

# The International Conference on Nutrition

## Reaffirming FAO's commitment to improving nutrition

<http://www.fao.org/docrep/v7700t/v7700t02.htm>

*"Hunger and malnutrition are unacceptable in a world that has both the knowledge and the resources to end this human catastrophe.... We recognize that globally there is enough food for all and... pledge to act in solidarity to ensure that freedom from hunger becomes a reality."*

*World Declaration on Nutrition, 1992*

Fifty years after the founding of the Food and Agriculture Organization, global food production has increased steadily and a substantial decline in the prevalence of undernutrition has occurred (Figure 1). Despite this progress, FAO estimates that more than 800 million people do not have access to enough food to meet their basic daily needs (Figure 2). In addition, more than 40 percent of the world's entire population, 2 000 million people, have deficiencies in one or more micronutrients.

### [1. Food supplies for human consumption](#)

### [2. Undernutrition in developing countries, 1988-1990](#)

Recognizing the gravity of this situation, FAO and the World Health Organization (WHO) convened the first global conference devoted solely to addressing the world's nutrition problems, the International Conference on Nutrition (ICN), at FAO Headquarters in Rome in December 1992. Representatives from 159 countries and the European Community, 15 United Nations organizations and 144 non-governmental organizations (NGOs) participated.

For the three years leading up to the ICN, intense preparatory activities were undertaken throughout the world. Governments prepared papers describing the food and nutrition situation within their countries, the factors influencing the nutritional status of the people and the groups within the population that were vulnerable to nutrition problems. State-of-the-art technical papers were prepared for the conference, and experts, policy-makers and planners from around the world participated in regional and national meetings. At the August 1992 Preparatory Committee Meeting held at WHO Headquarters in Geneva, government representatives considered the draft *World Declaration and Plan of Action for Nutrition*, which was finalized and adopted unanimously at the ICN later that year.

During the ICN, governments pledged to make all efforts to eliminate or reduce substantially, before the next millennium, starvation and famine; widespread chronic hunger; undernutrition, especially among children, women and the aged; micronutrient deficiencies, especially iron, iodine and vitamin A deficiencies; diet-related communicable and non-communicable diseases; impediments to optimal breast-feeding; and inadequate sanitation, poor hygiene and unsafe drinking-water.

The *World Declaration on Nutrition* and *Plan of Action for Nutrition* also serve as a guide to the technical issues of nutrition policy and programme development. Nine priority themes are elaborated in the *Plan of Action for Nutrition*:

- incorporating nutritional objectives, considerations and components into development policies and programmes;
- improving household food security;
- protecting consumers through improved food quality and safety;
- preventing and managing infectious diseases;
- promoting breast-feeding;
- caring for the socio-economically deprived and nutritionally vulnerable;
- preventing and controlling specific micronutrient deficiencies;
- promoting appropriate diets and healthy lifestyles;
- assessing, analysing and monitoring nutrition situations.

Many governments, non-governmental organizations (NGOs) and international agencies have maintained the momentum created by the conference. Each in its respective realm of work is striving to carry out the commitments made at the conference, and many are undertaking new initiatives.

One of the outstanding results of the ICN has been the preparation of National Plans of Action for Nutrition (NPANs). As of May 1995, over 73 countries had finalized or revised draft NPANs, while another 20 countries were still in the early drafting stages. The NPAN represents the country's particular priorities and strategies for alleviating hunger and malnutrition. Most NPANs are designed to direct countries, donor agencies and NGOs in project and programme implementation. They also serve as a mechanism for mobilizing political and funding support for food and nutrition programmes. For many countries the NPAN includes budget allocations and timetables for project proposals. Other countries have integrated the NPAN into national development plans in order to ensure national support. FAO member countries have indicated that the NPAN process has been invaluable in advancing nutrition issues to the forefront of national development agendas and in meeting the overall goals of the ICN.

National workshops for NPAN development have included representatives from government ministries, NGOs, private industry, universities and international agencies. The strengthening of intersectoral cooperation among those organizations working on nutrition-related issues is another noteworthy outcome of the ICN. In many cases, this cooperation has been institutionalized through multisectoral committees in which representatives from ministries of agriculture, health, education, planning and other sectors have combined efforts to develop comprehensive integrated programmes for improving nutrition.

FAO has had a fundamental role in complementing national initiatives following the ICN. The Organization has provided technical assistance in NPAN development and ICN-related activities to 92 countries. To enhance and supplement the technical assistance, FAO has provided over US\$1.5 million in funding assistance for national workshops, project implementation, national consultants and other ICN-related activities.

In supporting these efforts, FAO has concentrated on the areas of technical expertise within its mandate: promoting household food security and community development; ensuring the quality and safety of food supplies; combating micronutrient deficiencies; promoting nutrition education; assessing, analysing and monitoring food and nutrition situations; and incorporating nutrition objectives into development activities.

