

codex alimentarius commission

FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD HEALTH
ORGANIZATION

JOINT OFFICE: Via delle Terme di Caracalla 00100 ROME: Tel. 57971 Telex: 610181 FAO I. Cables Foodagri Facsimile: 6799563

ALINORM 91/15

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION
19th Session
Rome, 1-10 July 1991

REPORT OF THE SEVENTH SESSION OF THE
CODEX COORDINATING COMMITTEE FOR ASIA
Chiang-Mai, Thailand
5 - 12 February 1990

NOTE: This document incorporates Codex Circular Letter CL 1990/12-ASIA

W/Z5938

codex alimentarius commission

FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD HEALTH
ORGANIZATION

JOINT OFFICE: Via delle Terme di Caracalla 00100 ROME: Tel. 57971 Telex: 610181 FAOI. Cables Foodagri Facsimile: 6799563

CX 3/10.2

CL 1990/12-ASIA
April 1990

TO: - Codex Contact Points
- Participants at the 7th Session of the Codex
Coordinating Committee for Asia
- Interested International Organizations

FROM: Chief, Joint FAO/WHO Food Standards Programme
FAO, 00100 Rome, Italy

SUBJECT: Report of the Seventh Session of the Codex Coordinating
Committee for Asia (ALINORM 91/15)

The Report of the 7th Session of the Codex Coordinating Committee for Asia will be considered by the 19th Session of the Codex Alimentarius Commission which will be held in Rome 1 - 10 July 1991.

REQUEST FOR COMMENTS FROM GOVERNMENTS AND INTERNATIONAL ORGANIZATIONS

1. Proposed Regional Draft Code of Hygienic Practice for the Preparation and Sale of Street-Foods (Para 170, Appendix III)

Member Governments and International Organizations are invited to communicate their comments on the above Code which is presently at Step 3, to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy, not later than 30 August 1991.

SUMMARY AND CONCLUSIONS

The 7th Session of the Codex Coordinating Committee for Asia (5-12 February 1990, Chiang-Mai, Thailand) reached the following conclusions:

1. Relations with GATT (Para 73)

The Committee expressed satisfaction at the positive developments in GATT which would commit all Member Countries of GATT, who are also members of CAC to use Codex Standards as a basis for harmonization of national food laws and regulations, strongly supported FAO's efforts to strengthen its relationship with GATT and recommended FAO to continue its efforts in this direction.

2. Acceptances of Codex Standards (Para 76)

The Committee agreed that the subject of acceptances of Codex Standards should be addressed by the proposed Conference on Food Standards, Chemicals in Food and International Trade to be convened in Rome, Italy, in 1991.

3. Food Control and Consumer Protection Activities (Paras 84, 85)

The Committee expressed its appreciation and continued strong support for the training network for food control officials and recommended that the existing project to be extended and expanded. It strongly supported the proposed FAO/UNEP/UNEP/COM project to establish an Asian Regional Network for Mycotoxin Control and recommended that this message be conveyed to UNEP and that the project be implemented soonest.

4. Technical Cooperation among Developing Countries (Para 104)

The Committee commended the FAO, WHO, UNDP, UNEP and the ASEAN Countries on their efforts to implement the TCDC concept, especially noting the FAO/UNDP project on training of food control officials and the proposed FAO/UNEP project on control of mycotoxins and supported further development of the cooperation on an Asian basis.

5. Export/Import Certification and Inspection Programmes (Para 137)

The Committee endorsed the holding of the Joint FAO/WHO Conference on Food Standards, Chemicals in Food and International Trade and requested that the topic of the export/import food control programmes be an item for discussion at the next session of the Committee.

6. Guideline Levels for Aflatoxins in Foods (Para 147)

The Committee expressed the view that the guideline level for aflatoxin in peanuts for human consumption proposed by Codex Committee on Food Additives and Contaminants was low, queried the basis on which the guideline level for aflatoxins were proposed by CCFAC and proposed that a risk assessment of aflatoxins be carried out.

7. Radionuclide Contamination of Foods in International Trade
(Para 157)

The Committee was unable to accept the guideline levels for radionuclides being of the opinion that they were too high and recommended that action should be taken by CAC to reduce the guideline levels to ones based upon more acceptable risk assessment procedure and that CCFAC provide information on the guidelines one year after a nuclear accident and the rationale for establishing the guidelines for only one year.

8. Code of Practice for Street Foods (Para 170)

The Committee agreed to circulate the Draft Regional Code of Hygienic Practice for the Preparation and Sale of Street Foods to Governments at Step 3 of the Codex Procedure.

9. Elaboration of Codex Standard for Rice (para 176)

The Committee expressed the view that the Codex should not embark on the elaboration of a worldwide standard for rice.

10. Elaboration of Standards with International Trade Potential
(Paras 184, 185)

The Committee agreed to discuss at its next session the elaboration of Standards for Bamboo Shoots, Pickles and Chutneys which have an international trade potential, on the basis of background papers to be prepared by Indonesia and India.

11. Draft Codex Standard for Quick Frozen Fish Fillet (Para 191)

The Committee recommended to CCFPP that the scope of the Standard be enlarged by inclusion of additional species of fish.

12. Nomination of Coordinator (Para 186)

Dr. Azizan Ghazali of Malaysia was nominated for appointment by the Commission at its 19th Session as the Codex Coordinator for Asia.

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Opening of the Session	1
Adoption of the Agenda	2
Election of Vice Chairman	2
Review of Acceptances	3
Matters of Interest arising from Codex Sessions	4
Benefits, Trade Implications and Problems accrued to Member Countries by acceptance of Codex Standards and Codex MRLs.....	7
Strengthening the Infrastructure for National Food Control Systems	10
FAO Activities	10
WHO Activities and Projects at Country and Regional levels	11
Technical Cooperation among Developing Countries	13
Progress made to promote Food Safety based on Regional Indicators	14
Report on Activities within FAO and WHO complementary to the work of the CAC	15
Regional Food Export and Import Certification and Inspection Programmes	18
Regional and National Programmes on Control of Mycotoxins in Foods	18
Activities of Codex in the Field of Aflatoxins in Food and Feed	20
Methods of Control for Radionuclide Contamination of Foods in International Trade	22
Activities in Asia on Street Foods and a Proposed Code of Practice for Street Vended Foods	21
Consideration of the Need for a Codex Standard for Milled Rice	23
Activities regarding Control of Pesticide Residues in Foods	24
Elaboration of Regional Standards for Traditional Foods with Trade Potential - Proposals from the Committee	25
Nomination of Coordinator	25
Other Business	25
Date and Place of Next Session	28
 Summary Status of Work	 30

APPENDICES

	<u>Page</u>
APPENDIX I - List of Participants	31
APPENDIX II - Activities of ASEAN	42
APPENDIX III - Draft Code of Hygienic Practice for the Preparation and Sale of Street Foods	44

INTRODUCTION

1. The Seventh Session of the Codex Coordinating Committee for Asia (CCASIA) was held in Chiang Mai, Thailand, from 5-12 February 1990 under the chairmanship of the Coordinator for the Region, Prof. Dr. Pakdee Pothisiri.

2. The Session was attended by delegates from the following countries of the Region:

Bahrain	China	India
Indonesia	Iraq	Japan
Korea, Republic of	Kuwait	Malaysia
Nepal	Philippines	Saudi Arabia
Singapore	Thailand	

Observers were present from Brunei, USSR, IOCU and UNEP. In addition, the Chairman of the Codex Alimentarius Commission, Mr. Eduardo R. Méndez was also present.

3. A complete list of participants, including FAO and WHO officers is attached as Appendix I to this report.

INAUGURAL ADDRESS BY H.E. MR. PHAI'THOON KAEOTHONG, DEPUTY MINISTER OF INDUSTRY AND OPENING OF THE SESSION

4. Mr. Prasithi Chaisri, Deputy Governor of Chiang Mai, Thailand, welcomed the delegates and observers to the meeting, stating that he was extremely grateful to the Government of Thailand for selecting Chiang Mai as the venue for the Session. He acquainted the participants with attractions and points of interest in Chiang Mai and wished them a pleasant stay.

5. Mr. Kazunobu Onogawa, Deputy Regional Representative of UNEP in Thailand spoke on behalf of UNEP and indicated the interests of UNEP, as the specialized environmental agency of the UN system, in the contamination of food by chemicals which may adversely affect human health. Mr. Onogawa highlighted the achievements of the Global Environment Monitoring System food and animal feed contamination monitoring project implemented by FAO, WHO and UNEP.

6. Mr. H. Tsuchiya, Deputy Regional Representative, FAO Regional Office for Asia and the Pacific, Bangkok, Thailand, greeted the participants on behalf of the Director-General of FAO and drew attention to the important role, the Codex Alimentarius Commission was playing in setting food standards, regulating the use of food chemicals, protecting the consumer and ensuring fair trade practices. He stressed the role FAO could play in assisting the countries in setting and strengthening import/export food control systems and underlined that in its objective to eliminate barriers to international trade, GATT attached increasing importance to Codex as one of the basic organizations to eliminate technical barriers to trade.

7. Dr. Gerald Moy, Food Safety Adviser of WHO Western Pacific Centre for the Promotion of Environmental Planning and Applied Studies (PEPAS), Malaysia, pointed out that WHO is placing greater emphasis on its environmental health programme which includes food safety. It is becoming increasingly clear that stresses on the environment will make the provision of safe nutritious food for the world's growing population more difficult in the future. Dr. Moy also called attention to the problem of foodborne diseases which may be responsible for the deaths of millions of young children worldwide. Solution to this problem must be based on the shared commitment to food safety by Government, Industry and, most importantly, by consumers. Dr. Moy extended to the participants the greetings of the Director General of WHO.

8. Dr. Pracha Em-amorn, Secretary General of the Food and Drug Administration, Ministry of Public Health, Thailand, pointed out the increased importance that food

control has assumed, than in the past, as a means of guaranteeing the safety of food for human consumption as well as protecting the consumer against unscrupulous producers. He also pointed out that the establishment of food standards is an essential element of any food control system and commended the role of Codex in establishing international standards, promoting international trade, and protecting the consumer.

9. Mr. Samnao Chulkarat, Secretary General of the Thai Industrial Standards Institute extended his thanks to the Joint FAO/WHO Food Standards Programme for selecting Thailand as the venue of the Seventh Session of CCASIA and requested H.E. Mr. Phaithoon Kaeothong, Deputy Minister of Industry to declare the Seventh Session of CCASIA open.

10. While emphasizing that international food standards are elaborated to achieve the two objectives of protecting the health of the consumer and promoting international trade, H.E. Mr. Phaithoon Kaeothong drew attention to the fact that consumer protection develops human resources which in turn leads to development of the country. He pointed out that the National Health Development Plan 1982-1994 was established by the Royal Thai Government with a view to protect consumers through the control of the quality and safety of food. He extended his sincere thanks to FAO and WHO for their cooperation and support extended to his country and declared open the Seventh Session of the Codex Coordinating Committee for Asia.

Adoption of Agenda

11. Mr. Eduardo R. Méndez, Chairman of the Codex Alimentarius Commission addressed the participants to the Session and pointed out that the present membership of Codex consisted of 138 countries which represented 97% of the world's population. The Codex has so far elaborated 200 Standards, and 30 Codes of Practice which find extensive application by the members of the Codex. Mr. Méndez informed the participants that many important matters including benefits of acceptance of Codex Standards, review of Codex activities and food contamination will be discussed by the Coordinating Committee for Asia at the present Session. He looked forward for a fruitful and successful session.

In Memoriam

12. The Committee recalled with sincere appreciation the contributions made to its work and to the work of the Codex Alimentarius Commission by the late Mr. T. Satasuk, Director of Food Control Division, Ministry of Public Health, Government of Thailand and Mr. J.C. Jaisani, Assistant Director General, Health Services, Ministry of Health and Family Welfare, Government of India, both of whom died since the Committee's previous session. The Committee observed one minute silence in memory of Mr. Satasuk and Mr. Jaisani.

13. The Committee had for its consideration the provisional agenda for the meeting as contained in CX/ASIA 90/1. On the proposal of the Chairman, it was agreed to consider items 7(iii) and 11, and items 9 and 5 together. In order to allow the private industry to present its views on the need for a rice standard, it was agreed to consider the concerned agenda item 14 after agenda item 17. Agenda item 15 was deleted because the discussion document was not available.

14. The Committee adopted the provisional agenda with these changes as the agenda for the Session.

Election of Vice Chairman

15. The delegation of Thailand, seconded by the delegation of the Republic of Korea, nominated Dr. Azizan Ghazali (Malaysia) as Vice-Chairman. The Committee unanimously concurred with the proposal.

REVIEW OF ACCEPTANCES BY COUNTRIES IN THE REGION OF ASIA OF CODEX STANDARDS AND CODEX MAXIMUM LIMITS FOR PESTICIDE RESIDUES

16. The Committee had before it document CX/ASIA 90/3 which reviewed the progress concerning acceptances of Codex Standards and Codex Maximum Limits for Pesticide Residues by Countries in the Codex Region of Asia. It was noted that the Codex Standards and Codex Maximum Limits for Pesticide Residues adopted by the Codex Alimentarius Commission up to 1987 and updated where appropriate, were included in Volumes II to XVIII of the Codex Alimentarius and their supplements and sent to Governments with a renewed request for acceptance.

17. It was noted that the following countries in the Region of Asia had notified acceptances of some of the Codex Standards or Codex Maximum Residue Limits: Arab Republic of Yemen, Bahrain, Democratic People's Republic of Yemen, India, Iran, Iraq, Japan, Jordan, Kuwait, Malaysia, Philippines, Singapore and Thailand. The document also set out details of further replies which had been received from Iran and Malaysia since the last session of the Committee.

18. The Committee was informed that the 18th Session of CAC agreed that henceforth, the forms of acceptance of Codex MRLs for Pesticide Residues should be limited to (i) full acceptance, and (ii) free distribution.

19. The delegation of China stated that owing to legislative and technical reasons, China had not yet been in a position to give formal acceptance to Codex Standards and Codex Maximum Limits for Pesticide Residues. However, the importance of Codex Standards and Codex Maximum Residue Limits had been recognized by China as can be seen by their wide use in the development of food regulations.

20. The delegation of the Republic of Korea stated that his country was not able to formally accept any of the Codex Standards because of the very wide differences in the food additive provisions, compared to those in the national standards. However, the country allows free entry to foods which conform to Codex Standards.

21. Malaysia has responded with full acceptance to Codex MRLs which are the same as or less than the MRLs in the Malaysian Food Regulations and non-acceptance of Codex MRLs which are higher than Malaysian MRLs or where there are no Malaysian MRLs as in many cases. The other options i.e. "limited acceptance", "target acceptance" or "non acceptance with free distribution" and their respective variations are not provided for under the law of the country. Therefore Malaysia did not give acceptance to any or most of the MRLs for Captafol, Captan, Carbaryl, Carbophenothion, Chlorodimeform, Chloropyrifos, 2, 4-D, Edifenophos, Ethion, Fenthion, Lindane, Malathion, Methidathion, Monocrotophos, Thiphanate-methyl, Carbofuran, Cartap, Methamidophos, Maleic Hydraxide, Propargite, Aldicarb, Cypermethrin, Guazantine, Tecnazene, Permethrin, 2,4,5-T, Amitraz, Etrimfos, Deltamethrin and Bendiocarb. For the remaining pesticides, most of the MRLs were given full acceptance.

22. The Philippines had adopted some Codex commodity standards and Codex MRLs of selective pesticides. Codex MRLs and Standards are used as the basis for the formulation of national standards.

23. India has accepted Codex limits for pesticide residues in toto in the case of fruits, vegetables, meat, oilseeds and hulled products but in the case of food grains, the country has adopted about half of the Codex MRLs.

24. The delegation of Japan pointed out that Japan is making efforts to accept Codex Standards but is facing difficulties because of the wide variations between the national standards and the Codex Standards. The national MRLs for pesticides which are set up on the basis of actual use of the pesticides and levels of residues found are significantly different from Codex MRLs and, as a result, the country has not been able to accept any Codex MRLs. However, for pesticides not used in the country, the country uses Codex MRLs as a guideline for inspection.

25. Nepal uses the Codex Standards as a basis for elaboration of its own national standards. The national MRLs set up by Nepal for Aldrin, Dieldrin, Carbaryl, Chlordane, DDT, Diazinon Fenitrothion, Heptachlor, Lindane, Malathion and Phosphamidan are comparable to Codex MRLs.

26. Indonesia has used and is using several Codex Standards as a reference in developing national standards. The country has also used Codex MRLs for pesticides as a reference for drafting of national regulations on the limits for pesticide residues.

27. In Thailand, Codex Standards and Codex MRLs are used as the major reference in formulating and introducing food laws and food standards. So far the country has accepted eight Codex Standards and four Codex MRLs. The most recent officially accepted standard is the Codex Standard for Irradiated Food.

