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**REPORT OF THE REGIONAL EXPERT CONSULTATION OF THE
ASIA-PACIFIC NETWORK FOR FOOD AND NUTRITION ON
FOOD COMPOSITION ACTIVITIES**

Bangkok, Thailand, 18 to 21 November 2003



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**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
REGIONAL OFFICE FOR ASIA AND THE PACIFIC**

Bangkok, 2003

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ACRONYMS AND ABBREVIATIONS USED

AIS	Agricultural Development Systems
ALP	Agricultural Linkages Programme
ANFN	Asia Pacific Network for Food and Nutrition
ANI	Action for Nutrition Improvement
ASEANFOODS	Association of South East Asian Network of Food Data Systems
AUP	Agricultural University of Peshawar
BADC	Bangladesh Agricultural Development Corporation
BAN-HRDB	Bangladesh Applied Nutrition and Human Resource Development Board
BARC	Bangladesh Agricultural Research Council
BRRI	Bangladesh Rice Research Institute
CCDCP	Chinese Centre for Disease Control and Prevention
CD	Compact disc
CFRL	Central Food Research Laboratory
CFTRI	Central Food Technological Research Institute
CRI	Coconut Research Institute
CSIR	Ceylon Institute of Scientific and Industrial Research
CWEL	Cooperative Establishment Laboratory
DAE	Department of Agricultural Extension
DWCD	Department of Women and Child Development
FAO	Food and Agriculture Organization
FAO RAP	FAO Regional Office for Asia and the Pacific
FAO SAPA	FAO Sub Regional Office for the Pacific Islands
FBDGs	Food based dietary guidelines
FBS	Food balance sheets
FC	Food composition
FCD	Food composition data
FCT	Food composition tables
FIVIMS	Food Insecurity and Vulnerability Information Mapping Systems
FNB	Food and Nutrition Board
FNRI	Food and Nutrition Research Institute
HRI	Horticulture Research Institute
HYV	High yielding varieties
ICAR	Indian Council of Agricultural Research
ICDDR,B	International Centre for Diarrhoeal Diseases, Bangladesh
ICMR	Indian Council of Medical Research
ICN	International Conference on Nutrition
IFR	Institute for Food Research
IFS	Institute of Fundamental Studies

IHNDP	Integrated Horticulture and Nutrition Development
ILSI	International Life Sciences Institute
IMPP	Integrated Maize Promotion Project
INFH	Institute of Nutrition and Food Science
INFOODS	International Network of Food Data Systems
INGOs	International Non-governmental organizations
INMU	Institute of Nutrition Mahidol University
MASIAFOODS	Middle Asian Food Data System
MH	Ministry of Health
MoU	Memorandum of understanding
NARA	National Aquatic Research Authority
NDRI	National Dairy Development Board
NEASIAFOODS	North East Asia Food Data System
NFRDC	Nutrition and Food Research and Development Centre
NGF	Nutritional guidelines for Filipinos
NGOs	Non governmental organizations
NIH	National Institute of Health
NIN	National Institute of Nutrition
NNP	National Nutrition Programme
NPAN	National Plan of Action for Nutrition
NPD	National Project Director
PAEC	Pakistan Atomic Energy Commission
PARC	Pakistan Agriculture Research Centre
PCSIR	Pakistan Council for Scientific and Industrial Research
POA	Plan of action
PPAN	Philippines Plan of Action for Nutrition
PRSP	Poverty Reduction Strategy Paper
QA	Quality assurance
QC	Quality control
RDAs	Recommended dietary allowances
RENI	Recommended Energy and Nutrient Intakes
RM	Reference materials
SAARCFOODS	South Asian Association for Regional Cooperation Food Data System
SFCT	SAARC Food Composition Tables
SPC	Secretariat of the Pacific Community
TCP	Technical Cooperation Project
TORs	Terms of reference
TRI	Tea Research Institute
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNU	United Nations University
UTs	Union Territories

WHO	World Health Organization
WFP	World Food Programme
WFS	World Food Summit
WFS: 5yl	World Food Summit: Five Years Later
WTO	World Trade Organization

INTRODUCTION

1. The Asia-Pacific Network for Food and Nutrition (ANFN) held its Regional Expert Consultation on Food Composition Activities in Bangkok, Thailand from 18 to 21 November 2003. The Consultation was attended by 15 experts from ten member countries, namely: Bangladesh, China, India, Indonesia, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand and Viet Nam. The participant from Afghanistan joined one day later as an observer. The National Project Director (NPD) of the UNDP–FAO Project on Integrated Horticulture and Nutrition Development (IHND), Bangladesh participated as a special invitee. The Pacific Islands was represented by the Food and Nutrition Officer FAO SAPA region. The list of the participants is given in Appendix 1.
2. Biplab K. Nandi, Senior Food and Nutrition Officer, FAO–RAP and Secretary, ANFN welcomed the participants, observers and guests. He gave a brief background of the Asia-Pacific Network for Food and Nutrition and informed the Consultation of the rationale for adopting Food Composition Activities as its theme. All the participants, resource persons, observers and guests were requested to introduce themselves.
3. The Consultation elected M.A. Wahed, Head of the Nutritional Biochemistry Department, ICDDR, Bangladesh and Shashi P. Gupta, Technical Adviser, Food and Nutrition Board, India as Chair and Co-Chair of the Consultation, respectively, while Elsa M. Bayani, Executive Director of the National Nutrition Council, Philippines and Yogesh Vaidya, Deputy Director General of the Department of Plant Resources, Nepal were elected as rapporteurs.

Opening of the Consultation

4. On behalf of the Director-General of FAO, Hiroyuki Konuma, Deputy Regional Representative welcomed the participants of the Consultation. As He Changchui,

the Assistant Director-General and Regional Representative (ADG/RR) for Asia and the Pacific, was on duty travel, Mr Konuma opened the Consultation. He congratulated the elected chairs and rapporteurs and expressed appreciation to the ANFN Secretariat for a well thoughtout agenda for the Consultation.

5. He referred to the theme of this year's Consultation "Food Composition Activities" as being appropriate in that food composition activities had been receiving increased attention in recent years as we were faced with newer and expanded uses for food composition data. The importance of food composition data had long been recognized by the United Nations. In fact, when FAO was established 57 years ago, data on food composition immediately began to play a role in the Organization's activities. The early development of the World Food Surveys was linked to such data, and, over the years, FAO's support for agricultural planning and production has relied on knowledge about the nutritional value of foods. Data on food composition had always been crucial when providing assistance to governments in determining the nutritional adequacy of national diets and nutritional status of their people.
6. The FAO Regional Office for Asia and the Pacific had been active in promoting the regional food composition activities as part of its regional programme under the Asia-Pacific Network for Food and Nutrition (ANFN). FAO also worked with regional partners and facilitated several expert consultations for ASEANFOODS, SAARCFOODS and, more recently, with the establishment of NEASIAFOODS.
7. Reliable data on the nutrient composition of foods consumed by people were critical in many areas of food and nutrition applications which were central to the issue of food and nutrition security.
8. Mr Konuma stressed that in the elimination of hunger and undernourishment, sufficient emphasis should be given to the applications of Food Composition Data (FCD) at household and village levels. He expected that the discussions of the

Consultation would lead to clear outputs, work plans and facilitate the preparation of a project for appropriate application of FCD at village level to improve household food and nutrition security.

9. Lastly, he wished everyone a successful and productive Consultation. The full text of ADG He Changchui's address is given in Appendix II.
10. The Consultation adopted the objectives, provisional agenda and the time table (Appendices III and IV) as proposed by Biplab K. Nandi.

II. CONCLUSIONS AND RECOMMENDATIONS FROM THE PAPERS PRESENTED AND DISCUSSED

Agenda Item I: FAO perspective on international and regional food composition activities

11. Biplab K. Nandi presented an overview of food composition activities emphasizing the main agenda items, namely: (i) FAO perspective on the international and regional food composition activities; (ii) review of country status on food composition activities and identification of future actions; (iii) food composition data usage in achieving food and nutrition security in the region; (iv) linking food composition and follow-up activities related to ICN/NPAN/WFS: 5yI; and (v) matters concerning the development of a Regional Technical Cooperation Project (TCP) to promote and implement Food Composition initiatives either at the country or regional level.
12. Food Composition activities fell within Article 1.1 of FAO's Constitution, namely, "The Organization shall collect, analyze, interpret and disseminate information relating to nutrition, food and agriculture". Food composition was also explicit in the ICN and as part of the Strategies and Actions on Food Quality and Safety,

which in Section IV, 9 j, read as “Support and encourage the development and use of local food composition information”.

13. INFOODS was started as a joint FAO/UNU project by UNU in 1983 and had been co-sponsored by FAO since 1994. The FAO/UNU/INFOODS was formalized by a MoU with its Secretariat in Rome in January 1999. INFOODS promoted international cooperation in the acquisition and interchange of quality data on the composition of foods, in forms appropriate to meet the needs of government agencies, nutrition scientists, health and agriculture professionals, policy makers, food producers, processors, retailers and consumers.
14. FAO’s Food Balance Sheets (FBS) also used food composition data. The FBS which analyzed the food situation at the level of individual countries, provided the total food availability estimates by aggregating the food components of all commodities after conversion to nutritive values. Consequently from the nutritive values, the per caput dietary energy, protein and fat supplies were derived to show the trends in energy and nutrient availability and the composition of food supplies.
15. FAO’s collaboration for food composition activities ranged widely in areas related to data generation, facilitating data usage at various levels, technical assistance for food laboratories, standards development through the Codex Alimentarius, expert consultations and technical workshops and publications.
16. The Consultation had planned to give particular emphasis to the coordinators of the Regional Data Centres to describe the regional activities. This was noted to be important since some countries were not represented and since some regions had already initiated regional working groups.
17. An update on the food composition activities in the Pacific Islands was presented by Dirk Schulz, Nutrition Officer FAO, SAPA. In the Pacific Islands, major problems included the limited number of food analysis laboratories and skilled technicians.

Specific concerns relative to food composition activities included trade of agriculture and fishery products, risk from contaminants (specifically heavy metals and pesticides) and cyanogenic glycosides in cassava, chaya and bambooshoots.

