lecturers, participants, observers and organisers) representing Cook Islands, Fiji, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu attended the meeting. The main objectives of the meeting were to, build sustainable capacity in Pacific Island countries to meet WTO obligations; assess benefits to Pacific Island countries from the existing Agreements; provide tools to Pacific Island countries to act as "equal partners" in the continuation of the reform process; debate and discuss outstanding international issues of interest to the Pacific Island Countries related to WTO and the international trade of agriculture and fishery products.

63. A FAO workshop on the Uruguay Round Follow-up and Multilateral Trade Negotiations on Agriculture was held in Nuku'alofa, Tonga from 9 -13 July 2001. The workshop was funded through the European Community trust fund. It was attended by 36 participants from the Cook Islands, Fiji, Kiribati, Marshall Islands, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, and Vanuatu.. The key objective of the workshop was to enhance national capacity on WTO issues relating to agriculture and in particular the UR Agreements on SPS, TBT and TRIPS.

64. The fifth FAO Round Table Meeting for Pacific Island Countries on WTO Agreement Provisions was held in Wellington on 8 to 12 April 2002. The meeting was jointly sponsored by FAO, TIAF and the New Zealand Government. The five-day meeting was attended by 45 officials from Australia, Cook Islands, Fiji, Kiribati, Marshall Islands, New Zealand, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, and Vanuatu. Observers included the Forum Secretariat, South Pacific Trade Commission (SPTC), Secretariat of the Pacific Community (SPC), Forum Fisheries Agency (FFA), Pacific Plant Protection Organization (PPPO), and CTF. The main objectives of the Round Table were to: (i) build sustainable capacity in Pacific Island countries to meet WTO obligations; (ii) accrue benefits to Pacific Island countries from the existing Agreements; (iii) provide tools to Pacific Island countries to act as "equal partners" in the continuation of the reform process; and (iv) update, debate and discuss outstanding international issues of interest to the Pacific Island Countries related to WTO and the international trade of agriculture and fishery products.

#### *WHO Western Pacific Region Activities*

65. The 52<sup>nd</sup> session of the Regional Committee recognized food safety as a significant public health issue and endorsed a Regional Strategy for Food Safety. The Regional Strategy commits WHO to supporting advocacy and awareness-raising efforts as keys to increasing political commitment to national food safety efforts. Consequently, WHO activities have included support for World Food Day activities focused on food safety in Papua New Guinea; the development of advocacy materials in Papua New Guinea; and national food safety seminars in Kiribati, the Solomon Islands and Papua New Guinea. These activities followed on from the workshop on operational plans of action for food safety in the Western Pacific conducted in Manila, Philippines in November 2000. That workshop brought together health and non-health sector personnel from 14 countries to better recognize the need for multi-sectoral planning and program implementation. Policies, plans of action and legislation are key elements of any effective national food safety program. Food hygiene and environmental health regulations were reviewed and guidance provided to Cook Islands and Palau and food law, hygiene regulations and food recall guidelines drafted in Vanuatu. The Organization also continued to provide guidance to Ministry of Health, Fiji, on a proposed Food Safety Bill and food recall guidelines.

66. The importance of national food safety programs being founded on sound science was clearly reinforced at the FAO/WHO Global Forum of Food Safety Regulators in Morocco. In this regard, WHO has placed emphasis on strengthening the capacity of Member States to establish food safety programs that are risk-based by supporting targeted contaminant monitoring workshops and monitoring studies of soy and oyster sauce products in Fiji; various foods, including canned fish, in Papua New Guinea; and drinking water and selected foods in Nauru. Furthermore, WHO collaborated with ASEAN and ILSI to increase understanding of risk assessment principles and applications amongst health and non-health sector food safety enforcement officers. Inspectors were also trained in environmental health and food safety in Fiji.

67. Effective risk communication, education and training are also essential elements of national food safety programs. A program of training trainers of community health workers in food safety was initiated in Fiji and the Republic of the Marshall Islands based on an OPEC Fund for International Development/WHO package called *Basic food safety for health workers*. Food safety training programmes for food service personnel were conducted in the Northern Mariana Islands.