28. The Committee agreed that the Commission should continue its efforts to get more acceptances of Codex Standards and Codex MRLs by member governments. It is looking forward to the developments through GATT. Indications are such that there will be significant improvement in acceptances in the medium term at least.

MATTERS OF INTEREST ARISING FROM THE 18TH SESSION OF THE COMMISSION AND OTHER CODEX SESSIONS

29. The Committee had before it Document CX/ASIA 90/4 containing matters of interest to it.

Revised Publication of the Codex Alimentarius

30. The Committee was informed that the revised Codex Alimentarius will be published in loose leaf format in 14 volumes together with a new abridged version containing the substantive contents of the Codex Alimentarius in a single volume. The revised publication will be distributed through the worldwide sales networks of FAO and WHO and efforts are being made by the Secretariat to find ways in which the Codex Alimentarius could be made available in a computerized form.

Terms of Reference of Regional Coordinating Committees

31. The Committee noted that the terms of reference of the Coordinating Committees are fully harmonized. The Coordinating Committees have the new responsibility to encourage acceptances and an opportunity to propose to the Commission, the development of worldwide standards for products of interest to the regions including products considered by the Committee to have an international market potential in the future.

System for Defect Scoring for Coffee and Elaboration of Standards for Coffee and Coffee Products

32. The Committee noted that the ISO/TC34/SC15 has set up a task group comprising members from Kenya, Brazil, Colombia, Indonesia, Ivory Coast, Tanzania, U.S.A. and Venezuela to elaborate a defect scoring system for coffee and that this task group has presented a draft proposal DP 10470 International Green Coffee Defect Reference Chart. It was pointed out that member countries have the opportunity to work with their own National Standards Institutions when they comment or vote on ISO proposals and draft standards.

33. As regards elaboration of standards for coffee and coffee products, the Committee noted that the Commission at its 18th Session deferred action on the subject and asked the Secretariat to prepare a paper on current status of international standards for coffee for discussion at its next session and to send a circular letter to governments asking their opinion on the need for the elaboration of standards for coffee and coffee products.

34. The Committee noted that action as regards elaboration of standards for coffee and coffee products would be taken by the Commission at its 19th Session. The delegation of Indonesia proposed that robusta types of coffee should be included in the standards if a decision is taken by the Commission to elaborate them.

Amendments to the Codex Standards for Palm Oil and Palm Kernel Oil

35. The Commission at its 18th Session approved the initiation of the amendment procedure for the standards for palm oil and palm kernel oil. The Committee noted that it had proposed certain amendments to the standards for palm oil and palm kernel oil (ALINORM 89/15, Appendix V) at its last session. One of the amendments proposed inclusion of mesocarp or kernel of the fruit of all species of Elaeis as the source material for palm oil and palm kernel oil respectively.

36. The delegation of Malaysia pointed out that the Commission adopted mandatory GLC fatty acid ranges for palm oil and palm kernel oil based on the present description of species of Elaeis. It is hence important to maintain consistency between GLC fatty acid ranges and the species already defined in the standards.

37. The delegation of Thailand held the view that the word "edible" should not be deleted from the title of the standards. The oils could be used both for edible and industrial purposes and in the view of the delegation the title of the standards should specify for what purpose the oil is used.

38. The Secretariat agreed to bring the observations of Malaysia and Thailand to the U.K. Secretariat of the Codex Committee on Fats and Oils.

Elaboration of Standards for Palm Olein and Palm Stearin

39. The CCASIA at its last (6th) Session proposed Codex to elaborate standards for palm olein and palm stearin, in view of the fact that both of them are traded internationally in considerable amounts. The Commission at its 18th Session endorsed the elaboration of a standard for palm olein only and requested the Secretariat of the Codex Committee on Fats and Oils to determine by means of a circular letter, whether there was sufficient international trade in palm stearin for food use to justify the elaboration of such a standard.

40. The delegation of Indonesia informed the Committee that its exports of palm stearin exceeded palm olein by ten times and that there was indeed significant international trade in palm stearin. The delegation of Malaysia undertook to prepare a justification paper for the need to elaborate an international standard for palm stearin, if needed.

Guidelines for Simple Evaluation of Food Additive Intake

41. The Commission at its 18th Session adopted Guidelines for Simple Evaluation of Food Additive Intake. The Committee noted that the Guidelines (CAC/GL3-1989) will be made available to governments as Supplement 2 to Volume XIV of Codex Alimentarius.

International Numbering System for Food Additives

42. The Committee noted that the International Numbering System for Food Additives, the purpose of which was to provide internationally agreed numbers that could be used on food labels to identify food additives in compliance with the Codex General Standard for the Labelling of Pre-packaged Foods (CODEX-STAN 1-1985) was adopted by the Commission (18th) as an advisory text. The International Numbering System for Food Additives will be published in Vol. I of the revised edition of the Codex Alimentarius.

Proposals for General Provisions for the Use of Food Additives in Standardized and Non-Standardized Foods

43. The Committee recalled its discussions at its last (6th) Session, at which it strongly supported that action should be initiated by the Codex Committee on Food Additives and Contaminants to establish food additive provisions for non-standardized foods (ALINORM 89/15, paras 190-194).

44. The Committee noted that the subject had been considered by CCFAC on the basis of a paper CX/FAC 89/16 prepared by Dr. Denner, in the capacity of an independent consultant. The paper proposed procedures to establish general provisions for the use of food additives in standardized and non-standardized foods as a horizontal approach in the light of changing requirements in international trade.

45. The Secretariat informed the Committee that specified lists of food additives, which have been toxicologically cleared by JECFA and which can be used in food are available. These lists are not advisory and have been adopted by the CCFAC.

46. The Committee was informed that the subject will be further considered by the proposed Conference on Food Standards, Chemicals and International Trade to be held in Rome, Italy, during March 1991.

Draft Guidelines for the Preservation of Raw Milk by Use of the Lactoperoxidase System where Refrigeration is virtually Impossible

47. The delegation of Indonesia pointed out that milk production in its country increased significantly during recent years and expressed the view that the lactoperoxidase system would prove very useful in Indonesia in areas where refrigeration is virtually impossible and strongly endorsed the adoption of the method by Codex.

48. The delegation of Thailand pointed out the need for further evaluation of the safety of the lactoperoxidase system for preservation of milk.

49. The delegation of India expressed the view that though India was officially considering to permit the use of the lactoperoxidase system for preservation of raw milk in areas where refrigeration is virtually impossible, there is a fear that use of thiocyanate may adversely affect retention of iodine in the body thus aggravating the problem of Goitre in the region. The delegation proposed that this matter should be brought to the attention of the Commission, before it could adopt the guidelines.

Standard for Grated Desiccated Coconut

50. The Committee noted that a standard for grated desiccated coconut was advanced to Step 5 by the Coordinating Committee for Africa and that the 18th Session of the Codex Alimentarius Commission (ALINORM 89/40, para 125) recommended elaboration of a world wide Standard for the commodity, in view of the significant trade outside Africa.

Code of Hygienic Practice for Spices

51. Many of the countries in the Codex Region of Asia being producers and exporters of spices, the Committee was unanimous in its support for the elaboration of a Code of Hygienic Practice for Spices, which it noted has been undertaken by the Codex Committee on Food Hygiene.

Establishment of Worldwide Codex Standards for Fresh Pineapple, Papaya and Mango

52. The Committee noted that the Codex Committee on Tropical Fresh Fruits and Vegetables (CCTFFV) at its second session will be shortly considering the draft standards for fresh pineapple, papaya and mango and agreed to convey to the Committee its comments on the standards. A working group comprising members of delegations from India, Thailand, Malaysia, Philippines and Indonesia was constituted to study the draft standards and prepare comments which could be endorsed by the Committee and conveyed to CCTFFV for consideration.

53. The Committee expressed the view that the proposed standards for mango, papaya and pineapple should include the large number of varieties and cultivars commonly grown and exported from the Asian region. This subject is of vital interest to the countries of the Asian region and the Committee was of the view that the standards established should reflect existing conditions in the Asian countries, related to:

- existing and new varieties and cultivars of the fruits
- agricultural practices
- packaging and storage practices
- transportation practices and
- trade practices

54. The Committee requested individual member countries to submit the detailed and technical comments on these matters directly to the CCTFFV and attend the meeting in Mexico.

55. The Committee also held the view that the provisions in the standard should be applicable to the commodities at the point of export.

Labelling of Processed Foods Containing Palm Oil, Palm Kernel Oil and Coconut Oil

56. The Committee noted that the issue of labelling of processed foods containing palm oil, palm kernel oil and coconut oil that it had raised at its 6th Session would be discussed by the next Session of CCNFSDU to be held in October 1990 ^{1/}.

Code of Hygienic Practice for Aquaculture

57. The Committee unanimously supported the elaboration of a Code of Hygienic Practice for Aquaculture. It noted that a circular letter (CL 1989/13-FFP) on the subject was sent out to all Codex Contact Points and asked all such countries which did not respond as yet to the circular letter to act immediately.

BENEFITS, TRADE IMPLICATIONS AND PROBLEMS ACCRUED TO MEMBER COUNTRIES BY ACCEPTANCE OF CODEX STANDARDS AND CODEX MRLS

58. At the Sixth Session of the Codex Coordinating Committee for Asia, the delegation of Malaysia stated that the country faced no problems in the acceptance of the technical contents of Codex standards. This was evident from the fact that most of the national standards on food were based on Codex Standards. However, before Malaysia could consider acceptance of Codex Standards and MRLs, it needed to know from those countries which have accepted Codex Standards and MRLs, as well as from the Codex Secretariat, the following information.

- i) benefits (from both importer and exporter point of view);
- ii) trade implications (from both importer and exporter point of view); and
- iii) any problems faced during implementation.

59. The Committee requested the Codex Secretariat to gather the views of the countries in the Codex region of Asia on benefits, trade implications and problems experienced by them through acceptance of Codex Standards by a circular letter and prepare a document containing such views as well as views of the Secretariat for discussion at its next session. (ALINORM 89/15, paras 107-109).

60. The Executive Committee of the Codex Alimentarius Commission at its 35th Session noting the special interest of the countries of the Asian Region in discussing the benefits, trade implications and problems accrued to member countries by acceptance of Codex Standards and Codex MRLs, recommended that one half day discussion at the Seventh Session of CCASIA should be devoted to this topic (ALINORM 89/3, para 53).

61. The Secretariat sent out a circular letter 1989/10-ASIA in February 1989 to elicit the views of the countries in the Region of Asia on the subject raised by the delegation of Malaysia at the Sixth Session of CCASIA. In response to the circular letter, comments were received only from Thailand.

^{1/} This meeting has since been postponed to February 1991.

62. As a follow-up, Mr. D.S. Chadha (India) was appointed as a FAO Consultant with the following terms of reference:

"to consult with appropriate government officials in selected countries in the Codex Region of Asia (Malaysia, Thailand, India and Indonesia) to gather experiences of the governments on the points raised by Malaysia at the Sixth Session of the Coordinating Committee." (See para 58)

63. The basis for the selection of the above-mentioned countries was: (i) significant food export, and (ii) established and active participation in Codex Work. The Consultant visited Thailand, gathered information on India but, due to unforeseen circumstances, had to curtail his mission before it could be completed. The Secretariat issued another circular letter (1989/51-ASIA), requesting those countries which have neither responded to the circular letter 1989/10-ASIA nor have been visited by the FAO Consultant, attending the Seventh Session of CCASIA to inform the Committee at the session about their experiences on benefits and trade implications by acceptance of Codex Standards.

64. The Committee had before it document CX/ASIA 90/3 prepared by the Secretariat, based in part on the consultant's findings. Introducing the document, the Secretariat informed the Committee that it is impossible to fully quantify the benefits from acceptance of Codex Standards. In this respect the Secretariat cited the case studies concerning the economic impact of Codex Work on Trade in U.S.A. and Brazil (ALINORM 87/11 Parts I and II). The two principal impacts of Codex in the view of the Secretariat are so subtle that they are unrecognized by most. These are the trade facilitating impacts and the benefits to the economies and living standards of the countries.

65. The Committee was informed that formal acceptance of a Codex Standard would mean application of the standard both to imported and domestically produced products. The advantages derived from the acceptance would be:

- i) The harmonization aspect of the work of the Commission
- ii) Consumer protection
- iii) Substitution of local products for imports, and
- iv) Greater access to foreign markets.

66. Acceptance of a Codex Standard in practical terms would mean an assurance that the consumers would receive a safe food and the quality standards of the food produced in the country would be comparable to those needed to meet the demand of international market.

67. The Committee was informed that the GATT Agreement on Technical Barriers to Trade had also the same objective of Codex, namely, to remove or at least reduce to the extent possible, the non-tariff barriers to trade. However, neither this Agreement nor the GATT Rules themselves entirely rule out at present the possibility of the use of barriers to trade on grounds which are claimed to be in the interest of human or animal health or plant quarantine. More recently, within the current GATT Uruguay Round, trade ministers have endorsed the harmonization of national sanitary and phytosanitary regulations as a long-term goal through a work programme embodying several objectives. These objectives include recommendations concerning the development of harmonized sanitary and phytosanitary regulations and measures on the basis of appropriate standards established by relevant international organizations such as Codex.

68. The above developments in GATT would require all member countries in the framework of GATT to seriously consider utilizing Codex Standards or to modify their laws and regulations so that the effect will be much the same. This is a positive development and acceptance of Codex Standards by the more developed countries would no doubt result in a significant improvement of international trade possibilities for food commodities between the developed and developing countries.

69. The Committee was also informed that the advantages derived from the acceptance of Codex Standards are due to the harmonization aspect of the work of the Commission.

By agreeing on a common approach to checking the quality and acceptance of food, technical barriers to trade are removed and international trade is facilitated. Acceptance of Codex Standards represents a potential advantage since each acceptance by a country of a Codex standard moves in the direction of harmonization and therefore facilitation of trade. If all member countries would be willing to trade on the basis of Codex Standards, the basic objective of the Commission as conceived in the general principles would be achieved. Codex Standards provide a basis for upgrading quality of locally produced food and protecting against dumping of subquality products. The responsibility of applying the standard to food moving in the country is with the food control services of the importing country. For many countries, it means that they can use the experience of others as well as their own in formulating their national food laws and regulations. Acceptance of Codex Standards provides a common basis for understanding and provides an assurance of safety and quality to the consumer. The benefits for the exporter mainly depend on the action of the importing country in accepting Codex Standards. However, when importing countries can be assured that the basic quality requirements according to Codex Standards are met, it should facilitate trade.

70. The Committee was also informed that in the area of trade, the acceptance of Codex Standards promotes free distribution of standard products. However, in practice the international food trade often depends on the agreement between traders as well as the import regulations of the country. If the importing countries implement Codex Standards on the quality of food products or accept a Codex Standard for any product or use Codex Standards as criteria for the determination of the quality of imported food products, international trade is promoted and facilitated.

71. The Committee noted that there is a need for adequate infrastructure, laws, regulations and inspection procedures to assure that Codex Standards are implemented. In some countries, there may be a need for the industry to upgrade its food processing methods and quality control systems to ensure that manufactured products conform to the Codex Standards. Governments should be encouraged to assist the industry in such cases as above. On request, FAO provides assistance to the countries in the form of consultants, equipment and training in this regard. Also the National Codex Committees set up by the different countries for coordination of national positions on matters relating to food standards are not always as effective as they should be. This situation is faced in many of the developing countries and ways and means to strengthen the National Codex Committees should be sought. There is a need to create awareness for more effective participation in Codex activities particularly related to food standardization.

72. The Codex Standards, the Committee noted, can be promoted by involving the regional groups on standardization, for example ASEAN in Asia. ASEAN countries have constituted a Working Group on Agricultural Products, Forestry and Food and they have developed or are in the process of developing standards for many of the food products. Regional Standards could however become non-tariff barriers, and hence it is desirable that Regional Bodies should work on the basis of Codex Standards.

73. The Committee expressed satisfaction at the positive developments in GATT which will commit all member countries of GATT who are also members of the Codex Alimentarius Commission to use Codex Standards as a basis for harmonization of national food laws and regulations. It also urged Codex, WHO and FAO to continue to work closely with GATT to ensure for close cooperation. The Committee asked the Secretariat to prepare a detailed report on progress regarding GATT-Codex cooperation and benefits to trade resulting from this for presentation at the next session of CCASIA.

74. The Committee expressed the view that while it agrees with the views of the Secretariat on the benefits derived by acceptance of Codex Standards, the governments are facing problems for the acceptance of the Codex Standards. If a particular Standard is fully accepted, it would then have to be enforced for domestic production which may not always be within the existing capabilities of many countries in the Region. Also acceptance of a Codex Standard could result in a need for increased capital investment for modernizing existing technology and machinery, which many countries in the Region may not be able to afford. A view was also expressed that the

full benefits of acceptance of Codex Standards would not be derived unless and until all importing countries accept Codex Standards.

