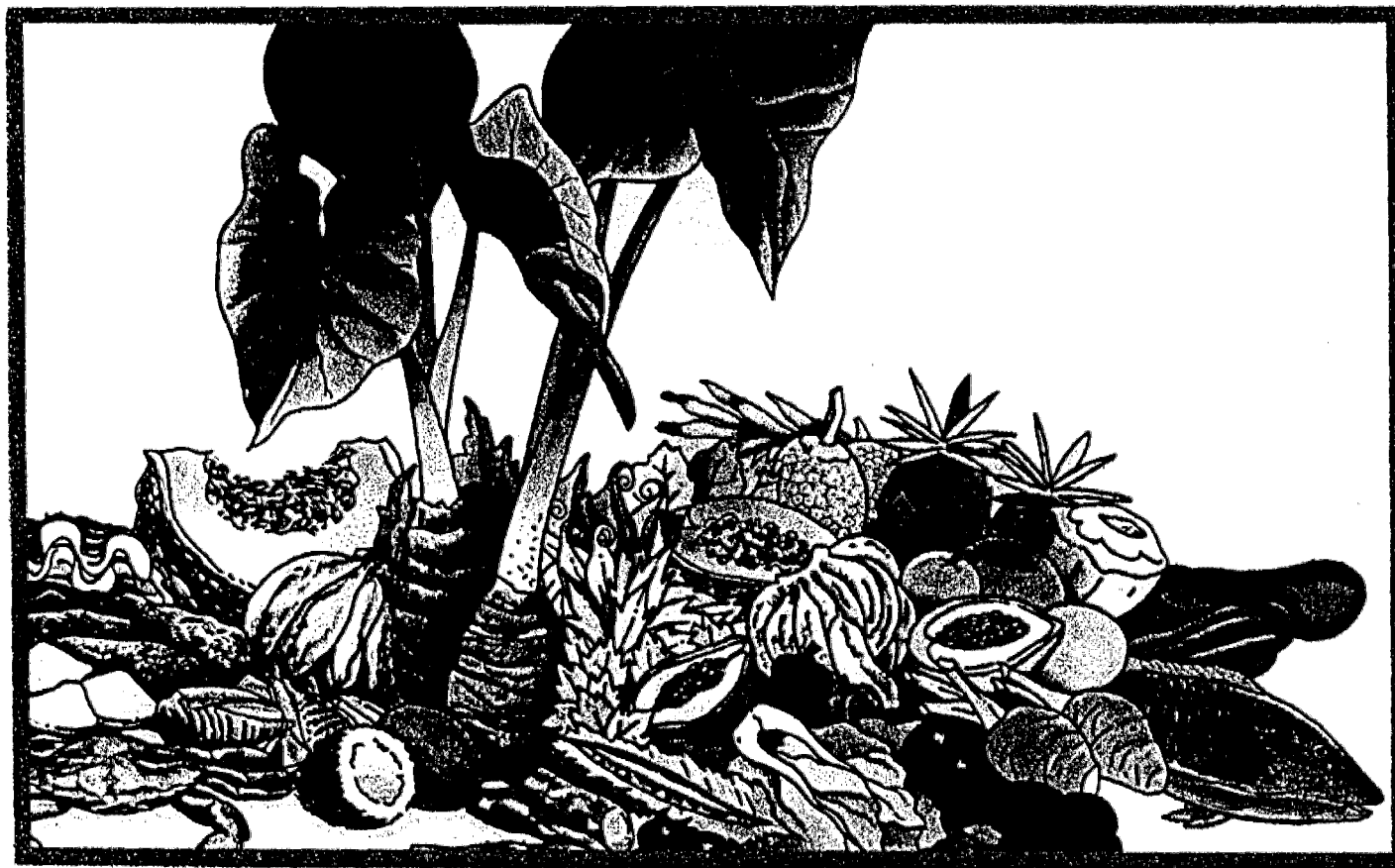


TONGAN PLAN OF ACTION FOR NUTRITION



*REVIEW WORKSHOP, 16-18 DECEMBER 1996
INTERNATIONAL DATELINE HOTEL, NUKU'ALOFA, TONGA*

Tongan Plan of Action for Nutrition.

Introduction.

The Tonga Plan of Action for Nutrition was first drawn up at the National Plan of Action for Nutrition Workshop at the Pacific Royale in January 1995. Participants included representatives of both government and nongovernment organizations. The document was then submitted to the National Food and Nutrition Committee and to Government and was approved in Cabinet Decision No. 451 of 29 March 1995.

The Tongan Plan of Action for Nutrition Review Workshop was held 16 -18 December, 1996. An up-date to the plan was made and this was then submitted to Government and approved in Cabinet Decision No. 138 of 5 February 1997. It is hoped that the plan will provide a useful guide to further nutrition work in Tonga. See Annex 1 for a list of the participants in the workshop.

The Plan sets forth all activities necessary to help achieve and maintain nutritional well-being and to make safe nutritious food available in sufficient amounts to all. Activities are grouped in the nine themes agreed upon at the International Conference on Nutrition (ICN) Rome, December 1992. These nine outputs include the following:

1. Incorporating nutritional objectives, considerations and components into development policies and programmes.
2. Improving household food security.
3. Protecting consumers through improved food quality and safety.
4. Preventing and managing infectious diseases.
5. Promoting breastfeeding.
6. Caring for the socio-economically deprived and nutritionally vulnerable.
7. Preventing and controlling specific micronutrient deficiencies.
8. Promoting appropriate diets and healthy lifestyles.
9. Assessing, analysing and monitoring nutrition situations.

Acknowledgement is made to the World Health Organization which provided the funding for the workshop and for the production of the plan.

1.1 Food and Nutrition Policy and Activities in the Central Planning Department will have been strengthened.

Activity	Who	Outcomes	Timeline	Benefits/risks
1.1.1 Appoint nutrition planner to the existing position in the Central Planning Department.	CPD	<ul style="list-style-type: none"> Vizo Halavatau. Nutrition Adviser - Lois Englberger. 	<p>Jan 1996</p> <p>Jan 1996</p>	Nutrition on the agenda of Government.
1.1.2 Revive the National Food and Nutrition Committee (NFNC) and review and confirm membership, preferably with members with planning and nutrition experience. Appropriate NGOs to be considered for full members.	CPD plus all sectors	<ul style="list-style-type: none"> NFNC revived. Membership needs to be reviewed. 	Nov 1994	Ensures nutrition receive a high priority.
1.1.3 Carryout active program of institutional development of NFNC, including examining the possibility of becoming a statutory body. Minutes of meetings to be sent to the Development Coordination Committee (DCC) and Cabinet on a monthly basis.	CPD NFNC	<ul style="list-style-type: none"> Statutory body needs an act of Parliament. Minutes are recorded and sent to DCC and Cabinet. 		Risk: necessary to be part of govt. for sustainability.
1.1.3.1 The NFNC should help develop posters, charts and manuals for community training, and increasing nutrition awareness, as well as promoting vegetable and home gardening, cooking demonstrations etc.	NFNC	<ul style="list-style-type: none"> do provide. is an on-going activity. it will continue in the future. 		On-going community education information.