68. In the period under review, WHO continued to support capacity building at the local level through implementation of healthy marketplace initiatives. In Papua New Guinea, the biggest market in the country, Gordons' market was revitalised and officially reopened at a launch of the healthy marketplace concept. The market has proven a model that has seen the concept also being taken up in Madang and Mount Hagen. Such expansion has also been a feature in other participating countries. In association with the expansion of the concept there has also been greater attention to the improvement of food safety in the marketplaces through food safety education targeting messages arising from HACCP based studies in the marketplaces

69. In a coordinated action amongst FAO, the Secretariat of the Pacific Community (SPC) and WHO, a Pacific Islands Food Safety and Quality Consultation will be conducted in Nadi, Fiji, 11-15 November 2002. This consultation will bring together policy makers responsible for ensuring food safety and quality and some of their technical support staff, with international and partner agencies' representatives. The consultation will review the current status of food safety and quality in Pacific Island countries and consider the need for more effective control of food safety and quality in Pacific Island countries. Guidance will be provided on how countries may take action to strengthen food control systems as well as how to address obesity prevention and control through more effective control of the safety and quality of available food. Actions that can be taken by international organizations, development banks, key aid agencies and other interested parties to better coordinate food safety and quality efforts throughout the Pacific will be formulated. It is expected that advisers, participants and representatives from Australia, Cook Islands, Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Niue, Northern Mariana Islands, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu will attend this meeting.

70. The Canadian Food Inspection Agency is organising a one day Fish Inspection Workshop for representatives of the South-West Pacific Island Countries. The meeting will take place prior to the 7<sup>th</sup> Session of the Codex Co-ordinating Committee for North America and the South Pacific.

#### IV. NATIONAL ACTIVITIES

71. Under its Technical Cooperation Programme (TCP), FAO implements numerous projects on critical aspects of food control and food standards. 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 standards and new trade regulations.

##### A. AFRICA<sup>6</sup>

72. A project to Improve the Quality of Street foods in Bobo Dialasso, Burkina Faso began in September of 2002 and will continue through the end of 2003. The main activities of the project will be to undertake a survey on the quality and safety of street foods, provide training on Good Hygiene Practices (GHP) to street food vendors and to formulate a municipal strategy for further improving the safety of street foods.

73. A project to Strengthen the National Food Control System in the Gambia begin early in 2001 and will continue through 2002. The project aims to increase the capacity of the government to ensure the safety and quality of both locally produced and imported foods. This will be accomplished by enacting national food laws, establishing a country-wide food inspection network, upgrading the capabilities for laboratory analytical services and training of food control personnel and street food inspectors.

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<sup>6</sup> FAO activities except where indicated.

74. A project to improve the quality of street foods in Dakar, Senegal began in 2000 and ended in 2001. The project was very similar in nature to the above mentioned project in Burkina Faso. The main activities involved training street vendors in food hygiene practices and the conception and production of educational materials on improved preparation and handling of street foods.

75. A project to strengthen the National Codex Committee in South Africa began in November 1999 and was concluded in September 2000. The main objective of the project was proper structuring and functioning of the South African National Codex Committee, establishment of its working groups and effective operation as an advisory group to the government on matters related to food standardization and food safety and implementation of the Uruguay Round Agreements on Sanitary and Phytosanitary measures and Technical Barriers to Trade. The project was successful in conducting high-level workshops to increase awareness among senior officials of the critical importance Codex in the post-Uruguay Round period which should result in enhanced participation of South Africa in Codex activities. Project activities also led to the establishment of a national Codex website for South Africa to disseminate information about Codex and broader food safety and regulatory matters to all interested parties. Additionally, the project conducted a systematic review of the import/export system.