75. Some delegations pointed out that because of certain provisions for food additives and stricter limits for contaminants, which are mandatory in the Codex Standards, they were not able to accept the Codex Standards. In this connection, the Committee was informed that Codex Standards are basic minimum standards elaborated so as to ensure a sound wholesome product, free from adulteration, correctly labelled and presented. The word minimum simply meant the level of quality and soundness of a product judged by consensus to be appropriate for trade nationally and internationally. The Committee was also informed that the safety norms in Codex Standards are based on deliberations of expert committees and cannot be compromised to suit the needs of some countries.

76. The Committee agreed that the subject of acceptances of Codex Standards should be addressed by the proposed Conference on Food Standards, Chemicals in Food and International Trade to be convened in Rome, Italy, in March 1991.

77. The Committee also agreed that a paper should be prepared on "Strengthening of National Codex Committees in the Codex Region of Asia" for presentation to the Eighth Session of the Codex Coordinating Committee for Asia.

STRENGTHENING THE INFRASTRUCTURE FOR NATIONAL FOOD CONTROL SYSTEMS

FAO Activities

78. In introducing the item the Secretariat referred to document CX/ASIA 90/5 and stressed that FAO continued to assist member countries in developing and strengthening integrated national food control systems, and in establishing food contamination monitoring and control programmes at the country and regional levels. Examples of the assistance being provided included the provision of equipment, supplies, training and technical advice and this was discussed, especially having relevance to the Region. In addition to providing assistance to member countries utilizing FAO Regular Programme Funds, the Committee was advised that financial assistance had also been utilized through UNDP and UNEP as well as from donors from National Governments.

79. The Regional FAO/UNDP Project establishing a food control training network in Asia was discussed in-depth. The Committee noted that the programme gave highest priority to the training of food inspectors, to the exchange of information among the countries of Asia and to promoting Technical Cooperation among Developing Countries (TCDC). The Project which is jointly sponsored by FAO and UNDP had recently been extended by three years. At the current time, five training centres are participating in the network and are located in India, Indonesia, Malaysia, China and Thailand. Training programmes include techniques of general food inspection, the inspection of low acid canned foods, export/import inspection techniques, management of food control programmes, inspection of food processing establishments, techniques of training, and management of food control laboratories.

80. The Committee was further advised that one of the important outputs of the Regional Programme was the publication and distribution of a Regional newsletter on Food Control in Asia entitled "NETWORK". The newsletter is being distributed twice a year, free of charge by the Export Inspection Council of India. A request was made for countries of the Region to submit articles on food control for consideration for publication in the newsletter. In addition, the Committee was further informed regarding the publication of the Manual "Management of Food Control Programmes" which was produced under the project and widely distributed throughout the Region.

81. The Committee was advised concerning the FAO/Government of Finland Project on the evaluation on a global basis of the problems associated with contamination of food in international trade which was conducted throughout the year 1989. Over 35 countries were reviewed, including eight in the Region of Asia and the Pacific. The findings of the country reviews were discussed at a technical meeting held in late January 1990 in Bangkok, Thailand. The report of the meeting is under final preparation and is to be

widely distributed. The information and recommendations of the meeting are to be utilized in the convening of a Joint FAO/WHO International Conference on Food Standards, Chemicals in Food and International Trade which is proposed to be held in March 1991 at FAO, Rome, Italy.

82. The Committee was informed regarding the FAO activities in the member countries of the Region to strengthen national food control programmes, including the establishment and strengthening of national food contamination monitoring programmes. Eighteen countries of the Region, including those in the countries of the FAO Near East Region are being assisted. In addition, six Asian regional assistance projects have been implemented.

83. The Committee was further advised regarding the proposed FAO/UNEP/UNEP/COM Project establishing a Regional Network on Mycotoxin Control. The proposed Network is designed to establish Centres of Excellence in three countries of the Region (India, Philippines and Thailand) to provide training in sampling and analysis of foods for aflatoxins and a centre to be responsible for information exchange and training/ education aspects. Training in analysis of foods for mycotoxins other than aflatoxins is proposed to be conducted in the USSR through UNEP/COM. It is expected that the project will commence activities in September 1990.

84. The Committee expressed its appreciation and continued strong support for the training network for food control officials and recommended that the project be extended and expanded so that more people could be trained. The TCDC aspects of the project were also strongly supported. The Committee as a whole commended FAO for the execution of the project and requested that UNDP be advised concerning the Committee's support for the project.

85. The Committee further strongly supported the proposed FAO/UNEP/ UNEP/COM project to establish an Asian Regional Network for Mycotoxin Control and recommended that this message be conveyed to UNEP and that the project be implemented soonest.

WHO ACTIVITIES AND PROJECTS AT COUNTRY AND REGIONAL LEVELS

86. The Committee was reminded that the Codex Region of Asia included countries which belonged to three WHO Regional Offices, namely, the WHO Eastern Mediterranean Regional Office (EMRO) based in Alexandria; the WHO Southeast Asian Regional Office (SEARO) located in New Delhi; and the WHO Western Pacific Regional Office (WPRO) situated in Manila. Consequently, WHO food safety activities in Asia were presented in three separate reports which were available to the Committee in document CX/ASIA 90/5. WHO cooperation not only included approaches for improving national food control infrastructure, but also emphasized education interventions for the long-term improvement of food safety practices, particularly in the home.

Eastern Mediterranean Region

87. One of the most important food safety activities in the Region during the past two years was the convening of a food safety consultation in February 1989 which was attended by representatives of Democratic Yemen, Egypt, Jordan, Pakistan, Saudi Arabia, Tunisia and Yemen. Organized by the WHO Eastern Mediterranean Regional Centre for Environmental Health Activities in Amman, Jordan, the consultation identified 15 problem areas common to the Region and formulated corresponding approaches to address these problems. In particular, the consultation recognized the importance of consumer education in promoting food safety and the need for developing approaches for the integration of food safety concepts into Primary Health Care delivery systems.

88. To support national programmes, specific cooperation was undertaken with Qatar, Egypt, Morocco, Saudi Arabia, Bahrain and Democratic Yemen in a variety of food safety areas. Close cooperation was also maintained with the League of the Muslim World regarding Islamic rules governing foods of animal origin.

South East Asia Region

89. During the biennium 1988-89, WHO cooperation with member countries in the WHO South East Asian Region continued with the objective of promoting the development and implementation of national food safety programmes. The regional targets call for the establishment of comprehensive national food safety programmes; the establishment of epidemiological surveillance of foodborne diseases; and the promotion of effective community participation in food safety programmes through Primary Health Care Approaches. To achieve these targets, approaches and activities identified were (i) establishment of a national focal point and a national committee on food safety with a view to enhance inter-sectorial collaboration; (ii) monitoring of food contaminants, particularly pesticide residues through strengthening of laboratory facilities for food analysis and epidemiological surveillance; (iii) manpower development with emphasis on training of food inspectors and food handlers; (iv) adoption of food standards in accordance with the Codex Alimentarius; (v) development of food safety legislation and strengthening its implementation; (vi) promotion of consumer awareness of the concept of quality food and their own involvement in prevention of food adulteration; and (vii) promotion of public education and dissemination of information on food safety and on foodborne diseases.

90. As regards to country activities, in Bangladesh WHO had cooperated in a training course for district and sub-district sanitary inspectors in food safety practices; and a workshop on food safety in public catering for the public health officers. In India, WHO had cooperated in a survey of pesticide residues in foods and in strengthening laboratory facilities for analysis of food contaminants. In Indonesia, WHO's collaborative activities were in the development of food legislation and standards for food inspection; translation of various Codex Alimentarius Standards into Indonesian; training of district food inspectors and administrative officers in food control system and sampling techniques; training of food safety personnel in tourist areas; and the formulation of training modules, regulations for food safety in restaurants, and guidelines on food sanitation in tourist establishments.

91. WHO has been implementing a regional project to cooperate in the training of food safety inspectors and administrators in countries of the Region. Fellowships provided under this regional project included such areas as food safety legislation and administration and current concepts in food safety inspection.

Western Pacific Region

92. Gastroenteritis commonly ranks among the top 10 most reported diseases; and diarrhoeal diseases often associated with foodborne agents are a major cause of infant mortality in many countries of the WHO Western Pacific Region (WPR). Thus, illness due to contaminated food is perhaps the most widespread health problem and an important cause of reduced economic productivity in the Region.

93. During 1988-89, WHO collaboration with the member countries or areas in the WPR focussed on strengthening national food safety programmes through the provision of consultants, fellowships, and equipment and supplies supported by WHO regular country budget of about US\$ 277,000. In addition, other significant resources, mainly to support technical advisory services, training and information in food safety, were made available by the WHO Western Pacific Regional Centre for the Promotion of Environmental Planning and Applied Studies (PEPAS) as well as by external donors.

94. Although most of the 32 countries or areas of the Region have active food safety programmes, implementation of their programmes vary widely depending on their stage of social and economic development as well as their institutional capabilities. Therefore, greater emphasis has been placed on evaluating programmes for ensuring food safety with the objective of identifying problems and impediments in implementation and development of food safety programmes. Furthermore, it is emphasized that food safety policy, strategy, and implementation are complementary to the goal of "Health for All by the Year 2000 (HFA/2000)" and the Primary Health Care (PHC) approach to achieve the goal.

95. Collaboration on various technical, institutional, and legal aspects of food safety was provided to Brunei Darrussalam, China, Federated States of Micronesia, Fiji, French Polynesia, Laos, Papua New Guinea, Philippines, Republic of Korea, Malaysia, Solomon Islands, Tonga, Vanuatu and Vietnam. Furthermore, WHO fellowships were awarded to candidates from Brunei Darrussalam, China, Laos, Kiribati, Macao, Malaysia, Philippines, and Republic of Korea to help develop the human resources for food safety in these countries.

96. The following activities undertaken may be of regional and inter-regional interest. A food safety information sharing network called FOSINFONET has been established at PEPAS. Information related to potential food hazards has been distributed regularly to 24 countries and areas of the Region. The FOSINFONET also provides a query-response service which is supported by on-line access to almost all major data bases. In addition, a video tape library has been established which now includes 57 topics related to food safety for training and educational purposes.

97. A regional document entitled "Food Safety Services in the Western Pacific Region" describing food safety administration, legislation and resources in 25 countries and areas of the Region was published. In addition, posters featuring 10 golden rules of food safety was published in Chinese.

98. A number of applied studies were initiated which included: development of an expert computer system for diagnosis and reporting of foodborne diseases; development of a field test kit for common food contaminants and adulterants, involving rapid methods especially those based on biotechnology; and a shellfish safety survey in Fiji.

99. Future activities include a regional seminar on food safety legislation with emphasis on legislation for small countries to be held at PEPAS in August 1990; a training course on food safety for the small island countries of the South Pacific in Suva, Fiji in November 1990; and a manual on inspection of imported food which will be published during 1990. In addition, WHO is one of the organizers of the First Asian Conference on Food Safety which will be held from 3-7 September 1990 in Kuala Lumpur.

TECHNICAL COOPERATION AMONG DEVELOPING COUNTRIES (TCDC)

100. The Committee did not have a document on the subject. The representative of FAO briefed the Committee on the development of the concept of TCDC within the UN system, its philosophy and the general approaches used so far in implementing it. Governments are being encouraged to utilize this approach making use of their existing national allocations from external assistance. The WHO representative provided information on the TCDC approach currently being utilized by their Organization.

101. As a successful example of TCDC within the Region, the Committee was informed of the efforts of the FAO/UNDP Asian Regional Project on Training Food Control Officials which was progressing towards implementing the TCDC concept.

102. The Committee was further informed of the FAO programme on TCDC which included the publication and distribution of a TCDC newsletter which contained information on TCDC activities on a global basis. A copy of the FAO TCDC newsletter No. 5 was provided to the Committee.

103. As another example of TCDC, the Committee was informed of several on-going activities within the ASEAN countries. Appendix II provides information on the subject.

104. The Committee commended the FAO, WHO, UNDP, UNEP and the ASEAN countries on their efforts to implement the TCDC concept, especially noting the FAO/UNDP project on training of food control officials and the proposed FAO/UNEP project on control of mycotoxins and supported further development of the cooperation on an Asian basis.

REPORTS BY MEMBER COUNTRIES ON PROGRESS MADE TO PROMOTE FOOD SAFETY BASED ON REGIONAL INDICATORS

105. At its earlier sessions the Committee noted great variations in the reports presented by member countries on progress made to promote food safety. The Committee saw the need to establish feasible, uniform criteria or indicators upon which reports of progress could be based in the future. Furthermore, these indicators could also be used by national food safety authorities in their self-evaluation process to realign priorities and make best use of limited resources. In order to assist member countries in their efforts to maximize the efficiency and effectiveness of their food safety programmes, WHO has promoted the development and use of monitoring and evaluation concepts and techniques. Possible indicators for regional use were discussed at both the 5th and 6th Sessions of the Committee. In early 1989, WHO published a document which provided guiding principles for evaluation of programmes for ensuring food safety. To further facilitate the use of indicators in evaluating food safety programmes, a set of "essential indicators" were developed to enable both member countries and WHO collectively to monitor the status of such programmes as well as to evaluate changes in these programmes over time. In a Circular Letter (CL 1989/42-Asia) issued in October 1989, the list of "essential indicators" was sent to Codex Contact Points in Asia in order to assess if the proposed indicators were actually feasible for monitoring and reporting purposes. Because the Secretariat had received so few responses, no discussion document was prepared. However, the Secretariat has subsequently received completed indicators from five member countries - Indonesia, Japan, Republic of Korea, Malaysia and Thailand. During the presentation of country reports a number of countries advised that they were still considering the list of "essential indicators."

106. The delegation of Malaysia had the most extensive comment on the indicators. It generally supported the use of indicators in providing a broad evaluation of the status of food safety in member countries and commended the effort of WHO in promoting the establishment of suitable indicators. However, the delegation offered several specific suggestions to improve the "essential indicators." It felt that using the infant mortality rate as an indicator might not be suitable as it may not accurately reflect the status of food safety in a particular country. On the other hand, statistics on the occurrence of diseases related to chemical contamination and natural toxins might be included in the indicators. Furthermore, declaration of the possibility of export markets being closed may create unwarranted alarm detrimental to the trade interests of the reporting country. The delegation suggested that, instead, information on rejection of food imports by commodity be included. In referring to programme resources for food safety, it noted that these would at best be estimates because agencies whose primary responsibilities are in areas other than food safety often will not have specific provisions for food safety in their budgets. Nonetheless the unaccounted contribution of these agencies can be substantial. Finally, the delegation recommended that statistics on food production be included as an indicator to provide an assessment of the magnitude and type of the potential problems that could be expected from the various industries.

107. The Secretariat thanked the Malaysian delegation for its useful and thoughtful comments. In acknowledging the validity of the points raised, the Secretariat noted that the use of infant mortality rate as an indicator was prompted by the fact that a recent study estimated that between 15 and 70% of all diarrhoeal diseases in young children may be due to foodborne pathogens. Therefore, in countries with high infant mortality rates, it would be important to monitor this indicator although it was recognized that other factors may effect the infant mortality rate in a country.

108. All member countries, with the exception of the Iraq delegation which had not yet arrived, provided reports on progress to implement their national food safety programmes. Written reports were received from China, India, Indonesia, Republic of Korea, Kuwait, Malaysia and Thailand. The reports presented the current objectives of their programmes and approaches for strengthening their national food control infrastructures. In this regard, several countries expressed their gratitude to FAO and WHO in extending cooperation in these efforts. Special thanks were also voiced for UNDP support for a number of important projects related to food control development.

109. The delegation of Malaysia informed the Committee that in reference to page 11 of the Document CX/ASIA-90/5, the mass food poisoning outbreak resulted in the death of 13 children only. The death of one adult, reported in the paper, was a mistake.

REPORT ON ACTIVITIES WITHIN FAO AND WHO COMPLEMENTARY TO THE WORK OF THE CAC

110. The Committee had before it document CX/ASIA 90/6. The Secretariat informed the Committee that in addition to supporting the Joint FAO/WHO Codex Alimentarius Commission, both organizations undertook several activities which were of additional direct or indirect support to the work of the Committee.

Report on Joint FAO/WHO Activities

Joint FAO/WHO Meeting on Pesticide Residues (JMPR)

111. The evaluation and recommendations of the JMPR provided much of the technical basis for the work of the Codex Committee on Pesticide Residues and the Codex Alimentarius Commission. The most recent meeting was held in September 1989 in Geneva. Sixteen ADIs were allocated and two temporary Acceptable Daily Intakes (ADI) were extended for another year. The reports and monographs were published by FAO in its Plant Production and Protection Paper series.