1.2 All new policies will have been submitted to the National Food and Nutrition Committee.

Activity	Who	Outcomes	Timeline	Benefits/risks
1.2.1 Submit all new policies to the NFNC.	NFNC/All Sectors/Relevant NGOs/Foreign Aid projects etc.	<ul style="list-style-type: none"> • need to include "relevant" . • up to NFNC to decide on priorities and to advise govt. on Food and Nutrition matters. 		Information sharing.
1.2.1.1 Assess impacts of policies on nutritional status of any group in the community likely to be affected.		<ul style="list-style-type: none"> • draft "food in schools" policy 	1996	<ul style="list-style-type: none"> * Provides a baseline. * Needs assessment.
1.2.1.2 Raise awareness of all policy makers (especially if not represented on NFNC) to economic and social aspects of NCDs, iron deficiency anaemia, breast-feeding etc.		<ul style="list-style-type: none"> • Dr. 'Ake radio, TV campaign "health awareness". • on-going MOH anaemia and breastfeeding promotion at MCH clinic. 	1995 on-going	Raises the importance of nutrition.
1.2.1.3 Disseminate approved policies for public information.		<ul style="list-style-type: none"> • NPAN. • National Nutrition Policy. • Weight and Height Charts, Food guides 	1995 1996	Informs the public.
1.2.2 Submit for review projects related to food and nutrition, however peripherally.	NFNC	<ul style="list-style-type: none"> • Healthy Weight Loss Competition. • Hami Sauce Project. 	1995	Information sharing.

1.3 All education and communication programmes related to food, nutrition and health to be implemented by other Ministries/Departments and NGOs will have been coordinated by NFNC.

Activity	Who	Outcomes	Timeline	Benefits/risks
1.3.1 Establish integrated Nutrition Education Programmes for the Youth and parents through all media and formats, including radio, village and community level meetings and seminars.	NFNC/ MOH/ MOE/ MAF/ MOF MLCI/ NGOS/ TNCC	<ul style="list-style-type: none"> • 3 multisectoral workshops. • MOE teacher in-service training. • MOE student training. • NGOs nutrition component of womens' development program. 	on-going	Increases nutrition knowledge.
1.3.1.1 Consider the integration or complementarity of the on-going monthly integrated MCH plan of family planning, breast-feeding and immunisation in all food and nutrition activities.		<ul style="list-style-type: none"> • MOH MCH, immunisation clinics. 	on-going	Incorporates nutrition into routine health screenings.
1.3.1.2 Emphasise the importance of local and regional foods eg. by teaching in schools, Agricultural Show competitions and demonstrations etc.		<ul style="list-style-type: none"> • MAF radio programs. • womens' projects at village level. • no competition organised yet. 		Improves food security.
1.3.1.3 Promote knowledge of local foods through home gardening, demonstrations of cooking and food preparation, by the designing of 'user-friendly' training manuals on local food values for community use, and possible values for community use, and possible commercial applications of local foods.		<ul style="list-style-type: none"> • MOE practical projects for schoolchildren. • MAF womens' development training program in purchasing, cooking and nutrition. 		Improves food security.

Activity	Who	Outcomes	Timeline	Benefits/risks
1.3.2 Upgrade knowledge of consumer skills - especially reading food labels and buying skills, including at village level.	NFNC/ MAF/ MOH/ MOE/ FSP/ Village/ Communities	<ul style="list-style-type: none"> workshop on consumer education "South Pacific Consumer". 	1995	keeping the public informed.
1.3.2.1 Distribute training manual on food values.		<ul style="list-style-type: none"> nutrition composition charts of Tongan foods available. 	on-going	
1.3.2.2 Translate into Tongan some food labels e.g. especially warnings and for powdered milks etc.		<ul style="list-style-type: none"> needs clarification on who is responsible. 		Risk: misinformation given about foods to public.
1.3.2.3 Encourage and support the formation of a consumer association.		<ul style="list-style-type: none"> South Pacific Consumer working to form an association. 	on-going	Protection of the consumer.
1.3.3 Encourage the practice of responsible personal health decision-making skills to promote health e.g. choosing a prudent diet, choosing not to smoke, to drink alcohol in moderation or not at all, to exercise etc.	NFNC/ MOH/ MOE/ All Sectors/ NGOs/ TNCC	<ul style="list-style-type: none"> NGOs "healthy lifestyle". Healthy Weight Loss Program. 	on-going on-going	Promoting healthy lifestyles.
1.3.3.1 Develop training programmes, radio and other information to help the making of wise health choices.		<ul style="list-style-type: none"> weekly radio programs by NFNC and MOH. 	on-going	Information giving.

2.1 Food production research will have been carried out.

Activity	Who	Outcomes	Timeline	Benefits/risks
2.1.1 Carry out food production research through the Ministry of Agriculture and Forestry, Research Division.	MAF	<ul style="list-style-type: none"> • PRA now introduced. • new integrated approach now employed - Farming Systems Research. 	on-going	Needs assessment.
2.1.1.1 Do research on resistant varieties of crops and foods.		<ul style="list-style-type: none"> • sweet potato, irish potato and banana varieties released. • taro, yam variety evaluation now on-going. 	on-going	
2.1.1.2 Do research on crop protection technologies.		<ul style="list-style-type: none"> • pesticide recommendations. • insect parasite released. 	on-going	
2.1.1.3 Carry out research on rapid and disease-free propagation of crops and other foods such as trees, vines etc.		<ul style="list-style-type: none"> • banana plantlets released. • work on taro, kava and vanilla now on-going. 	on-going	
2.1.1.4 Encourage the acceptance of nutritious foods and crops e.g. legumes.		<ul style="list-style-type: none"> • new research on subsistence farming and root crops. 	on-going	
2.1.1.5 Expand animal production aiming at self-sufficiency by encouraging the community to raise poultry and pigs at home.		<ul style="list-style-type: none"> • new focus on animal husbandry. • women's development section, local fruit trees. 	on-going	
2.1.2 Disseminate all research findings for information/distribution by reporting findings to NFNC for wider distribution.	NFNC/MAF/ MCLI/USP etc.	<ul style="list-style-type: none"> • available but not in layman's language (technical papers). 	on-going	Informs the public.

