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JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel: 39 06 57051 www.codexalimentarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

Agenda Item 5

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### FAO/WHO COORDINATING COMMITTEE FOR ASIA

*Fourteenth Session, Jeju-Do, Republic of Korea 7-10 September 2004*

## CAPACITY BUILDING FOR FOOD STANDARDS AND REGULATIONS

### A. INTRODUCTION

1) This paper describes FAO/WHO capacity building activities on food safety issues, including food standards and regulations, that have been implemented since the 13<sup>th</sup> Session of the Codex Committee for Asia and are relevant to member countries in Asia.

### B. NEED FOR CAPACITY BUILDING

2) 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).

3) 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 Epizooties (OIE) for animal health; and the International Plant Protection Convention (IPPC) for plant health

4) 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.

5) 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 section 12.3 of the TBT states "Members shall, in the preparation and application of technical regulations, standards and conformity assessment procedures, take account of the special development, financial and trade needs of developing country Members, with a view to ensuring that such technical regulations, standards and conformity assessment procedures do not create unnecessary obstacles to exports from developing country Members". Reinforcing these views, the Executive Heads of FAO, WHO, WTO, WB and 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.

6) In keeping with these mandates, FAO and WHO engage in diverse capacity building activities designed to assist developing countries to improve their food safety and plant and animal health systems. Together with international organisations, national governments, international and regional financial institutions and NGOs, various capacity building and technical assistance initiatives have been undertaken. This often involves a review and analysis of the institutional set up for food control: evaluating its effectiveness, identifying main weaknesses, and formulating recommendations and proposals for the establishment of technically sound food control systems which are 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.

### **C. RECENT AND ONGOING CAPACITY BUILDING ACTIVITIES AT GLOBAL LEVEL**

#### ***International Events***

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

[www.aoac.org/meetings1/iupac/main.htm](http://www.aoac.org/meetings1/iupac/main.htm)

8) FAO and WHO, in collaboration with ILSI facilitated a workshop on 5 March 2004 on the Detection of Protein and/or DNA in Foods Derived from Modern Biotechnology. The workshop was held in the same venue and immediately prior to the 25th Session of CCMAS and was attended by 23 participants from 9 countries. The purpose of this workshop was to give an introduction to the tools, information and experiences available to test for protein/DNA from foods derived from modern biotechnology to the CCMAS delegates and other interested parties. Emphasis was placed on similarities and differences among chemical analytical methods available, with particular attention to how biological factors can affect measurement results. Current efforts in methods development, standardization and validation, including those within ISO, were described. The complete workshop programme can be accessed from: [www.fao.org/es/esn/food/capacity\\_workshops2004\\_en.stm](http://www.fao.org/es/esn/food/capacity_workshops2004_en.stm)

9) FAO held a Ministerial Round Table on 3 December 2003, on the occasion of the 32nd session of the FAO Conference, on the Dimension of Food Safety in Food Security. The background document and final report for this round table discussion can be accessed from:

[www.fao.org/es/ESN/food/meetings\\_mrt\\_en.stm](http://www.fao.org/es/ESN/food/meetings_mrt_en.stm)

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

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

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

#### UPCOMING EVENTS

13) FAO and the Institute de Recherche pour le Développement (IRD) are facilitating a conference (Jaen, Spain, 6-8 September 2004) to address the issues of food-borne pathogens, anti-nutritional and toxic factors in fermented foods produced in small-scale producing units. This conference will promote sharing of information and viewpoints between scientists and experts from Africa, Europe and the Mediterranean countries on progress in scientific and regulatory knowledge of small-scale units. A call for presentations and posters which address key questions related this topic has been issued. More details are available from: [www.fao.org/es/ESN/food/meetings\\_fermented\\_en.stm](http://www.fao.org/es/ESN/food/meetings_fermented_en.stm)

14) As a follow-up to the successful first Global Forum of Food Safety Regulators and with the support and approval of the FAO and WHO member countries, FAO and WHO are facilitating the Second Global Forum of Food Safety Regulators (GF-2) in Bangkok, Thailand from 12-14 October 2004, under the main theme of: "Building Effective Food Safety Systems". In order to allow greater focus during discussions, and to promote practical and pragmatic actions, the topics to be discussed will be limited in scope, namely under the two following sub-themes: 1) Strengthening official food control services and 2) Epidemio-surveillance of foodborne diseases and food safety rapid alert systems. Many countries are providing financial and in-kind support to FAO and WHO to assist in the organization of GF-2. More information on the First and Second Global Fora can be found at: [www.foodsafetyforum.org/index\\_en.htm](http://www.foodsafetyforum.org/index_en.htm)