18. The Consultation was informed that a TCP project on “Strengthening food analytical capabilities in the Pacific Region” in collaboration with the University of South Pacific as the host institution was in progress. To date, the outputs of the project included: an assessment of the analytical capacity of food laboratories in five participating countries; upgraded analytical capacity for food analysis; development of an appropriate sampling protocol for the Pacific Region; generation of regional data for Pacific Islands Food Composition data; and capacity-building efforts.
19. The project was expected to result in the publication of the second edition of the Pacific Island Food Composition Table and achieve international accreditation of the Institute of Applied Sciences Laboratory. A regional workshop was also being planned to present the results of the project and facilitate a debate on the use of a regional chemical laboratory for the Pacific Region.
20. The Consultation was informed that the FAO sub-regional office conducted a study in Kiribati this year to analyze different cultivars of Pandanus for their carotenoid content with a view towards promotion of vitamin-dense cultivars to address the problem of Vitamin A Deficiency in Kiribati and other Micronesian countries.
21. Mr Schulz presented a WHO funded study on the total mercury content in several types of seafoods, which were commonly consumed in the Fiji Islands. The study which was conducted at the Institute of Applied Science at the University of the South Pacific, found that the total mercury levels in some of the large predatory fish species (marlin and swordfish) exceeded the Codex Alimentarius guideline level of 1 mg/kg. Other types of fish steaks, smaller reef fish, shellfish, canned tuna and mackerel had average levels below the guidelines. If confirmed by further research,

this would have implications for certain health risks, particularly to pregnant women, arising from consuming larger fish species, such as marlin, swordfish, large albacore tuna (canned and fresh) and sailfish.

22. The consultation suggested that it might be useful to make analyses that distinguish inorganic mercury from organic mercury content (rather than measuring total mercury only) in future studies in view of its greater negative effect on human health.
23. It was pointed out that the stage of maturity of a foodstuff as well as the source of the food may have influences on the nutrient content of the food being analyzed and should therefore be taken into account.

Agenda Item 2: Review of status on food composition activities and identification of future actions (regional and country updates)

SAARCFOODS UPDATE: Presented by Jehangir Khalil

24. SAARCFOODS (South Asian Association for Regional Cooperation Food Data System) was established in 1996 as a regional centre of INFOODS. The member countries under SAARCFOODS include Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. The first organizational meeting of SAARCFOODS was held in Peshawar, Pakistan in 1996 with Pakistan as the focal point and Jehangir Khan Khalil as the regional coordinator. This meeting constituted the infrastructure development of SAARCFOODS. Sub committees and Working Groups were organized and regular communication with its member countries has since been in progress. The second meeting was held in Kathmandu, Nepal in 1998. This meeting set the stage for preparation of a detailed framework for future activities as well as finalization of country wise working mechanisms, preparation of draft project proposals on national food composition programmes and activities of technical committees.

25. The main activities of the SAARCFOODS were to : (a) establish strong national food composition (FC) programme in each country of the region, (b) obtain training for personnel in all aspects of food composition, (c) encourage and promote development of national/regional FCT, (d) add other important food components /nutrients for analysis to national/regional food analysis programmes, such as dietary fibre, cholesterol, carotenoids, phytoestrogens, etc., (e) obtain further information on the INFOODS coding and use of CODEX, and (f) motivate governments on prioritizing FC activities and seeking FAO, UNU and INFOODS assistance in the process.
26. Current activities included development of an inventory of scientists/technicians involved in food analysis so as to facilitate the formation of a network of food analytical personnel at national and regional levels.
27. Of the SAARC countries only India and Pakistan had generated their own data while the rest of the countries namely Bangladesh, Nepal and Sri Lanka had compiled FCD mostly from the Indian FCT.
28. The status of FCT activities in Bhutan and Maldives had to be ascertained by the focal point and steps were to be taken to initiate and undertake FC activities in these two countries. The activities in Nepal and Sri Lanka were required to be strengthened on a priority basis.
29. An important task of SAARCFOODS was to identify national level capacity and facilitate development of linkages with other organizations and regional centers and get a regular update of Food Composition Activities in the region. Development of SAARC Food Composition Tables (SFCT) had been planned as a follow up of the SAARCFOODS meeting held in FAO RAP in 2000. The guidelines for the SFCT had been approved by the national coordinators which included letter codes, food groups, the country codes, nutrients to be included, units of expression, tagnames,

etc. Computerization of the SFCT was another activity envisaged. The database had been completed and the tables were available on a CD. These would need to be circulated and disseminated to the country focal points of the region.

30. Training activities on Strengthening Food Composition Activities had also been facilitated for candidates from SAARC region. One official from Nepal attended the Food Composition Course in the Netherlands and four other candidates from Nepal, Bangladesh, and Pakistan undertook a training course in Food Composition at the Institute of Nutrition Mahidol University (INMU), Thailand in 2000. A training programme was scheduled for the region in 2005 in Dhaka as a follow up to the INFOODS meeting held in Washington in June 2003. A special emphasis would be given to Food Composition Training and enhancing laboratory facilities.
31. Despite these accomplishments, SAARCFOODS still had a number of issues and constraints to be addressed. These included: (a) lack of priority to food composition activities at the national level by most SAARC governments, (b) lack of skilled personnel, equipment and chemicals, and (c) problems related to data quality and methodology.
32. Future activities would address the problems mentioned above with a focus on capacity building, upgrading of laboratories, establishment of linkages particularly with industry, reactivation of working groups and generation of food composition database for SAARCFOODS.
33. The Consultation noted concern that there was a need to mainstream FCT activities of resource poor countries like Bhutan and Maldives within the activities of SAARCFOODS. It was suggested that efforts to communicate with these countries should be pursued more vigorously. It was agreed that a time-frame of three months would be sufficient enough to ascertain their willingness and ability to participate in the SAARC Network.

34. Creating awareness on food composition programmes through the focal points was another action envisaged besides strengthening linkages with ASEANFOODS and NEASIAFOODS. In this regard, the Coordinators of SAARCFOODS, ASEANFOODS and NEASIAFOODS met on the last day of the Consultation to review the future course of action.
35. The Consultation noted that there was a need to have FCT print materials since some countries did not have sufficient access to electronic FCD facilities. It was urged that the establishment of SAARFOODS should strengthen and catalyze activities to improve the quality and quantity of food composition data and their appropriate dissemination to the member countries.
36. The Consultation concurred that for most countries, food composition related activities were not priorities of the government. It was therefore recommended that FAO play an advocacy role to help convince governments to allocate funds for this purpose.

Bangladesh: Presented by M.A. Wahed

37. National and international institutes in Bangladesh have carried out several studies on nutrient intake in the past. However, to date, limited information was available on the food composition of specific Bangladeshi foods, and that currently available was derived from food composition tables from other countries, mainly India.
38. It was pointed out that diets in many parts of India differed significantly from those of Bangladesh. The concentration in foods of some of the micronutrients, especially trace elements, was highly dependent on the geochemical environment, soil conditions and cultural practices and, as such, adoption of another country's FCT might not be advisable.

39. Presently, a short food composition list prepared by Helen Keller International was being used in Bangladesh. This was a compilation from other food composition tables including the Indian FCT, with emphasis on Vitamin A rich foods. Institutions that had produced booklets/posters/leaflets on food values (raw basis) included the Institute of Nutrition and Food Science (INFS) Dhaka University, Institute of Public Health Nutrition (IPHN), Bangladesh Applied Nutrition and Human Resource Development Board (BAN-HRDB), Bangladesh Agricultural Research Council (BARC), Dhaka, Bangladesh Rice Research Institute (BRRI), and Home Economics College, Dhaka. An electronic version of FCT titled *Bangla 2000* had been developed in collaboration with Wageningen University, Netherlands.
40. The Consultation was informed that the problems encountered in the implementation of the FCD activities were related to sampling, methodology, quality control and uncertainty. Most of the laboratories in Bangladesh also lacked standard equipment and trained personnel.

India: Presented by Bapu Rao

41. The National Institute of Nutrition (NIN), Hyderabad of the Indian Council Medical Research (ICMR), brought out a comprehensive publication on the nutrient composition of Indian foods more than three decades ago. The publication entitled *Nutritive Value of Indian Foods* had been revised and reprinted from time to time and served as the sole source of data on food composition for academia, research and government organizations dealing with nutrition.
42. The Indian FCT contained the nutritive value of about 600 foods analyzed mainly by the NIN, ICMR. The new edition would additionally include the nutritive values of foods in the northeastern region as well as values of foods rich in carotenoids and dietary fibre.

43. As part of its food composition activities, NIN had undertaken the analysis of foods of tribal areas and special ready-to-eat foods for children. It had also undertaken studies on low cost nutrient supplements for malnourished children developed by Central Food Technological Research Institute (CFTRI) and the National Dairy Development Board (NDRI) to assess the quality of protein and their growth promoting effects.
44. The Food and Nutrition Board (FNB) has developed and widely disseminated recipe books which include low cost nutritious recipes for different regions. Nutritive values of the recipes in terms of energy, protein, iron and calcium per serving or 100 g, are included and this information has reportedly been very useful to the communities in identifying rich sources of various nutrients.
45. Home Science Institutions had developed manuals on basic food preparations and their nutritive values. Drawing upon this information and expertise, the Indian Council of Agricultural Research (ICAR) undertook a multicentric study in 2002 in nine states and developed a manual named *Nutriguide*. The manual served as guide for calculation of dietary adequacy using the nutrient composition of Indian recipes and was being used by dietitians, nutritionists and students of nutrition in Home Science Colleges.
46. As part of multi sectoral collaboration, the Ministries of Health and Agriculture and the Department of Women and Child Development along with laboratories had been closely involved in food composition activities. The Ministry of Environment had also identified species of fruits and vegetables with high beta carotene content and had disseminated the information to their regional centers and research institutions in pursuance of National Nutrition Policy.
47. In order to help the utilization of information on nutritive value of various foods, it was necessary to propagate rich sources of various nutrients through mass media as

well as traditional modes of communication like rallies, street plays, puppet shows, etc.

Nepal: Presented by Yogesh Vaidya

48. Nepal had compiled FCT and produced its first ever FCT named *Nutrient Content of Nepalese Foods* in 1986. This was published by the Nutritional Research and Development Division of Central Food Research Laboratory (CFRL). The tables included data on energy, proximate composition and some selected minerals and vitamins. The revised version published in 1994 provided a supplementary table with a profile of the β carotene content of 107 wild and common vegetables and fruits. In addition, some FCT posters and leaflets had been produced and distributed for use in agricultural extension programmes.
49. Nepal had a few national level laboratories for food analysis activities, including food quality control and standardization, food processing, food composition, crop and plant research. However, these had yet to make a significant contribution to the National Food Composition Programme.
50. There was a strong need to establish a national food composition data centre to promote and coordinate the national food composition programme. Specifically, resources were to be generated for equipment and laboratory upgrading and capacity building in data generation, compilation and dissemination.
51. Future actions recommended were, advocacy on the importance and information on use of food composition data by various stakeholders particularly policy makers; establishment of a network of collaboration and expertise sharing among food laboratories of government, public and private sectors; partnerships with international laboratories for reliable and compatible data generation; standardization of food laboratories for their performance in sampling procedures, analytical methodology and quality assessment; nutrition labelling and monitoring

and evaluation; and promotion, dissemination and appropriate use of food composition data and information, through different extension and communication media.