2.1 Food production research will have been carried out.

Activity	Who	Outcomes	Timeline	Benefits/risks
2.1.1 Study feasibility of establishing a dairy industry.	MAF/MLCI	<ul style="list-style-type: none"> • Company formed to establish a dairy industry based on a 1993 study. • Request made to FAO for funding a pasteurisation plant. 	1996	<ul style="list-style-type: none"> • Independent local industry. Less reliance on imported foods. • Risk continuity of supply?

2.2 Environmental Impact Assessments (EIA) will have been performed.

Activity	Who	Outcomes	Timeline	Benefits/risks
2.2.1 Allow for an EIA for every proposal, where appropriate, that comes up before the NFNC and submit a proposal on how to mitigate any identified problems.	CPD NFNC MLSNR	<ul style="list-style-type: none"> • none submitted in 1996. • contained in existing 1985 government legislation. 		

2.3 Sound crop production technologies will have been adopted.

Activity	Who	Outcomes	Timeline	Benefits/risks
2.3.1 Promote vegetables and home gardening, emphasising local fruits and vegetables and organic gardening, eg. through families, schools, village/community officers, village farm meetings, active family food production programmes, ensuring seedlings are available etc.	NFNC/MAF/ MOE/NGOs	<ul style="list-style-type: none"> • MAF assistance in village and farm research. • MOE primary, secondary and tertiary level teaching in schools. • NGOs work with MAF in promoting home and community gardens. 	1994 on-going on-going	Increases food security through the ability to establish an independent food supply.
2.3.1.1 Submit all plans to promote vegetable and home gardening to NFNC to review and to advise so as to avoid duplication of efforts.		None received yet.		
2.3.2 Encourage inclusion of legumes in gardens and diets by working at grassroots level through the Women's Development Section of MAF.	MAF	<ul style="list-style-type: none"> • Womens' development section working with the Japan Government. • Competition organised for Agriculture staff. 	1996	Increase the variety of foods consumed.
2.3.3 Strengthen women's section of MAF, especially training on skills for nutritious food preparation, preservation and processing, home gardening, distribution of healthy cookbooks etc.	MAF	<ul style="list-style-type: none"> • New building with a kitchen in MAF for teaching purposes. • Writing and distribution of cookery books and recipes. 	on-going	Decrease the dependence on imported foods.
2.3.4 Increase and improve education and training of all Tongans on nutrition and foods through all methods including training of trainers, vocational courses on nutrition etc.	NFNC/MAF/ MOE/NGOs	<ul style="list-style-type: none"> • MOE teacher training program. • Student training courses. 	on-going	Increase knowledge about food and nutrition.
2.3.5 Encourage District Agriculture Committees and District Women's Agricultural Committees to meet monthly and to set new planting targets on a village basis.	MAF	<ul style="list-style-type: none"> • Organisation of monthly meetings for women at the village level. 	on-going	Allows the sharing of information.

2.4 Appropriate land use policies will have been developed and adopted.

Activity	Who	Outcomes	Timeline	Benefits/risks
2.4.1 Review and reinforce on-going activities with input from Ministry of Lands and Survey.	NFNC/ MLSNR	deferred.		

2.5 Food production for export and local consumption will have been increased.

Activity	Who	Outcomes	Timeline	Benefits/risks
2.5.1 Collate, analyse and disseminate agricultural/horticultural/fishing information through various media but especially at a local grass roots level on a weekly basis by working with farmers and fishermen directly, including reporting on the radio of local and export sales.	NFNC/MAF/ MOF/Media	<ul style="list-style-type: none"> • MAF output of information on agriculture. • MOF output of information on fishing. • NFNC and MAF weekly radio programs. 	on-going	Informing local producers about what help is available.
2.5.2 Increase adoption rates of improved technology eg. organic farming, fruit trees etc. including development of organic farming manuals and charts and leaflets.	MAF/MOE	<ul style="list-style-type: none"> • MAF produce leaflets and information kits. • There is a need to establish a baseline. 	on-going	Reduce dependence on artificial agricultural chemicals.
2.5.3 Increase volume of vegetable and fruit marketed locally by expanding information on planting and producing procedures eg. of citrus trees.	MAF/MLCI	<ul style="list-style-type: none"> • There is a need to establish a baseline. • 1996 was a very good year for the production of local fruits and vegetables. 	TBA	Reduce dependence on imported fruits and vegetables.
2.5.3.1 Identify potential markets for local fruit and vegetables.		<ul style="list-style-type: none"> • Tonga-Fiji trade established. • Japan, Korea, Taiwan trade mission. 	1996	Strengthen local and national economies.

2.6 Production of fish and other marine products will have been increased.

Activity	Who	Outcomes	Timeline	Benefits/risks
2.6.1 Encourage commercial production of quality fish and marine products for both domestic consumption and export through training and consultancies and research into new fishing techniques.	MOF/MLCI	<ul style="list-style-type: none"> • MOF local training programs in Tuna handling and storage and food processing. • MOF regular training workshops. 	1996 on-going	Creation of employment and improvement of the Tongan economy.
2.6.2 Create an environment conducive to the development of private sector involvement in fisheries, including protection to local fishermen by implementation of the Fisheries Conservation Management Act.	MOF/MFN/MLCI	<ul style="list-style-type: none"> • Fish Conservation Management Act implemented. • Protection of local fishermen by prohibiting foreign fishing vessels to fish Tongan waters. • 1976-79 protection of Tongan marine parks. 	1996 1996?	Risk. A needs assessment required here to determine what local fishermen want.
2.6.3 Encourage alternative fishing habitats to prevent over-exploitation of traditional fishing grounds eg. development of aquaculture and dissemination of relevant information in Tongan as well as English.	MOF/MLSNR	<ul style="list-style-type: none"> • MOF introduction of new species of fish into Tongan waters. • Looking for overseas donors. • USAID project for the setting up of fish aggregating devices. • Protection of coral reefs through consumer education campaigns. 	1995	Risk. Need to determine what the present fish stocks are.
2.6.4 Promote consumption of marine products eg. by emphasising fish is good for health, nutrition, and the prevention of cardiovascular diseases.	MOF/MOH/MOE/NGOs	<ul style="list-style-type: none"> • MOF radio program by market manager. • MOH radio program about healthy lifestyle. • MOE demonstration cooking and recipe classes. 	on-going	Risk. A needs assessment is required to determine consumer attitudes to fish consumption and health.