15) Chulalongkorn University, Bangkok, Thailand, in cooperation with WHO will implement an International Symposium on Food Safety Systems on 15 October 2004 in Bangkok immediately after GF-2. This symposium is entitled "In Search of Better and More Effective Food Safety Systems: Thailand towards the Kitchen of the World". It aims to utilize the outcomes from the GF-2 as a thought starter and a stimulator of improvement in food safety systems, taking Thailand as an example. Participants will have an opportunity to discuss with the GF-2 delegates, Thai and international food sector personnel involved in food safety. More information on the symposium is available from: [www.ahs.chula.ac.th/foodsafety2004/](http://www.ahs.chula.ac.th/foodsafety2004/)

### ***Global Projects***

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

17) 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 the national level within the industry and responsible government agencies in the application of internationally-agreed principles of food hygiene and a HACCP-based approach to food safety throughout the coffee production and processing chain. The project also builds the analytical capacity and capability required to support national programmes for prevention and control of OTA contamination of coffee.

18) As part of a two-year project initiated in 2002, FAO has recently conducted a series of sub-regional training courses in Latin America and the Caribbean to improve the safety and quality of fresh fruits and vegetables. Sub- regional workshops have been held in the Southern Cone Region (17-21 March 2003), Central American and Spanish Speaking Caribbean Countries (21-26 July 2003), Andean Countries (22-27 March 2004), and the Caribbean Region (24-28 May 2004). Through this project, a training manual and database of resources available in the area have been prepared and are now freely available on the FAO web pages or as a CD-ROM, in English, French, and Spanish. 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. More information is available from:

[www.fao.org/es/ESN/food/foodandfood\\_fruits\\_en.stm](http://www.fao.org/es/ESN/food/foodandfood_fruits_en.stm)

### ***Global Initiatives***

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

20) In February 2003, FAO and WHO launched a Project and Trust Fund for Enhanced Participation in Codex to increase the participation of developing countries and countries in transition in the vital work of the Codex Alimentarius Commission. The fund provides financial support to increase their ability to participate in the establishment of global food safety and quality standards, as well as improve their capacity to implement those standards in their own countries. Thanks to the generosity of several donors, the minimum threshold of US\$ 500 000 was reached at the beginning of March 2004, allowing

the Fund to become fully operational. Over eighty applications from all Codex regions were received by April 2004, with delegates from Ghana, Indonesia and Papua New Guinea already benefiting from the Fund. More information and application forms are available from [www.who.int/foodsafety/codex/trustfund/en/](http://www.who.int/foodsafety/codex/trustfund/en/) in Arabic, Chinese, English, French, Russian and Spanish.

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

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

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

### ***Global Tools Available***

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

25) FAO, often in collaboration with WHO, convenes ***Expert Consultations/ workshops*** to provide guidance and advice to the Codex system and to national governments on specific issues such as Safety Assessment of Foods from Genetically Modified Animals ([www.fao.org/es/esn/food/risk\\_biotech\\_animal\\_en.stm](http://www.fao.org/es/esn/food/risk_biotech_animal_en.stm)), Non-human Antimicrobial Usage and Resistance ([www.fao.org/es/ESN/food/meetings\\_antimicrobial\\_en.stm](http://www.fao.org/es/ESN/food/meetings_antimicrobial_en.stm)), the use of a Good Agricultural Practice Approach ([www.fao.org/prods/GAP/gapindex\\_en.asp](http://www.fao.org/prods/GAP/gapindex_en.asp)), and Pathogens of concern in powdered infant formula ([www.fao.org/es/ESN/food/risk\\_mra\\_riskassessment\\_entero\\_en.stm](http://www.fao.org/es/ESN/food/risk_mra_riskassessment_entero_en.stm)). Some of these Expert Consultation reports are available electronically from the FAO website and printed copies of most are available in multiple languages from the FAO publications page: [www.fao.org/es/ESN/publications/publications\\_en.stm](http://www.fao.org/es/ESN/publications/publications_en.stm).