Pakistan: Presented by Jehangir Khalil

52. Several laboratories were involved in the generation of food composition data in Pakistan and included those of the Pakistan Council for Scientific and Industrial Research (PCSIR), Pakistan Agriculture Research Centre (PARC), Agricultural Universities, Home Economic Colleges, Pakistan Atomic Energy Commission (PAEC) and the National Institute of Health (NIH).
53. The first Pakistani FCT, compiled in 1960 entitled *Nutritive Value of Foodstuffs and Planning of Satisfactory Diets in Pakistan* contained six food groups and 242 food items. Another table on indigenous feedstuffs was added in 1979 with data on proximate composition, mineral content (Ca, P, Na, K, Fe, Cu, Mn, Zn) and digestibility coefficients for 579 foods. The current Pakistan FCT was first published in 1985 with 210 items divided into 13 food groups with data on proximate composition, mineral and vitamin content (Ca, P, Fe, thiamin, riboflavin, niacin, beta carotene, vitamin C), and amino acids. The table was reprinted in 1990 and revised in 2001 to include Zn, iodine, vitamin A and cholesterol content and also the composition of some weaning and supplementary food mixes. In 2000, the Food and Nutrition Department of the College of Home Economics, Karachi compiled 73 records of FCD related research and submitted it to FAO Agricultural Statistical database, AGRIS.
54. The Pakistan FCT was entirely based on analyses carried out in the national laboratories and represented only the edible portion of the foodstuffs as purchased. The FCT despite containing most of the food items commonly used in Pakistan, reportedly did not fulfill the basic requirements of home economists, dietitians and nutritionists.

55. The FCD had shown applications for use in food consumption surveys, school feeding programmes, epidemiological surveys, trade and promotion of foods in interventions for nutrition (micronutrient related) problems and in food security analysis in collaboration with WFP in Pakistan.
56. Future actions recommended were creation of awareness for prioritizing the food composition programme, training, laboratory accreditations; development of photo atlas and food images, library and diet analysis software, new food composition database; development of a manual on sampling and sample handling, computerization of the FCT and web posting; development of reference materials for quality assurance; and setting up a nutrient analysis laboratory with latest equipment and trained manpower to perform all tests required to fulfill World Trade Organization (WTO) requirements.

Sri Lanka: Presented by Chandrani Liyanage

57. In Sri Lanka, FCT were published by UNICEF Colombo in 1979 which was essentially a review of the FCT from NIN, India. No national research centre has yet been established in Sri Lanka where continuing programmes for generating and updating food composition data can be carried out.
58. The institutions directly involved in food analysis and related applications included the Horticulture Research Institute (HRI), Sri Lanka Standards Institute (SLSI), National Aquatic Research Authority (NARA), Ceylon Institute of Scientific and Industrial Research (CSIR) and Institute of Fundamental Studies (IFS), Coconut Research Institute (CRI), Tea Research Institute (TRI), Cooperative Wholesale Establishment Laboratory (CWEL) and Universities. In addition, the Government Analyst Department also analyzes the foods consumed locally for various purposes including food safety.

59. Food testing laboratories in Sri Lanka still used some of the conventional methods and the data gathered were obsolete, needing revision. Poor infrastructure in terms of instruments, personnel and lack of coordination prevented good quality food composition data from being generated. There was no network to collect food composition data from the researchers and technologists involved in food analysis. As there was no systematic sampling protocol, it was difficult to determine if the values of analyses represented regional and national food supplies. Also, regional, seasonal and maturational variations and differences in the foodstuffs have not been taken into consideration.
60. Amino acid and fibre content were some of the data currently being analyzed. Nitrate content of foods and water have also been analyzed where ground water in certain areas was found to have high levels of nitrate. Quality testing of foods and implementation of food and hygiene regulations were handled by four main chemical laboratories and one microbiological laboratory operating through the Health System in the country.
61. A national committee that included nutritionists, other food composition users and food analysts was formed in 2000 to initiate food composition activities. Initiatives under the National Plan of Action for Nutrition (NPAN) have also been underway to formulate policies and strategies for improved nutrition and household food security. Consequently, the policy making committee has been informed that generation and compilation of Food Composition data would need to be given priority as FCT were not yet available in the country.
62. Future actions recommended were prioritizing activities on food composition, providing suitable laboratory facilities, training for analysts in sampling techniques and improved methods of analysis, financial allocations for chemicals and establishing networks between and among analytical and data laboratories with the national centre for food composition activities.

NEASIAFOODS UPDATE: Presented by Yue –Xin Yang

63. NEASIAFOODS (North East Asia Food Data System) another Regional Database Centre of INFOODS had been established in 2002 from its forerunner MASIAFOODS (Middle Asian Food Data System) established in 1995. The MASIAFOODS was reorganized in 2002 and renamed into NEASIAFOODS. It included four participating countries, namely: China, Japan, Korea and Mongolia besides three other locations such as Macau, Hong Kong and Taiwan. The official Coordinator for NEASIAFOODS was the Institute of Nutrition and Food Safety of the Chinese Centre for Disease Control and Prevention, Beijing.
64. NEASIAFODOS consisted of two groups of countries which had been classified on the basis of the food composition activities being carried out. Group I included China, Hong Kong and Korea which deal with matters related to terminology, nomenclature and data compilation. Group II included Taiwan, Mongolia, Macao and Japan and dealt with the analytical methods and quality control systems.
65. NEASIAFOODS activities included: (a) review of food composition data of three participating countries (Japan, China and Korea) for energy, protein, carbohydrate and fat; (b) calculation and comparison of intra-and intercountry differences in nutrient values; (c) conduct of Expert Consultations for data and nutrient description; (d) collection of analytical methodologies for energy, protein, fat and carbohydrate; and (e) Conduct of NEASIAFOODS meetings. As part of its training activities, in 2003 two officials attended the Food Composition Training Course in the Netherlands.
66. The first meeting of MASIAFOODS was held in 1995 as an Establishment Meeting. The second one was held in December 2002 to revise the name to NEASIAFOODS and the third meeting of NEASIAFOODS was planned for May 2004 in Korea. The main objectives of the upcoming meeting were to strengthen FCD activities in member countries, improve the exchange of information on FCD

and strengthen cooperation and improve coordination among countries in undertaking FCD activities and to discuss how to use FCT for nutrition surveys and for promoting nutrition education.

67. The Consultation noted that some of the problems facing NEASIAFOODS were: (a) lack of priority given by governments to FC activities; (b) lack of knowledge about food and nutrient description; (c) analytical methods of nutrient analysis and new concepts; (d) lack of knowledge on compilation of FCD; (e) lack of funds to promote the activities for FCD; and (f) lack of FCD in some member countries, such as Mongolia. Sensitization of governments was urgently required in this regard. Future actions included training programmes on data description and nutrient analysis and web site development.

China: Presented by Yue –Xin Yang

68. In China FC activities started in 1952 at the Institute of Nutrition and Food Safety, China. CCDCP was the central laboratory for Chinese FCD generation, compilation and dissemination. Since 1952 six editions of FCT have been published by INFS. Several studies on Food Analysis and Food Evaluation have also been completed through the support of the Chinese Government and FAO. The currently available information on FCD has derived data not only from China but also from Singapore, the United States of America and other countries.
69. The latest edition of the Chinese FCT that was published in 2002 had data analyzed with new and improved methods. The data were more accurate for nutritional researchers and comprehensive for public users in China. The foods analyzed were representative of 18 provinces, autonomous regions and municipalities and cover most areas of the country. The foods were grouped into 21 major categories and included 31 nutrients in 1507 foods, 18 amino acids in 657 foods, 32 fatty acids in 441 foods, and data for folate, iodine, isoflavone and glycemic index of some foods.

70. The edition also included the analytical methods as well as 280 photos of the foods. This directly linked the food with its name to avoid misunderstanding by users and the marked weight in grams of the food in some photos helped to evaluate food consumption. Two electronic publications were set up in cooperation with FeiHua Company since 2000. The website is www.fh.21.com.cn
71. FCT in China had been widely used for research, nutrition surveillance, industry and education. In the year 2000, the DRIs and FBDGs based on FCD were developed by the Chinese Nutrition Society.
72. Future actions included improvement of the quality and quantity of FCD in China and capacity building on nutrient analytical methods and equipment. It also intended to make progress in regional food composition database and contribute to the development of NEASIAFOODS under the support and direction of FAO and INFOODS.

ASEANFOODS: presented by Prapasri Puwastien

73. ASEANFOODS (Association of South-East Asian Networks of Food Data Systems) was established in 1986 as the Regional Centre of INFOODS with member countries comprising Indonesia, Malaysia, the Philippines, Singapore, Thailand and Brunei Darussalam. Viet Nam joined the network in 1996. In 2001 ASEANFOODS welcomed three new member countries: Cambodia, Lao PDR and Myanmar. So far the focal points in the new member countries could not be identified and efforts to identify these are in progress in collaboration with FAO. In order to coordinate the activities of the member countries, INMU was appointed as the Network's Regional Centre in 1996 with Prapasri Puwastien as the Coordinator.
74. The main objective of ASEANFOODS was to organize activities to strengthen the development of national and regional food composition data with high quality and adequate quantity besides accessibility of those to the users. With the support and

collaboration of international organizations, namely, FAO, UNU, INFOODS and OCEANIAFOODS as well as national organizations including INMU, various activities have been carried out from 1986 to date. The activities undertaken during 2000 to date have been presented at the Consultation.

75. The Consultation was appraised of the ASEANFOODS, accomplishments which included the development of the first ASEAN FCT in 2000 and the organization of the first international course in Asia known as “FoodComp-Asia 2002” with the support of FAO and ILSI. Major activities to strengthen laboratory performance have included (1) development of food reference materials (RMs) with consensus values of components; (2) two rounds of laboratory performance studies, (3) a questionnaire survey among laboratories in ASEAN that dealt with existing analytical control system, use of reference materials, their participation in the proficiency study and problems encountered and requirements. The document on ASEAN Manual for Food Analysis Methodology was under preparation.
76. Future activities of ASEANFOODS included preparation of the ASEAN FCT as an electronic database with food illustrations, updating the FCT by 2007, organization of the second FoodComp-Asia Course in 2006, and follow-up of the development of the RMs and laboratory performance studies and ASEANFOODS web. An ASEANFOODS meeting will be held in 2005. The activities for revising, documenting and dissemination of the ASEAN FCD would be carried out during 2005–2010. The web site is: <http://www.inmu.mahidol.ac.th/aseanfoods>

Indonesia: Presented by Komari Kartopawiro

77. FCT for Indonesia had been published and circulated for almost four decades. However, the updated FCT containing analyzed data was published by the Directorate of Community Nutrition, Ministry of Health. Integrated efforts have produced food composition tables published in 2001, which cover a wide range of

foods from 12 provinces in Indonesia. Pictures of specific foods from the provinces were also presented.