76. A project to Improve the Quality of Street foods in South Africa was approved in 1999, but due to delays in project implementation was continued through 2001. The main objective of the project was to improve the quality of street food and vending in South Africa in order to ensure consumer safety and to provide vendors and handlers with health education and training regarding acceptable street food preparation and handling practices. This objective should have been met through a thorough evaluation of the street food situation and identification of critical control points in street food preparation, handling and selling, training seminars for food control inspectors and street food vendors, and a consumer education campaign on street food safety and environmental hygiene.

77. A project designed to Strengthen the National Food Control System in Swaziland was funded in September of 1999 and continued through 2001. The main objective of the project was to improve quality, safety and nutritional value of food produced in Swaziland and to ensure the acceptability of food entering into the country. The activities undertaken to accomplish this included, using the experience gained in similar national food legislation in the sub-region to prepare a draft national food law; setting up effective Food Control Administration for the country; upgrading the training programme for food inspectors, and training of 5 local trainers in food inspection who will train 20 food inspectors. The capabilities of the existing food analysis laboratory were enhanced by providing training to two analytical chemists and microbiologists and providing some essential analytical equipment and other laboratory materials.

78. A second phase project aimed at enhancing the coffee quality in Uganda through prevention of mould growth began in early 2002 and is scheduled to continue through early 2003. The main objective of the project is to develop a centre of excellence in the field of coffee quality assurance in Uganda, which can serve as an important regional resource. The specific activities to be undertaken include, elaborating guidelines for the production, processing and handling of coffee, identifying suitable technologies for small scale coffee producers and processors, upgrading analytical laboratory capacity for carrying out quality control measures related to coffee and preparing and disseminating training materials on good agricultural practice, good manufacturing practice and HACCP for the coffee sector.

79. An eighteen month project to strengthening the Government Analyst Laboratory, Food Standards Advisory Board and Port Health Authority in Zimbabwe received funding in June 1999. The main objective of the project was to improve the food control system and services in Zimbabwe by up-grading the food analytical capabilities of the Government Analyst Laboratory (GAL), improving the information-handling capacity of the food control secretariat at the GAL, strengthening the Secretariat of the Food Standards Advisory Board (FSAB) and optimising the food inspection

operations of the Port Health Authority. The objectives were accomplished by provision of technical assistance in analytical quality assurance and food control management and food import inspection. Training workshops were held on increasing the efficiency of food control systems and utilisation of new computerized information systems. Seventeen port health officers from 10 ports of entry received training in imported food inspection planning, policies and procedures. A complete assessment of the capabilities of the Government Laboratory was undertaken and recommendations made for increasing the effectiveness in meeting international requirements for laboratory accreditation.

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

81. A Cooperative program with 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.

82. FAO has received several requests by national governments for future projects:

- The Government of the Democratic Republic of the Congo has requested assistance with a National Strategy for Food Control. This request is currently under review.
- The Government of Gabon in collaboration with FAO has formulated a proposal to Strengthen the Food Control System. This project is still in the formulation phase.
- The Government of Guinea, Conakry, has requested assistance with food control and quality of the informal food sector in Conakry. The request is currently under review.
- The Government of Guinea Bissau has requested assistance with improving the safety of street foods through training of street food vendors in safe food handling and preparation. This request is currently under review.
- The Government of Tanzania has requested assistance in strengthening the National Food Control System and National Codex Committee. The request is currently under review by FAO.
- The Government of Senegal has requested assistance in strengthening and supporting Quality Assurance Systems in Food Safety Laboratories. The request is in the formulation phase.

83. Future WHO Activities include:

- Expansion of global network of participating institutions to monitor chemical contamination of food supply.
- Promotion of use of all food technologies which may contribute to public health e.g. pasteurization, food irradiation and fermentation.
- Promotion of the work of a WHO/FAO expert advisory body to assess microbiological risk in food.
- Support member states in providing the scientific basis for health-related decisions regarding foods derived from biotechnology.

## B. ASIA

84. A TCP project on Strengthening Food Control and Codex began in Bhutan in June 2000 and is scheduled for completion September 2002. The project is oriented toward the reorganisation 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.