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

27) FAO and WHO have jointly prepared and published (2003) *Assuring Food Safety and Quality - Guidelines for Strengthening National Food Control Systems* to enable national authorities, particularly in developing countries, to improve their food control systems. This publication replaces the previous (1976) guidelines. The guidelines seek to provide advice on strategies to strengthen food control systems to protect public health, prevent fraud and deception, avoid food adulteration and facilitate trade. In addition to national authorities, the guidelines will also be of assistance to a range of other stakeholders including consumer groups, industry and trade organizations, farmer groups and any other groups or associations that influence national policy in this area. The guidelines are now available electronically in English ([www.fao.org/es/ESN/food/control\\_FCS\\_en.stm](http://www.fao.org/es/ESN/food/control_FCS_en.stm)) and Spanish ([ftp://ftp.fao.org/es/esn/food/guideFCS\\_es.pdf](ftp://ftp.fao.org/es/esn/food/guideFCS_es.pdf)) and will soon be available electronically in French and Arabic. Printed copies can be ordered in English, French, Spanish, and Arabic from: [www.fao.org/es/ESN/publications/pub\\_control\\_en.stm](http://www.fao.org/es/ESN/publications/pub_control_en.stm).

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

29) *Food Quality and Safety Systems - A FAO Training Manual on Food Hygiene and the Hazard Analysis and Critical Control Point (HACCP) System* is available electronically in English (<http://www.fao.org/docrep/W8088E/W8088E00.htm>), French ([ftp://ftp.fao.org/es/esn/food/HACCPManual\\_fr.pdf](ftp://ftp.fao.org/es/esn/food/HACCPManual_fr.pdf)), Spanish ([ftp://ftp.fao.org/es/esn/food/HACCPManual\\_es.pdf](ftp://ftp.fao.org/es/esn/food/HACCPManual_es.pdf)), and Russian (<http://www.fao.org/DOCREP/006/W8088R/W8088R00.HTM>) or as a printed publication in these four languages from: [http://www.fao.org/es/ESN/publications/pub\\_quality\\_en.stm](http://www.fao.org/es/ESN/publications/pub_quality_en.stm).

30) *FAO/IAEA Manual on the Application of the HACCP System in Mycotoxin Prevention and Control* is available electronically in English ([ftp://ftp.fao.org/es/esn/food/mycotoxin\\_manual.pdf](ftp://ftp.fao.org/es/esn/food/mycotoxin_manual.pdf)) or as a printed publication (in En, Fr, Es) from: [http://www.fao.org/es/ESN/publications/pub\\_quality\\_en.stm](http://www.fao.org/es/ESN/publications/pub_quality_en.stm). The manual will soon be available electronically in Spanish and French as well.

31) Training manuals and guides on *food safety in the street food sector* are also available in multiple languages in publication format from the FAO publications page: [http://www.fao.org/es/ESN/publications/publications\\_en.stm](http://www.fao.org/es/ESN/publications/publications_en.stm). A *Training of Street Food Vendors didactic guide*, materials designed for training courses are available electronically in English and Spanish from: [www.rlc.fao.org/prior/segalim/accalim/Guias/faoguias.html](http://www.rlc.fao.org/prior/segalim/accalim/Guias/faoguias.html)

32) FAO has also published many *manuals on food inspection*, including a series of fourteen Manuals on Food Quality Control. Printed copies of these manuals are available in multiple languages from the FAO publications page: [http://www.fao.org/es/ESN/publications/publications\\_en.stm](http://www.fao.org/es/ESN/publications/publications_en.stm).

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

34) FAO and WHO provide a platform for the exchange of current information on the topic of Acrylamide through an electronic *Acrylamide InfoNet*, which is operated by the Joint (United States Food and Drug Administration and the University of Maryland) Institute for Food Safety and Applied Nutrition (JIFSAN). The Research Database now lists more than 100 projects and a "Call for Data on

Levels of Acrylamide in Food and the Total Diet" was issued in July 2003. The Infonet is available from [www.acrylamide-food.org/](http://www.acrylamide-food.org/)

