BACKGROUND NOTE ON THE CODEX ALIMENTARIUS COMMISSION
AND THE FAO CO-ORDINATED PROGRAMME OF FOOD CONTROL

Paper Submitted by FAO

Codex Alimentarius Commission

The Codex Alimentarius Commission is an intergovernmental body established in 1962 by FAO and WHO with the purpose of ensuring fair practices in international trade and protecting the health of the consumer. The Commission, after twenty-five years, has elaborated more than 200 individual commodity standards, thirty-five codes of hygienic and technological practice and approximately 2,000 maximum residue limits for pesticides. The impact of this work on the quality and safety of foods has helped to upgrade food manufacturing and processing standards all over the world. It has improved prospects for the facilitation of trade, and encouraged governments and industry alike to take cognizance of consumers' expectations.

Food exports are vital to many countries as a source of foreign currency earnings, and many countries have established export quality control and quality promotion schemes in order to enhance their opportunities to compete in the international marketplace. Codex Standards for raw and processed food commodities moving in international trade cover aspects such as; uniform labelling requirements; use of food additives; the presence of contaminants or residues of pesticides or veterinary drugs; sanitary (or hygiene) requirements; composition and analysis. Although the Commission is an intergovernmental body, representatives of the food industry, consumers' organizations, marketers and distributors participate in its meetings. Several of its subsidiary committees rely on the advice of Joint FAO/WHO Expert Committees and Panels which bring the world's best scientists together to evaluate on a scientific basis the safety of additives, or the levels of residues which remain in food after harvesting or slaughter.

Codex does more than create conditions which will help remove barriers to trade; it also stresses the ethical aspects of the food supply. One tangible expression of this work is the Code of Ethics for International Trade in Food which may be seen as a defence for countries not having a strong official food control system. The Code works against attempts to dump poor quality or unsafe food.
Good agricultural, processing, distribution and marketing practices are essential to ensure consumer protection. The Commission contributes to protecting consumer health by obtaining international agreement on food standards and codes of hygienic practice which are concerned with essential composition, chemical and microbial contaminants, nutritional quality and consumer information.

The work of the Codex Alimentarius Commission is consistent with the 1985 UN General Assembly resolution on consumer protection. Moreover, the objectives of food safety, improved quality, and reduced non-tariff barriers to trade appeal to the general public as well as to specialized groups. In fact, work in the area of food quality and standards can represent a complete congruence of public and commercial interests.

Through its links with the many technical divisions of FAO, and in liaison with WHO, the Codex Alimentarius Commission has ready access to the specialized knowledge which is vital to the preparation and implementation of international food standards. In the application of these standards, FAO has become the UN centre of excellence for programmes in food quality, safety and contamination control.

The FAO co-ordinated programme of food control

FAO has an active and in-depth programme to assist developing countries to establish or strengthen their national food control systems. The group within FAO most directly involved in this activity is the Food Quality Control and Consumer Protection Group of the Food Quality and Standards Service.

An effective food control programme has four fundamental aspects:

- There must be a basic food law, supplemented by detailed regulations requiring, among other things, that sound hygienic practices be followed along the food chain, the establishment of food standards, the prescription of safe conditions of use for food additives, pesticides and informative labelling which will not mislead or deceive prospective purchasers and therefore consumers.

- For effective administration of these laws and regulations, an organization of capable technical administrative officers, food inspectors and analysts, with adequate food laboratories and other facilities are needed. This includes forming an effective national strategy on food control which takes into account the development needs of the country, assists in furtherance of programmes for increased food production, improved processing and reduction of food losses.

- The consumer must be made aware of food problems by information and education, especially proper food handling and storage. The consumer is an effective agent in helping to control food activities.
Finally, food producers, processors and handlers must co-operate with enforcement agencies to ensure food safety and quality.

When considered together, these four aspects become an integrated national food control system. FAO has given careful consideration to those matters over a number of years beginning in early 1970's and has developed an overall policy framework for strengthening national food control systems and a range of publications on food inspection, sampling analysis, including as an example chemical and microbiological aspects. FAO disseminates these publications to all member countries and uses them in its project assistance work in developing countries.

The development and strengthening of such integrated national food control systems as well as the establishment of food contaminants control and monitoring programmes at national, regional and international levels are the main areas of FAO activities. Technical assistance in food control, in the form of project implementation, consultation, training and/or other advisory services is being provided or launched in forty countries of the world, including Europe, Latin America, the Near East, Africa and Asia. Following are some highlights of a few of these activities which are being carried out at present and which provide a general idea of FAO's work which is carried out to meet general or specific food control requests from developing countries.

**Food legislation**

FAO has assisted many developing countries in the review and updating of their food law and regulations related to food quality control over the past twenty-five years. From the start of this work in the late 60's, and up to the present, FAO has utilized the work of the Codex Alimentarius Commission as the basis for national regulations. FAO has found that this promotes national food industry, and has not created any policy or technological problems in the countries where this work has been done. The first country to receive comprehensive assistance in this area was Zambia, in 1970-74, and this work has been repeated in several other African, Asian and Middle-Eastern countries. A Basic Food Law for the countries of the Latin American and Caribbean region, prepared by an FAO Consultant and integrating the FAO/WHO Model Food Law and the experience of the several countries from the area, has been prepared and was endorsed by the participants. As a result, some countries such as Honduras, Paraguay and Nicaragua, have expressed their intention to use this model in the updating of their national legislation.

**Review of national food quality control strategy and infrastructure**

To provide a certain measure of coherence in national food quality control systems, FAO has assisted many countries to review their food control strategies or infrastructure by workshops or specific consultancies since starting this work in the 1960's. During 1988 and 1989, the food
control infrastructures of Bhutan, Fiji, Vietnam, Uganda, Somalia, Senegal, Malta, Bolivia, Belize and Ecuador were studied and project proposals were prepared in order to strengthen their national capabilities.

