a) Food notified to be labelled

b) Other general food

Legal provisions are established regarding labelling requirement, food additive, food contaminant, poisoning substances residue, packaging material, food colouring and flavoring etc.

Import and export foods are required importation license, manufacturing license and registration from FDA of the Ministry of Public Health before distributing into the Kingdom.

- Regulatory Compliance

Three main divisons named Food Control Division, Inspection division, and Consumer Protection Task group are responsible for this important activities. Legal mandatory consists of direct and indirect measures. Activities include setting up food standard and specification as well as hygienic and labelling requirements, controlling of the production, import and export of food products, issuance of Manufacturing License and Importation License, registration of specific-controlled food products before marketing, approval of food additives and packaging material to be used in too, labelling and advertising approvals, giving technical advisory for food product development, inspection of food establishment, sampling and quality assessment of food products, taking legal action ge. seizure, product recalls, prosecution, conducting epidemiological studies and promotion of consumer awarness.

(1) Pre-marketing Control

Activities include the process of issuance of manufacturing license and importation license to manufacturer and importer, registration of controlled food products before marketing, approval of food additives used in food, labelling and advertising approvals.

1.1 Manufacturing License

Plant lay-out is to be submitted for approval. Plant inspected by TFDA inspector is required before issuing manufacturing license . This license is to be renewed every three years.

1.2 Importation License

A license is needed in order to import food into Thailand. A licensed importer can import various kinds of food . The designated storage or warehouse has to be inspected and approved by the TFDA before a license is issued. An importation license is to be renewed every three years as well.

1.3 Product Registration

If a food product, either manufactured or imported, is categorized as Specifec-Controlled Food, it must be registered. Analysis of the product as well as details of the process and ingredients is required for the registration process and the standard of that product to meet the standard specified in the Ministerial Notification.

1.4 Labelling Approval

All imported food products, fresh, frozen or processed form are required to bear labels containing Thai language. The labels of all

imported products are subject to aproval by TFDA prior to sell in the market. For Food products, in general, labelling must follow the Notifications of the Ministry of Public Health No: 68 (B.E.2525) and No: 95 (B.E.2528) Re : Label.

1.5 Advertising Approval

Any form of advertisement for food through any media is subject to approval of TFDA. False or deceptive advertisement on quality or benefit of food is prohibited.

(2) Monitoring and Compliances

The purpose of monitoring control is to ensure that food distributed to consumers are wholesome and have quality that complies with the national food standard. As a result, this measure deals primarily with the activities of enforcement. Inspection of all food factories and premises throughout the country is conducted regularly, together with random sampling of food products for laboratory analysis and assay to ensure compliance with legal requirements. In case of violation, actions like seizure, recall, and prosecution will be executed. In general, there are two types of inspections :

2.1 Regular Inspection

This is a planned inspection to ensure that the TFDA's annual plan on consumer protection has been successfully implemented. There are 3 types of regular inspection :

- Licensing Inspection. This is a comprehensive inspection of newly established plant or the renewal one prior to issuance of manufacturing license.

- Routine Inspection. This is a periodic inspection of the premises that already hold licenses.

- Follow-up Inspection. This is to confirm that certain corrections reguired by prior inspection have been made.

2.2 Suspected or Petitioned Inspection This is a particular type of inspection with specific purpose of investigation and gathering necessary evidence for prosecution.

(3) Food Surveillance

The aim of food surveillance is to assure the safety and quality of food items distributed in marketplace. Food surveillance is conducted by several ministerial organizations and TFDA also plays a main role in this activity. Foods are taken from marketplace and then analyzed to ensure the conformity to the standards.

Food Certification System

1. Voluntary Compliance

Besides the regulatory compliance, Food Control Division of the TFDA takes the important role relating to up-grade and develop of food manufacturers throughout the country by setting up the GMP as a guiding for all food plants. The HACCP programe is also one of all measures used for technical and advisory services for food quality promotion in order to meet the international standard. Various types of GMPs of food, eg. canned food, drinking water, beverages, fish sauce, soy sauce, milk products, fishery products have already been set up. Many technical training courses and information services have also been conducted and are

in progress. These include the development of hygienic practices in food processing and quality grading of food establishments intended for international trade, issuing different forms of certification such as Certification of Free-sale, Sanitary Certification and GMP's Certification.