85. A TCP project for Strengthening the National Codex Committee of Cambodia began in September 1999 and was completed in December 2000. The overall goal of this project was to improve consumer protection and Cambodia's food export potential by strengthening food quality and safety control. The project anticipated achieving these objectives by training food inspection officials in each of the following areas: (i) developing overall food quality and food safety systems using international criteria for the establishment of maximum permissible limits for contaminants, and food additives levels in foods; and (ii) general principles for food import and export inspection and certification, including information exchange in food control emergency situations. A national Codex Committee was established and given guidance on their responsibilities, programme of activities and operating procedures. Study tours were provided for two senior members of the national Codex Committee to the Secretariat of the Codex Alimentarius Commission, in order to familiarise them with the work of the Commission and its current and future directions.

86. A TCP project on strengthening control of residues in meat and derived products began in China in May 2001 and is scheduled for completion end 2002. The project is justified by the strong interest of the country to comply with the requirements of the WTO membership. The country received assistance in training and provision of laboratory equipment to apply reference methods in the control of veterinary drug residues and pesticides residues in meat and derived products. The training was conducted in the country and at the FAO/IAEA Reference Centre for Food and Pesticide Control.

87. A TCP project in India was initiated in November 2000 and is scheduled for completion end 2002. The objective of the project is 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 include a series of training 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 harmonisation of national food standards and regulations with CAC recommendations is an expected output of the project.

88. A TCP project for Mongolia to Strengthen Food Import Control has just received approval for commencement June 2002 with an anticipated completion date of January 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% 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.

89. A TCP project to develop an Export Inspection and Certification Programme in Vietnam began in May 1999 and concluded in June 2002. The main objective of the project was to assist in establishing an efficient, well-managed and reliable export inspection and certification system for food that meets WTO requirements, and to improve the capability of laboratories in Vietnam to carry out chemical and microbiological analyses of foods. Activities carried out in order to meet this objective included: training of involved parties in Vietnam on WTO requirements in international food trade; provision of assistance to the Government of Vietnam in establishing appropriate

procedures for export inspection and certification of nuts, grains, fresh and processed fruit and vegetables; training of laboratory staff in appropriate analytical techniques; laboratory management and quality assurance procedures and training of food inspectors. Additionally, study tours for two senior government officials were provided to facilitate insight into the establishment and day-to-day running of food export control systems, these officials will be instrumental in developing similar systems in Vietnam.

90. Also in Vietnam, a TCP project has recently been initiated on *Improvement of Coffee Quality and Prevention of Mould Formation and Ochratoxin A (OTA) Contamination*. The project aims to improve incomes and livelihoods of smallholder coffee producers in Viet Nam via production, processing, storage, transport and phytosanitary management interventions to improve coffee quality and its competitiveness, reduce losses and safeguard markets and coffee consumer's health by reduction/elimination of Ochratoxin A contamination from moulds.

91. The Government of Bangladesh has requested assistance in strengthening their food quality and control systems. The request was received in April 2002 and is currently in the approval process. 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.

92. The Government of Thailand has requested assistance with strengthening compliance of the SPS requirements for expanded exports of fresh and processed fruits and vegetables. The project has been requested by the Government of Thailand given the great potential in Thailand for exporting fresh and processed fruits and vegetables. Thailand has experienced problems of export rejection due to microbial contamination of fruit and vegetables and safety and quality of some processed fruits. The project will address these issues through training in Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) at the level of industry and food safety officials. Training in microbiological risk analysis will also be provided. This project is currently in the final stages of the review process.

93. The Government of Pakistan has requested assistance 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.

#### C. EUROPE

94. In November 2001, a training course for food inspectors was held in Malta. The course was sponsored by WHO and included training for food inspectors on food safety and street vendors with follow-up training for food microbiologists.

95. The WHO European Food Safety Programme organized a training workshop on HACCP for sanitary and veterinary inspectors, April 2001 in Albania. A similar course will be organized for the Former Yugoslavian Republic of Macedonia.

96. In November 2001, a training programme for food inspectors was held in Malta. The training was sponsored by the WHO Food Safety Programme in Europe and included training for food inspectors on food safety and street vendors with follow-up training for food microbiologists.