78. Indonesian FCT included data on proximate analyses, vitamins, minerals, cholesterol, and fatty and amino acids. Collaborating institutions in this effort included the Department of Community Nutrition and Family Resources; and Department of Food Technology and Nutrition of the Bogor Agricultural University and Research and Development Centre for Agricultural Product Industry of the Department of Industry.
79. Since data on food composition were very important for use of academicians, research and food industry and policy makers, activities related to establishing the database and disseminating them to various sectors had been initiated. Food composition data were also being widely applied in the formulation of recommended dietary guidelines and in research and policy formulation for industry and agriculture fields.

Philippines: Presented by Elsa Bayani

80. The FCT for the Philippines were consistent with INFOODS' guidelines on the generation and compilation of food composition data. It had also disseminated and raised awareness on the FCT through development of an FCT User's Guide, CD and hard copies of FCT including software for menu evaluation. A symposium on the Recommended Energy and Nutrient Intakes (RENI) which encourages the use of the FCT had also been conducted.
81. Other relevant activities that supported the regional and global food composition activities included capacity building for (a) development of ASEANFOODS Manual for Food Analysis; (b) preparation of reference materials which is a requirement of the CODEX, and (c) organization of proficiency test rounds.

82. Constraints to the further development and use of the Philippine FCT included: (a) a limited budget for food composition data generation activities. Specifically, this was important in view of the need for food composition data generation on food groups related to diet-related degenerative diseases, newer varieties of plants and animals produced through bioengineering and changing the composition of foods due to variations in the environment and methods of sample collection; (b) new and improved methods and more sophisticated equipment for analysis; (c) lack of proper understanding on the use of FCT resulting in either misuse of FCT data, wrong policy decisions or inappropriate design of nutrition information campaigns and advertising campaigns; and (e) need for advertising campaigns.
83. Future actions recommended were: (a) resource/fund generation and advocacy with legislators and other stakeholders to emphasize the importance of FCT in relation to food and nutrition security goal; (b) forging of agreement between the government and the food industry; (c) capacity building on modern methods and equipment for nutrient analysis to complement and improve the limited food composition data generated by stakeholders for its wider usage; (d) technical assistance to government and commercial laboratories to fast track ISO accreditation and generation of quality data. For users of FCT, more orientation was required for which a User's Instruction Guide should be developed and disseminated to ensure its proper use.

Thailand: Presented by Prapasri Puwastein

84. THAIFOODS or the Thailand Network of food data systems was established at the same time as ASEANFOODS in 1986. It was a network of seven institutes with the Institute of Nutrition, Mahidol University (INMU) acting as the coordinator. Its purpose was to organize activities that strengthened the development of food composition databases with high quality to serve the needs of the Thai users and support ASEANFOODS activities.

85. The Consultation was updated on the activities undertaken from 1999 to date which included establishment of the Thai food composition database and strengthening the performance of laboratories similar to that of ASEANFOODS.
86. In 1999, the first English version of Thai Food Composition Tables was published. It contained analyzed data of 16 food groups with 1050 food items covering 24 nutrients. The tables were divided into two sections: Section 1 included fresh and processed foods with data for 21 nutrients while Section 2 gave additional analyzed data for total fat, saturated fat, cholesterol and sugar of many food groups.
87. Future activities included updating the Thai FCTs by 2006, continuation of work on RMs and laboratory performance, and conduct of training courses, workshops and technical meetings, among others.

Viet Nam: Presented by Le Danh Tuyen

88. The first FCT compiled in 1944 included the chemical composition of foods in Indochina which featured foods most commonly eaten in Viet Nam, Lao PDR and Cambodia. These were revised in 1964 and 1972. For the last three decades, the tables have been used by the Ministry of Agriculture and Food Industry for statistical purposes. The Ministry of Health used FCT in nutritional surveys and for calculations on dietary allowances of the Vietnamese populations and its armed forces.
89. An updated edition of the FCT included analytical results of the Food Science and Food Safety Laboratory for proximate content, minerals and some water and soluble lipids. The data on amino acids and fatty acids have been derived from other sources.
90. In 2001, revised FCTs were compiled which included a total of 725 food items, most commonly eaten in northern and southern Viet Nam. This provides

information on the content of protein, lipid, glucose, vitamins A, B1 and B2 and minerals P, Ca and Fe. Energy is expressed in both kilocalories and kilojoules.

91. Future actions included development of a database on food composition of Vietnamese foods. In addition to fulfilling users' needs, harmonization and interchange with regional and international databases were required. More research was needed to revise and update the Vietnamese FCT.
92. Based on the Country presentations the Consultation provided the following recommendations for strengthening food composition activities.

Recommendations on FCD for Country Action

1. Develop/adopt good laboratory practices (GLP) for evaluation of quality of borrowed /calculated/analysed data based on following set of criteria:
 - (a) Borrowed /calculated data would depend upon:
 - Factors such as similarity of foods (variety, geographical and seasonality factors)
 - Data sources and their quality
 - Data calculation
 - (b) Analyzed data would depend upon:
 - Number of samples
 - Sampling method
 - Analytical method
 - Quality control system
 - Adaptation of INFOODS guidelines for expressing menus
2. Develop an inventory/directory of experts in food composition and nutrient analysis as well as the government and private institutions engaged in related analyses.
3. Undertake appropriate advocacy initiatives to raise awareness on the importance of food composition activities.

4. Establish linkages between and among governments, private food industries and nutrient analysis laboratories, particularly in areas of data generation, compilation and dissemination.
5. Undertake/participate in capacity building programmes/activities on data generation and compilation.
6. Strengthen linkages with appropriate food composition data systems networks such as ASEANFOODS, SAARCFOODS, and NEASIAFOODS to promote South-South Co-operation.
7. Develop partnerships between and amongst focal persons/institutions, food composition experts, active FCD users and ANFN representatives to have continuous dialogue and follow up of recommendations
8. Initiate cost-effective social marketing activities (e.g. through schools, mothers/caregivers, seminars/orientation/classes, etc.) for wider dissemination and usage of FCD.
9. Develop user-friendly information, education and communication (IEC) materials.
10. Develop suitable project proposals for strengthening of FCD activities.
11. Explore possible collaboration with potential funding agencies in support of FC activities.
12. Actively lobby for the adoption of the slogan/theme “you have the right to know what you eat” as a national and international theme.

Recommendations on FCD for FAO Action

1. Provide technical assistance to national focal points /institutions for promoting and strengthening FC activities.
2. Support country efforts in upgrading technical capability as well as laboratory facilities for generation, compilation and dissemination of FCD.

3. Promote sharing/exchange of FCD expertise and other resources between and among member countries of ASEANFOODS, NEASIAFOODS, SAARCFOODS, and INFOODS.
 4. Organize/support national/regional/international meetings on timely and relevant themes that relate to Food Composition activities and data usage.
 5. Raise awareness on food composition activities and applications within governments as well as international organisations such as World Food Programme (WFP), World Health Organization (WHO), United Nations Children's Fund (UNICEF), United Nations University (UNU), International Atomic Energy Agency (IAEA) and various bilateral agencies.
93. As indicated earlier, the joint effort of FAO/INFOODS or the International Network of Food Data Systems had led to the establishment of regional centres and provision of technical support for food composition data generation and dissemination. Three of the Regional Centres from the Asia Pacific Region that were represented at the Expert Consultation were SAARCFOODS, NEASIAFOODS and ASEANFOODS. The Consultation therefore deliberated on the activities of the Regional Centres and, in particular, agreed to give a focus to SAARCFOODS at the Consultation.
94. Based on the Regional Updates, the Consultation provided the following recommendations for the Coordinating Bodies for collaboration with FAO.

Recommendations for Regional Coordinating Bodies: Collaboration with FAO

- Given the importance of food composition information in agriculture, trade and health which finally aims at achieving food security, FAO can sensitize the national governments in the region on appreciating food composition programmes and providing support to such programmes. The focal points of the Regional Coordinating Bodies need to play a more proactive role in this context.

- Technical assistance to be given by FAO to enhance capacity building and facilitate hands-on-training programmes and study visits for food analysts in the region.
- Technical support to be given by FAO for organizing Meetings of Coordinating Bodies, namely SAARCFOODS, ASEANFOODS and NEASIAFOODS.
- Strengthen implementation of Food Composition activities for promoting usage at various levels. In this regard, FAO can facilitate the production of user-friendly materials/publications such as brochures, booklets for dissemination and wider usage.

Agenda item 3: Food composition data usage in achieving food and nutrition security in the region

Working Group Sessions

95. The participants were grouped into three Working Groups (WG). The topics for the three WG were :
 - Improving quality and quantity of food composition;
 - Use of food composition data for nutrition education;
 - Outlining a TCP proposal on Food Composition Activities.
96. WG I consisted of representatives from Bangladesh, India, Indonesia, Nepal and Thailand; WG II consisted of representatives from Bangladesh, India, the Philippines, and Viet Nam and WG III included the Coordinators of SAARCFOODS, NEASIAFOODS and ASEANFOODS together with representatives from Thailand and Sri Lanka. The terms of reference and names of group participants and the corresponding outputs of the WG are given in Appendices V, VI and VII.

97. WG I proposed criteria for improving quality and quantity of food composition data as calculated or analyzed values data. In case of calculated data, the aspects highlighted were similarity in terms of variety, geographical location and seasonality, data sources and their original quality and data calculation.
98. The group emphasized that the needs/requirements for improving the quality of FCD were instruction guidelines, training in quality control systems and a food composition course that would address needs and gaps in data generation, data compilation and data use.
99. WG II highlighted the current status of FCT usage, its applications through FBDGs, country update on dissemination of FCT and outlined implementation strategies for effective and efficient dissemination of FCTs for the consumers.
100. A matrix on the status of FCT Development and Dissemination was developed by WG II (Appendix VIII). It was noted that while most countries have developed FCT, their dissemination for use at consumer and community levels was not adequate.
101. It was felt that advocacy for policy makers on the importance of FCT with a clear understanding of recommended dietary allowances and nutrition goals in keeping with ICN, WFS, NNP, NPAN, MDGs and FIVIMS follow up actions were essential. It was likewise agreed that advocacy efforts were to be undertaken on a priority basis in this regard.
102. WG III reviewed the possibilities and provided an outline for developing a TCP project where it aimed to find ways to strengthen national level FC activities and facilitate the organization, coordination and dissemination of a regional FC database.