Joint FAO/WHO Food Contamination Monitoring Programme

112. The Joint FAO/UNEP/WHO Food Contamination Monitoring Programme was established under the Global Environment Monitoring System (GEMS) of UNEP to coordinate and stimulate monitoring activities at national, regional and global levels for the early detection and assessment of chemical contamination of food. A description of the programme's activities was contained in CX/ASIA 90/6. It was noted that there were 13 participating laboratories within the Region collaborating in the Programme. In addition, data collected under the programme were available to the subsidiary bodies of the Codex Alimentarius Commission for use in establishing maximum levels of contaminants in commodity standards.

113. The laboratory quality assurance aspects of the programme were highlighted. However, it was pointed out that the results of these studies to date indicate that large differences exist among laboratories with regard to their analytical capabilities and that the CAC at its 18th Session had requested that urgent action be taken under the Programme to improve the quality of data submitted by countries. As a result, training and other assistance was being provided to improve the quality of the data produced.

Joint FAO/WHO Expert Consultation on Recommended Allowances of Nutrients for Food Labelling Purposes

114. The Committee was informed that the Consultation had been organized in response to the request of the Commission at its 17th Session. The Consultation was held in Helsinki, Finland in September 1988. The Consultation reviewed the current recommended intakes of nutrients established at national and international levels and discussed available data on Recommended Daily Intakes (ADIs)/Recommended Daily Allowances (RDAs) as well as the Reference RDAs of the Codex Guidelines on Nutritional Labelling. The Consultation recommended that a "Nutrient Reference Value" (NRV) be used for nutrition labelling to clearly indicate to consumers that the references served only as a standard for comparison of nutrient content of foods and did not relate to individual nutrient needs. The Consultation had established a list of 15 nutrients with their respective Nutrient Reference Values. The Consultation report had been published and presented to both the 16th Session of the Codex Committee on Nutrition and Foods for Special Dietary Uses, and the 20th Session of the Codex Committee on Food Labelling.

Joint FAO/WHO Expert Committee on Food Additives

115. During the past two years, the Joint FAO/WHO Expert Committee on Food Additives (JECFA) held its 33rd, 34th and 35th meetings to continue its work in assessing the safety of food additives, contaminants and animal drug residues in food. At the 33rd and 35th meetings, a total of 17 food additives were evaluated and specifications for another 37 were considered. In addition, a number of metals and contaminants were evaluated. The 34th meeting of JECFA was devoted solely to the evaluation of animal drug residues and 10 drug products were evaluated. The 36th meeting of JECFA, also dealing with animal drug residues, is currently being held in Rome. It was also reported that the specifications of JECFA were being organized into a single compendium by FAO in cooperation with the Japan Food Additives Association and the International Life Sciences Institute.

Food Irradiation

116. Two important meetings related to the irradiation of food were convened during the reporting period. The first meeting was a Joint FAO/IAEA/WHO/ITC-UNCTAD/GATT International Conference on the Acceptance, Control of and Trade in Irradiated Food held in Geneva in December 1988. The Conference recognized the important contribution food irradiation offered in the reduction of foodborne disease and post-harvest losses, but also cited the need for competent regulatory controls to prevent the use of food irradiation as a substitute for GMPs. In June 1989, a Joint FAO/IAEA/WHO/ICGFI consultation on microbiological criteria for foods to be irradiated was held in Geneva to provide guidance to governments and the food industry in assuring that only foods which had been subject to GMPs are used for further processing, including irradiation.

Report on FAO Activities

117. The Committee was informed of specific activities relating to cooperation with member governments, particularly those countries of the Region which were described in detail in CX/ASIA 90/5 and which were carried out by the FAO Food Control and Consumer Protection Group in the Food Quality and Standards Service.

118. Food control assistance to developing centres, including promotion of coherent national food quality control systems and the organization of national food control strategy workshops remained high priority. Increased attention was being paid to programmes dealing with export and import certification of food and agricultural products and where applicable, Codex Standards were being recommended.

119. Training continued to receive high priority. An Asian Regional Network of Training Centres has been established to strengthen various food inspection and laboratory activities. The proposed regional training programme on first echelon repair of laboratory equipment scheduled to be held in June 1990 in India was highlighted. In addition, the Committee was informed that FAO continues to provide sets of Reference Standards (mainly pesticides and mycotoxins) to food control laboratories in the Region in order to assist in improving the quality of analytical results.

120. Food legislation continues to be of primary interest to FAO and assistance has been provided to several countries, including Indonesia and Thailand to strengthen their food control laws and regulations.

121. Mycotoxins: The Committee was informed concerning the establishment of a network of training centres utilizing existing institutes in Asia for mycotoxin control. The Joint FAO/UNEP/UNEP/COM project was scheduled to commence by September 1990.

122. Pesticide Residues: FAO continues to assist many countries in strengthening their food contamination programmes, especially those programmes which monitor pesticide residues. These activities include studies on food for national consumption. Such a study is to be carried out in 1990 in the Philippines which will provide information on the levels of pesticide residues in local food. A regional training course on methods of analysis of foods for pesticide residues is planned to be held in late 1990 in the Philippines.

123. **Radionuclides:** The Committee was informed concerning the action taken by FAO following the April 1986 Chernobyl accident which included the convening of an expert consultation which had recommended "Action Guidelines" for radionuclides found in food. In addition, FAO was carrying out training in the various regions aimed at strengthening the analytical and control capacities of the Member Nations. A series of Regional Workshops on Methods of Analysis of Foods for Radionuclide Contamination is under schedule. Two such regional workshops have so far been held — one in India and one in Kuwait.

124. **Food Contamination Affecting International Trade:** The Committee was informed regarding the study on "Identification of Food Contaminants Affecting International Trade" being carried out by FAO at a Global Level under funding by the Government of Finland. About 35 countries were reviewed of which eight were from the Region. The results of the reviews had been discussed at a technical meeting held in Bangkok, Thailand, in late January 1990. The meeting report will be widely distributed and the information and recommendations proposed are to be utilized at a Joint FAO/WHO Conference on Food Standards, Chemicals in Foods and International Trade proposed to be held in Rome in March 1991.

125. **Street Foods:** FAO has continued to support activities related to improving the street food situation in the countries of the Region. So far, studies have been carried out in India, Indonesia, Malaysia, Nepal, Philippines, Singapore, Sri Lanka and Thailand. In addition, an FAO Expert Consultation on Street Foods was held in Yogyakarta, Indonesia in December 1988. The Consultation very strongly recommended that national authorities take early steps to recognize and assist the street food industry in order to be able to initiate necessary action to upgrade its performance and through training and development measure, ultimately absorb street food vendors as partners in the urban food supply system. The economic and social benefits of this large informed sector were discussed and the Committee recommended that action should continue to assist countries of the Region to improve the performance of this industry.

126. **Publications:** FAO is very active in publishing guidelines and manuals covering different aspects of food control such as food inspection, sampling, export, inspection and laboratory aspects. The Committee was informed that the Manual of Food Quality Control No. 6 - Food for Export, was being revised and should be available in late 1990. In addition, Manual No. 14/9 - Food Sampling Techniques, has been published and is available in English, French and Spanish. A Manual on Food Analysis for Mycotoxins as well as a "Manual of Quality Assurance for Food Control Laboratories" was under preparation. The Committee was informed that under the FAO/UNDP Regional Asian Project for training food control officials, a publication on "Management of Food Control Programmes" has been published and widely distributed. Because of the high demands for this publication it has undergone reprinting. This manual was prepared, taking into particular consideration the needs of the countries of Asia.

Report on WHO Activities

127. In order to promote education of food handlers and the public at large, WHO has issued "Examples of Health Education Materials in Food Safety", "Training Guide for Management in Food Service Establishment", "Teacher's Guide for Primary Schools" and a poster containing the "WHO Golden Rules for Safe Food Preparation". In addition, WHO published "Health Surveillance and Management Procedures for Food Handling Personnel" which advises that routine medical and laboratory examination of food handlers may not be as effective in promoting food safety as basic food safety education programmes.

128. Two pilot projects are underway in collaboration with the German Technical Cooperation Agency and the Industry Council for Development to integrate food safety into Primary Health Care delivery systems which focuses on microbiological pathogens in food and culture-specific interventions for reducing their presence.

129. In February 1988, WHO convened an informal working group on foodborne listeriosis which provided recommendations to public health authorities and industry on approaches for controlling the disease.

130. To provide a factual and comprehensive review of the role of food irradiation in reducing foodborne hazards and unnecessary food losses, WHO, in collaboration with FAO, published a book on the subject in 1988.

131. To promote the evaluation of food safety programmes, WHO issued in 1989 guiding principles for conducting such evaluations. In addition, the second edition of "Food Safety Services in Europe" was also issued.

132. Technical cooperation in strengthening national food contamination monitoring programmes was extended to China, Myanmar, DPR Korea, India, Indonesia and Thailand.

133. Finally, "Guidelines for Predicting Dietary Intake of Pesticide Residues" was published in 1989 in collaboration with the Codex Committee on Pesticide Residues.

134. The observer from IOCU commented on the International Conference on the Acceptance, Control of and Trade in Irradiated Food and presented the position of IOCU which opposed further development and use of food irradiation until full assessment of the health, social and economic aspects of the technology was completed. The representative of IOCU believed that it was also the opinion of a number of governments outside the region. The Committee acknowledged some problems remain to be solved. The delegation from Indonesia noted that no methods were available to determine if a food had been irradiated and cited this as the major impediment to the wider use of irradiation.

REGIONAL FOOD EXPORT AND IMPORT CERTIFICATION AND INSPECTION PROGRAMMES

135. There was no document available for discussion. The FAO Representative in introducing the Agenda Item reminded the Committee of the discussions held on this topic at the last session (6th) of this Committee and the importance governments in the Asian Region were placing on the development of export/import food control programmes. The Committee was informed regarding the increasing recognition being given to food exports as a valuable source of foreign exchange and the need for food import control programmes in the Region to prevent the "dumping" of low quality food that threatened consumer health. The Committee was further informed that India, Indonesia and Thailand were involved with the assistance of FAO, in strengthening the food export control programmes. Assistance was being provided through technical advice, training, equipment and supplies and included the provision of draft laws and regulations related to food export certification. In addition, FAO had held in early 1988 an Asian Regional Workshop on Export/Import Food Control Programmes. It was the recommendation of the last session (6th) that the subject of export/import food control programmes be discussed at the 7th Session of the Committee.

136. The delegation of China, India, Indonesia, Japan, Kuwait, Malaysia, Nepal, Republic of Korea and Thailand informed the Committee of their national programmes related to controlling food exports and imports. The discussion that ensued stressed the importance of these control programmes and the need to harmonize laws and regulations including the process of certification. The Committee was informed that the control of foods for import/export is scheduled to be discussed in depth at the proposed Joint FAO/WHO Conference on Food Standards, Chemicals in Food and International Trade scheduled to be held in Rome in March 1991.

137. The Committee endorsed the holding of the Joint FAO/WHO Conference on Food Standards, Chemicals in Food and International Trade and requested that the topic of the export/import food control programmes be an item for discussion at the next session of the Committee.

REGIONAL AND NATIONAL PROGRAMMES ON CONTROL OF MYCOTOXINS IN FOODS

138. The Committee had before it Document CX/ASIA 90/7 which contained the report of the FAO Regional Workshop on Mycotoxins in Foods, held in Chiang Mai, 2 February 1990.

139. Introducing the document, Mr. R. Bhat, FAO Consultant, referred to the increasing international attention given to mycotoxins in foods, especially aflatoxins because of

their health and economic implications. Their impact on international trade is reflected by the stringent control measures for limiting the contaminant in foods implemented by many countries of the world. The problems of aflatoxins are of special interest to the Asian countries since most of the high risk commodities for aflatoxins are either exported or imported by several countries of the Region. Thirty-four Delegates from eight countries as well as representatives from FAO and UNEP attended the Workshop.

140. The Workshop discussed the trade implications and prevention and control measures on aflatoxins. Matters related to aflatoxin control such as use of simple methods of detection of aflatoxins, development and assembly of field kits, analytical quality assurance programmes and the need to evolve compulsory compliance procedures for aflatoxins in export/import commodities were discussed. The need for internationally-agreed methods of sampling and analysis of food and feed for aflatoxin contamination as well as agreed international tolerance levels for food and feed were highlighted.

141. During the Workshop, a consensus was reached regarding the need to consider in addition to aflatoxins, control measures for ergot alkaloids and deoxynivalenol. Also harmonization of the maximum permitted limits for mycotoxins in foods and, in the absence of such limits, the establishment of interim tolerance limits were felt necessary. The necessity of establishing and monitoring levels of aflatoxins in animal feed and feed ingredients was also stressed. Prioritization of efforts on mycotoxin prevention, establishing and strengthening of national capabilities for inspection, sampling, monitoring mycotoxin levels in foods, establishing and strengthening of network activities pertaining to training, information dissemination and data base were considered essential.

142. The Workshop recommended that:

- i) Food control infrastructures need to be strengthened in order to effectively implement mycotoxin control programmes.
- ii) Consideration should urgently be given to establish a regional network for the dissemination of information and training of personnel on an Asian regional basis.
- iii) Inter- and intralaboratory collaborative studies on aflatoxins within and among countries of the Regions should be initiated where possible.
- iv) Harmonization of laws and regulations for controlling mycotoxins in countries of the Region should be aimed at international levels, including tolerance limits in foods, and methods of analysis and sampling and necessary guidelines should be established based on those of the CCFAC. Limits for aflatoxins in animal feeds and feed ingredients should be fixed and clarifications provided.
- v) Technical cooperation among the countries of the Region should be strengthened to popularize simple methods of detection and the use of field kits for aflatoxins.
- vi) Inclusion of a component of a rational compulsory compliance procedures for aflatoxins and a code of voluntary practice for prevention of aflatoxins for commodities meant for export in countries of the Region is desirable.

143. The Secretariat also informed the delegates that a project proposal on a Regional Training Network for Mycotoxin Control under the joint auspices of FAO/UNEP/USSR is in the final stages. It envisages initiating a number of training programmes for participants from Asian countries in methods of analysis for aflatoxins in India, sampling techniques in Thailand, information exchange and extension work in the Philippines and training in analysis of mycotoxins other than aflatoxins in USSR. The project is expected to strengthen mycotoxin control capabilities in the region, promote

the work of food contamination monitoring programmes, develop a training package for mycotoxin sampling and analysis and above all promote TCDC in the region. The Secretariat also referred to another proposed FAO programme on aflatoxin quality assurance to ensure the analytical capabilities of the laboratories of the countries of the region in analysis of aflatoxins which is in the pipeline.

144. The delegation of India expressed the view that the basis for establishing guidelines for aflatoxins should be established based on toxicological data and the matter should be referred to CCFAC for consideration. Regarding aflatoxins in feeds, the Committee recommended that Codex should propose its own guidelines taking into consideration the existing guidelines in different countries of the world rather than utilizing the EEC guidelines. In addition to aflatoxins, the Committee recommended that tolerance levels should be suggested for deoxynivalenol and ergot alkaloids. The delegate of Singapore referred to the lack of aflatoxins testing facilities in some of the exporting countries and stressed the need to strengthen the analytical testing facilities. He also suggested the need for establishing tolerance levels based on risk assessment.

145. The Committee agreed to refer the matter to the Codex Committee on Food Additives and Contaminants. The Committee unanimously adopted the recommendations in toto and on suggestion from the delegation of India strongly supported by Malaysia and Nepal agreed that the topic of mycotoxins in foods should be an item for discussion at the next session of the Committee.

ACTIVITIES OF CODEX IN THE FIELD OF AFLATOXINS IN FOOD AND FEED

146. The Committee noted that Codex, through its Committee on Food Additives and Contaminants (CCFAC) had been quite active in (i) Setting guideline levels for aflatoxins in food and feed, (ii) Formulation of sampling plans for aflatoxins, and (iii) Proposing methodology for determination of aflatoxins in food and feed.

Guideline Levels for Aflatoxins in Foods

147. The Committee noted that CCFAC proposed guideline levels for aflatoxin B₁ of 5 µg/kg in peanuts intended for human consumption and is seeking government comments at Step 3. The Committee expressed the view that the guideline level for aflatoxins in peanuts proposed by CCFAC was low and that the guideline level for aflatoxins should be expressed as total aflatoxins (B₁+B₂+G₁+G₂) and not as B₁ alone. It queried the basis on which the guideline levels for aflatoxins were proposed by CCFAC and proposed a risk assessment of aflatoxins be carried out.

Guideline Levels for Aflatoxins in Feeds

148. The Committee noted that in the absence of alternate data, CCFAC proposed the same guideline levels as proposed by the European Community for aflatoxins in feeds and is seeking government comments at Step 3.