97. A FAO project to Improve the Food Control Administration and Strengthen Food Import/Export Control and Food Analytical Services in Lithuania began in May of 1999 and was completed in November 2001. The project aimed to support further development of food control systems in the country in order to assure adequate consumer protection and promote export of agricultural products through greater compliance with internationally recognised standards and procedures. The main project outputs included; establishment and training of an import/export task force, establishment of a food legislation task force, training of planners and policy makers in risk analysis and improved capacity of food control laboratories.

98. A FAO project in Slovakia to Strengthen Food Quality and Control was funded in January 1999 and completed in December 2000. The main objective of the project was to assist the Slovak Republic in strengthening its regulatory food control system in order to improve consumer protection by ensuring the safety and quality of the food supply. This objective was met through a thorough review of existing regulations and elaboration of recommendations for improvement and/or modification. An assessment of the existing food laboratory network capabilities, including analytical methods, performance standards and the needs for equipment, supplies and personnel training was undertaken. Study tours on Food Control Administration, Food Inspection and Food Laboratory Management in two European countries were arranged for three Slovakian food control personnel. A training course for laboratory personnel, establishment of certification testing procedures for qualifying food control laboratories was provided.

99. A project in Moldova to Strengthen the Organisation of the National Codex Committee was recently completed by FAO. The main objective of the project was to provide the basis for the establishment of an effective system for food standardization and safety, consumer protection and market access through the strengthening of the National Codex Committee and its operational mechanisms, with the ultimate aim of enhancing government capacity to improve the level of national standards in both local food control matters and international trade. The main project outcomes were: establishment of a 23 member National Codex Committee; establishment of a Codex information system and national office; review of national legislation with the goal of harmonization with Codex official standards; training in modern food control methods for key persons in the food control organization of Moldova.

100. The countries that have signed the Stability Pact (Albania, Bosnia & Hercegovina, Bulgaria, Croatia, the Former Yugoslav Republic of Macedonia, Romania, Slovenia & Yugoslavia) have prepared in collaboration with WHO/EURO and the Council for Europe a sub-regional project to Strengthen Food Safety & Nutrition Services in South East Europe. The first component for capacity building on Food Legislation has just been funded.

101. The Czech government has requested assistance of FAO in strengthening non-governmental organisations of Central and Eastern Europe related to the implementation of Food Safety Guarantee Policy. The general objective of the requested project is to improve communications with consumer public on food safety matters in Central and Eastern European Countries. The proposed outputs of the project include a manual for risk communications with consumers and capacity building in the areas of food safety and consumer communications.

102. The Government of Croatia has requested FAO's assistance in Improving Food Safety. This proposal is currently in the formulation phase.

103. The Government of Cyprus has requested FAO's assistance with food safety standards with the objective of becoming more competitive in international trade markets. The proposal is currently in the formulation stage.

104. The Russian Federation and Ukraine have requested to WHO/EURO the organization of training on epidemiological investigation of food-borne outbreaks and on food microbiological analyses.

105. Tajikistan has requested to the WHO Food Safety Programme in Europe to provide training on microbiological/chemical risk assessment and communication.

106. The Government of Turkey has requested FAO assistance with strengthening food control programs. The request is currently under review.

#### D. LATIN AMERICA AND THE CARIBBEAN

107. A FAO/ILSI-Brazil National Seminar on Risk Analysis for Food Control: A Practical Approach through Case Studies was held in Brasilia, Brazil from 9-11 May 2001. Eighty persons representing the main Government Institutions involved in food control, industries and Universities at the level of technical experts, senior administrators and researchers participated. Case studies on microbial pathogens, chemical contaminants, GMOs, mycotoxins, additives, BSE and packaging, were presented by the invited international and national lecturers. The implications of risk analysis in the new international trade context for developing economies and constraints in complying with import requirements were discussed. Five working groups were created for problem solving examples of different food safety issues where risk analysis methodology had been applied and in mock case studies using the participant's own data. Solutions to the case studies, conclusions and establishment of priorities were prepared on the final day by each working group and one common workshop recommendation was approved.