2. The Department of Medical Sciences (DMSc) of Ministry of Public Health provides food analytical services for all food control activities through the work of Food Analysis Division. Recently, the Food-for-Export Analysis Division was established in providing laboratory services. Pre-export inspection of the consignment and food producers for export, are also performed upon request, issuing certificates for food export consignments in the field of food safety and health standards according to the requirements of importing countries and promotion of food export industry with reference to health requirements.

Now, services concerning exportation are available through the Centre for Expert Food Service just established in March 1922. This centre will act as "a one stop" service centre for the Ministry of Public Health and will provide various types of service required by the exporters and country of destination. It is located in the Department of Medical Sciences, Bangkok and operated with the cooperation of the Thai Food and Drug Administration.

II. Current Food Situation

As the eating habit and cooking style of people have drastically changed during the past decade. Semi-processed and processed foods become more popular and influent to Thai's daily life. From 1979 to 1993, licenses of 3462 domestic food manufacturers and 971 importers were issued by the Office of Food and Drug Administration (FDA) and more than 10,000 food formulae were registered. In Thailand, The Food and Drug Administration (FDA), Ministry of Public Health is responsible for regulatory control and monitoring of food for quality and safety with the support of food analytical services of the Department of Medical Science (DMSc.). In addition, provincial health office help FDA for the control of some certain food products regarding to the decentralized power system of FDA in the year 1991.

From the monitoring data on microbiological and chemical hazards as well as the use of food additives examined by DMSc during the recent years, shown that major problem has come from poor sanitation and hygiene.

2.1 DOMESTIC AND IMPORTED FOOD

2.1.1 Microbial contamination : Positive improvement in microbiological quality was observed in almost all types of specific-controlled food except food in sealed containers and semi-processed food, bottled drinking water, powdered and concentrated flavored-syrup beverage, fruit juice, ice cream and sauces that more than 10 % of samples examined during 1989-1991 were contaminated by microbial sanitary indicator, food poisoning, yeast and mold: Fifteen percent of ready-to-eat food sold at food stalls were contaminated by food-borne pathogens.

2.1.2 Toxic elements : Over 400 samples of primary food, were analyzed for the level of toxic and essential elements. The result of this study was similar to the situation of heavy metals contamination reported in many countries, average levels of lead, cadmium: mercury and arsenic in seafood were higher than other food commodities. Compared to the legal limits, none of food samples was found to have levels of mercury and arsenic higher than 0.2 mg/kg and 2 mg/kg respectively. For lead, about 20 % of vegetable samples and 27 % of fish samples contained more than the legal level of 1 mg/kg. It is expected that lead levels in foods will decrease in the future as the government has taken action since 1990 to lower the lead content in petrol from 0.45 g/1 to 0.13 g/l.

2.1.3 Pesticide residues and polychlorinated biphenyls (PCBs) : Monitoring and survey of primary and semi-processed food commodities for pesticide residues have also been carried out. Analysis of more than 100 residues of organochlorine, organophosphate and carbarmate compounds was performed by the DMSc facilities. Traces amount of DDT and some organochlorine (OC) compounds were still detected in many groups of Thai staple food while organophosphate (OP) residues were more frequently found than OC in vegetable and fruit samples, of which about 5 % of vegetables and 6 % of fruits contained residues exceeding the Codex maximum limits.

Pesticide intake by the total diet approach, has been launched in Thailand by the Department of Medical Science 1988. The nation-wide study in 1991 showed that 10 pesticides (5 OC, 4 OP and 1 carbamate)

were detected. The intake amount of each pesticide was much lower than WHO acceptable daily intake which was similar to the studies from many developed countries.

PCBs have not been detected in fishes or any types of fatty food since 1973.

2.1.4 Aflatoxins The maximum limit of aflatoxins in Thai food is 20 mcg/kg. In 1991, over 400 samples of various types of food were analyzed for aflatoxin, 30 % of peanut and its products were contaminated and the amounts above legal limit of aflatoxins were present in 9 % of the samples. In 1992, more than 200 samples of peanut and products were monitored again, it was found that the contamination rate decreased to 11 % . No toxins was found in processed vegetable oil samples.