103. A Technical Assistance Project could be initiated at the country level as for example in Bangladesh where funds could be requested from the government. In such cases, FAO RAP could consider providing technical assistance and other donors could also be explored for necessary collaboration.
104. The rationale for a TCP on FC included country/region specific concerns such as a high demand for FC data, weaknesses in FC activities or absence of FCT activities in some countries (e.g. Bhutan, Maldives). FC data were required for calculations of nutrients in national food balance sheets, food consumption surveys, dietary assessment, nutrition labeling, and trade facilitation and to ensure the protection of consumers through safe food.
105. As regards technical know-how, skills and attitude it was noted that the data generation process needed strengthening (with regard to reference materials, proficiency tests and QA that lead to accreditation). Other areas included improved laboratory skills (methodology).
106. As regards data dissemination, it was emphasized that this must be target group-oriented and tailored towards specific groups such as FC professionals, decision makers, the public, industry, etc.
107. The institutional framework/arrangements would need to be determined in accordance with the participating countries. It was proposed that whenever possible, accredited laboratories in the region could act as host institutions.
108. It was proposed to have a core group of coordinators to formulate a TCP project. The three Regional Coordinators expressed their willingness to act as core members to develop and submit a TCP project shortly.

**Agenda item 4: Implementation of follow-up activities related to
ICN/NPAN/WFS: 5yl**

Bangladesh: Presented by Mirza Altaf Hossain

109. A total of 13 Ministries have been involved in the implementation of follow-up actions relative to ICN and WFS: 5yl. It was highlighted that though the country has attained self-sufficiency in cereals, the production of other vital food commodities such as fats and oils, pulses, vegetables, fruits, milk and milk products, fish and meat continued to be far below the RDA. To narrow the gap, the government had taken initiatives to boost the production of oilseeds, potato, maize, pulses, fish and livestock.
110. One of the most important follow-up activities was the formulation and approval of the National Agricultural Policy. The Ministry of Agriculture (MOA) has developed the plan of action (POA) in accordance with the National Agricultural Policy with technical support from FAO. In this regard, a five year UNDP-FAO-GoB project called Integrated Horticulture and Nutrition Development (IHNDP) was in implementation and was covering fifteen districts in the country.
111. Other projects included Brenda Multipurpose Development Authority (BMDA), strengthening of the Seed Wing of Bangladesh Agricultural Development Corporation (BADC), Hortex Foundation, strengthening of Agricultural Information Systems (AIS), Integrated Maize Promotion Project (IMPP), Soil Resources Management and Analytical Service Project, Soho Gudan Rin Prokolpo (SAGURIP) or Crop Storage Project, high yielding varieties (HYV) seed production and technology transfer project and the National Nutrition Programme (NNP).

China: Presented by Xue Xin Yang

112. The Consultation was informed that the economic situation in China had improved over the recent years, and correspondingly, the Engel Index had decreased from 67 to 54 percent over the period 1978 to 1995. The National Plan for Food and Nutrition for the period 2001-2010 issued in 2000 had goals of food intake per person per year as well as daily nutritional goals for energy, protein and fat.
113. School Nutrition Promotion Programmes were being implemented at national and provincial levels and a Soya Bean Promotion Plan was being undertaken to increase protein intake and reduce malnutrition.
114. Food Based Dietary Guidelines (FBDGs) and Dietary Reference Intake (DRIs) have been published by the Chinese Nutrition Society in 2000. National Nutritional Surveillance has also been carried out during 2000–2002. Prevention and control programmes for the prevention and control of micro nutrient deficiencies including dietary improvement, fortification (fortification with iron and vitamin A of flour, oil and sauce) and supplementation programmes, promotion and protection of breast feeding programmes as well as better care of children were in operation.

India: Presented by Shashi P. Gupta

115. The Food and Nutrition Board under the Department of Women and Child Development was the focal point for ICN in India. It had undertaken a series of actions in pursuance of the National Nutrition Policy.
116. Disaggregated data on the nutrition situation had been generated for 187 districts of 18 States/UTs which was consolidated and presented in the India Nutrition Profile, 1998. Nutrition Surveillance projects were being taken up in five States and efforts for universalizing nutrition monitoring and surveillance through the ICDS infrastructure were in progress.

117. Horticultural interventions for nutrition improvement were in operation in consonance with the IX and X Five Year Plans. Likewise, examples of some schemes being implemented to ensure food security included the Targeted Public Distribution System, for families below poverty line, Antodaya Anna Yojana for poorest of the poor, Mid-day Meal scheme for primary school children and Annapurna Scheme for poor senior citizens.
118. Nutrition advocacy, sensitization and awareness generation have been stepped up. Development, production and dissemination of print materials in local languages, radio sponsored programmes on “Nutrition and Health” and 27 video films on various nutrition topics under the series “Nutrition and National Development” were some of the important activities. States had also taken initiatives in nutrition training of self-help women groups, development of State Nutrition Policy and State Plan of Action on Nutrition.
119. The National Nutrition Mission had been set up under the chairpersonship of the Prime Minister in July 2003. The process of reviewing the achievements under the National Nutrition Policy and the National Plan of Action on Nutrition was underway.

Indonesia: Presented by Komari Kartopaviro

120. The consultation was informed that there were ten programmes currently being implemented as a follow-up to ICN/NPAN/WFS. These included development of institutional capacity building which focuses on training of trainees in relation to decentralization of the food and nutrition programme; development of food and nutrition workers addressing formal and nonformal education on food and nutrition; improvement of food security by the Institute of Food Security under Ministry of Agriculture; food and nutrition surveillance system; the prevention and elimination of under nutrition through food supplements for children under three years of age

and through fortification of wheat flour with iron, zinc, vitamin B1, B2 and folic acid, as well as iodine in salt.

121. Furthermore, Indonesia was carrying out nutrition education utilizing food guidelines, programmes on education for institutional food services and was implementing food quality and safety programmes by the Ministries of Health, Agriculture and Drug and Food Administration and Universities.

Nepal: Presented by Yogesh Vaidya

122. The National Plan of Action for Nutrition (NPAN) of Nepal was adopted by the government in 1998 and was incorporated in the national plans from Eighth Plan onwards. The present Tenth Plan (2002/2003-2006-2007) included nutrition policies as one of the major components under Social Services.

123. In the agriculture, health, education and local development sectors, nutrition had become the focus of the annual programmes. Several NGOs/INGOs had contributed to the improvement of the nutritional well-being of the people living in different socio-economic and geographic conditions.

Pakistan: Presented by J. Khalil

124. The government of Pakistan had instituted a number of activities in support of the WFS to eliminate hunger and food insecurity at the household level. The agriculture, health and nutrition perspective plan for 2011 included actions on enhancing food production including that of animal and poultry production.
125. The Poverty Reduction Strategy Paper (PRSP) had put strong emphasis on programmes relating to social actions (education, health, infra-structure development, etc.), income generation and eradication of micronutrient deficiencies.

126. Other programmes included school feeding, Agricultural Linkages Programme (ALP) and IDA eradication programmes, salt iodization, vitamin A supplementation, nutrition education, population planning, school feeding Programme, UNICEF Initiative on Child Health and the WFP Initiative on Education of Girl Child and WFP Food Security Analysis. Various UN agencies in Pakistan had also formed a thematic group on Food Security to strengthen local institutions and producers for improving household food security through integrated production, supported by nutrition education and poverty alleviation programmes.

Philippines: Presented by Elsa Bayani

127. The Philippines, through the Philippine Plan of Action for Nutrition (PPAN), continued to sustain its gains related to its commitments to the ICN, WFS and WFS: 5y1 through its various programmes.

128. The 2003 Nutrition Month celebration focused on the promotion of breastfeeding by having a theme “*Kabataan Palusugin, Isulong ang Breastfeeding*” or “Nourish the Youth, Promote Breastfeeding”, which has been in keeping with the message #2 in Guidelines for Filipinos (NGF).

129. For sustainability efforts on preventing and controlling specific micronutrient deficiencies, national food fortification programmes were being pursued as a long-term measure. Prior to its dateline for mandating food fortification in November 2004, enabling mechanisms including monitoring systems and incentive packages were being put in place to encourage active participation of the food industry.

130. The PPAN continued forging collective efforts in pursuance of its package of programmes and strategies known as “Action for Nutrition Improvement (ANI) Programme” to control and prevent protein energy malnutrition in the country to

address the Millennium Development Goal of reducing by half the undernourished 0-5 year old children by year 2015.

Pacific Islands: Presented by Dirk Schulz

131. Most NPANs in the Pacific Island Countries were developed in the mid to late 1990s but these have not been reviewed since. It was noted that although the plans were multisectoral, the implementation was often limited to the health/nutrition sector. A major limitation was the lack of monitoring of progress in almost all countries.
132. The Consultation was informed that based on the experience of on FAO/WHO workshop on the Development and Implementation of Intersectoral Food and Nutrition Action Plans and Policies, held in Capetown, South Africa in February 2003, the Secretariat of the Pacific Community (SPC) was collaborating with WHO and FAO in implementing a JICA funded Workshop for Policy Makers on NPANs. The initial workshop will be held in November 2004 involving Fiji, Palau, Kiribati, Tonga and American Samoa. It was planned that a follow-up visit to each of the countries would be conducted by one of the course facilitators within six months of the workshop.

Sri Lanka: Presented by Chandrani Liyanage

133. The National Plan of Action for Nutrition was prepared in 2002 and the Nutrition policy in the country was being updated. FBDGs had also been prepared in 2003. After the previous policy had been put in place, Sri Lanka had shown improvement in the health and related status indicators especially in the vulnerable groups.
134. Various health care programmes, maternal and child health programmes, supplementation for pregnant and lactating mothers, school feeding programmes, agricultural, nutrition education and nutritional fortification, including iodination of

salt and legislation for sale of only iodized salt were some of the strategies in operation. National level initiatives included food subsidies through Janasaviya and Samrudhi Programmes while NGOs like Sarvodaya, Reedbana, etc. were implementing feeding programmes along with nutrition education.

Thailand: Presented by Songsak Srianujata

135. Since the ICN, WFS in 1996 and WFS: 5yl , Thailand had achieved several goals in the area of nutrition. The prevalence of low birth weight was below 10 percent, underweight in children under five years had reduced; IDA in school children was below 10 percent and the prevalence of goitre in school children was reduced from 4.3 to 2 percent in 2001. The emerging problem of overweight had been recognized and preventive measures were accordingly being implemented.
136. Consistent with WFS action plans, the participation of people in environmental conservation and the agricultural development plan has been fostered. Poverty reduction projects such as the Debt Moratorium Project, One Village One Product Project, and People's Bank Programme are being implemented. Establishment of National FIVIMS Project and National Food Safety Project, the application of international standards and quality control systems such as Hazard Analysis Critical Point (HACCP), Good Manufacturing Practices (GMP) and Good Agricultural Practices (GAP) for food safety, the implementation of Public Health Assurance Project and Food and Nutrition programmes were some of the measures being undertaken.
137. Actions for promoting sustainable agriculture such as organic and integrated farming, agroforestry farming, enhanced research and technology transfer through both local wisdom and new technology by establishing Agricultural Technology Transfer Centres at sub-district levels, designation of agro-economic zones for cash crops, and development of water resource and irrigation systems included some of

the examples. The setting-up of a Committee on food security to monitor the implementation of action plans was in progress.