Sampling Plans for Aflatoxins

149. The Committee noted that CCFAC agreed to establish a statistical sampling plan for aflatoxins and is seeking comments from governments. On the other hand, the Codex Committee on Cereals, Pulses and Legumes (CCCPL) has taken a pragmatic approach and agreed to accept for immediate guidance, a simple and practical sampling plan based on the principle of average of the lot by a single randomly selected composite, until such time a statistical sampling plan is developed.

150. The Committee was informed that international harmonization was rather a slow process and that it would take considerable time before a sampling plan for aflatoxins, that would be internationally acceptable, could be finalized.

Methodology for Determination of Aflatoxins in Food and Feed

151. Methodology for determination for aflatoxin B₁ or total aflatoxins in food and feed had not yet been proposed by the CCFAC. The Committee noted that CCFAC by CL 1989/16-FAC is seeking information from governments on methods of analysis for aflatoxins with supporting data for the validation of the methods of analysis.

152. The delegation of India proposed that in addition to others, CCFAC should consider methods based on thin layer chromatography for determination of aflatoxins in food and feed which would be easily accessible to developing countries.

METHODS OF CONTROL FOR RADIONUCLIDE CONTAMINATION OF FOODS IN INTERNATIONAL TRADE

153. The Committee had before it CX/ASIA 90/9 which reviewed the activities taken by the Commission at its 18th Session in July 1989 that led to the adoption of Guideline Levels for Radionuclides in Foods as the result of an accidental release. The Committee was informed that most national food laws prohibit the sale and shipment of food contaminated with poisonous or deleterious substances. For contaminants such as radionuclides and mycotoxins where a no-effect level cannot be established, special considerations are applied in setting contaminant levels which acknowledge the impossibility of avoiding all inadvertent contamination of foods with these substances. The Codex Alimentarius Commission has taken the food protection principles into consideration in making recommendations about such environmental contaminants. These principles are based on the utilization of safety factors which assure the consumers of wide margins of safety beyond the basic levels derived from known health and toxicological data.

154. The Committee was informed concerning the actions taken by FAO and WHO to establish guidelines following the Chernobyl accident in 1986. The Committee was further advised regarding the Commission's discussion of this matter at the 18th Session of the CAC (Geneva, July 1989). Several delegations to the Commission were not in favour of adopting the proposed Guideline Levels. The Commission nevertheless adopted them as Codex Guideline Levels for Use in International Trade following Accidental Nuclear Contamination of Foods and noted that the Guideline Levels would remain applicable for one year following a nuclear accident. The Commission also agreed that the question of applying dilution factors and the treatment of minor dietary components should remain under review. It also recommended that the relevant international organizations continue to work together in developing methods of sampling and analysis which would meet the requirements of food control authorities.

155. The Committee was advised that the Guideline Levels for Radionuclides in Foods remain under review. The criteria which would normally be considered before such a review includes a reevaluation of the basic safety data; an analysis of the actual levels of contamination to which the population is exposed; or a continuing diversification of national legislations and regulations resulting in potential barriers to trade.

156. Several delegations, including those from Thailand, Malaysia, Indonesia, India, Kuwait, Republic of Korea and Singapore stressed that the CAC Guideline Levels for Use in International Trade following Accidental Nuclear Contamination of Food were too high and that the countries were thus not in a position to accept them. The delegation from Malaysia asked for clarification on what levels would be applicable one year after a nuclear accident.

157. The Committee unanimously recommended that the Codex Alimentarius Commission and the Codex Committee for Food Additives and Contaminants be advised of the fact that the countries of the Region were unable to accept the Guideline Levels as they were too high; that action should be taken soonest by CAC to reduce the Guideline Levels based upon more acceptable risk assessment procedures and that the CCFAC provide information on the application of the Guidelines one year after a nuclear accident.

158. The Secretariat requested the Committee to submit national levels for radionuclides currently permitted to allow an assessment of tolerable risk under existing public health policy. However, such information was not readily available.

ACTIVITIES IN ASIA ON STREET FOODS AND A PROPOSED CODE OF PRACTICE FOR THE PREPARATION AND SALE OF STREET FOODS

159. The Committee had before it document CX/ASIA 90/10 on the subject prepared by Indonesia.

160. Introducing the paper, the delegation of Indonesia informed the Committee that street foods are going to stay and are an important source of economic and convenient foods, particularly for the urban poor. Street foods have an enormous impact on society economically as well as socially and nutritionally. The delegation then gave an outline of the Draft Code of Hygienic Practice for the Preparation and Sale of Street Foods, that would be applicable to the Asian Region.

161. The Committee noted that the Code addressed different issues in the sale of meals, snacks and drinks as street foods. It excluded the consideration of prepackaged foods, fresh vegetables and fruits and fresh meat and fish sold in the streets. The Code contained sections on (i) Scope, (ii) Definitions, (iii) Requirements for inputs and ingredients, (iv) Requirements for the place of area of preparation, (v) Requirements for preliminary preparation, and (vi) Requirements for final preparation. The Committee noted that the Code proposed many additions to a similar text on which the Codex Coordinating Committee for Latin America and the Caribbean is seeking comments from governments at Step 3.

162. The delegations of Thailand, China, Malaysia, India and the Philippines presented reports on the street food situations in their countries and stressed the need for training of street vendors, extension studies, provision of hygienic water supply and cooperation of international organizations and other interested parties in improving the safety of street foods. Some delegations stressed that a licensing fee, though its levy may lead to some problems in the early stages, should be considered for street vending of foods. The finances derived through the licensing fees could then be utilized for improving street foods.

163. The observer from IOCU pointed out that in the case of street foods, the issues of food safety and cost should both be taken into consideration and a balance achieved so that street vendors could continue to operate. The observer stressed the need for potable water supply, removal of wastes, training of vendors and introduction of appropriate technology.

164. In responding to a query raised by the Malaysian delegation regarding the inclusion in the draft Code of a provision for the medical examination of street food vendors, the WHO representative stated that WHO had long been concerned with the health hazards posed by street foods which may in some respects be considered an extension of food preparation in the home. In recognizing the socio-economic importance of this sector, WHO was committed to approaches which will permit street foods to continue to be sold while minimizing their adverse health aspects.

165. In reviewing the contribution of medical examinations to food safety, WHO pointed out that such examinations were generally ineffective and could only guarantee the state of health of the food handler on the day of examination. Even the most basic food safety training would be far more effective in reducing contamination of food by non-symptomatic disease carriers by improving everyday food handling practices. In view of the enormous difficulty and cost of implementing such a programme for street food vendors, the WHO representative stated that medical examination of street food vendors should not be undertaken. The FAO representative commented that countries attending the FAO consultation were cognizant of the WHO recommendation but strongly felt that the examinations helped raise awareness of food handlers and consumers to the problem of foodborne disease and that for that reason, retained.

166. The WHO representative also pointed out that under the provisions for the holding of cooked food, the draft Code did not mention the possibility of keeping food hot as a means of preventing the growth of microorganisms. He suggested that, in tropical countries, keeping food hot was more feasible than refrigeration since it was simple and inexpensive. Preliminary HACCP studies of street foods conducted by WHO indicated

that holding of cooked foods for long periods of time at ambient temperature was one of the most serious food safety problems associated with street foods. The delegation of Indonesia advised that this point was mentioned in the draft Code but that the provisions would be amended to be more explicit.

167. The Committee recognized the active interest taken by FAO as the lead agency in the UN system, in improving the street food situation including the assistance it provided to member countries. The Committee noted that the countries recognized the street food industry which has an enormous impact on the urban food supply economically as well as socially and nutritionally. The Committee supported FAO work in this area and recommended that these efforts continue. The Committee endorsed efforts by governments to support the street food sector and especially to strengthen the infrastructure necessary for their safe operation.

168. The Committee was informed that the Committee on Agriculture, FAO at its 10th Session noted the economic, social and nutritional importance of street foods and supported the efforts made for training and institution building with particular relevance to street foods in urban areas, with a view to providing consumer protection and improving food handling practices.

169. The Committee indicated that the convening of an additional expert consultation by FAO and WHO should be considered only in the future and when sufficient additional information is available.

Status of the Draft Code of Practice

170. The Committee agreed to refer the proposed Draft Regional Code of Hygienic Practice for the Preparation and Sale of Street Foods to the Codex Committee on Food Hygiene for review and to circulate to governments for comments at Step 3 of the Codex procedure. The draft Code of Practice is contained in Appendix III to the present report.

CONSIDERATION OF THE NEED FOR A CODEX STANDARD FOR MILLED RICE

171. The Committee had before it Document CX/ASIA 90/11 prepared by Thailand. Introducing the paper, the delegation of Thailand informed the Committee that the Commission at its 18th Session approved the elaboration of a worldwide standard for milled rice by the Codex Committee on Cereals, Pulses and Legumes (CCCPL), and referred to the problems of classification of rice that CCCPL would have to resolve while elaborating such a standard.

172. In the views of Thailand, ISO specification for rice (ISO 7301) which does not have a provision on classification meets the needs of international trade. The two main groups of rice, i.e. indica type (*Oryza sativa* L. var. indica) and japonica type (*Oryza sativa* L. var. japonica) comprise various sub-species which are very different in size, shape of grain and cooking quality. Classifying these species in the same group will cause problems to international rice trade and cause confusion to consumers. Thailand also is of the view that if provisions of classification are to be laid down, there will probably be problems in classification of some varieties of japonica type which are long and wide. Moreover, rice trade in the world market from the past till now still leaves classification to be negotiated between the buyer and seller. As for provisions of hygiene and labelling which are requirements of some countries, Thailand is of the opinion that at present, various countries have their own regulations on the mentioned subject which are different. Some countries' regulations are even higher than those of Codex and they trade on the basis of their own regulations instead of those of Codex. Therefore, the requirements on hygiene and labelling should depend on the regulation of the importing country.

173. The delegation of Thailand informed the Committee that Codex should not elaborate an international standard for milled rice at this stage, because not only is it duplication of work, but also causes confusion in international trade.

174. The Secretariat pointed out that a suggestion made by Thailand that CC ASIA should be made responsible for elaboration of a worldwide standard for rice was not feasible since the elaboration of worldwide standards is not in the terms of reference of Coordinating Committees. Such work can be assigned by the Commission to the Coordinating Committees only in special cases.

175. The delegation of Singapore informed the Committee that the ISO specification for rice lacks in certain provisions normally contained in Codex Standards and proposed that a worldwide standard could be elaborated using as a basis the ISO specification and including other provisions like hygiene and food additive provisions normally contained in all Codex Standards.

176. The Committee expressed the view that Codex should not embark on the elaboration of a worldwide standard for rice. It endorsed the views of Thailand contained in the paper CX/ASIA 90/11 and asked the Secretariat to communicate them to the Executive Committee of the Codex Alimentarius Commission and Chairman of the Codex Committee on Cereals, Pulses and Legumes.

ACTIVITIES REGARDING CONTROL OF PESTICIDE RESIDUES IN FOODS

177. The Committee had before it document CX/ASIA 90/13 containing a summary of the Joint FAO/WHO activities regarding pesticide residues in foods that would be of interest to the Region of Asia. The Committee noted that the activities of the Codex Committee on Pesticide Residues (CCPR) and the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) would be of special interest to the Region of Asia where infestation by pests is widespread because of existing tropical climate and thus making use of pesticides imperative. The Committee agreed that the subject on FAO/WHO activities regarding control of pesticide residues in foods is of much interest to it and should be a standing agenda item at all sessions of the Coordinating Committee for Asia.

178. The Committee noted that CCPR is identifying simple methods of analysis for pesticide residues that could be used by the developing countries, which are not presently in a position to equip their regulatory laboratories with needed sophisticated instrumentation. The Committee expressed the view that sensitivity of the method cannot be compromised and that any simple method identified by CCPR for determination of pesticide residues should be sensitive enough. The delegation of India informed the Committee of the availability of a kit in its country that could be used for rapid monitoring of pesticide residues in food. The Committee was informed that information regarding the kit can be obtained by writing to the Director, Central Food Technological Research Institute, Mysore, India.

179. The Committee noted that many fumigants, because of their cost-effectiveness, are used by some countries in the region of Asia as grain protectants. For example, the Philippines and India use methyl bromide and phosphine for storage of grains. The Committee was informed that none of the fumigants had been toxicologically cleared for use by JMPR and that it was essential for the interested countries in the Region of Asia to provide residue data to CCPR and JMPR for their consideration to clear the use of fumigants for grain storage. The Committee noted that because of higher ambient temperatures existing in tropical climates of countries in the Region of Asia, the residues of fumigants could be much less than in foods receiving similar treatment in temperate climates. The Committee noted that the use of fumigants in grain storage will be discussed by the next session of CCPR to be held in the Hague, on the basis of a paper to be prepared by Israel.

180. The Committee noted that there could be certain pesticides used in the developing countries of Asia for which maximum residue limits were not established. The Committee expressed the view that such pesticides should be first identified. It asked the Secretariat to gather the information from countries in the Region of Asia by means of a circular letter.

181. The Committee was informed that the FAO Conference held in November 1989 approved the inclusion of prior informed consent clause in the International Code of Conduct on the Distribution and Use of Pesticides. The inclusion of the clause would ensure that

hazardous and banned pesticides are not exported to a developing country without the country first being provided with information on the dangers involved and on how to use the chemicals properly.

ELABORATION OF REGIONAL STANDARDS FOR TRADITIONAL FOODS WITH TRADE POTENTIAL - PROPOSALS FROM THE COMMITTEE

182. There was no document for consideration by the Committee. The delegation of Indonesia informed the Committee that Asia accounted for over 90% of the international trade in bamboo shoots and proposed that an international standard for bamboo shoots be elaborated by Codex.

183. The Committee noted that elaboration of standards for bamboo shoots would not be easy and would face problems especially because of the wide variety of bamboo shoots that are consumed, and the wide variety of processing (canning, drying, fermentation, etc.) which may be used. The Committee also noted that, in addition to Indonesia, Thailand and China in the Region of Asia are major producers of the commodity and would be interested in the elaboration of a standard for bamboo shoots. Japan is a major importer and does not export bamboo shoots. The Committee also noted that Thailand had already an existing national standard for bamboo shoots.

184. The Committee asked the delegation of Indonesia to take the lead and with the assistance of Thailand and China prepare a paper for presentation at the Eighth Session of CCASIA, justifying the need for elaboration of an international standard for bamboo shoots.

185. The delegation of India informed the Committee that two of its traditional foods, pickles and chutneys have an international trade potential and agreed to prepare a background paper on the subject for presentation at the Eighth Session of CCASIA.

NOMINATION OF COORDINATOR

186. The delegation of India, seconded by the delegations of Nepal and Indonesia proposed that Dr. Azizan Ghazali (Malaysia), Vice-Chairman of the current session of the Committee, be nominated for appointment by the 19th Session of the Codex Alimentarius Commission (Rome, July 1991) as the Codex Coordinator for Asia. This proposal was unanimously endorsed by the Committee. Dr. Azizan Ghazali indicated that she accepted the nomination, subject to the approval of the Government of Malaysia.

OTHER BUSINESS

Consideration of the Development of the Manufacture of Dried Shark Fins in Asian Countries

187. The delegation of Thailand informed the Committee that the Codex Committee on Fish and Fishery Products (CCFFP) was presently elaborating a standard for dried shark fins, which is presently at Step 3 of the Codex procedure. The scope of the Standard makes provision for use of fins from 21 types of sharks. In the view of the Thai delegation, the scope of the standard should be extended to include those species of sharks that are caught in the seas of the Asian Region.

188. The Committee agreed with the views of the delegation of Thailand and asked the Secretariat to gather the needed information by means of a circular letter.

189. The delegation of Thailand informed the Committee of the need for elaboration of a Code of Practice on Dried Shark Fins and requested the Secretariat to bring this to the attention of CCFFP and the Executive Committee of the Commission.

Consideration of Inclusion of Species of Fish in the Draft Codex Standard for Quick Frozen Fish Fillet

190. The delegation of Thailand informed the Committee that the draft standard for quick frozen fish fillet presently under elaboration by CCFFP restricts the scope to the species of the family Gadidae, Merluccidae, Scorpanidae and Pleuronectiformes.

191. Because of the difference in climatic conditions, some Asian countries manufacture quick frozen fish fillets by using fish of different species from those specified in the Codex standard. However, there are many other species of fish in Asia which can be used as raw material for quick frozen fish fillets having the same quality as stipulated by Codex. The delegation proposed that additional species of fish of the family Lutjanidae, Latidae, Plectorhynchidae and Epinephelidae be included in the scope of the draft Codex standard. The Committee endorsed the views of the delegation of Thailand.

192. The Secretariat agreed to forward to CCFFP the views of the Committee as well as information on the scientific name, taxonomic information, existing resources and marketing forms for the species of fish proposed for inclusion.