2.7 Employment opportunities will have increased.

Activity	Who	Outcomes	Timeline	Benefits/risks
2.7.1 Offer technical and vocational education for girls and boys eg. by job participation, work experience.	MOE/ MLCI/ TNCC/ PM's Office	<ul style="list-style-type: none"> • MOE Training courses in health, nutrition and catering. • MLCI training courses for job seekers. • TNCC training for school leavers. • PMs Office selection of people to undertake training with the SPC. 	<p>on-going</p> <p>on-going</p> <p>on-going</p> <p>on-going</p>	Strengthen workforce and knowledge in food and nutrition.
2.7.2 Establish new food industries.	MLCI	<ul style="list-style-type: none"> • 70-80 new industry applications this year, one third of which involve food. 	1996	Diversify the Tongan economy.

OUTPUT 3: FOOD QUALITY AND SAFETY IMPROVED.
3.1 The national awareness of Public Health and Food Safety issues will have been raised.

Activity	Who	Outcomes	Timeline	Benefits/risks
3.1.1 Develop, implement and maintain a National Food Standards Code.	MLCI/MOH	<ul style="list-style-type: none"> Proposals to have consultant develop a FSC from DCC. Mlci attempt to form a working group to develop a FSC for Tonga. 	1996	To ensure a minimum standard of food safety.
3.1.2 Examine feasibility of conducting a survey which examines the level of pesticides and contaminants in the Tongan diet, probably by expansion of MAF Laboratory.	MLCI/MAF	<ul style="list-style-type: none"> MAF and CSIRO (Aust) soil contamination study. Strengthen MAF laboratory. Report for MLSNR on contaminants in seafood. 	1998 1996	To ensure a minimum standard of food contamination.
3.1.3 Develop a mechanism to coordinate the recall of food products which pose a risk to public health.	MLCI/MOH	<ul style="list-style-type: none"> Through a FSC when developed. 		Mechanism for public protection.
3.1.4 Develop, implement and maintain a National Code of Practice.	MLCI	<ul style="list-style-type: none"> Through a FSC when developed. 		Sets a minimum standard of food quality.

Activity	Who	Outcomes	Timeline	Benefits/risks
3.1.5 Publish a "Food Composition Table" which lists nutrients available in the Tongan Food supply and thus allows scientific, dietetic and nutritional advice to be given.	NFNC/MLCI/ MOH	<ul style="list-style-type: none"> • Using SPC food composition tables (800 foods). • Have limited Tongan food composition tables. • Will translate into Tongan language. 	<p style="text-align: center;">1996</p> <p style="text-align: center;">1980's</p> <p style="text-align: center;">1997</p>	Provide an information tool for public use.
3.1.6 Develop programme of consumer education.	NFNC/MOE/ MOH/NGOs	<ul style="list-style-type: none"> • no program established. • 1996 workshop to plan an association. 		Keep the public informed.

3.2 Mechanism for Food Products Quality Assurance Development will have been worked out.

Activity	Who	Outcomes	Timeline	Benefits/risks
3.2.1 Examine feasibility of establishing a Food Research & Development Centre probably in cooperation with MAF or through a working group of MAF, MOH, MF, MLCI.	MLCI/ MAF	• Proposal submitted to Cabinet for approval small unit envisaged.	1995	Independent R & D for Tonga. Risk: economic feasibility needs to be examined.
3.2.2 Provide technical services (information) and technologies needed by the food industry sector to meet the quality requirements of the market e.g. by support for training/attachments from private enterprise and external bodies.	MLCI	• 6 people sent overseas for short term training.	on-going	Keep a high standard of food quality.
3.2.3 Train different levels of personnel from the government, food industries and village communities on the requirements for food quality control, food processing and good manufacturing practices.	MLCI/MAF	• training courses offered to individuals.	on-going	Sustain a high standard of food quality.
3.2.4 Develop appropriate food processing technologies from various agricultural and fish resources for potential utilization and value added exports and create new food industries.		• Request made to Australian food research centre to develop a food processing module.	1996	Improves Tongan economic potential.

3.3 The necessary infrastructure and equipment for Food Quality and Safety will be in place.

Activity	Who	Outcomes	Timeline	Benefits/risks
3.3.1 Provision of centrally based equipment such as computers, dietary software, and equipment.	NFNC/ MLCI/ MAF	<ul style="list-style-type: none">• NFNC has attempted to compile a library of food tables, books and dietary advice.	on-going	Enables access to nutrition information.

OUTPUT 4: INFECTIOUS DISEASES PREVENTED AND MANAGED.

4.1 Awareness of inter-relationship of nutrition, environment and disease will have been increased by public education and by health promotion of personal hygiene.

Activity	Who	Outcomes	Timeline	Benefits/risks
4.1.1 Develop and disseminate health education/promotion materials, in particular on food handling, and the interaction between sick and healthy people.	MOH/MOE/ TNCC/NGOs/ community groups/MLCI/ MOF/MAF	<ul style="list-style-type: none"> • Need to establish closer links between MOH and MOE. 	on-going	Increases public knowledge about hygiene.
4.1.1.1 Promote health through vocational courses, workshops (e.g. on occupational health and safety) and through all available media (pamphlets, posters, radio and TV programmes etc.).		<ul style="list-style-type: none"> • MOH radio program. • MOH occupational health course overseas. • nothing done on safety. • draft legislation on occupational health. 	on-going 1997 1996	Gives opportunities for employees to protect their health.
4.1.2 Raise awareness of close linkages between infectious diseases, nutrition and the environment through use of the mixed media.	MOH/MOE/ TNCC/NGOs/ community groups/ MLSNR (EIA)	<ul style="list-style-type: none"> • MOH workshops. • MOE workshops. • Need to have joint workshops to share information. 	on-going on-going	Increases public knowledge about health disease and nutrition.