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

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

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

38) As of September 2004, the portal contains references to over 15,000 items, drawn from the three SPS-recognized standard setting bodies, as well as from CBD, FAO, WHO, and WTO. It also includes demonstration 'nodes' of nearly 400 items each from the US and the EU, and smaller data sets from selected developing countries. Version 1.0 of the portal was formally launched on 25 May 2004, on the occasion of the FAO/WHO Regional Conference on Food Safety for Asia and the Pacific (Seremban, Malaysia). It is now freely accessible from the FAO Biosecurity PAIA webpage ([www.fao.org/biosecurity](http://www.fao.org/biosecurity)) or directly from [www.ipfsaph.org](http://www.ipfsaph.org). Interested users are invited to utilise the portal, share the link with other users, and provide feedback to the FAO project team on the portal content and usability. Work is now underway to include more detailed information from the current sources, including from Codex, JECFA and JMPR, as well as data from additional countries. A capacity building programme related to the portal is also planned. More information on the portal project is available as CAC27/INF/4.

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

#### ***Global Tools Under Development***

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

- 41) FAO/WHO are in the process of finalising a CD-ROM training package on *Food Safety Risk Analysis*, which includes a framework and overview manual, a training module presentation, case studies in risk analysis, and access to FAO/WHO resources related to food safety risk analysis. A workshop was held in Bali, Indonesia on 4 March 2004 to introduce the package to some potential users and to provide participants with practical tools for risk analysis. The workshop report is available from the following: [ftp://ftp.fao.org/esn/food/meetings/bali\\_report\\_mar04.pdf](ftp://ftp.fao.org/esn/food/meetings/bali_report_mar04.pdf)
- 42) In order to assist countries in *Evaluating Capacity Building Needs for Food Control*, FAO and WHO are preparing a joint publication on the subject to assist countries to identify and prioritise the areas where capacity building is needed.
- 43) FAO and WHO are currently developing a training manual on *Improving Participation in the Work of Codex*, designed to strengthen national food safety and quality systems through enhanced participation in the Codex process. It has been field-tested in Africa and the Pacific and it is expected to be available in final form in late 2004. The manual provides information on the Codex process and the development of national Codex programmes. It should serve both as a reference document for those involved in national Codex activities and as a training tool for national/regional training courses on Codex. In addition, the manual is an important capacity building tool within the ongoing FAO and WHO programmes to increase effective participation in Codex activities, and it is anticipated that it will be of great support when used in conjunction with direct participation in Codex meetings of increasing numbers of countries through the funds of the FAO/WHO Codex Trust Fund.
- 44) As part of a field project on the safety of street foods, FAO is in the process of preparing a *Training of Trainers Manual in Street Food Safety* to assist countries in improving the safety of this important source of nutrition for many cultures.
- 45) FAO is finalizing publications on the following topics:
- A manual on the *Prudent Use of Antimicrobials*.
  - A manual on *Marine Biotoxins*
  - Worldwide Regulations for Mycotoxins in Food and Feed in 2003*
- 46) In recent years, WHO has elaborated rules to promote the production and handling of safe food, the *Five Keys to Safer Food*: keep clean, separate raw and cooked food, cook food thoroughly, keep food at safe temperatures and use safe water and raw material. WHO is now developing a food safety training manual based on the Five Keys to Safer Food. The purpose of this manual is to facilitate implementation of the Five Keys at country level. The manual will provide relevant food safety information when disseminated.
- 47) All these materials, once finalized, will be issued in multi-lingual form for wider use by member countries.

## **D. RECENT AND ONGOING CAPACITY BUILDING ACTIVITIES AT REGIONAL LEVEL**

### **Capacity Building Activities in Asia**

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



49) In an effort to facilitate the discussion of practical actions and capacity building recommendations to promote food safety in the countries of the Asian and Pacific region, FAO and WHO convened a Regional Conference on Food Safety for Asia and the Pacific in Seremban, Malaysia from 24 to 27 May 2004. This Conference is the second in a series of regional meetings, the first of which was held in European Region in February 2002, that FAO and WHO are convening at the request of member countries to meet their needs for policy guidance and capacity building in food safety. The Conference also included side events on the topics of the Safety of Street-vended Foods and *Enterobacter sakazakii* in infant formula. The discussion papers and background information on the Conference, in addition to the final report are available from the Conference website: [http://www.foodsafetyforum.org/asian/index\\_en.asp](http://www.foodsafetyforum.org/asian/index_en.asp) and will be available at the 14<sup>th</sup> CCAAsia meeting.