Consideration of the Need for Guidelines for Control of "Low Energy" or "Reduced Energy" Food in Asian Countries

193. The delegation of Thailand informed the Committee that the Asian countries should have the appropriate guidelines for controlling the utilization of the low energy or reduced energy foods with regard to the following:

- i) Ensuring maximum benefit and appropriate price for consumers of low energy or reduced energy foods;
- ii) Development of local production;
- iii) Supporting the research to evaluate the impact of the short term and long term consumption of low energy or reduced energy foods on consumers' health;

in order to avoid hazards which may occur.

194. The delegation undertook to prepare a code of practice for use of "Low Energy" or "Reduced Energy Foods" for presentation at the next session of CCASIA. The Secretariat informed the Committee that this should be brought to the attention of the Executive Committee.

Consideration for Implementation of Food Labelling in Asian Countries

195. The delegation of Thailand informed the Committee that most of the Asian countries, import various foods from countries within and/or outside the Asian region. Foods for special dietary uses, i.e. infant formula, low energy foods, reduced energy foods, etc. are mainly imported from developed countries. Consumers in Asia can easily obtain these foods directly from any outlet. However most consumers have insufficient nutritional knowledge to understand the nature of such foods if not appropriately labelled.

196. The delegation stressed the need for developing suitable guidelines for food labelling that should take into consideration:

- i) Codex General Standard for the Labelling of Prepackaged Food which covers labelling of all prepackaged foods to be offered as such to consumers or for catering purposes, and
- ii) Codex General Standard for the Labelling of and Claims for Prepackaged Foods for Special Dietary Uses which covers presentation of and claims for the label of foods for special dietary uses to be offered as such to consumers or catering purposes.

Both standards have various specific provisions, for example, definition, mandatory labelling, additional mandatory requirements and presentation of mandatory information which are very useful to consumers.

197. The Committee endorsed the views of Thailand and asked the Secretariat to communicate them to the Codex Committee on Food Labelling.

The Problem of EDTA in Canned Seafood

198. Thailand is facing problems in its trade of canned seafoods with EEC countries since the EEC regulations do not permit the use of EDTA as a food additive in canned seafood products.

199. The Committee noted that the problems faced by Thailand were of interest to the region of Asia, in view of future developments.

200. The WHO Representative advised the Committee that because EDTA has a low ADI, its permitted use in other foods could result in an intake that would exceed the ADI.

201. The Committee noted that EDTA is toxicologically cleared by JECFA for use in food. It asked the delegation of Thailand to provide technological justification for the use of EDTA in seafoods and propose amendments to all fish standards for inclusion of the food additive. The delegation of Thailand agreed to bring the matter to the attention of the next session of the Codex Committee on Fish and Fishery Products.

202. The Committee proposed re-evaluation of EDTA by JECFA.

Safety Aspects Built-In Traditional Foods and Their Improvement

203. The delegation of Nepal informed the Committee that traditional foods are one of the indispensable components of life for the majority of the people in the developing world. Tradition has also taught all concerned how to combat food hazards. There are, however, food taboos and unsafe practices which can be rectified through educational approaches. There are several codes of practice of hygienic preparation, handling, and consumption practices, which require documentation, scrutinization and dissemination before they are forgotten. There is also an emerging trend that urbanization may take away the cultural values of food safety that have been established from time immemorial. Food preparation practices comprising boiling, acidifying, fermenting, and salting are some of the examples which may be quoted as safe practices. These techniques are time-tested for the survival of the human race. This is one of the priority areas which has not received much attention in the recent past. There are also several episodes of food poisoning by consuming traditional foods during festivals and occasions where foods are served to a large number of people involving mass catering.

204. The delegation proposed that FAO and WHO together initiate studies on identifying and preserving these traditional safety parameters before they are given away in the name of urbanization/modernization.

Such studies should embrace the following activities:

- i) Identification of traditional foods,
- ii) Inherent safety principles of these foods,
- iii) Studies on hazards, if any, associated with them,
- iv) Establishment of code of safe preparation and processing practices,
- v) Standardization of traditional foods,
- vi) Preparation of publicity materials in highlighting the need for safety aspects of such foods, and
- vii) Proper dissemination of information through various mass media.

205. FAO and WHO agreed to consider the proposal from Nepal to evaluate the safety aspects of processing of traditional foods. Insofar as traditional foods are consumed

in the region or subregion, the CCASIA could be involved in elaborating relevant codes of practice.

206. The delegation of Nepal undertook to prepare a paper on safety aspects of traditional foods and their improvement for presentation at the next session of CC ASIA.

Kuwait Food Standards

207. The delegation of Kuwait brought the attention of the Committee to a list of Kuwait Food Standards that are presently available. More information on the standards can be obtained by writing to the Under Secretary, Ministry of Commerce and Industry, Standards and Metrology Department, P.O. Box 2944, Kuwait.

AGENDA FOR THE EIGHTH SESSION OF CC ASIA

208. The Committee noted that in addition to the general agenda items (i) Matters of interest, and (ii) Acceptances, the following topics would be considered at its next (8th) session.

- i) Reports by FAO and WHO on national, regional and global activities related to food safety and food control
- ii) Reports by Member countries on progress made to promote food safety, including appropriate indicators
- iii) Information on other work of FAO and WHO complementary to the work of the Codex Alimentarius Commission
- iv) Regional Food Export and Import Certification and Inspection Programmes
- v) Strengthening of National Codex Committees in the Region of Asia
- vi) Regional and national programmes on control of mycotoxins
- vii) Code of Practice for Street Vended Foods
- viii) Activities regarding control of pesticide residues in foods
- ix) Background papers justifying the elaboration of (a) International Standard for Bambooshoots, and (b) Pickles and Chutneys.

209. The Committee indicated that in addition to the above (i) Code of Practice for Control and Utilization of Low Energy or Reduced Energy Foods, that will be prepared by Thailand, and (ii) Safety Aspects of Traditional Foods and their Improvement, that will be prepared by Nepal would be considered at the next Session.

DATE AND PLACE OF NEXT SESSION

210. The Committee was informed that its next Session would be held in Malaysia at an acceptable time to the Host Government during the first half of 1992, subject to the approval of Codex Alimentarius Commission.

VALEDICTION

211. The Committee learnt that this would be the last appearance for Dr. N. Rao Maturu (FAO), as Secretary to the Codex Coordinating Committee for Asia and expressed its deep appreciation for his contribution to its work. It extended to him and his family its best wishes for a long and productive retirement.

Vote of Thanks to the Government of Thailand

212. The Committee wished to place on record and to express to the Government of Thailand, its sincere appreciation of the Government's generosity in having kindly provided host facilities for the Session. The Committee also wished to express its appreciation of the generous hospitality extended to delegates during the course of the Session.

Thanks to the Chairman and the Thai Industrial Standards Institute

213. The delegation of Malaysia, on behalf of the Committee, thanked the Chairman, Prof. Dr. Pakdee Pothisiri, for so ably conducting the proceedings of the Session. The delegation also extended special thanks to the Thai Industrial Standards Institute and members of the Thai Secretariat for the excellent arrangements made for the Session.

SUMMARY STATUS OF WORK

Subject Matter	Step	For Action by:	Document Reference
GATT - Codex Cooperation and Benefits to Trade	-	8th CC/ASIA	ALINORM 91/15 para. 73
Strengthening of National Codex Committees in the Codex Region of Asia	-	8th CC/ASIA	ALINORM 91/15 para. 77
Determination of Regional indicators to monitor progress in the promotion of food safety to be used by Member States	-	a) WHO b) 8th CC/ASIA	ALINORM 91/15 (para. 208)
Regional Food Export & Import Certification and Inspection Programmes	-	8th CC/ASIA	ALINORM 91/15 (para. 137)
Regional and National Programmes on Control of Mycotoxins in Foods	-	8th CC/ASIA	ALINORM 91/15 (para. 145)
Draft Code of Practice for Street Vended Foods	-	a) Governments in the Codex Region of Asia b) 8th CC/ASIA	ALINORM 91/15 (para. 170)
Activities regarding Control of Pesticide Residues in Foods	-	8th CC/ASIA	Continuing Activity
Elaboration of Regional Standards for Traditional Foods with Trade Potential	-	a) Indonesia, India b) 8th CC/ASIA	ALINORM 91/15 (paras. 184,185)
Code of Practice for Dried Shark Fins	-	a) CCFFP b) Executive Comm. c) 8th CC/ASIA	ALINORM 91/15 (para. 189)
Consideration for Inclusion of Species of Fish in the Draft Standard for Quick Frozen Fish Fillet	-	CCFFP	ALINORM 91/15 (para. 192)
Guidelines for Control of "Low Energy" or "Reduced Energy" Food in Asian Countries	-	a) Exec. Comm. b) Thailand c) 8th CC/ASIA	ALINORM 91/15 (para 194)
Implementation of Food Labelling in Asian Countries	-	CCFL	ALINORM 91/15 (para. 197)
Safety Aspects Built in Traditional Foods and their Improvement	-	a) Nepal b) 8th CC/ASIA	ALINORM 91/15 (para. 206)

APPENDIX I

LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

CHAIRMAN
PRESIDENT
PRESIDENTE

Dr. Pakdee Pothisiri
Deputy Secretary General
Food and Drug Administration
Ministry of Public Health
Devesm Palace
Samsen Road
Bangkok 10200, Thailand

BAHRAIN
BAHREIN

Mr. Ebrahim Ali Hamad
Supervisor of Food Hygiene
Public Health Directorate
Ministry of Health
P.O. Box 42

CHINA (Cont'd)

Mr. Zhou Xing Hai
Project Senior Official
The State Administration
of Import & Export Commodity
Inspection
12, Jianguomenwai
Beijing 100050

CHINA
CHINE
CHINA

Mr. Xu Guanghua
Senior Agronomist
Dept. of Science and Technology
Ministry of Agriculture
Beijing 100026

Mrs. Luo Xueyun
Deputy Director
Institute of Food Safety
Control & Inspection
Ministry of Public Health
29 Nan Wei Road
Beijing 100050

INDIA
INDE
INDIA

Mr. Balbir Singh, I.A.S.
Joint Secretary
Ministry of Health and
Family Welfare
Government of India
Nirman Bhavan
New Delhi

Mrs. Debi Mukherjee
Assistant Director General (PFA)
Ministry of Health and Family
Welfare
Government of India
Nirman Bhavan
New Delhi

INDONESIA
INDONESIE
INDONESIA

Prof. Dr. Florentinus Winarno
Vice Chairman CAC
Development Centre, IPB
Dept. of Culture & Education

P.O. Box 61
Bogor

Mr. Ading Suryana
Director of Food Control
Ministry of Health
Jl. Percetakan Negara No. 23
Jakarta

Dr. Ignatius Suharto
LIPI - INDONESIA
UPT-KIMIA
Jl. Sukarno-Hatta 470/205 A
Bandung

Mrs. Sjamsimar Sitaba
Head of Sub-Directorate of Food
Legislation
Directorate General of Drug and
Food Control
Ministry of Health
Jl. Percetakan Negara 23
Jakarta 10570

Dr. Indira Darmawan
Technical Staff
NPC INS/86/015
Directorate for Standardization
and Quality Control
Ministry of Trade
Jl. Abdul Muis 87
Jakarta

Mr. Sigit Sunarto Notowijoyo
Chief, Agriculture Investment/
Secretary of Standardization
Committee
Bureau of Planning
Ministry of Agriculture
Jl. Harsono RM. No. 3
Ragunan, Pasar Minggu
Jakarta Selatan

IRAQ

Mr. Ridha Ahmed
Government Official
Ministry of Health
Baghdad

JAPAN
JAPON
JAPON

Mr. Rentaro Ito
Deputy Director
Food Sanitation Division
Ministry of Health and Welfare
1-2-2, Kasumigasek, Chiyodaku
Tokyo

Mr. Nobuhiko Yoshioka
Deputy Director
Consumers' Economy Division
Food and Marketing Bureau
Ministry of Agriculture,
Forestry and Fisheries
Tokyo

Mr. Masatoshi Matsui
Ministry of Foreign Affairs
Higashikurume
Tokyo

Mr. Yuichi O'Hara
Technical Advisor
Japan Food Hygiene Association
5-8 Kyobashi 1-Chome
Chuo-ku, Tokyo

KOREA (REPUBLIC OF)
COREE (REPUBLIQUE DE)
COREA (REPUBLICA DE)

Dr. Baik Duck Woo
Director
Dept. of Hygiene, N.I.H.
Ministry of Health
and Social Affairs
5-Nokbondong Enpyon
Seoul

KUWAIT
KOWEIT

Mr. Ali Ahmad Alfaras
Deputy Director of Food Control
Kuwait Municipality
P.O. Box 10 Safat

Mr. Ahmad Mohammed Ali
Engineer
Ministry of Commerce and Industry
Standards and Metrology Dept.

Mr. Yacoub Al-Mutawa
Director of Public Health Lab
Ministry of Health
Dept. of Public Health

MALAYSIA
MALAYSIE
MALASIA

Dr. Azizan Ghazali
Deputy Director of Health Services
Ministry of Health
Block E, Govt. Complex
Jalan Dungun, Damansara Heights
50490 Kuala Lumpur

Mr. Abd. Zaman Samat
Assistant Director
City Hall Kuala Lumpur
Department of Hawkers & Petty
traders, City Hall
Kuala Lumpur

Mr. Anuar Ariffin
Assistant Director of Health
Ministry of Health
Jalan Cenderasari,
50480 Kuala Lumpur

Mr. Yeo Heng Hau
Principal Assistant Secretary
Ministry of Primary Industries
6th Floor, Menara Dayabumi
Jln. Sultan Hishamuddin
Kuala Lumpur

Mr. Basri Zakaria
Senior Agricultural Officer
Ministry of Agriculture
Jalan Sultan Salahuddin
50624 Kuala Lumpur

MALAYSIA (Cont'd)

Mrs. Soh Swee Keng
Head, International Standards Unit
Standards and Industrial Research
Institute of Malaysia (SIRIM)
P.O. Box 35
47000, Shah Alam
Selangor Darul Ehsan

Mr. Mohd Salleh Kassim
Director of Enforcement
Palm Oil Registration and Licensing
Authority - Kuala Lumpur (PORLA)
Ministry of Primary Industries
P.O. Box 12184
50770 Kuala Lumpur

Miss Norlaili Abdul Aziz
Medical & Health Officer
City Hall of Kuala Lumpur
Health Department
Jalan Tun Razak
Kuala Lumpur

Mrs. Noraini Br. Mohd. Othman
Food Technologist
Ministry of Health
4th Floor, Block E.
Offices Complex
Jalan Dungun, Damansara Heights
50490 Kuala Lumpur

Mr. Hithaya Jeevan
Chemist
Department of Chemistry
Jalan Sultan
4666 Petaling Jaya

Mrs. Sawiyah Alias
Agricultural Officer
Ministry of Agriculture
Dept. of Agriculture
Kuala Lumpur

Mr. Zulfakaer Maimon
Senior Health Inspector
City Hall of Kuala Lumpur
Jabatan Kesihatan
Dewan Bandaraya K.L.
Jln. Tun Razak
Kuala Lumpur

MALAYSIA (Cont'd)

Mrs. Rozita Baharuddin
Administrative Officer
Palm Oil Registration and
Licensing Authority (PORLA)
Ministry of Primary Industries
P.O. Box 11555
50770 Kuala Lumpur

Mr. Adinan Husin
Director, food Technology
Division, MARDI
Malaysian Agriculture Institute
P.O. Box 12301
Kuala Lumpur 50774

Mrs. Nor'aini Sudin
Head, Technical Advisory Service
Palm Oil Research Institute of
Malaysia
Ministry of Primary Industries
P.O. Box 10620
Kuala Lumpur 50480

Mr. Mohamad Nasir
Senior Health Inspector
Dewan Bandaraya
Jabatan pengurusan Penjaja
Dewan Bandaraya
174 Jin Tuanku ABD Rahman
Kuala Lumpur

NEPAL

Dr. Tika Karki
Director, Central Food
Research Laboratory
Ministry of Agriculture
Babar Mahal
Kathmandu

PHILIPPINES
PHILIPPINES
FILIPINAS

Mr. Nerius Roperos
Director
Bureau of Plant Industry
Dept. of Agriculture
San Andres St. Malate
Manila

PHILIPPINES (Cont'd)

Mrs. Filipinas Caliboso
Manager, Food Protection Dept.
National Post-Harvest
Institute for Research and
Extention
Department of Agriculture
Munoz
Nueva Ecija

SAUDI ARABIA
ARABIE SAOUDITE
ARABIA SAUDITA

Mr. Sirag Massode
Director of Standard Department
Saudi Arabia Standard
Organization
P.O. Box 3437
Riyadh 11471

Mr. Yacoub Al-Turki
Food Specialist in
Standard
Saudi Arabian Standards
Organization
P.O. Box 3437
Riyadh 11471

SINGAPORE
SINGAPOUR
SINGAPUR

Mr. Chia Hong Kuan
Head, Food Control Dept.
Ministry of the Environment
The Environment building
40 Scotts Road
Singapore 0922