Food quality control training

Training of governmental and food industry personnel in all aspects of food quality and safety is a major aspect of FAO work. Recent training courses, workshops and seminars on different aspects of food control have been held at national levels under project activities such as in Algeria, Cape Verde, Cuba, Nepal and in Thailand. These training activities also included foreign study tours for inspectors, administrators and laboratory workers to acquaint them with new or improved food technology.

In Asia, a regional training network has been established for the training of food inspectors in such areas as food export/import inspection, inspection of food processing industries and sampling techniques. For this purpose, five training centres have been established utilizing existing institutions in the region (China, India, Indonesia, Malaysia and Thailand) which are organizing the regional training courses.

This regional training project is issuing and distributing a newsletter twice a year for information to the national food control authorities. The newsletter is appropriately named "Network" and gives details on the project work and activities ongoing in the region in food control. It includes experiences of local countries in their food control efforts. Similar training networks for Latin America and Africa are being planned and designed and will be implemented when financial resources are located to support these activities.

Export food and international trade

Special emphasis is being given to improve national export food inspection and certification programmes, and control projects have been established which deal specifically with this matter in Indonesia, Thailand and Costa Rica. In India, assistance has been provided in training of export food inspectors. In Senegal, a national workshop on export food control was organized recently to assess the situation and define strategies for the future. Regional workshops were held in Asia (Indonesia), Africa (Egypt) and Latin America (Costa Rica) to define export/import food control needs.

A study on "Identification of Food Contaminants Affecting International Trade" has been carried out by FAO at a global level under funding by the Government of Finland. About thirty-five countries from all regions of the world were selected to participate in this one year study. Consultants visited countries to review food export/import systems and collect data on major contaminants found in foods at import/export levels. A technical meeting was held in Bangkok in early 1990 and reviewed the preliminary country reports prepared by the consultants. The final report of the study is under preparation.
Food contamination

Food contamination continues to be a serious problem around the world. Surveillance and monitoring of contaminants (chemical and biological) in foods is therefore important not only for public health but also because of its negative economic impact. Excessive levels of aflatoxins or pesticide residues are often a cause of food export/import rejections in international food trade.

The Second International Conference on Mycotoxins was held in Bangkok, Thailand, from 28 September to 2 October 1987 and was a Joint FAO/WHO/UNEP Meeting.

In assessing the current mycotoxin situation, the Conference viewed with real concern the health and socio-economic consequences of mycotoxin contamination of food and feed stuffs. The rôle of mycotoxins other than aflatoxins was given special emphasis. The Conference reviewed activities performed by international agencies and countries regarding mycotoxins and recommended sixteen priority activities to be undertaken by governments in mycotoxin prevention and control programmes. These included monitoring and control of mycotoxin contamination as well as training, information and research.

In particular, it urged international organizations (such as FAO) to provide as adequate and sustained support as possible to national efforts in these fields, in particular the development, application and harmonization of reliable, inexpensive and internationally accepted methods of sampling, sample preparation and analysis and standardization of legislation, including the establishment of permissible levels of mycotoxins in foods.

FAO has therefore assisted countries in assessing the national mycotoxin contamination of foods such as in Guatemala, Cuba, Tanzania, Malawi, Thailand, Philippines. Projects for establishing mycotoxin contamination monitoring programmes have been carried out in different countries. Training courses for mycotoxins analysis in foods were held at national and regional levels. In particular, as a follow up to the Second Joint FAO/WHO/UNEP International Conference on Mycotoxins, a joint FAO/UNEP/UNEPCOM mission visited various countries in Asia and formulated a draft project proposal to establish a regional training network for mycotoxin control in the region. Participating training centres are proposed to be in India, Philippines and Thailand. The proposed duration of the project is three years now scheduled to commence in mid-1990 and will cover subjects such as mycotoxin prevention, extension activities, mycotoxin analysis. In the Caribbean area, a mycotoxin monitoring programme has been planned and FAO assistance has been requested. In Africa, a training course on aflatoxin analysis has been organized and a training package for mycotoxin analysis in foods is under preparation.
Other food contamination surveys included the determination of residues of various pesticide chemicals currently used by many countries. They include studies on food for national consumption and/or exportation, water supplies and several materials involved in the chain production. Studies on the subject have been carried out in Argentina and Dominica. Projects for pesticide residues control in foods for export have been undertaken in Zambia and Thailand.

Following the April 1986 Chernobyl accident FAO has been carrying out a number of activities to assist member countries both to establish national levels based on international recommended radionuclide contamination levels and to strengthen their analytical and control capacities. A series of Regional Workshops on Methods of Analysis of Foods for Radionuclide Contamination is ongoing. Four regional centres have been identified in India, Kuwait, Ghana and Mexico to host these workshops. The India and Kuwait Workshops were held in 1989.

Conclusions

In conclusion, the benefits of proper food quality control are clear. These include benefits to food producers, consumers, the food trade and nations as a whole. Food control today is not just a policing activity - it also contributes to national development and the general health and well-being of the population.

The food control system of today must:
- be up-to-date, using modern technology;
- take into account national development needs;
- assist programmes for increased food production, improved food processing and handling practices;
- become an integral part of the entire food system.

FAO involves each of these aspects in its co-ordinated approach to assisting developing countries in food control. The elements needed for effective programmes are available through training and use of Codex and FAO/WHO technical and scientific work to establish national rules that will protect consumers and promote better food quality and safety for domestic and international markets. Developing effective government and industry quality control systems takes time and policy-level commitment. FAO has carried out many successful assistance activities with developing countries to develop effective and cost-efficient food control systems.