50) A FAO/WHO workshop, in collaboration with ILSI was held in Bali, Indonesia on 4 March 2004 to introduce an FAO/WHO CD-ROM training package on Food Safety Risk Analysis to some potential users and to provide participants with practical tools for risk analysis. FAO/WHO are in the process of finalising the package, which includes an overview and framework manual, a power point presentation, cased studies on risk analysis, and valuable annexes. The workshop report is available from the following: [ftp://ftp.fao.org/es/esn/food/meetings/bali\\_report\\_mar04.pdf](ftp://ftp.fao.org/es/esn/food/meetings/bali_report_mar04.pdf)

51) The fourth in the series of conferences organized for the South Asian region under the global FAO / ILSI Cooperative Framework was held in Kathmandu, Nepal 10-11 December 2002. This Regional Meeting on Modernising Food Control Systems in the SAARC Region was held to 1) examine critical issues in food safety in SAARC region (microbiology, food additives, biotechnology, nutraceuticals and micronutrient fortification of foods), 2) provide the latest updates on food safety tools (Risk Analysis, HACCP, GMP), 3) sensitize policy makers and management to institute mechanisms for risk assessment, 4) recommend strategy for modernizing food control systems, 5) review existing food laws and regulations in SAARC countries with a view to identify main differences and diversions from international standards and understand the implications of using Codex as the reference point, and 6) identify ways for fostering stronger regional cooperation for capacity building. The full programme for the conference can be accessed at: <ftp://ftp.fao.org/es/esn/food/meetings/10Dec2002agenda.pdf>

52) The fifth in the series of conferences organized for the South Asian region under the global FAO / ILSI Cooperative Framework was held in Goa, India from 21-23 September, 2003. This Regional Meeting on Modernising Food Control Systems in the SAARC Region was held to 1) examine critical issues in food safety in SAARC region (microbiology, food additives, biotechnology, nutraceuticals and micronutrient fortification of foods), 2) provide the latest updates on food safety tools (Risk Analysis, HACCP, GMP), 3) sensitize policy makers and management to institute mechanisms for risk assessment, 4) recommend strategy for modernizing food control systems, 5) review existing food laws and regulations in SAARC countries with a view to identify main differences and diversions from international standards and understand the implications of using Codex as the reference point, and 6) identify ways for fostering stronger regional cooperation for capacity building. The full programme for the conference can be accessed at: [ftp://ftp.fao.org/es/esn/food/meetings/Goa\\_report\\_2003.pdf](ftp://ftp.fao.org/es/esn/food/meetings/Goa_report_2003.pdf)

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

54) An FAO/WHO Workshop on *Applying Food Safety Risk Analysis in Asia – Practical Approaches* was held in Kuala Lumpur, Malaysia on 16 September 2002, in collaboration with ILSI-South East Asia, the financial support of ILSI International and the kind hospitality of the Ministry of Health, Government of Malaysia. The workshop was held to raise awareness of the countries of the Region

about risk analysis in food safety, and to contribute to increased participation of developing countries in Codex Regional Coordinating Committee meetings. A total of ninety-two participants representing nineteen countries from the Asian region, three observer countries, ILSI, Consumers International, and the FAO/WHO/Codex secretariats participated at the workshop. Of these participants, twenty-one food safety officials from the Asian region were financially supported by FAO/ILSI, most of whom remained for at least part of the 13th Session of the Codex Coordinating Committee for Asia. The full report of the workshop is available from:

[ftp://ftp.fao.org/es/esn/food/meetings/workshop\\_sep2002.pdf](ftp://ftp.fao.org/es/esn/food/meetings/workshop_sep2002.pdf)

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

### **WHO WPRO Regional Perspectives in Asia**

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

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

58) As stated in the endorsed<sup>1</sup> Western Pacific Regional Strategy for Food Safety, policies, plans of action and legislation are key elements of any effective national food safety programme. WHO collaborated with Cambodia, China and Lao People's Democratic Republic to review the current food safety situation and to further develop national food safety policies and/or plans of action. At the request of the Ministry of Health in China, the WHO organized several missions that reviewed the organization of the food safety system and identified strategies and actions to enhance the food safety control structures; identified how the newly formed State Food and Drug Administration (SFDA) will coordinate action on food safety with the Ministry of Health; collaborated with the Development Research Center (DRC) on how a farm to table approach could be applied to food safety in China; and prepared a proposal for possible European Union (EU), WHO and FAO collaborative action to strengthen food safety systems in China. In Cambodia, Lao People's Democratic Republic and Viet Nam, food laws and/or regulations were reviewed and in Lao People's Democratic Republic and Viet Nam new food laws were approved. Support was also provided to enable the Food and Drug Department of Lao People's Democratic Republic to disseminate information regarding its legislation.