THAILAND
THAILANDE
THAILANDIA

Professor Vichai Tanphaichitr
Director
Research Centre
Faculty of Medicine
Ramathibodi Hospital
Rama VI Road
Bangkok 10400

THAILAND (Cont'd)

Mr. Thien Mekanontachai
Deputy Secretary-General
Thai Industrial Standards Institute
Rama VI Street
Bangkok 10400

Mrs. Phani Na Rangsi
Senior Expert
Thai Industrial Standards Institute
Rama VI Street
Bangkok 10400

Miss Kanya Sinsakul
Director Standardization Division
Thai Industrial Standards Institute
Rama VI Street
Bangkok 10400

Mrs. Marisa Hotrabhavananda
Director, Office of National Codex
Alimentarius Committee
Thai Industrial Standards Institute
Rama VI Street
Bangkok 10400

Miss Sasithorn Suntharak
Director, Technical and Foreign
Relations Division
Thai Industrial Standards Institute
Rama VI Street
Bangkok 10400

Mrs. Yanee Vanasatit
Director, Food Control Division
Food and Drug Administration
Sam Sen Road
Bangkok 10200

Mr. Thaveesak Chanmanee
Director, Inspection Division
Food and Drug Administration
Sam Sen Road
Bangkok 10200

Mrs. Suparb Suanpan
Senior Nutritionist
Nutrition Division
Department of Health
Sam Sen Road
Bangkok 10200

THAILAND (Cont'd)

Miss Srisit Karunyavanij
Medical Scientist
Division of Food Analysis
Department of Medical Sciences
Bangkok 10100

Mrs. Pranee Srisomboon
Division of Food Analysis
Department of Medical Sciences
Bamrung Muang Road
Bangkok 10100

Dr. Poonsap Virulhakul
Senior Food Technologist
Fishery Technological Development
Division
Department of Fisheries
64 New Road
Bangkok 10120

Mr. Wipit Chaisrisongkram
Veterinary Public Health Section
Division of Disease Control
Department of Livestock
Development
Phaya Thai Road
Bangkok 10400

Mrs. Nuansri Tayaputch
Research Scientist
Department of Agriculture
Phahon Yothin Road
Bangkok 10900

Mrs. Praneet Udomsithiseth
Scientist, Commodity Standards
Division
Department of Foreign Trade
Bangkok 10200

Mrs. Nantana Kaewubon
Director of Biological Science
Division
Department of Science Service
Rama VI Street
Bangkok 10400

Associates Professor Anothai
Jatanasen
Head, Department of Nutrition
Faculty of Public Health
Rajvithi Road
Bangkok 10400

THAILAND (Cont'd)

Dr. Saipin Maneepun
Director, Institute of Food
Research and Product Development
Kasetsart University
Bangkhen
Bangkok 10900

Dr. Pong Vananuvat
The Federation of Thai
Industries - Food
Processing Group
394/14 Samsen Road, Dusit
Bangkok 10300

Mr. Kamchai Iamsuri
Director
Board of Trade of Thailand
150 Rajbopit Road
Bangkok 10200

Associate Professor Danis
Davitiyananda
Head, Department of Veterinary
Pharmacology
Faculty of Veterinary Science
Chulalongkorn University
Bangkok 10500

Dr. Sakdiprayoon Deema
Inspector General
Ministry of Agriculture and
Co-operatives
Rajchadamnoen Avenue
Bangkok 10200

Mrs. Nongyow Thongtan
Director, Agricultural Chemistry
Division
Department of Agriculture
Bangkok 10900

Mr. Sthaphorn Vaidhyakarn
Head, Seed Quality and Standard
Branch
Rice Research Institute
Department of Agriculture
pHahon Yothin Road
Bangkok 10900

THAILAND (Cont'd)

Mr. Phot Inganinanda
Rice Inspection Committee
Board of Trade of Thailand
Sathorn Thani Building
No.2, Floor 16
Sathorn North Road
Bangkok 10500

Mrs. Marasee Surakul
Assistant Secretary General
Office of the National FAO
Committee of Thailand
Ministry of Ariculture &
and Cooperatives
Rajdamnern Avenue
Bangkok 10200

Associate Professor Dr. Songsak
Srianujata
Institute of Nutrition
Mahidol University
Nakornchaisri
Nakornpathom 73170

Mr. Wanchai Somchit
Thai Food Processors' Association
888/114 Ploenchit Road
11th Floor Mahatun Plaza
Bangkok 10330

Miss Nipaporn Boonyanandha
Thai Fishery and Frozen Products
Association
160/194-7 Silom Road
13th Floor, ITF Silom Palace
Bldg.
Bangruk, Bangkok 10500

OBSERVER COUNTRY
PAYS OBSERVATEUR
PAIS OBSERVADOR

BRUNEI DARUSSALAM
BRUNEI DARUSSALAM
BRUNEI DARUSSALAM

Mrs. Datin Masni Mohd Ali
Head, Lab. of
Scientific Services
Ministry of Health
Jalan Sumbiling
B.X. Begawan 2003

KOREA (REPUBLIC OF)
COREE (REPUBLIQUE DE)
COREA (REPUBLICA DE)

Mr. Hwang E. Nam
Korea Food Science & Technology
Association
720 Banghak-dong, Dobong-ku
Seoul

Mr. Jung Yun Kim
Korea IGTC Representative
720 Banghak-dong, Dobong-ku
Seoul

USSR
URSS

Mr. Serguei Morozov
Director
UNEACOM, Centre for
International Projects
P.O. Box 438, CIP, Moscow

Dr. Olga Doronina
Project Coordinator
Centre of International
Project
P.O. Box 438 CIP, Moscow

OBSERVERS
OBSERVATEURS
OBSERVADORES

Miss Boedaeri Trisilowati
Q.A. Manager
P.T. Indofood Interna Corp
Ancol I/4-5
Jakarta, Indonesia

Mr. Widodo
P.T. Coca-Cola Indonesia
5th Lippo, FE Bld.
Jl. H.R. Raslinasaid Kav B10
Jakarta 1294, Indonesia

Mr. Ignatius Herriyanto
Manufacturing Specialist
P.T. Food Specialities Indonesia
Wisma Metropolitan II
7th Floor, Sudirman Kav 31
Jakarta 10002, Indonesia

OBSERVERS (Cont'd)

Dr. Rexilius Lutz
Adviser
German Agency for Technical
Cooperation
c/o Dept. Agriculture
Malaysian, German Pesticide
Project (MGPP)
50480 Kuala Lumpur
Malaysia

Dr. Chanin Charoenpong
Senior Food and Drug Specialist
Food Control Division
The Food and Drug
Administration
Sam Sen Road
Bangkok 10200, Thailand

Miss Daranee Mukhajonpun
Food and Drug Specialist
Food Control Division
The Food and Drug
Administration
Sam Sen Road
Bangkok 10200, Thailand

Mrs. Pranee Kiatsurayanont
Food and Drug Specialist
Technical Division
Food and Drug Administration
Samsen Road
Bangkok 10200, Thailand

Mrs. Phimchai Vongvoravit
Food and Drug Specialist
Food Control Division
The Food and Drug Administration
Sam Sen Road
Bangkok 10200, Thailand

Miss Pornpimol Kattinanondh
Senior Food and Drug Inspector
Inspection Division
The Food and Drug Administration
Sam Sen Road
Bangkok 10200, Thailand

OBSERVERS (Cont'd)

Miss Mayuree Bamrongchatudom
Food and Drug Specialist
Food Control Division
The Food and Drug Administration
Sam Sen Road
Bangkok 10200, Thailand

Miss Churairat Rungrodjanarak
Medical Scientist
Division of Food Analysis
Department of Medical Sciences
Bangkok 10100, Thailand

Mrs. Gobtong Thoophom
Medical Scientist
Division of Food Analysis
Department of Medical Sciences
Bangkok 10100, Thailand

Mr. Prakai Boriboon
Medical Scientist
Division of Food Analysis
Department of Medical Sciences
Bangkok 10100, Thailand

Mr. Glar Issarapirom
Medical Scientist
Division of Food Analysis
Department of Medical Sciences
Bangkok 10100, Thailand

Miss Attaya Kungsuan
Fishery Technologist
Fishery Technological Development
Division
Department of Fisheries
Ratchadamnoen Avenue
Bangkok 10200, Thailand

Mrs. Puengpit Dulyapach
Chief, Farm home improvement
Sub-Division
Agricultural Administrative
Development Division
Department of Agricultural Extension
Bangkhen, Bangkok 10900, Thailand

Mrs. Supranee Impituksa
Scientist
Agricultural Toxic Division
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

OBSERVERS (Cont'd)

Miss Poonsri Jirathana
Scientist
Agricultural Chemistry Division
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

Miss Kulwilai Suthilucksanavanish
Scientist
Agricultural Chemistry Divisions
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

Mr. Adul Suwannate
Scientist
Agricultural Chemistry Division
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

Mrs. Chavaratana Thubthimthai
Scientist
Agricultural Chemistry Division
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

Mr. Thai Leekijiwatana
Scientist
Agricultural Chemistry Division
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

Mrs. Panneeka Attanon
Scientist
Agricultural Chemistry Division
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

Mr. Charun Pornkuntham
Scientist
Agricultural Chemistry Division
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

OBSERVERS (Cont'd)

Mrs. Lilly Pranusorn
Scientist
Agricultural Chemistry Division
Department of Agriculture
Bangkhen, Bangkok 10900
Thailand

Mr. Bunlert Sirichai
Scientist
Department of Foreign Trade
Sanam Chai Road
Bangkok 10200, Thailand

Mr. Sunon Anilbol
Commodity Standards Technical
Officer
Office of Commodity Standards
Department of Foreign Trade
Rajdamnern Avenue
Bangkok 10200, Thailand

Mr. Somsak Tanasupawat
Commodity Standards Technical
Officer
Office of Commodity Standards
Department of Foreign Trade
Rajdamnern Avenue
Bangkok 10200, Thailand

Mrs. Fookiat Sinakhom
Neuclear Chemist
Waste Disposal Division
Office of Atomic Energy for on
Peace
Vibhavadi Rangsit Road
Bangkhen, Bangkok 10900
Thailand

Mrs. Pornsri Polphong
Radiation Physicist
Radiation Measurement Division
Office of Atomic Energy for Peace
Vibhavadi Rangsit Road
Bangkhen, Bangkok 10900
Thailand

Mr. Vuttichai Wanglee
Rice Inspection Committee
Board of Trade of Thailand
4195 Chiang Mai Roa
Klongsan
Bangkok 10600

OBSERVERS (Cont'd)

Dr. Palarp Sinhaseni
Standards Testing Quality Control
Services Programme Co-ordinator
Office of the Science & Technology
Development Board
6th Floor, Jaran Insurance Building
401 Rachadapisek Road
Bangkok 10310, Thailand

Assistance Professor Luckana
Rujanakaikarn
Deputy Dean, Faculty of
Agriculture
Faculty of Agriculture
Chiang Mai University
Huai Kaeo Road
Chiang Mai 50002, Thailand

Miss Metanee Sukontarug
Standard Officer
Office of National Codex
Alimentarius Committee
Thai Industrial Standards Institute
Rama VI Street
Bangkok 10400, Thailand

Mr. Vichai Trangkhasombat
The Coca-Cola Export Corporation
17th Floor Regent House
183 Rajdamri Road
Bangkok 10330, Thailand

Mr. Vichit Chank
The Coca-Cola Export Corporation
17th Floor Regent House
183 Rajdamri Road
Bangkok 10330, Thailand

Mr. Sommart Prapertchob
Food Legislation Manager
Nestle (Thailand) Co., Ltd.
500 Amarin Tower
Ploenchit Road
Pathumwan, Bangkok 10330
Thailand

Miss Kanchana Nate-on
Assistant Director
Ministry of Commerce
29/1 Singharaj Road
Chiang Mai 50000, Thailand

OBSERVERS (Cont'd)

Miss Chanchai Jaengawang
Food Analysis Division
Deputy of Medical Sciences
Ministry of Public Health
Sam Sen Road
Bangkok 10200, Thailand

Mrs. Somjai Wichaidit
Deputy Director
Research Center
Ramathibodi Hospital
Rama VI Road
Bangkok 10400, Thailand

Mr. Chairoj Jitkaew
Group Quality Assurance Manager
Nestle (Thailand) Co., Ltd.
500 Amarin Tower
Ploenchit Road
Pathumwan, Bangkok 10330
Thailand

Mrs. Prima Wangwongwiroj
Thai Industrial Standards
Institute
Ministry of Industry
Rama VI Road,
Bangkok 10400, Thailand

Mr. Somrual Dokmaihom
Plant Protection Division
Dept. of Agriculture Extension
Ministry of Agriculture
& Cooperatives
Phaholyothin Road
Bangkhen, Bangkok 10900, Thailand

Ms. Suchinda Nimanitaya
Faculty of Agriculture
Chiang Mai University
Hai Kaeo Road
Chiang Mai 50002, Thailand

Miss Ratana Thanomsakyooth
Foreign Relations Officer
Office of the National FAO
Committee of Thailand
Ministry of Agriculture &
and Cooperatives
Rajdamnern Avenue
Bangkok 10200, Thailand

OBSERVERS (Cont'd)

Mr. F.S. Chu
Professor
Dept. of Food Microbiology
University of Wisconsin
Madison, WI. 53706
U.S.A.

Mr. Stanley Nesheim
Research Chemist
U.S. Food & Drug Administration
HFF-423, 200 c street S.W.
Washington D.C. 20204
U.S.A.

INTERNATIONAL ORGANIZATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES INTERNACIONALES

CODEX ALIMENTARIUS COMMISSION

Dr. Eduardo R. Mendez
Chairman of the Commission
P.O. Box 60-486
Mexico D.F. 03800

FAO

Mr. H. Tsuchiyama
Deputy Regional Representative
FAO Regional Office for Asia and
The Pacific
Maliwan Mansion
39 Phra Atit Road
Bangkok 10200, Thailand

Dr. R.U. Qureshi
Regional Food Policy and Nutrition
Officer
FAO Regional Office for Asia and
the Pacific
Maliwan Mansion
39 Phra Atit Road
Bangkok 10200, Thailand

Mr. Floyd Haugen
Chief Technical Advisor
Joint FAO/WHO Food Standards
Programme
JI. M.H. Thamrin 14
P.O. Box 2338
Jakarta, Indonesia

INTERNATIONAL ORGANIZATIONS (Cont'd)

FAO (Cont'd)

Dr. Ramesh V. Bhat (FAO consultant)
Assistant Director
National Institute of Nutrition
Hyderabad - 500 001
India

IOCU

Mrs. Annelies Allain
IOCU Representative
P.O. Box 1045
10830 Penang, Malaysia

UNEP

Mr. K. Onogawa
Deputy Regional Representative
UNEP Regional Office for Asia
and the Pacific
UN Building, Rajadamnern Avenue
Bangkok 10200, Thailand

WHO

Dr. Ali Basaran
WHO Regional Adviser
WHO, Western Pacific Region
U.N. Avenue
P.O. Box 2932
Manila, Philippines

Dr. Han Tun
WHO Liaison Officer
C/O ESCAP
United Nations Bldg.
Rajdamnern Avenue
Bangkok 10200, Thailand

INTERNATIONAL ORGANIZATIONS (Cont'd)

JOINT FAO/WHO SECRETARIAT

Mr. R.J. Dawson
Senior Officer
Food Quality and Consumer
Protection Group
Food Policy and Nutrition Division
FAO - Via delle Terme di
Caracalla
00100 - Rome, Italy

Dr. N. Rao Maturu
(Secretary)
Food Standards Officer
Joint FAO/WHO Food Standards
Programme
FAO - Via delle Terme di
Caracalla
00100 - Rome, Italy

Dr. Gerald G. Moy
Food Safety Adviser
WHO Western Pacific Centre
for the Promotion of
Environmental Planning and
Applied Studies
P.O. Box 12550
50782 Kuala Lumpur, Malaysia

ALINORM 91/15
APPENDIX II

ACTIVITIES OF ASEAN

I. Brief Activities on Food Research and Development in ASEAN

1.1 ASEAN Protein Project (1974-84)

- Available raw materials in the region were developed and produced commercially
- Technology and hygienic practice of traditional fermented foods were improved

1.2 ASEAN Food Waste Materials (1980-89)

Technologies developed by the project can be classified into:

- Biogas technologies
- Membrane technologies
- Technologies for feed formulation, and

Other technologies which were developed

- Production of carbonated and non-carbonated coconut beverages
- Improvement of salt boiling process for fish
- Processing of fish processing residues into fish sauce

1.3 ASEAN Food Habits (1982-89)

- The importance of food habits is considered for improvement of nutritional status of the population in the region.
- ASEAN Food Data Network was established to disseminate and assist information exchange among member countries.