4.2 High immunization coverage and follow up of the 1 - 5 years age group will have been maintained.

Activity	Who	Outcomes	Timeline	Benefits/risks
4.2.1 Continue to provide immunization to all Tongan children so that the target diseases of the Expanded Programme of Immunization (EPI) cease to be public health problems. (see intermediate goals for 1995: World Summit for Children and goals for year 2000).	MOH/MOE/ MAF/NGOs/ TNCC	<ul style="list-style-type: none"> • MOH immunization coverage 93% of infants under 1 year. • investigation need to make about funding for vaccines. 	1996	Public protection from infections disease.
4.2.2 Ensure availability of vaccines and cold chain equipment, particularly in light of cessation of external funding for vaccines in 1996.	MOH/MFN	<ul style="list-style-type: none"> • Japan have funded the cold chain equipment 1997-2000. 	on-going	Sustainability of protection from infections disease
4.2.3 Ensure efficacy of vaccines by proper refrigeration and monitoring.	MOH	<ul style="list-style-type: none"> • regular tests made at Vaiola hospital. 	on-going	Ensures adequate protection.
4.2.4 Update knowledge of all health and related staff.	MOH	<ul style="list-style-type: none"> • training arranged for 1997 WHO funded. 	on-going	Keep health staff fully informed.
4.2.5 Raise awareness and strengthen community participation in the Expanded Programme on Immunization (EPI) and thus develop consumer demand of parents for all children to be immunized.	MOH/Media/ NGOs/ TNCC	<ul style="list-style-type: none"> • needs support from other sectors. • NFNC need to collect the immunization statistics for children. 		Sustains the immunization program.

4.3 Case diagnosis, case management and contact tracing would have been strengthened.

Activity	Who	Outcomes	Timeline	Benefits/risks
<p>4.3.1 Provide training on diarrhoeal diseases prevention and control, management of respiratory diseases and other infectious diseases (possibly using refined WHO/UNICEF Integrated child management modules), to both public health community staff and hospital staff.</p>	<p>MOH</p>	<ul style="list-style-type: none"> • MOH provide training. • ARI highest morbidity in children - needs further investigation. 	<p>on-going</p>	<p>Control of diarrhoeal disease reduces risk at further infections.</p>
<p>4.3.2 Provide public information and training, particularly to mothers, on home management through training, workshops and the mixed media.</p>	<p>MOH/Media/ NGOs/TNCC/ MOE</p>	<ul style="list-style-type: none"> • PMs Office - there is a need to other sectors to be involved in the Women's Unit training program. 	<p>on-going</p>	<p>Increases knowledge about protection from infectious diseases.</p>

4.4 Supportive measures from Environmental Health Section will have been strengthened.

Activity	Who	Outcomes	Timeline	Benefits/risks
<p>4.4.1 Raise the awareness of Government officials, health and agricultural workers, teachers and the community on the close interrelationships between nutrition, the environment and disease, using all available means and mixed media.</p>	<p>NFNC/MOH/MAF/MLSNR/NGOs/ Private enterprise</p>	<ul style="list-style-type: none"> • MOH major objective on the relationship between food, environment and health. • MOE schools teach environment and health. • CPD-future workshops to raise awareness. • MLSNR-environmental awareness in school children. 	<p>on-going</p> <p>on-going</p>	<p>Gives a holistic view of health.</p>
<p>4.4.2 Conduct an environmental impact assessment (EIA) under the auspices of NFNC.</p>	<p>NFNC/ MAF</p>	<p>need to consider if these are necessary.</p>		
<p>4.4.2.1 Study the feasibility of establishing an EIA Unit within the NFNC.</p>	<p>NFNC/ CPD/ MLSNR/ MAF</p>	<p>''</p>		
<p>4.4.2.2 Develop appropriate EIA criteria for health and nutrition activities.</p>		<p>''</p>		

OUTPUT 5: BREAST-FEEDING PROMOTED (BF).

5.1 Virtually all women will be breast-feeding their infants.

Activity	Who	Outcomes	Timeline	Benefits/risks
5.1.1 Encourage all mothers to breast-feed their children exclusively for four to six months and to continue breast-feeding, with appropriate complementary foods well into the second year.	MOH/NGOs/ TNCC/MOE	<ul style="list-style-type: none"> • 1 monthly maternity leave - not enough. • 50% (1 - 3 months) of mothers are breast feeding. 	<p>on-going</p> <p>1995</p>	Helps to protect infants from infection.
5.1.2 Increase awareness of mothers and the community on the critical importance of breast-feeding by on-going radio health programmes, development of IEC materials and the conduct of relevant workshops.	MOH/NGOs/ TNCC/MOE	<ul style="list-style-type: none"> • NFNC - to action maternity leave to be extended to 2 months with pay. • MOH, radio, clinics, IEC. 	on-going	"
5.1.3 Empower all women to breast feed and to promote a community environment which supports this empowerment.		<ul style="list-style-type: none"> • not started. 		Public acceptance of BF as protection for infants.
5.1.4 Organize activities for Breast-feeding Week on a regular, annual basis including such activities as a best (breast-fed) baby contest.	MOH/NGOs/ TNCC/MOE/ Media	<ul style="list-style-type: none"> • radio - BF week organised for 1997. • enlightened the princess in the promotion of breast feeding. 	<p>1997</p> <p>1992</p>	public increases knowledge of the benefits of BF.

5.2 The use of breast-milk substitutes will have been reduced.

Activity	Who	Outcomes	Timeline	Benefits/risks
5.2.1 Promote understanding of community and government support for breast-feeding through all the mixed media and by workshops.	MOH/MOE/ NGOs	<ul style="list-style-type: none"> • MOH. • Need for a BF survey also child mortality survey (40 children < 1yr in 1995) have died. 		Assures the public of government support for BF.
5.2.2 Enforce and strengthen the provision of the Tongan adaptation of the WHO International Code on the Appropriate Marketing of Breast-Milk Substitutes.	NFNC/MOH/ MOE/NGOs	<ul style="list-style-type: none"> • adopted by Tonga (voluntary). • needs to be strengthened. 	1995	Assures the public of international support for BF.
5.2.3 Promote breast-feeding by increasing the tax on imported milk substitutes and feeding bottles.	MOH/NFNC/ MFN	<ul style="list-style-type: none"> • NFNC to investigate. • not attempted yet. 		RUK: affects mothers who cannot BF.

5.3 All hospitals, and maternal and child health facilities, will have continued to function as 'baby-friendly' as defined in the ten steps on UNICEF/WHO.