108. FAO and the Ministry of Health of Chile organised a workshop in Laboratory Quality Assurance in Santiago, Chile from 4-8 August 2002. The course general objective was the development of a quality assurance system for chemical analysis of food, to train participants from the national health laboratory network in the establishment and implementation of an analytical quality system complying with the standard ISO 17025 for their laboratories and in preparing for accreditation. The course consisted of lectures and exercises, including a practical audit.

109. The National Codex Committee from Paraguay (CONACAP) and FAO organised a National Seminar on Codex Alimentarius which was held in Asunción (August 1<sup>st</sup>, 2001) with the participation of 45 persons. Achievements and difficulties of CONACAP were discussed and several recommendations were agreed, one of them being the strengthening of the management of CONACAP. This recommendation has originated the formulation of a FAO technical cooperation project.

110. FAO provided assistance to the Government of Chile, General Secretariat of the Presidency and the Dirección Multilateral, Ministry of Foreign Affairs, in modernising 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 organisations, 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.

111. A project designed to strengthen Food Control and Safety for Fish Export in Antigua began in January 2001 and is expected to continue through September 2002. The project will assist the government to organise and manage food control activities in the country, including, drafting of new food regulations to ensure safe and wholesome local food products; improvement of the inspection and certification of export fish and fishery products; training of food control personnel and upgrading the analytical capabilities of the food control laboratory. These goals will be accomplished through technical backstopping missions by experts in the areas of food quality control and fish inspection and quality control, a study tour for one Ministry official on export fish certification, review of lab equipment, training for lab staff and production of a manual on food inspection.

112. A second phase project to strengthen the National Codex Committee on Argentina was funded in May 2000 and completed in April 2001. The objective of this assistance was to improve and expand the Codex information system and enhance the capacity of the national body to highlight national issues of importance at international Codex meetings. The project aims to strengthen the National Codex Committee through the appointment and training of nine provincial Codex focal points on international criteria for the development of norms, guides and recommendations of Codex and their application in control programs. The project will conduct a series of workshops on food control issues, including, application of HACCP and risk analysis in food control; training for food inspectors and training of laboratory technicians in quality control measures.

113. A project to Control Legislation for Veterinary Drug use in Barbados was funded for five months beginning in August 2000 and continuing through part of 2001. The global objective of the project was to aid Barbados in developing new legislation on the control of veterinary drugs and to regularise the trade in veterinary drugs, ranging from their import and manufacture to their storage and sale. The legislation will also protect consumers and foster exports of food products. The final project outcomes included, a system for registration of all veterinary drugs permitted for use in Barbados, establishment of a licensing system for veterinary drug importers, legislation on maximum residue limits (MRL's) for foods of animal origin and improvement of national programmes for monitoring and control of veterinary drug residues in foods of animal origin.

114. A project designed to strengthen the Food Control System in Guyana began in May 2002 and will continue through October 2003. the project will assist the Government in upgrading the food law and harmonising national food standards with international standards, improving the efficiency of the food inspection in order to facilitate compliance with the WTO Agreements on SPS and TBT, upgrading of the analytical capabilities of the Government food control laboratory, to ensure the monitoring of food contaminants and permit the certification of exported products and strengthening the capability of the Guyana National Bureau of Standards (GNBS) and the National Codex Committee, 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.

115. A project to strengthen the food control system of Haiti is scheduled to begin shortly. This is a second phase project following up on an 18 month project to reinforce national food control capacity. The main activities of this project will be 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.

116. A project to strengthen the National Codex Committee in Paraguay began in July 2002 and is scheduled for completion in February 2004. The main objectives of the project are 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 will achieve these objectives through technical assistance provided by international experts, including assistance in drafting a proposal for modernising the food control system and provision of training and workshops on food control systems and the role of Codex.

117. An eighteen month project to strengthen the food control system of Suriname began in May 2002 and is scheduled to continue through October 2003. The main objective of the project is 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 are 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.