1.4 ASEAN Food Technology Research and Development (1982-89)

Regional cooperative activities were as follows:

- Processed food handling: fruit & vegetable, cereal & oilseed, and fish products
- Production and utilization of microbial enzyme
- Food safety and toxicology

Objectives of Food Technology Research and Development Project:

- i) Accelerate technology transfer through
 - pilot scale production and market test
 - organization of community processing centre
 - direct transfer of relevant information
- ii) Continue needed information development concerning processing and quality of ASEAN food

* Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand.

II. ASEAN Food Standard (1986-90)

In providing research grants to various ASEAN national institute dealing with food standards, academic and reserach development it assists:

1. Survey manufacturing practice, observe GMP and give necessary advice/suggestion, especially for canned pineapple, frozen shrimp, canned tuna and palm oil plants.
2. Study various differences among existing national standards/specifications in ASEAN countries with present or would-be Codex standards and other main national standards and/or importing regulations of canned pineapple, frozen shrimp, canned tuna and palm oil.
3. Create subsidiary project on Food Standard to collate and evaluate ASEAN food standards.
4. Continue to develop regional capability for quality analysis and safety of ASEAN foods.

III. Proposed Project for ASEAN Food Technology Research and Development (1990-94)

Objectives

1. To develop small and medium scale food industries in ASEAN
2. To improve quality and safety of foods produced in ASEAN
3. To foster effective technology transfer

Sub-projects with specific objectives

1. Sub-project I Food Product & Process Development

Objectives

- to increase value added of food processing
- to develop capability of ASEAN food indutry to undertake commercially-applied, market-oriented food product and process development
- to understand scientific base for traditional technologies improvement

2. Sub-Project II Food Safety & Quality Assurance

Objectives

- to raise microbiological quality of processed food products
- to establish good manufacturing procedures for a range of ASEAN food products and processes

3. Sub-Project III Technology Transfer

Objectives

- to improve training and communication skills of scientists and technologists and to facilitate improved information transfer
- to improve technical and interaction cooperation between research institutions and industry
- to establish reserch and development collaboration in application of food technology for mutual advantage

Expected Achievements of the Project

1. Reduction of market losses/greater market penetration of exported products
2. Maintain and raise industries profitability through high value added products
3. Positive employment
4. Develop expected technologies; minimize losses due to waste, inefficiency and public health hazards and enable fully employ market potential
5. Enhance capacity to respond to the need for sustained and continuous R&D activities
6. Strengthen institutional and staff expertise in technology extension and greater commercial orientation in research and development and closer interaction linkage with industry.

ALINORM 91/15
APPENDIX III

DRAFT CODE OF HYGIENIC PRACTICE FOR THE PREPARATION AND
SALE OF STREET FOODS
(At Step 3)

SECTION 1. INTRODUCTION/SCOPE

This code contains a series of requirements and practices to be observed in the preparation and sale of street foods and drinks for direct consumption. For purposes of this code street foods exclude prepackage foods, fresh vegetable and fruits and fresh meat and fish.

This standard shall govern all individual and legal entities involved in the preparation and/or sale of foods and drinks in the public street and shall apply to places where they are prepared, points where they are sold and means of transport used. Its purpose is to ensure a safe food or beverage product, suited for consumption, in order to protect the health of persons who use this type of food service. Due recognition should be given by the government to the informal sector of street foods vendor enterprises.

SECTION 2. DEFINITIONS

Street foods - ready-to-eat foods and beverages prepared and/or sold by vendors especially in streets and other similar public places

Enteric - Pertaining or relating to the intestines

Sputum - Spittle

Impermeable - Not allowing the passage of water

Crockery - All containers (glasses, plates and dishes) used in serving a meal

Waste water - Water from domestic and industrial drains

Environment - That which surrounds the foods

Informal - Clandestine, not official or authorized

Perishable - Easily spoiling or decomposing

Running water - Water coming out of a tap

Germs - Microbes

Pests - Undesirable animals (insects, rodents)

Street foods in general could be grouped into three major categories: meals, snacks and drinks.

Stationary street food vendors are those operating on fixed locations such as in front of schools, hospitals and offices, and at traffic points such as gas station, bus and ferry terminals, railway station and road junctions. The other type of stationary vending units are to be found in almost every neighbourhood, of which stall (warung) and tables are the most common types of vending units.

Ambulatory street food vendors are those who carry their wares by hand, on the head, on the back, or on shoulder poles, etc. and those who make use of wheeled transport such as bicycles and push carts.

Source of contamination: Food displayed or peddled around or in containers which cannot be closed off uncovered will be easily infected or contaminated by dust, exhaust gases, insect, microbes (spoilage and pathogenic) and others.

SECTION 3 REQUIREMENTS FOR INPUTS AND INGREDIENTS

Purchase of Inputs and Ingredients

Purchase only food sold in clean places (on shelves or in baskets or boxes but never directly on the ground) because these foods will be less contaminated than others.

Purchase only meat off butchers' meat hooks or from approved slaughterhouses, rejecting the products of clandestine slaughter because clandestine meat has not been inspected and could come from diseased animals.

Purchase only packaged foods with a guarantee or manufacturers' brand name and not unlabelled food of informal origin because, should any illness result from its consumption, the manufacturer or producer can easily be located to clarify the question of responsibility and avoid new outbreaks.

Purchase only products sensory properties (colour, odour, taste, etc.) of which are those of fresh and not spoiled food because this is a sure way of purchasing food of the best quality.

The ingredients which have health risks must be purchased from legal authorized wholesaler, who could give assurance that those ingredients are wholesome and guaranteed being of food grade standard (such as food colours, artificial sweeteners and other food additives).

Transport, Reception and Storage of Inputs and Ingredients

Products used in the preparation of meals shall be transported in such a way that they are not spoilt by heat or the length of time on the journey, or contamination by undesirable substances or products that may be transported together with food. The vehicle or means of transport shall be used exclusively for food because contaminants may accidentally become mixed with the food and cause poisoning.

Inputs and ingredients must be received in a clean and protected place. Meat, ofal and fish should be put on trays, and commodities in bulk in clean containers.

Non-perishable food, which does not spoil easily and which is not immediately used, should be kept protected, covered and in closed containers because this will avoid contact with pests (flies, cockroaches and rodents) that could contaminate it.

Perishable food which is not going to be prepared immediately, and which spoils easily, should be kept refrigerated because this will prevent food from being spoilt and becoming dangerous to eat.

Keep receptacles containing food clearly identified and far away from those containing toxic or poisonous substances, because, by identifying them correctly, fatal accidents can be avoided.

SECTION 4. REQUIREMENTS FOR THE PLACE OR AREA OF PREPARATION

The place of preparation shall be sufficiently lit, shall be kept permanently clean and far from any source of contamination (rubbish, waste waters, animals) and shall be completely separate from living accommodation because food is most likely to suffer contamination during preparation and the danger is more serious if the food is going to be eaten raw or only slightly cooked (salad).

Similarly, if the preparation of food is completed in sales points on the public street, the area must be clean, protected from the sun and the wind, separate and not accessible to the public, because of the same reasons as pointed above.

Sanitary Facilities

The places where food is prepared must have a liberal supply of drinking water, and services for the disposal of waste waters, and bins for rubbish and refuse from the preparation because these are basic sanitary arrangements necessary to ensure that food is free of contamination.

When food is prepared at points on the public street it must also be ensured that there is good quality water, and access to services for the disposal of waste water and rubbish.

Water at the sales point may be kept in stainless steel containers holding at least 20 litres and duly protected. The bins for rubbish and refuse must be made of impermeable material, easy to clean, with a plastic bag inside to facilitate handling of the rubbish.

The working or preparation surfaces must be covered with impermeable material such as resistant plastics or stainless steel, clean and in good condition.

Saucepans, utensils and crockery must be clean and in good condition. Unsuitable materials, such as those made of copper, cadmium, lead or any other toxic material should not be used because these metals react easily with food, particularly if the food is acid, and form toxic compounds.

Water which will be used for preparation of unboiled street food drinks must first be cooked thoroughly before use.

The street food vendors should have an ample supply of clean and potable water, with adequate facilities for its handling and storage to protect it from storage.

The water supply should be separated into two well identified containers, i.e. potable water and non potable water.

Ice which will be used for preparation of street food drinks must be prepared or made from potable water and should be manufactured, handled and stored so as to protect it from contamination.

SECTION 5. REQUIREMENTS FOR PRELIMINARY PREPARATION

Handling Utensils

Wooden surface on which food is chopped up must be scrubbed with soap or detergent and water after every operation, because this prevents recontamination of the food being handled by the possibly contaminated food in contact with the surface just before. The scrubbing brush removes the germs and scraps of food from the cracks in the wood.

Wash with detergent and water all the utensils (knives, recipients, etc.) before use and in between each operation, because this lowers the risk of contaminating food with dirty utensils.

Keep fuel or any inflammable product in closed and clearly identified receptacles away from food and from the cooker.

When ingredients are mixed before cooking or serving this should be done in receptacles specially intended for this purpose. Do not use other receptacles that may previously have contained some toxic product (for example, a jar of paint or motor oil) because the container could still be impregnated with residues of the toxic substance, which could pass into the food, and also because the material it is made of is not suitable for containing food.

All used utensils must be soaked in warm water or in appropriate detergent, and scrubbed with soap and rinsed with clean water. Wooden utensils or other traditional utensils which are difficult to be cleaned must be steamed or cooked for sometime enough to kill the undesired micro-organisms.

Hygienic Practices

Wash hands with soap and water before handling any food. A container should be available exclusively for washing hands, because dirty hands are the main source of contamination and carriers for most food-borne diseases.

Wash greens and other vegetables with plenty of water, taking special care with those to be eaten raw, because these greens could have been irrigated with waste waters, in which case they would be highly contaminated, and their consumption would constitute a serious risk to health.

Wash all food, including meat, before preparing it, to reduce the risks of contamination.

The water used in the basin must be potable and running water, because by flowing over the food, it will wash away some of the contaminants.

Clothes should be protected with an apron, and hair covered with a cap throughout food handling, because this prevents clothes touching the food or hairs falling into the dish.

Do not wearings on the fingers or bracelets on the wrists while handling food.

To reduce certain pesticide residues, vegetables need to be washed thoroughly and if necessary by the blanching process, before they are eventually used for street food preparation.

No one with infected sores or broken skin should handle food at any time, because infected wounds are a focus for germs that can contaminate food on contact.

SECTION 6. REQUIREMENTS FOR FINAL PREPARATION

Cooking and Handling

Cook the food sufficiently, whether it is boiled or cooked directly over a fire, because heat destroys many contaminants, mainly germs and parasite cysts.

If the food is not served immediately, it should be kept in a cool, well ventilated place or, better still, refrigerated, and never outdoors or exposed to the sun, because if it is not kept cool germs will proliferate easily.

If food is to be reheated, it must be only the portion to be served, food should not be reheated more than once, because if it is not heated sufficiently and if it is reheated more than once, any possible germs in the food will multiply to the point of making it dangerous.

Cooking utensils should be of suitable material (wood or stainless metal) and the receptacles should be heat-resistant and used only for the preparation of food.

The street foods must have individual covers or wraps or container for meal, snacks and drinks to protect any possible dangerous contamination.

The packaging process should be done under conditions that preclude the introduction of contamination into the products.

Hygienic Practice

Never continue to cook with a utensil that has been used to taste the food: take a clean one. Because the food can be contaminated with germs from the mouth, particularly if the cook is ill.

Avoid sneezing or coughing over the food, particularly when it is ready to be served, because the tiny drops from coughs and sneezes contain germs that could contaminate the food.

Salads should be prepared with utensils and never with hands, because hands are the main vehicle of contamination.

SECTION 7. REQUIREMENTS FOR MARKETING

If food is transported to the place of sale, it should be in hermetically sealed and protected containers so that they are not in contact with dirty surfaces (such as the boot or seat of a car), because if the vehicle is not suitable for transporting foodstuffs, maximum precaution should be taken to protect food.

The place where the food is prepared should be as near as possible to the place where it is sold, so that it will not deteriorate in transport over long distances.

Both the stationary and ambulatory street food vendors should not be encouraged to market the street foods in or near the vicinity where the risk of exhaust vehicles is substantial such as near bus station (due to its heavy metal contamination). The street food marketed near those place need to be regulated more strictly than other places.

Both the stationary and ambulatory street foods sold or marketed near schools must also be regulated and monitored more strictly, since most of the young children are much more vulnerable to several type of contamination.

The required box or crate as vending unit in both stationary and ambulatory street food vending should be nicely designed and constructed using material which are easily cleaned and should protect the food from dust and other contamination.

The Sales Point and Its Surrounding

The sales points (kiosks, barrows, tricycles, mobile stalls, etc.) must be built of solid and resistant materials, clean and in good condition, and be kept in clean places when not in use. They should not be used for any other purpose.

They should be stationed in places where they do not interfere with vehicular traffic or obstruct pedestrians and in the areas established by the authorities.

They should always be kept clean and tidy, including the working surface, table, benches and boxes, cupboards, glass cases, etc., because the place should not only look nice but also be suitable for selling food.

Never keep in the sales point articles not needed for the handling and marketing of food, such as clothes, blankets, footwear, swaddling clothes, etc., because these objects can contaminate food.

The sales point should not be used as a permanent or temporary dwelling but should be exclusively for the handling and marketing of food because this will avoid additional sources of contamination of food.

The surroundings of the sales point should be kept clean and free of litter because, as well as being more attractive to the consumer, this will prevent further pollution of the environment and contamination of the food by the environment.

No animals should be allowed in or near the sales point, because animals could contaminate the food and transmit diseases.

Protection and Serving of Food

The food and beverages exposed for sale must be protected with glass cases and covered with wire netting or plastic material. Preferably, food and beverages should be served using disposable plates, covers and glasses. If this is not possible, the plates, covers and glasses should be clean and in good condition.

If the sales point is a mobile vehicle, the driving compartment should be properly separated from the food area of the vehicle. Food remaining unsold at the end of the day may not be used the next day.

Take-away food shall be sold in clean, unused paper and/or plastic. The use of printed paper or printed plastic is forbidden, particularly if it comes into direct contact with the food.

Only final preparation, heating and serving of food is allowed in the sales point.

The utensils for selling food must be kept clean, covered and protected, because they easily become contaminated if they are left dirty or unprotected.

Wash utensils with detergent and running, potable water, categorically rejecting the use of buckets or other receptacles containing water that is not thrown away immediately after use, because if the same water is used twice it can lead to contamination and recontamination of the utensils washed in it.

Serve the food with utensils that can be easily washed, because this will make it more difficult for scraps of food to remain on the utensils and thus allow germs to develop.

Serve the food properly, holding the utensils in the right place, avoiding any contact between the hands and the food or the surface that will be in contact with it.

Do not handle money and food at the same time, the worker who prepares and serves the food should not have any contact with money and, if this is unavoidable, should wash his or her hands before serving food again, and should have a separate wash basin because money is a very contaminating element.

Requirements for the Vendor-Handler

Persons handling food (either preparing or selling it) should be in good health, for which purpose they should undergo regular medical checks testifying to their health with certificates renewable every six months or a year. This check-up will consist in a general clinical examination, a sputum examination to detect carriers or disseminators of the tuberculosis bacillus or the presence of infected cuts or sores, and also to detect whether the person is a healthy carrier of enteric diseases, because this will provide greater security for the food to be consumed. A health card shall be indispensable and obligatory for anyone selling or handling food.

Any vendor-handler of food should wear appropriate clothing consisting of at least an apron and cap for men and a hairnet or headscarf for women, always clean and in good condition; they should be preferably white or pale in colour.

Every handler vendor should receive training in hygienic handling of food covering at least the following aspects: the concept of food-borne diseases; environmental hygiene and food protection practices. The authorities should give priority attention to training in food hygiene because training provides the handler vendor with the knowledge needed to provide a food product for direct consumption in adequately hygienic conditions.

The handler-seller should observe elementary hygienic practices: short hair, short, clean finger-nails, clean hands, no coughing or sneezing over the food, no handling of food with cuts or skin infections, no smoking during the preparation and serving of food. Because the practice of hygienic habits enables the consumer public to be provided with food prepared and served in the best hygienic conditions.

Handling and Disposal of Wastes

Rubbish bins must be kept away from where the food is handled and always have a lid, because this will prevent the rubbish bin from acting as a focus of attraction for pests.

There should be absolute separation of solid wastes (sweepings, etc.) from liquid wastes (washing water) because they are easier to eliminate in this way and the risk of contamination is reduced.

The disposal of the separated wastes shall be as follows:

- cleaning wastes will go to a receptacle intended for this purpose for later removal by a Public Garbage Collection Service;
- food scraps can be kept to feed animals;
- liquid wastes will go to the nearest drain.

Because this will prevent the drains being blocked by solid wastes and thus becoming a hotbed for contamination and proliferation of pests.