Activity	Who	Outcomes	Timeline	Benefits/risks
5.3.1 Disseminate and promote the 10 steps to all hospitals, health centres, health workers etc. using all the mixed media.	MOH	<ul style="list-style-type: none"> • 4 workshops on 10 steps. • not ready yet. • posters in Tongan on the 10 steps. 	1995	Attempts to ensure hospitals improve the health and wellbeing of infants.
5.3.2 Further promote breast-feeding by ending distribution of free or low cost breast-milk substitutes in all maternity wards and in the hospitals.	MOH/MLCI	<ul style="list-style-type: none"> • BF substitutes are very expensive in Tonga. • No free distribution of formula allowed in Tongan Hospitals. 		Infant protection from an inadequate diet.

5.4 Growth of all infants will be routinely monitored up to 2 years.

Activity	Who	Outcomes	Timeline	Benefits/risks
5.4.1 Increase the awareness and training of all health workers on growth promotion.	MOH	<ul style="list-style-type: none"> on-going activity before NPAN and continues. 	on-going	Enables staff to pass on knowledge to others.
5.4.2 Provide appropriate equipment and facilities.	MOH/NGOs	<ul style="list-style-type: none"> MOH provides in hospitals, esp MCH. 	on-going	Provides staff with appropriate tools.
5.4.3 Promote health education on growth promotion to all mothers and the community in general, including high schools and tertiary education students, recognizing them as potential mothers and parents.	MOH/TNCC/NGOs/MOE	<ul style="list-style-type: none"> School health training . Medical officer appointed . workshop on health esp. for youth. MOE, secretary, tertiary health education. 	on-going 1997 1996 on-going	Allows the public to make informed choices about health.
5.4.4 Analyse existing data on infant and child growth that have been collected by current monitoring.	MOH	<ul style="list-style-type: none"> not achieved. collection of data on-going. needs for a growth monitoring survey. need for a consultant to organise the survey. 		Provides policy makers with sufficient data to make decisions.

OUTPUT 6: SOCIO-ECONOMICALLY DEPRIVED AND NUTRITION VULNERABLE CARED FOR.

6.1 Appropriate and relevant elements of nutrition with routinely taught in school curricula starting from primary school.

Activity	Who	Outcomes	Timeline	Benefits/risks
6.1.1 Strengthen health studies programme in primary schools.	MOE	<ul style="list-style-type: none"> • continuing. • nutrition taught in primary and secondary schools. 	on-going	Health incorporate into curriculum.
6.1.1.1 Target schools in the newly settled areas of Tongatapu and the outer islands.	MOE/NGOs/ MOH	<ul style="list-style-type: none"> • interagency cooperation required. 	on-going	Make health studies available to all students.
6.1.2 Integrate health and nutrition in other subject areas, including involving parents during PTA meetings.		<ul style="list-style-type: none"> • primary schools - parents greatest influence. 	on-going	Increased public knowledge about health.
6.1.2.1 Ensure schools.		<ul style="list-style-type: none"> • no action yet. • canteens in schools need attention by NFNC. • education campaign need to be mounted on (1) overnutrition (2) undernutrition in school children. 		Ensure a minimum standard of food and nutrition quality for school children.

6.2 Better public health and nutrition education with particular focus on women will have been promoted.

Activity	Who	Outcomes	Timeline	Benefits/risks
6.2.1 Promote better public health and nutrition education with particular focus on women (especially those in deprived areas) but ideally including home economics education for both boys and girls.	NFNC/ MOE/ MOH/ NGOs	<ul style="list-style-type: none"> • more taught to buy and girls in schools. • NFNC radio program each week. • MOH radio program each week. 	on-going	Integrates nutrition into home economics increases awareness.
6.2.1.1 Reinforce the need for both boys and girls in forms 1 and 2 to study Health Studies and to extend this to the upper levels as well.		<ul style="list-style-type: none"> • MOE - company health studies in grade 1 and 2 in Government schools Home ec. elective. 		Nutrition study available to school children.
6.2.1.2 Produce information sheets for the community in the local language.	MOH/ NFNC	<ul style="list-style-type: none"> • produce information sheets in local language: 	on-going	Nutrition information easily available at the village level.

6.3 Malnutrition of children under 5 years will not be a public health problem.

Activity	Who	Outcomes	Timeline	Benefits/risks
6.3.1 Improve maternal diets and nutrition through health promotion and education using the mixed media and various formats.	MOH/MOE/MAF/NGOs	<ul style="list-style-type: none"> • 1986 survey results used by NFNC/MOH, MOE and NGO's. 	on-going	Maximises health of infants.
6.3.2 Ensure all mothers have adequate ante-natal care.	MOH	<ul style="list-style-type: none"> • high rates of attendance at MOH clinics. • need to know the rates. 	on-going	Maximises health of mothers.
6.3.3 Promote breast feeding as a means of reducing malnutrition.	MOH/MOE/NGOs/TNCC	<ul style="list-style-type: none"> • MOH and NFNC do. 	on-going	Reduces health risks for infants.
6.3.4 Increase health and nutrition education on the timing and type of complementary foods and later diets for children.	MOH/NFNC/NGOs	<ul style="list-style-type: none"> • MOH/MOE/NFNC do as on-going activity. 	on-going	Gives children better opportunities for increased health.
6.3.5 Further strengthen the control and management of food borne diseases.	MOH/ MLSNR	<ul style="list-style-type: none"> • need to know the rates of food borne disease. 	on-going	Protects public from food borne diseases.
6.3.6 Further reduce severe as well moderate malnutrition among children.	MOH	<ul style="list-style-type: none"> • 1986 rates below 1% in children. • need further survey to find present rates. 	on-going	Increases health of children.