118. A project designed to strengthen the National Codex Committee of Uruguay began in 2001 and will continue until 2003. The main objective of this project is 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 will be a stronger Codex Committee able to inform and advise the state and civil society in matters related to Codex.

119. A project was funded to provide emergency technical assistance to the Government of Uruguay in evaluating *Fusarium* contamination of grains. A large part of the 2001 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 an emergency legislation was passed limiting the DON content in human foods and animal feed. The project has been expanded into longer-term technical assistance (2002-2004) with the purpose of establishing adequate controls in the supply chain and to formulate future prevention and control strategies. It includes 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.

120. A regional project to strengthen the management of National Codex Committees and Application of the Codex Alimentarius standards of the Andean Countries is presently in its final stage of approval. Bolivia, Colombia, Ecuador, Peru and Venezuela will participate in this project. The main objectives are to strengthen the management of the National Codex Committees; to develop a national and sub-regional training program and to promote the harmonisation of the national standards to Codex.

121. Two projects have been approved under the Prevention of Food Losses (PFL) Special Fund which involve capacity building activities in Latin America.

122. A regional project for strengthening the analytical activities, laboratory quality assurance and capacity building of the Interamerican Network of Food Analytical Laboratories (INFAL) is currently being drafted.

123. The Government of Brazil has requested assistance with two activities. The first being a project to improve the quality of black pepper with the Ministry of Agriculture and Supply, Vegetable Production Control and Promotion. The second would incorporate a microbiological risk analysis

approach in food control programmes with the Codex National Committee. Both proposals are currently being drafted.

E. NEAR EAST/EASTERN MEDITERRANEAN

124. A FAO project to support the Management and Control of Pesticides, Animal Drug and Chemical Residues in Foodstuffs was initiated in Iran, in August 2000. 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 will aim to ensure maximum consumer protection and promote international trade in foodstuffs. The objectives of the project will be met through a series of training activities concerning GAHP for livestock extension officers and Good Agricultural Practices (GAP) 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 program of pesticide and drug residues in foodstuffs will also be established.

125. A project to Upgrade the Food Control System in Lebanon was completed in October 2001. The main objectives of the project were to improve the efficiency of the food control system and strengthen local capacity through training. With the support of international and national consultants, a core of food inspection personnel received a training of trainers course, these trainers in turn, carried out a series of workshops for food inspectors and food technicians working at the national and sub-national level in government and industry. A thorough and systematic review of the current food control system was also completed, resulting in an improved system of quality assurance and revised and updated national food standards.

126. A project to support the creation of a harmonised food control system based on risk analysis principles began in Morocco in January 2002. The overall goal of the project is 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 will be met through visits to Morocco by international consultants working with local authorities to draw up a proposal to reorganise the food control system, study tours for Moroccan officials to visit countries with strong food control systems and workshops for government officials responsible for food control, research institutions and consumer groups.

127. A project to Train Food Quality Control Laboratory Staff in Syria was completed in 2000. The main objective of the project was to improve the analysis capabilities of the Syrian food control laboratories and raise their performance to the level required by international accreditation bodies. To complete this objective in-service training of central and provincial laboratory staff was conducted by international consultants. In service training topics included, analysis of drug residues and mycotoxins; analysis of food additives and nutrients; and analysis of chemical contaminants in foods. Two training programmes outside Syria were planned for senior laboratory staff. One training in laboratory management and a second on analysis of food contaminants. A final seminar on laboratory accreditation procedures was planned for the end of the project.

128. A project to assist the Government of Sudan in Harmonising Food Standards and Regulations to facilitate International trade of Food Products began in January 2002. The objective of the project is to assist the Government of the Sudan in reviewing and updating the food standards and regulations in the country as well as in strengthening the organisational set/up of the National Codex Committee and its operational mechanism. This objective will be accomplished through a full review of the national food control and food import/export system, multi-sectoral workshops on National food control strategies and Codex and WTO and strengthening of the National Codex Committee.