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

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

Food Safety Committee of the Department of Health and Consumers International to enhance consumer representative access to information on food safety and Codex; and the local development of advocacy materials in Lao People's Democratic Republic.

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

#### **UPCOMING WHO WPRO ACTIVITIES/PROJECTS**

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

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

#### **E. CAPACITY BUILDING ACTIVITIES AT NATIONAL LEVEL**

##### ***Field Projects***

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

63) A TCP project on Strengthening Food Control and Codex began in Bhutan in June 2000, with funding for Phase 2 of this project approved in February 2004. The project is oriented toward the re-organisation 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.

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

65) An FAO TCP project in India was initiated in November 2000 and was completed in late 2003. The objective of the project was to strengthen the National Codex Committee and the National Codex Contact Point to ensure the effective conduct of Codex work at a national level and enhanced participation at international level. Activities included a series of training programs 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 has been produced as an output of the project.

66) An FAO TCP project for Mongolia to Strengthen Food Import Control commenced in June 2002 and is scheduled for completion in October 2004. The objectives of the project are to establish and strengthen the national system of control of food import quality and safety. This is extremely important for Mongolia as 90% 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.

67) FAO has implemented a TCP project to provide assistance to Nepal in the review of agricultural policy and legislation. The FAO legal department is the lead unit for this activity.

68) An FAO TCP project on strengthening SPS compliance for fresh fruits and vegetables commenced in Thailand in December 2003, and will continue through October 2005. The project has been requested by the Government of Thailand given the great potential in Thailand for exporting fresh and processed fruits and vegetables. Project activities will focus on management of programs for the prevention and control of microbiological hazards in these products, technical capabilities of food producers, training on food safety and quality assurance systems for producers, processors and government officers responsible for the implementation of these systems. In addition, the overall export inspection and certification system of fruits and vegetables will be improved.

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

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

71) Under a 2001-2002, Technical Assistance Agreement funded by the Asian Development Bank, the Ministry of Health and WHO undertook a collaborative programme that involved a four-pronged approach addressing (i) policy and legislation; (ii) laboratory facilities and operations; (iii) food-borne

disease surveillance; and (iv) information, education, communication and training. The main objective of the Technical Assistance Agreement was to strengthen the capacity of the Ministry of Health to promote food safety and reduce the incidence of foodborne disease. The work included reviews of existing legislative arrangements; audits of laboratory facilities and analytical capability; assessment of surveillance needs; and the development of an information, education and training centre for food safety. The overriding theme was that attempts to improve food safety should address all steps along the food chain, in the *farm-to-plate* continuum.

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

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

#### UPCOMING ACTIVITIES/PROJECTS

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

74) FAO has developed a proposal to implement a project in China on the Introduction, Extension and Utilization of Testing Technologies of Pesticide Residue in Vegetables and other Agricultural By-products. The proposal is currently in the review phase.

75) The Government of Pakistan has requested assistance from FAO for building national capacity for Food Quality and Safety. Specifically, the Ministry for Food, Agriculture and Livestock (MINFAL) is seeking assistance in reviewing and revising national SPS laws, remodelling animal and plant quarantine services, enhancing the capabilities of reference laboratories, forging technical linkages and fostering cooperation with developed economies. The request is still in the initial formulation phase.

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

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

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

79) WHO will focus its future efforts on enhancing food safety through a number of key strategies. WHO will facilitate coordinated international action and extend its partnership activities in food safety

in the Region. Key partners in this respect include national food safety authorities, FAO, SPC, ASEAN, Consumers International, development banks and aid agencies, as well as universities. Particular attention will be given to supporting sub-regional approaches to food safety (eg ASEAN) and to strengthening the national capacity particularly in countries such as Cambodia, China, Lao PDR, Mongolia, Philippines and Viet Nam. Attention will continue to be paid to strengthening national capacity to develop policies, plans of action and legislation, to empowering Member States to more effectively participate in the Codex standards development process and enabling them to establish national standards consistent with Codex guidance.

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