OUTPUT 7: SPECIFIC MICRONUTRIENT DEFICIENCIES PREVENTED CONTROLLED.**7.1 Micronutrient status of national diets will be adequate.**

Activity	Who	Outcomes	Timeline	Benefits/risks
7.1.1 Improve or maintain micronutrient (including iron) content of diets by nutrition information and health education through posters, charts and pamphlets and by training, with emphasis on including traditional Tongan foods.	MAF/MOH/ NFNC/NGOs/ MOE	<ul style="list-style-type: none"> • MAF - improve nutritional quality through cooking and storage program. • MOE/NGOs have similar programs. 	on-going	Eventual information of micronutrient deficiencies.
7.1.1.1 Promote micronutrient awareness in villages through on-going programmes of MAF and MOE.			on-going	
7.1.1.2 Utilize private sector involvement (e.g. bakeries, restaurants) to sponsor better food and nutrition.		<ul style="list-style-type: none"> • NFNC involvement with bakery. 	on-going	
7.1.2 Improve awareness of iron content of diets, biological availability of iron in different food combinations and dietary enhancers and inhibitors to iron absorption, by wider dissemination of nutrition information.	MAF/MOH	<ul style="list-style-type: none"> • MAF Women's section has a nutrition awareness program at the village level - almost 200 groups of women in Tonga. 	on-going	

Activity	Who	Outcomes	Timeline	Benefits/risks
7.1.2.1 Continue to distribute iron (and folate) supplements to pregnant women and monitor iron levels for pregnant women.	MOH	<ul style="list-style-type: none"> • MOH ante-natal clinics and health centres. 	on-going	
7.1.3 Investigate feasibility of iron fortification of appropriate foods and conduct relevant research if feasible.	MAF/MLC/ MOH	<ul style="list-style-type: none"> • not achieved. • needs to be revised by NFNC. 		

OUTPUT 8: APPROPRIATE DIETS AND HEALTHY LIFESTYLES PROMOTED.**8.1 Tongan dietary guidelines will have been developed and disseminated.**

Activity	Who	Outcomes	Timeline	Benefits/risks
8.1.1 Develop and promote Tongan dietary guidelines through training and demonstrations and disseminate them through pamphlets to guard against micronutrient deficiencies.	NFNC/MOH/ NGOs/MAF/ MOE	<ul style="list-style-type: none"> NFNC draft dietary guidelines made for approval in 1997. 	1996	
8.1.2 Promote traditional foods through all means including training and demonstrations.	NFNC/MOH/ MOE/NGOs	<ul style="list-style-type: none"> NGO's conduct projects called "Food Savers" project. 	on-going	
8.1.3 Encourage wise food choices by increasing information and availability.	NFNC/MAF/ MOH/NGOs/ MOE	<ul style="list-style-type: none"> NFNC - provision of information on healthy food choices. 	on-going	

8.2 A majority of Tongans will be convinced of the need for healthy diets.

Activity	Who	Outcomes	Timeline	Benefits/risks
8.2.1 Promote nutrition and health education promotion, including counselling, through all available avenues e.g. schools, sporting clubs, churches etc. and using all available media.	NFNC/MOH/ NGOs/TNCC/ MAF	<ul style="list-style-type: none"> • MOH using all available mean to promote nutrition. • MOE in primary, secondary schools. 	on-going	Ensure a more informed public.
8.2.1.1 Strengthen currently on-going nutrition programmes.		<ul style="list-style-type: none"> • working with other sectors. • NGO recognise nutrition as a PHC issue. • MOH radip program voted the most listened to in 1995. 	on-going	
8.2.2 Discourage importation of and consumption of less nutritious foods.	NFNC/MOH/ MAF	<ul style="list-style-type: none"> • NGO's - NFNC has achieved some success in raising awareness of less nutrition foods. 	on-going	Guides public to a more appropriate diet.
8.2.2.1 Study feasibility of differential (heavier) taxing on importec "less nutritious" foods.		<ul style="list-style-type: none"> • Mutton Flaps papper to be presented to Cabinet by NFNC in 1997. 	on-going	<p>Protection of local industry.</p> <p>Improves quality of diet for Tongans.</p>
8.2.2.2 By consurr er education, increase demand for health er foods such as leaner meat.		<ul style="list-style-type: none"> • NFNC. 	on-going	

Activity	Who	Outcomes	Timeline	Benefits/risks
8.2.3 Encourage the consumption of local foods by marketing and other support for local foods e.g. by identifying them in the market, by import quotas etc.	NFNC/MAF/ MLCI	• NFNC.	on-going	
8.2.4 Offer dietary advice and diet counselling services, including through radio programmes, as well as on a one to one basis and by training for those counselling.	MOH	Dietition at hospitals plus nutritionist at NFNC.	on-going	Inform the public.

8.3 A majority of Tongans of all ages will be taking regular appropriate exercise at all levels.

Activity	Who	Outcomes	Timeline	Benefits/risks
8.3.1 Encourage appropriate exercise, at all levels for all ages (including the different stages of life - childhood, adolescence, adulthood and old age).	NFNC/ MOE/ NGOs/ Scouts/ Guides/ TNCC/ Sporting clubs	<ul style="list-style-type: none"> • NFNC - Japanese Volunteer Fitness instructor enrolled. • most successful Tongan program was weight loss program in 1995-96. 	1997 on-going	
8.3.1.1 Use all forms of exercise including walking, physical education classes, music/movement/aerobic classes etc.		<ul style="list-style-type: none"> • All agencies involved in on-going exercise projects. 	on-going	

8.4 Levels of overweightness, obesity and noncommunicable diseases in the community will have stabilised.

Activity	Who	Outcomes	Timeline	Benefits/risks
8.4.1 Widely disseminate health and nutrition education/promotion, focussing on energy input and output to combat overweightness, obesity and noncommunicable diseases in the community.	NFNC/MOH/ MOE/MAF/ NGOs	<ul style="list-style-type: none"> • overweight issues included in all programs. • for all agencies. 	on-going	
8.4.1.1 Disseminate information on obesity, diabetes, and other noncommunicable diseases by all means; pamphlets, charts, radio spots etc.		<ul style="list-style-type: none"> • radio used MOH, NFNC. • other media used by other agencies 	on-going	
8.4.2 Develop programmes for community outreach for diagnosis and management of the noncommunicable diseases, including diabetes.	MOH	<ul style="list-style-type: none"> • MOH - screening programs in communities 	on-going	
8.4.2.1 Conduct training workshops for health workers and the community as well as disseminating information and conducting screening in the community.	MOH	<ul style="list-style-type: none"> • Diabetes clinic - daily. • Hypotension clinic - weekly. • CVD Clinic - weekly held. 	on-going	
8.4.3 Promote Community activities, competitions (e.g. weight loss, beauty contests, aerobics, marathons etc.) and other incentives to lose or maintain weight.	NFNC/ MOH/ MOE/ NGOs/ Local Councils/ Private enterprise	<ul style="list-style-type: none"> • NFNC healthy not IOC's comp. • NFNC community aerobic 	on-going	
8.4.3.1 Feature energy balance (weight control) as one aspect of World Food Day activities (October 16).		<ul style="list-style-type: none"> • NFNC activity involved every year. 	on-going	

8.5 The level of risk factors for the noncommunicable disease (such as smoking and consumption of high energy diets and alcohol) will have been reduced.