Viet Nam: Presented by Le Danh Tuyen

138. Viet Nam aimed to ensure significant improvement in the nutritional status of the Vietnamese people by 2010. Specific objectives and supporting indicators and strategic action plans were developed and were expected to achieve elimination of PEM as well as micronutrient malnutrition.
139. Like other developing Asian countries, Viet Nam was faced with diet related chronic diseases and these were being addressed through appropriate preventive approaches. Epidemiological research in nutrition in transition, strategic action as well as nutrition education had been reinforced within the framework of National Nutrition Strategy 2001-2010.
140. The Consultation recognized that most countries face problems in the implementation of projects/programmes due to political instability which result in change in policies, bureaucratic procedures/problems, lack of resources, natural or man-made calamities, etc.
141. The Consultation also noted that many countries had been implementing community based nutrition programmes using innovative strategies for programme funding as for example tax incentives that finance literacy programmes, income generation schemes and better health care.
142. Based on the country presentations and discussions under agenda item 4, the Consultation proposed the following recommendations:

Recommendations for ICN/WFS: 5yl/FIVIMS follow-up actions

Country level action

- Continue advocacy and sensitization of policy makers and implementers on ICN and WFS commitments.
- Disseminate widely the information on the progress made as a result of follow-up actions.
- Continue support towards operationalization of FIVIMS related activities.
- Document success stories and share innovative strategies used in implementing food based, community centred nutrition programmes.
- Work for allocation of budget for NPAN activities.
- Pursue intersectoral and multisectoral collaboration to strengthen the linkages between agriculture, nutrition and health through the creation of intersectoral coordinating committees.

For FAO Action

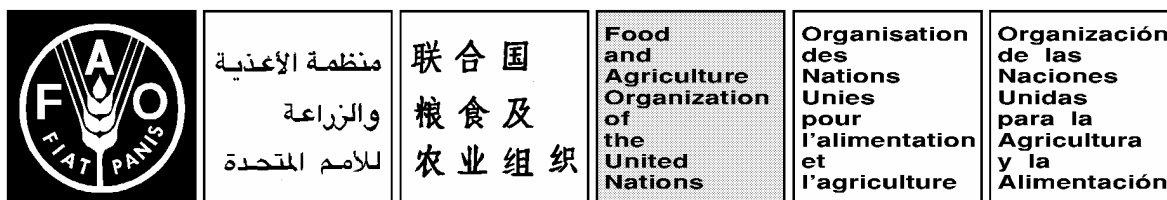
- Support national and regional activities that will strengthen and sustain ICN, NPAN and WFS: 5yl follow up efforts and actions.
- Assist member countries in generating resources for NPAN related activities.
- Promote exchange /sharing of cost effective strategies for nutrition improvement.

Agenda item 5: Special item - Food composition and usage of horticultural crops for better nutrition in IHNDP: a case study. Presented by A.K. Rashid Uddin Ahmed

143. The Consultation noted that Integrated Horticulture and Nutrition Development Project (IHNDP) covered over 33 000 farmers in resource poor villages of 15 districts in Bangladesh. The project had been promoting the production and

consumption of horticultural crops (vegetables, fruits and spices) for better nutrition.

144. A two way approach that included (a) maximization of horticulture production with improved technologies and (b) enhancing consumption through an innovative nutrition education programme was being implemented. Capacity building through training and transfer of technology using demonstrations had been widely undertaken.
145. The on-going project showed promise in enhancing the dietary consumption and diversity of the diets of rural farmers in the project areas. The Consultation recognized and strongly urged that while the project was showing signs of progress in creating nutrition awareness among the project households, it would be necessary to consider the use of specific nutrition indicators to see the impact of change.



Appendix I

LIST OF PARTICIPANTS

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**REGIONAL EXPERT CONSULTATION OF THE ASIA PACIFIC NETWORK
FOR FOOD AND NUTRITION ON FOOD COMPOSITION ACTIVITIES**

FAO REGIONAL OFFICE FOR ASIA AND THE PACIFIC

18 to 21 October 2003

OPENING ADDRESS

by

He Changchui

Assistant Director-General

and

FAO Regional Representative for Asia and the Pacific

Distinguished participants,
Colleagues from FAO,
Ladies and gentlemen,

It is indeed a pleasure for me to address this important meeting of the Regional Expert Consultation of the Asia Pacific Network for Food and Nutrition on Food Composition Activities. I would like to welcome all of you, on behalf of FAO Director-General Jacques Diouf and on my own behalf, to this meeting at the FAO Regional Office for Asia and the Pacific.

Since the UN Conferences of the 1990s, in particular the International Conference on Nutrition (ICN) in 1992 and the World Food Summit (WFS) in 1996 and the WFS: fyl in 2002, governments have affirmed their commitment to achieving food security for all and the immediate goal of halving the number of undernourished people by 2015. This has been further reiterated in the Millennium Development Goals.

The theme of this year's Consultation is "Food Composition Activities". Food composition activities have been receiving increasing attention in recent years as we are faced with newer and expanded uses for food composition data. The importance of food composition data has long been recognized by the United Nations. In fact, when FAO was established 57 years ago, data on food composition immediately began to play a role in the Organization's activities. The early development of the World Food Surveys was linked to such data, and, over the years, FAO's support for agricultural planning and production has relied on knowledge about the nutritional value of foods. Moreover, data

on food composition has always been crucial when providing assistance to governments that are determining the nutritional adequacy of national diets and nutritional status of their people.

In recognition of the need for renewed and collaborative food composition work, FAO and the United Nations University (UNU) have established a close working relationship. The International Network of Food Data Systems (INFOODS) was established in 1984 on the basis of the recommendations of an international group convened under the auspices of the UNU with the goal of stimulating and coordinating efforts to improve the quality and availability of food analysis data worldwide and to ensure that anyone anywhere would be able to obtain adequate and reliable food composition data. From its inception, INFOODS has recognized FAO's early development and contribution to the dissemination of regional food composition tables.

FAO has been committed to improving the quality and availability of food composition data and, in particular, enhancing its applications for promoting food security and nutrition. Along with UNU, FAO has been involved in promotion of the INFOODS project.

The FAO Regional Office for Asia and the Pacific has been active in promoting the regional food composition activities as part of its regional programme under the Asia Pacific Network for Food and Nutrition (ANFN). FAO also works with regional partners and has facilitated several expert consultations for ASEAN FOODS, SAARC FOODS and more recently with the establishment of NEASIAFOODS. It is gratifying that this regional expert consultation of the ANFN on food composition activities is a part of this effort.

Reliable data on the nutrient composition of foods consumed by people are critical in many areas, namely diet and nutritional assessment, the formulation of appropriate institutional and therapeutic diets, nutrition education, food and nutrition training, epidemiological research on relationships between diet and disease, plant breeding, nutrition labeling, food regulations, consumer protection and agriculture, as well as for a variety of applications in trade, research, development and assistance. These applications are also central to the issue of food and nutrition security which is concerned with the availability and accessibility to food in both the quantities and qualities required to support an active, productive and healthy life. This requires that consideration be given to examination of the nutrient composition of foods, diets and commodities.

Your task at this consultation will provide FAO and its member countries with an update of the food composition activities in the region, develop strategies for enhancing the quality and quantity of food composition data and provide guidance towards the development of better methodologies and procedures for food composition. You will also be examining the usage of food composition data in a wide range of areas such as evaluating diets and food preparations, including considerations of its use in trade, preservation of agro-biodiversity, and risk reduction for chronic diet related diseases.

Countries need more detailed information about the nutrient composition and the nutritional value of foods, and this has led to enhanced legislation regarding nutrition information on foods. Food manufacturers are attempting to respond to this need by seeking new formulations of foods in consonance with current health and nutrition recommendations, which require updated information on the composition of foods and their ingredients. Moreover, the global nature of food processing and the expansion of food trade have increased the likelihood of greater food trade across international borders. This necessitates the need for nutrition labeling and regulation related to food trade and exchange. Accurate data are also needed to show the links between food and nutritional status and to design interventions, meet regulatory standards, appropriately label foods and assist in product formulation.

Reliable food composition statistics are vital for national planning and policy making on food security and nutrition. From a strategic viewpoint, FAO is intensifying support for the implementation of policies aimed at improving access to sufficient, nutritionally adequate and safe food. It is also assisting in food consumption and diet surveys, in training national personnel, and in the analysis and dissemination of food and nutrition statistics by working with other international and technical agencies to facilitate cross-sectoral analyses. In this regard, FAO along with other national and international partners, facilitated the International Conference on Dietary Assessment Methods (ICDAM) in January 2003 that addressed the need for improved dietary assessment methods in relation to health, disease and food security.

While there is no single formula to ensure food security, the production, distribution, preparation, processing and ultimately consumption and utilization of food are some of the key elements. In the next four days you will be addressing issues related to the quality and quantity of food composition data and will make recommendations on how to facilitate the process of appropriate food composition data exchange in the region. Allow me to emphasize that, ultimately, the analysis and utilization of the data are our overriding concerns. The quality, timeliness and reliability of the information available to farmers, scientists, government planners, industry, traders and non-governmental organizations is crucial to making rational decisions on planning, investment, marketing, research and training.

In conclusion, I would like to reiterate that FAO looks forward to your continued co-operation with the Asia Pacific Network for Food and Nutrition. I wish you success in your discussions and I am confident that with your expertise, you will work towards strengthening your efforts along with FAO in its commitment towards meeting the goals of eliminating hunger and malnutrition in the world, in particular in the Asia and Pacific region. In the midst of your busy schedules, I hope you have a chance to enjoy the well-known Thai hospitality and experience the charm of its people and culture.

Thank you for your kind attention.