2.1.5 Food additives Labelling of additives used in specific-controlled and standardized foods is required by law. Violation of food additive regulation was found in some ready-to-eat food, such as using cyclamate, a prohibited sweetener, in preserved fruits, excessive amount of benzoic acid and its benzoate salts in vender soft drink. Food coloring and non-food coloring agents were occasionally found in the food not allowed to be colored, such as pickled fruits, fish ball, and dried shrimp.

2.2 FOOD FOR EXPORT

More than 14,000 samples of foods were analyzed annually by Department of Medical Science for export certification. Frozen vegetables, fruits, seafood and meat products, canned, and dried food are the main commodities tested. Around 2 % of samples did not comply to the importer quality standards due to food-borne pathogens, misused of additives, antibiotic residue contamination and some physical defects.

III. Problems in general

The expansion of food industry in Thailand is dramatically rapid to keep pace with the increasing demands of domestic and international markets. Even more than 10,000 food farmulae are registered. However, A number of small scale or home-made producers without registered licences are also increasing. This makes the difficulty for food control agencies to look after each factories, especially, when the owners of medium and small scale are lack of knowledge in good manufacturing practices (GMP) in the field of food sanitation and hygiene, and have poor quality control management due to no well-trained personnel in factories. Moreover, inspection techniques being used by FDA Staff are inefficient to track down the food problems at the food processing sites.

In addition, Thai people have limited sense of safety awareness due to dificiency in consumer protection's mind and health education.

3.1 Problems of Pre-marketing Control to be solved

1. Lacking of well-trained officers to give guidance for manufacturer on food processing and food sanitation. (both FDA and Regional officers)

2. Manufacturers have insufficient knowledge of quality control system.

3. Ineffective equipment and facilities for training and education of manufacturers and consumers.

4. Officers can't keep up with the technology progressive rapidly.

3.2 Problem of Post-marketing control to be solved

The post-marketing surveillance is one of the most importance and necessary for the safety of consumers. The persons working in this field are still insufficient of knowledge for inspection such as inspection technique in order to ensure that the products processed and distributed in the market are safe for consumers. In addition the inspection tools are quite few and out-of-date. Almost of monitoring system is depended on finished product analysis.

IV Objectives of the Project

The Project-type technical cooperation including dispatch of experts, technical training and study tour in Japan as well as provision of equipment from the government of Japan will bring a great support and assistance to the development of technical knowledge of inspection, food control and safety assessment, domestic human resources training and training facitities focused on the food sanitation which is the important key to eliminate the problems of food-borne diseases or sickness to the consumers from the beginning. Effective food sanitation control system will reduce or prevent the causes of illness from foods, detention and rejection of exported foods from Thailand which are going to impact Thai's economic and society directy as a whole.

V. Specific Objectives

To promote health protection programme through strengthening of food sanitation and safety control system by

(1) To develop the well-trained personnel in the proposed field by Thailand, Provincial health office personnel.

(2) To transfer knowledge and expertise in food quality control and food safety to personnel in medium and small scale food industries.

(3) To provide useful information to the public in relevent to food sanitation.

VI. Requests to JICA

The project will be categorized into 2 parts:

1. Equipment supplies requested are as follows :

a. 3 Mobile units for monitoring and surevillance programme, for Inspection Division and Consumer Health Promotion office.

b. Audiovisual Aids plus installation of studio for Public Relation Program.

c. Training Facilities plus training tools for Manpower development of officers and manufacturers from both government and private sector.

2. Technical assistance as follows :

a. Consultants in 3 fields :

- Food Sanitation and Public Relation Activity
- Food Quality Control and Safety Assessment System
- Food Inspection and Evaluation

b. Study Tour in 3 fields

- Public Relation Programme
- Food Law , Food Sanitation Administration and safety assessment system
- Food Inspection and Evaluation

c. Training in 2 fields

- Inspection and Evaluation
- Quality Assurance and Quality Control System
- Risk Assessment of animal drug/pesticide/antibiotic/contaminant residue
- Food Control System

3. Contribution Request

- Preparing of training module for education of community levels
- Workshop for Training of Food Inspectors in FDA and provincial health officers
- Workshop for Management of Information system.

JICA