129. A one year project to strengthen the National Codex Committee of Tunisia received funding in March 2000. The main objective of the project was to aid the Government of Tunisia to strengthen food quality and control systems and promote export of agricultural products by putting into place a National Codex Committee capable of responding to the changing international trade environment. The objective of this project will be achieved by implementation of the appropriate mechanisms to ensure correct functioning of the Codex committee, sensitisation of principal actors (food industry, academia, consumers) on the functioning of Codex and integration of a plan of action to incorporate Codex recommendations into the operation of the national food control system.

130. Through continuous feedback and support, various Member states of the WHO Eastern Mediterranean Region 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 on 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 will be effective in early 2002. On a regional level, 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.

131. There are several FAO projects in the both the formulation and approval phases.

- The Government of Egypt has requested assistance in Strengthening Quality Control Systems for Cereals and Groundnuts. The request is in the formulation stage.
- The Government of Syria has requested assistance in strengthening the National Codex Committee and updating and harmonising food legislation and regulations. The project proposal has been written and is in the final review process.
- An official request has been received from the Government of Yemen to Strengthen National Food Inspection Systems. The request is currently in the initial formulation stage.

#### F. WESTERN PACIFIC/SOUTH-WEST PACIFIC REGIONS

132. FAO and WHO held a workshop on "National Codex Committee and Establishment of National Plan of Action for Food Safety" at Loloata Island Resort (Boroko, Port Moresby), Papua New Guinea from 12 to 15 June, 2001 through collaborative action. The workshop was funded through WHO and FAO regular programmes and the Government of New Zealand. It was attended by 28 participants from Government and private sector. The main objectives were: (i) to promote awareness among key players in food safety standards and food control on role, function and activities of Codex Alimentarius; (ii) strengthen the National Codex Committee in Papua New Guinea and Codex Contact Point; (iii) formulate a strategy, plan of action and identification of infrastructure support's needs for the Codex Committee; and (iv) the formulation of a strategy, plan of action and identification of infrastructure support's needs for a national food safety programme.

133. A workshop on "Food Safety and Codex Alimentarius" was held at Majuro, Marshall Islands from 3 to 5 July, 2001 through collaborative action by FAO and WHO. The workshop was funded through WHO and FAO regular programmes. It was attended by 25 participants from Government and private sector. The main objectives were: (i) to promote awareness on food safety, elements of food control system and Codex Alimentarius among various stakeholders in Marshall Islands; (ii) the formulation of a strategy, plan of action; and (iii) identification of infrastructure support's needs for the strengthening of food control system in Marshall Islands.

134. FAO provided technical assistance to the Government of Tonga to perform a needs assessment of food quality control. A needs assessment of laboratory testing capacity was carried out in November of 2001. The Ministries of Agriculture and Forestry, Health, Labor, Commerce and Industry and Fisheries all have responsibility for some aspect of food control and were all consulted. Visits were also made to food industries, markets and NGO's. The subsequent report highlighted an absence of food testing and research facilities and advocated the establishment of a food control laboratory for Tonga, possibly operated under the control of the National Codex Commission, which was established in 1999. The establishment of such a facility should improve capacity to assure the quality of imported and domestic products to ensure consumer safety as well as increase compliance with international standards for food exports.

135. A TCP project on National HACCP-Based Fish Inspection Systems in the South Pacific has been initiated for Fiji, Marshall Islands, Palau, and Republic of Tonga to improve the effectiveness of HACCP-based seafood quality assurance system in the South Pacific region through capacity building by developing national capacity in fish inspection; providing training in modern seafood inspection and quality assurance activities; delivering advice and training to seafood industry personnel; and plan for the establishment of appropriate national analytical facilities for seafood products. This would contribute to improving the quality and safety of seafood supplies within each participating country and meet the requirements of major international trading partners, especially those of the EU market

136. A proposal for Strengthening Capacity building in Codex, Food Regulation and International Food Standards Harmonization for the Cook Islands, Fiji, Samoa, Tonga and Vanuatu is currently undergoing review.

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