**REGIONAL EXPERT CONSULTATION OF THE ASIA-PACIFIC NETWORK
FOR FOOD AND NUTRITION ON FOOD COMPOSITION ACTIVITIES**

**18 - 21 NOVEMBER, 2003
FAO Regional Office for Asia and the Pacific, Bangkok**

OBJECTIVES

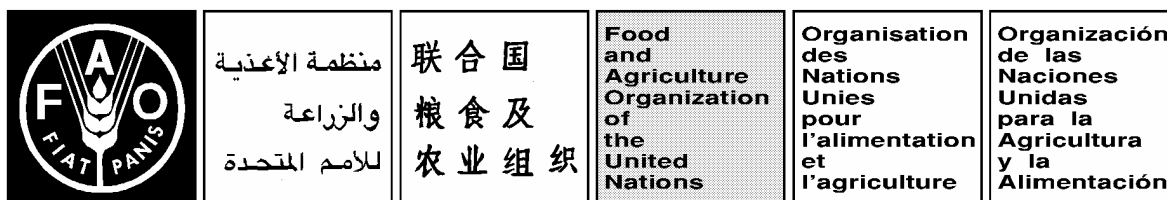
1. To get an update of the food composition activities in the region including ASEANFOODS, SAARC FOODS and NEASIAFOODS.
2. To develop a strategy for increasing the quality and quantity of food composition data, and prepare a work plan, including resource options, to progress the work in the regions.
3. To discuss data dissemination options for existing food composition data, including web access.
4. To consider broader emerging uses of food composition data, including trade, preservation of agro-biodiversity, and risk reduction for diet-related chronic diseases.
5. To optimize usage of food composition data in evaluating diets and food preparations.
6. To strengthen usage of food composition data through food based dietary guidelines (FBDG) in promoting healthy diets and lifestyles.

AGENDA

1. FAO Perspective on international and regional food composition activities
2. Review of country status on Food Composition Activities and identification of future actions/activities
3. Food Composition data usage in achieving food and nutrition security in the region
4. Follow up activities related to ICN/NPAN/WFS: 5yI
5. Any other matters

EXPECTED OUTCOMES

1. Existing systems and projections of food composition activities in the region reviewed.
2. Documentation of appropriate guidelines and standard procedures for sampling and sample handling, data handling , standards and quality, recipe calculations and retention factors, including compliance with INFOODS systems and use of CODEX alimentarius guidelines
3. Agreement on criteria for standardized methods and identification of commonality of regional data and establishment of e-forum for effective interchange of data. ANFN at RAP to serve as a possible link.
4. Consideration and deliberation on issues such as consumer applications, product development, safety standards, compositional declarations, scientific identifications of indigenous foods and their nutrient/micronutrient compositions.
5. Evaluation of available recipe composition data on common food ingredients including standard recipes for each country, describing food/nutrient composition and preparation methods, and generation of yields and nutrient retention factors based on those methods.



Appendix IV

REGIONAL EXPERT CONSULTATION OF THE ASIA-PACIFIC NETWORK FOR FOOD AND NUTRITION ON FOOD COMPOSITION ACTIVITIES

18-21 November 2003, Bangkok, Thailand

TIMETABLE

DAY 1

Tuesday , November 18, 2003

0830 hrs.	Registration
0900 hrs.	Opening Session
	Welcome: Biplab K. Nandi, Secretary, ANFN Senior Food and Nutrition Officer, FAO, RAP Introduction of Participants, Election of the office bearers of the Meeting
0915 hrs.	Opening Address Dr. He Changchui, Assistant Director-General and Regional Representative for Asia and the Pacific
0930 hrs.	Tea Break
1000 hrs.	Objectives, adoption of agenda and organization of the Consultation Biplab K. Nandi
<u>Agenda Item1: FAO Perspective on International and Regional Food composition activities</u>	
1015 hrs.	Food Composition Activities: An FAO Perspective Biplab K. Nandi

1045 hrs. FAO and Food composition activities in the Pacific Islands
Schultz Dirk

Agenda Item 2: Review of country status on food composition activities and identification of future actions/activities (Regional and Country presentations and discussions)

1115 hrs. SAARCFOODS
Jehangir Khan Khalil :Coordinator

1200 hrs. Lunch (Hosted by the Assistant Director-General and Regional Representative)

1330 hrs. Bangladesh

1345 hrs. India

1400 hrs. Nepal

1415 hrs. Pakistan

1430 hrs. Sri Lanka

1445 hrs. NEASIAFOODS + China
Yue-Xin Yang : Coordinator

1515 hrs. Tea Break

1530 hrs. ASEANFOODS
Prapasri Puwasatein : Coordinator

1600 hrs. Indonesia

1615 hrs. The Philippines

1630 hrs. Thailand

1645 hrs. Viet Nam

1700 hrs. Meeting of the Rapporteurs

DAY 2

Wednesday, November 19, 2003

Agenda Item 3: Food Composition data usage in achieving food and nutrition security in the region

0830 hrs. Introduction and Formation of Working Groups

0845 hrs. Working Group Sessions

Working Group I: Improving quality and quantity of food composition data.

Working Group II: Uses of food composition data for Nutrition Education.

Working Group III: Outlining a TCP proposal on Food Composition Activities.

0945-1000 hrs Tea Break

Working Group Sessions (Contd).

1200 hrs. Lunch

Agenda Item 3: Food Composition data usage in achieving food and nutrition security (Contd).

1300 hrs. Working Groups Sessions (Contd).

1430 hrs. Presentation of Working Group I Outputs

1500 hrs. Presentation of Working Group II outputs

1530 hrs. Tea Break

1600 hrs Presentation of Working Group III Outputs

1630hrs. Discussion

1730 hrs. Meeting of the Rapporteurs

DAY 3

Thursday, November 20, 2003

Agenda Item 4: Review of follow-up activities of ICN/NPAN/WFS: fyl

0830–1030 hrs. Country presentations (10 minutes each)

0830 hrs.	Bangladesh
0840 hrs.	China
0850 hrs.	India
0900 hrs.	Indonesia
0910 hrs.	Nepal
0930 hrs.	Pakistan
0940 hrs.	The Philippines
0950 hrs.	Sri Lanka
1000 hrs.	Thailand
1010 hrs.	Vietnam
1020 hrs.	Tea Break
1050 hrs.	Pacific Islands
1110 hrs.	Discussion
1200 hrs.	Lunch

Agenda Item 5: Special Item

1300 hrs.	Food composition and usage of horticultural crops for better nutrition: Integrated Horticulture and Nutrition Development Project Experience, Bangladesh – A case study Mr. Rashid Uddin Ahmed :National Project Director
1345 hrs.	Tea Break
1400 hrs.	Meeting of the Drafting Committee and
1800 hrs.	Drafting of the report

DAY 4

Friday, November 21, 2003

0830–1100 hrs. Drafting of the Report

1115 hrs. Presentation and Adoption of the Report

1200 hrs. Working Lunch

1230 hrs. Presentation and Adoption of the Report (Contd).

1500 hrs Closing

WORKING GROUP I: TERMS OF REFERENCE

IMPROVING DATA QUALITY AND QUANTITY OF FOOD COMPOSITION DATA

Chairperson:	Prapasri Puwastien
Rapporteur:	M. A. Wahed
Facilitator:	Yogesh Vaidya
Group participants:	S. Bapurao, Komari Kartopawiro, M.N. Wardak

Objectives:

1. To identify resource options to improve FCD quality
2. To identify resource options to improve the quantity of FCD
 - 2.1 Options to identify missing information in terms of nutrients and food items including indigenous foods
 - 2.2 Options to generate FCD to fill missing information

Expected outputs

- Options to improve FCD quality
- Options to improve FCD quantity
- Needs/recommendation to support the above activities

WORKING GROUP I: ACTUAL OUTPUTS

I. Quality improvement of FCD

1.1 Criteria for good quality FCD

Should be set up for those that are derived from analysis and from borrowed and calculated data and be made known to the data generators, compilers and users.

1.11 For borrowed and calculated FCD

The following aspects should be considered:

- Similarity of foods (variety, geographical and seasonality and factors)
- Data sources and their original quality (analysed data)
- Data calculation (how the data be calculated, the parameters/characteristics of foods involved)

1.12 For analysed FCD

INFOODS is in the process of developing international system/guidelines for evaluation of FCD and quality score. The FCD quality characteristics are, for example, sampling plan and methods, number of sample analyzed, food description, methods of analysis, quality control systems, etc.

1.2 How to improve the quality of FCD

1.21 For borrowed/calculated data

The FCD from the origin must be reviewed and chosen first from neighbouring countries. The selection is based on the criteria for good quality FCD. The procedure for estimating nutrient values for FCD of Schakel, Buzzard, Gebhardt (1997), JFCA 10, 102-114, 1997) is recommended to be used/considered when the international system/guideline for calculation of missing values is developed by INFOODS. The developed guidelines should be strictly followed in order to have same quality FCD worldwide.

1.22 For analysed data

A quality control system should be set up. Internal QC system - in-house quality control sample and control chart - should be developed in each laboratory. External QC systems - RMs development and proficiency study – should be developed at national and regional level. The development of FCD at each level should follow the criteria of good quality FCD and the developed guidelines.

II. Quantity improvement of FCD

Improvement of the quantity of FCD includes developing new FCD or filling up of the missing FCD. A scheme of stepwise activities for systematic development of FCD – both by borrowing and calculating and by actual analysis are given below:

2.1 Identification of needed FCD (nutrients, food items)

The required nutrients and food items must be first identified and prioritized , Then the data generator must decide which way to generate the data: borrow, calculate or by actual analyze.

2.2 Generation of FCD by borrowing or calculation

Information on standard recipes, ingredients, serving size, percent yield, retention, etc., must be prepared as per requirement.

2.3 Generation FCD by actual analysis

The first step of food analysis is sampling for fresh, cooked and processed foods. All the characteristics of food, i.e., nomenclature, food description, classification, identification, picture, etc, must be recorded. Sample preparation for laboratory analysis must be standardized. The standard analytical methods must be used for analysis of nutrients with build-in quality control system for reliable FCD generation.

The generated FDC both by the above procedures must be evaluated for data quality.

2.4 Database development

After data quality evaluation, a user database will be systematically developed with all detailed information of the compiled data.

The detailed instruction of each step as mentioned above must be developed and strictly followed for quality database development. The content of each instruction is given as an example in table 1. A technical team of experts must be formed and assigned to develop these instructions.

III. Need/Requirement

For the improvement of quality and quantity of FCD training of personnel is a pre requisite in the fields of:

- 3.1 Data generation: through data borrowing/calculation and actual analysis**
- 3.2 Quality control system – internal and external**
- 3.3 Data compilation: data selection, scrutinisation, statistical evaluation, and software development, etc.**
- 3.4 Data use and dissemination: application software, media uses.**

Note: for the above purposes, FoodComp course run by regional institutions should be prescribed and supported.