Activity	Who	Outcomes	Timeline	Benefits/risks
8.5.1 Reduce unhealthy lifestyle behaviours leading to increased levels of NCD risk factors by health education/promotion to reduce people's demand for cigarettes, alcohol and drugs, with specific gearing towards young non-smokers.	MOH/MLCI/ TNCC/NGOs/ MOE	<ul style="list-style-type: none"> MOH - draft bill to prohibit selling tobacco products to children and also to prohibit smoking in Government building. 	on-going	Protecting the health of young Tongans.
8.5.1.1 Conduct activities on World No Tobacco Day (May 1), and other NCD risk factors.		<ul style="list-style-type: none"> MOH and MOE intend joint survey at school children. 	1997	Demonstrate Tonga's support.
8.5.2 Encourage the adoption of legislation that supports healthy lifestyles.	MOH/MLCI/CL D/CPD/TNCC/ NGOs (lobbying)	<ul style="list-style-type: none"> MOH document on healthy lifestyles. 	on-going	Receptive and supportive Health Minister.
8.5.2.1 Review existing legislation.		<ul style="list-style-type: none"> review on tobacco done only. 	1995	Find gaps in legislation.
8.5.2.2 Adopt and adapt WHO Action Plan on Tobacco or Health 1995 that uses incentives, persuasion and legislation e.g. banning of smoking in public places, restaurants etc.		<ul style="list-style-type: none"> MOH, agencies, esp. MOH, using WHO plan. 	1996	

Activity	Who	Outcomes	Timeline	Benefits/risks
8.5.3 Try innovative incentives e.g. by introducing a special tax on cigarettes and alcohol, the proceeds of which would be used for health promotion activities.	CPD/MFN/ MOH/NGOs (lobbying)	Tobacco and alcohol taxed by Tongan government, but funds go into general revenue.	on-going	Discourage excessive tobacco and alcohol use.
8.5.4 Train the trainee and counselling services for those with NCD risk factors be made available.	MLCI/MOH/ NFNC/NGOs/ TNCC	<ul style="list-style-type: none"> • funds available from government. • NFNC to coordinate. 		

8.6 The results of the 1992 Nutrition/NCD survey will have been analysed and released for general information and use.

Activity	Who	Outcomes	Timeline	Benefits/risks
8.6.1 Finalize analysis and compilation of results.	MOH	<ul style="list-style-type: none"> Chairman of NFNC to apply to Minister of Health to release the information on 1992 dietary survey. 	1997	
8.6.2 Dissemination of results.	MOH/NFNC/ MOE			
8.6.3 Convene NCD workshop for policy makers.	MOH	<ul style="list-style-type: none"> not achievable until the result of the survey are known. 		

OUTPUT 9: NUTRITION SITUATION ASSESSED, ANALYSED MONITORED.**9.1 Surveys and research activities related to health nutrition will be processed through NFNC.**

Activity	Who	Outcomes	Timeline	Benefits/risks
9.1.1 Develop framework by which nutrition-related surveys and research can be reviewed, ensuring plans are made for analysis and dissemination.	CPD/NFNC/ MOH/NFNC	<ul style="list-style-type: none"> • not achieved. • need to collect all statistical, and nutrition information from 1983 - to provide baselines. 		Provides a basis for policy decision making.
9.1.1.1 Evaluate usefulness and relevance of the 1986 National Nutrition Survey.		<ul style="list-style-type: none"> • Results available. • OWT/charts and malnutrition results. • iron deficiency anaemia. 	1986	Provides a baseline at nutrition data.

9.2 National Nutrition data will be available for policy making and other purposes.

Activity	Who	Outcomes	Timeline	Benefits/risks
9.2.1 Conduct feasibility of plan to conduct a national nutrition survey, taking into account the 1986 survey and 1992 NCD/Nutrition Survey.	NFNC	<ul style="list-style-type: none"> • 1994 SPC consultant used. • need to complete 1992 survey. <p>NFNC ask for the information - write to Minister of health.</p>		Monitors the effects of NPAN.
9.2.2 Develop Planning Committee and propose methodology depending upon the result of the review of earlier surveys and clear through NFNC.		<ul style="list-style-type: none"> • not established yet to be done in year 2. 	1997	Formalises R & D on nutrition.
9.2.3 Develop methodology and analytical framework, implement survey, analyse and disseminate results.	NFNC/MOH/ Media	<ul style="list-style-type: none"> • methodology will be developed at 1996 workshop. 		Ensures sustainability of food and nutrition R & D.

9.3 A simple functional National Nutrition Surveillance system will have been developed.

Activity	Who	Outcomes	Timeline	Benefits/risks
<p>9.3.1 Study feasibility and existing data already being collected e.g. a review of the national health charts for children, and including an evaluation of information in the 1986 survey when considering a surveillance system.</p>	NFNC	<ul style="list-style-type: none"> • need STC to organise. • limitation of NFNC. 	1997	Provides a baseline of nutrition and health data.
<p>9.3.2 Using local expertise whenever possible, propose and develop a sustainable, cost-effective plan.</p>	NFNC	<ul style="list-style-type: none"> • needs to be established. 	1997	Ensures sustainability and independence of nutrition research.
<p>9.3.3 Implement, evaluate and modify to ensure rapid dissemination of information to those using such monitoring information.</p>	NFNC	<ul style="list-style-type: none"> • needs to be established. 	1997	Keeps nutrition R & D up to date.

9.4 Monitoring and evaluation system to assess the effectiveness and usefulness of the NPAN will have been developed.

Activity	Who	Outcomes	Timeline	Benefits/risks
9.4.1 Develop appropriate methodology, including identification of appropriate indicators and by a study of data already available.	NFNC	<ul style="list-style-type: none"> develop at 1996 workshop. 		Identifies nutrition indicators and trends for decision-making.
9.4.3 Modify NPAN, once implemented and evaluated, as needed.	NFNC	<ul style="list-style-type: none"> STC given mandate to change subject to approval by the NFNC. 	1997	Keeps NPAN up to date.

Annex 1

List of Resource Persons :

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| 1. | Mrs. 'Ainise Fungavai | Ministry of Education |
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| 14. | Mrs. Rosemary Taufatofua | Central Planning Department |
| 15. | Mr. George Moengangongo | Interested Member of the Community |
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| 17. | Mrs. Kato Latavao | Red Cross Society of Tonga |
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