Table 1. Example of the components of instruction

Instruction	Content	Example/note
1. Identification of data needs: key foods/nutrients	How to identify the needed food items/nutrients; e.g., using data from national survey of food intake/questionnaire survey of the data users	Indigenous foods, folate, phytochemicals, nutrient bioavailability
2. Sampling plan/methods	What, where, how, number of food items, amount, frequency, transportation, etc	
3. Photographs (food characteristics)	How to make photograph, scale (real, enlarge, miniature size)	
4. Specific gravity	How to estimate it?	
5. Edible portion/serving size	How to get edible portion and serving size?	Work with consumers
6. Measurement of sample size	How to do it?	
Nomenclature and description	How to get scientific, common and local name of the food and classification along with the description and sources of information ?	Library references and consultation with taxonomists
8. Food: preparation/cooked	How to get standard recipes, ingredients, retention factor and yield factors?	
9. Sample for analysis	How to prepare laboratory sample: single, composite, multiple composite?	
10. Methods of analysis	Standard methods of analysis: prescribed: ASEAN Manual of Food analysis	Will be available by 2004
Quality control system	How to develop in-house and external QC system in a laboratory	
12. Missing data	Where and how to get the data from: borrowed/calculation: suggested guidelines to follow - 1997 ,114-102 ,10J FCA	Should be reviewed by tech. committee
13. Data quality analysis	Criteria for good quality FCD should follow guidelines to be developed by INFOODS	
14. Systematic database development	Data have to be compiled step by step , scrutinized, standardized and developed to a user friendly database	

WORKING GROUP II: TERMS OF REFERENCE

USE OF FOOD COMPOSITION DATA FOR NUTRITION EDUCATION

Chairperson: Elsa Bayani

Rapporteur: Shashi Gupta

Facilitator: Lalita Bhattacharjee

Group participants: Maria Tuazon, Mirza Altaf Hossain, Tuyen, Rashid Ahmed

Objectives:

1. To strengthen food composition usage through food based dietary guidelines (FBDGs).
2. To highlight food and nutrient composition and preparation methods as applicable for improving nutrition.
3. To promote national level activities on food composition data for consumer use.
4. To discuss food composition data dissemination options .

Expected Outputs

- Appropriate usage of diets and food preparations in promoting healthy lifestyles .
- Considerations for increasing usage in product development and consumer applications.
- Development of user- friendly dissemination materials through print as well as electronic media, as appropriate.
- Strategic action plans for application of food composition data for improved nutrition knowledge and dietary practice.

WORKING GROUP II: ACTUAL OUTPUTS

I. STATUS OF FCT USAGE:

- Available but usage is not adequate, largely limited to academia, research institutions and food industry
- In the context of FCT usage, there is need for complementing its use with FBDGs
- Need for completion of data gaps)
- Lack of awareness and priority of government
- Poor coordination among concerned national level institutions and food industry
- Difficulties in use of FCT arise because of its complexity leading to poor understanding at consumer and household levels

II. USAGE OF FCT THROUGH FBDGS

A. Countries which have Food based dietary guidelines (FBDGs), Food pyramids, Food guides , FCT , etc.

Bangladesh, China, Indonesia, India, Japan, Pakistan, Philippines, Sri Lanka, Thailand, Viet Nam

B. Countries which do not have FBDGs and FCT

- Afghanistan, Bhutan, Macao, Hong Kong, Mongolia and Nepal

C. Country update on dissemination of FCT

- Philippines : FCT, User's Guide, Compact disc/CD;
- India : FCT, FCT brochure, booklets, Nutriguide, CD
- Bangladesh : FCT, Simple tables, compilations
- Viet Nam : FCT, Poster, Booklet
- China : FCT, CD
- Pakistan : FCT
- Sri Lanka : FCT
- Thailand : FCT, User's guide/manual, CD, INMUCAL

III. FCT DISSEMINATION PLAN OF ACTION

A. Development, production and distribution/dissemination of FCT materials in the following forms and actions:

Forms :

- Flip pocket booklet
- Charts
- Posters, booklets, leaflets
- Calendars
- Tri Media
- Advocacy materials for policy makers, planners and implementers
- Menu, foods, recipe information

Actions :

- Translation of FCT into user friendly materials for different target groups
- Agriculture –FCT from production to consumption
- Education –simplified and included in curricula of formal and non-formal education systems
- Health – Diet Counselling Cards, Promoting healthy lifestyles
- WCD/Welfare – Training Curricula , Job responsibilities, Flip booklets, Posters, etc

B. Adaptation of FCT content for :

- Foods/Food groups
- Nutrient rich food groupings (macro and micronutrient groupings)
- Food servings/portions
- Food exchange lists
- Food scores
- Desirable dietary patterns (DDP)

C. Targeting FCT usage for and through :

- Mothers, Care givers
- Seminars/classes
- Schools
- Campaigns - Tri media

D. Promotion through Celebration of Events /Days/Months/Weeks

- Nutrition Events
- World Food Day (Oct 16)

- Agriculture/Health/Social Development/ Fairs, Festivals, Exhibitions
- Farmers Demonstrations/Rally

E. STRATEGIES FOR IMPLEMENTATION

- Advocacy for policy makers on the importance of /clearer understanding RDAs, Nutrition goals, (ICN Follow up actions, NNP/ NPAN, MDGs, FIVIMS)
- Organization of Core group and focal point for appropriate adaptation and implementation of FCT
- Priority content/messages identified and disseminated.
- Incorporation of FCT in training modules for multi sectoral use (Agriculture, Health, education , WCD)
- Social Mobilization at household/community levels
- Resource generation and allocation by government, donors, NGOs

F. STRENGTHENING PARTNERSHIPS/ ALLIANCES /LINKAGES FOR EFFECTIVE AND EFFICIENT FCT DISSEMINATION

- Research institutions/groups
- Implementers (Extension)
- Educationists/Academia (through training curricula)
- Training institutions

G. ROLES AND RESPONSIBILITIES OF STAKEHOLDERS

Country/national level

- Research Institutions/Nodal /Focal agency to continue FCT dissemination efforts in coordination with SAARCFOODS, ASEANFOODS , NEASIAFOODS and INFOODS as well as ANFN
- Coordinating Council for national adoption/launching/undertaking
- Development of FCT materials and dissemination mechanism by Core Group/Focal Point
- Intensified dissemination of RDAs/FCT particularly for vulnerable groups

Sub National level (Province, district/sub-district/town) and village levels

- Disseminate FCT through IEC materials , tri media and other routine activities

Regional/International level

- FAO to advocate to other UN agencies and Nations to provide for /allocate funds and technical assistance for FCT activities
- FAO to develop generic FCT advocacy and IEC materials, e.g. Tools , Kits
- FCT data information exchange between and among member countries through networking/web sites and meetings/field trips
- Regular follow up and monitoring of progress of FCT activities
- Documentation and dissemination of best practices/success stories and weaknesses/failures on FCT
- Organize national/international workshops on FCT for Nutrition Education

WORKING GROUP III: TERMS OF REFERENCE

OUTLINING A TCP PROPOSAL ON FOOD COMPOSITION ACTIVITIES

Chairperson: **Jehangir Khalil**

Rapporteur: **Dirk Schulz**

Facilitator: **Dirk Schulz**

Group participants: **Songsak, Yang, Chandrani**

Objectives :

1. To strengthen national level activities on Food Composition
2. To facilitate organization and dissemination of regional food composition database
3. To exploring possibilities for developing a Technical Cooperation Programme (TCP) proposal on Strengthening Food Composition Activities

Expected outputs

- Programme development and promotion in food composition
- Enhancing intersectoral and multi sectoral linkages for facilitating appropriate dissemination and usage of food composition data
- Closer regional networking through existing FCD structures such as SAARC, ASEAN and NEASIAFOODS
- Preparation of a Technical Cooperation Programme (TCP) concept note on Strengthening Food Composition Activities

Please prepare a 1-2 page proposal summary providing the following components:

1. Rationale
2. Background and justification

3. Specific objectives
4. Inputs and Activities
5. Outputs and Outcomes
6. Participating countries

WORKING GROUP III : ACTUAL OUTPUTS

TCP OUTLINE

Justification/Rationale

- Demand for FC data is high
- Many countries weak in FC activities
- Some countries have no FCT and FC activities (Bhutan, Maldives)
- Some countries have need for strengthening FC activities (training, guidelines, laboratories)

Goal and objectives

- Goal: To improve food security, quality and safety in the region by strengthening the food analytical capabilities
- Objectives:
 - Assessment of the situation in each country
 - Improvement/upgrading of laboratory facilities
 - Strengthening the capabilities of personnel
 - International accreditation of laboratories

Outputs

- Situation of analytical capabilities
- Trained personnel
- Upgraded Laboratory facilities
- Guideline on FC activities (Sampling, QA, compilation, methodology)
- Generate FCD on foods for which data is lacking
- Accreditation process initiated

Institutional Framework

- Participating Countries: TBD
- Hosting Institutions: Accredited laboratories in Thailand, China, Philippines
- Work Plan
- To be decided depending on participating countries and institutions

MATRIX ON STATUS OF FCT DEVELOPMENT AND DISSEMINATION

Country	Development of FCT (developed/compiled/updated/ Revised)	Coordinating and implementing agency		Type of FCT materials developed	Main users			Dissemination at national, sub-national & community levels
		Existence of focal point	Existence of core group		Academic & Research Institutions (A &R)	Food industry (FI)	Programme implementers (PI)	
BANGLADESH	C	√ ICDDR,B	×	Leaflets/Booklets	√	×	√	N, SBN,C
PHILIPPINES	D	√ FNRI	√	User's guide FCT, CD+ hard copy	√	√	√	N, SBN, C
INDIA	D/REV	√	√	√		√	√	N,SBN,C
INDONESIA	D	NFRDC	IFR	FCT for processed foods	√	√	√	√
AFGHAN-ISTAN	×	×	×	×	×	×	×	×
NEPAL	C	X	X	√	√	√		N
VIETNAM	D	NIN	NIN	Hard copy	√			N, SN
CHINA	D	MH	INFH	√	√	√	√	N, SN

PAKISTAN	D	AUP	X	X	√	X	√	N,SBN,C
SRI LANKA	C	√	√	Partly	√	√	Partly	C
THAILAND	D	INMU	INMU	INMUCAL (as CD), Software, Hard copies	√	√	√	N, SBN, C & Internationally
PACIFIC ISLANDS	At sub regional levels		SPC/FAO/U NDP	SPC/FAO	√	√	√	√
ASEAN	D	INMU	ASEAN FOODS Countries	Hard copy	√			N, Regional International

Legend :

√ Yes ; X No

Developed = D; Updated = UPD; Revised =REV

National = N; Sub National = SBN; Community = C

Abbreviations:

AUP: Agricultural University of Peshawar

FNRI: Food and Nutrition Research Institute

ICDDR,B: International Centre for Diarrhoeal Diseases, Bangladesh

IFR: Institute for Food Research

INFH: Institute of Nutrition and Food Science

INMU: Institute of Nutrition Mahidol University

MH: Ministry of Health

NIN: National Institute of Nutrition

NFRDC: Nutrition and Food Research and Development Centre

SPC : Secretariat of the Pacific Community