Food security is a high priority for FAO as the largest of the UN specialized agencies and the one assigned the role of improving the food and agriculture sectors. The ICN focused on food security at the household and community levels and helped to make more explicit the linkages between nutrition and agricultural development. FAO is promoting agricultural development to increase food consumption and provide income to reduce poverty. In light of the challenges facing countries and the international community in their efforts to obtain lasting food security for all, FAO will convene the World Food Summit in 1996, at which heads of State will deliberate the pragmatic and concrete measures needed to achieve this goal at the national, regional and global levels.

As FAO reflects on its 50 years of existence, the ICN may be regarded as one of its most significant accomplishments. A set of principles has taken root and a process has been set in motion, with the global community working together to ensure that all people have access to nutritionally adequate and safe foods throughout the world. Through the ICN, FAO has reaffirmed its commitment and is fulfilling its obligation to those individuals for whom the Organization was established.

## World Declaration on Nutrition <sup>1</sup>

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### [Annex](#)

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<sup>1</sup>This document is also available in Arabic, Chinese, French, Russian and Spanish. To obtain copies contact the FAO Food Policy and Nutrition Division.

Ce document est également disponible en français, en arabe, en chinois, en espagnol et en russe. Pour en obtenir des exemplaires, s'adresser à la Division des politiques alimentaires et de la nutrition.

Este documento existe también en árabe, chino, español, francés y ruso. Pueden obtenerse ejemplares, solicitándolos a la Dirección de Política Alimentaria y Nutrición.

***The ICN Declaration and Plan of Action were announced to the press. From left: Ibrahim Adam, Chairperson of the Commission of the Whole of ICN; Edouard Saouma, Director-General, FAO; Simone Veil, Chairperson of the ICN; Hiroshi Nakajima, Director-General, WHO. - La Déclaration et le Plan d'action de la CIN ont été annoncés à la presse. De gauche à droite: M. Ibrahim Adam, Président de la Commission plénière de la CIN; M. Edouard Saouma, Directeur général de la FAO; Mme Simone Veil, Présidente de la CIN; M. Hiroshi Nakajima, Directeur général de l'OMS. - Se anunciaron a la prensa la Declaración y el Plan de Acción de la CIN. De izquierda a derecha: el Sr. Ibrahim Adam, Presidente de la Comisión Plenaria de la CIN; et Sr. Edouard Saouma, Director General de***

*la FAO; la Sra. Simone Veil, Presidenta de la CIN, y el Sr. Hiroshi Nakajima, Director General de la OMS.*

1. We, the Ministers and the Plenipotentiaries representing 159 states and the European Economic Community at the International Conference on Nutrition (Rome, December 1992), declare our determination to eliminate hunger and to reduce all forms of malnutrition. Hunger and malnutrition are unacceptable in a world that has both the knowledge and the resources to end this human catastrophe, We recognize that access to nutritionally adequate and safe food is a right of each individual. We recognize that globally there is enough food for all and that inequitable access is the main problem, Bearing in mind the right to an adequate standard of living, including food, contained in the Universal Declaration of Human Rights, we pledge to act in solidarity to ensure that freedom from hunger becomes a reality, We also declare our firm commitment to work together to ensure sustained nutritional well-being for all people in a peaceful, just and environmentally safe world.

2 Despite appreciable worldwide improvements in life expectancy, adult literacy and nutritional status, we all view with the deepest concern the unacceptable fact that about 780 million people in developing countries - 20 percent of their combined population - still do not have access to enough food to meet their basic daily needs for nutritional well-being.

3. We are especially distressed by the high prevalence and increasing numbers of malnourished children under five years of age in parts of Africa, Asia and Latin America and the Caribbean. Moreover, more than 2000 million people, mostly women and children, are deficient in one or more micronutrients: babies continue to be born mentally retarded as a result of iodine deficiency; children go blind and die of vitamin A deficiency; and enormous numbers of women and children are adversely affected by iron deficiency. Hundreds of millions of people also suffer from communicable and non-communicable diseases caused by contaminated food and water. At the same time, chronic non-communicable diseases related to excessive or unbalanced dietary intakes often lead to premature deaths in both developed and developing countries.

4. We call on the United Nations to consider urgently the issue of declaring an International Decade of Food and Nutrition, within existing structures and available resources, in order to give additional emphasis to achieving the objectives of this World Declaration on Nutrition. Such consideration should give particular emphasis to the food and nutrition problems of Africa, and of Asia, Latin America and the Caribbean.

5. We recognize that poverty and the lack of education, which are often the effects of underdevelopment, are the primary causes of hunger and undernutrition. There are poor people in most societies who do not have adequate access to food, safe water and sanitation, health services and education, which are the basic requirements for nutritional well-being.

6. We commit ourselves to ensuring that development programmes and policies lead to a sustainable improvement in human welfare, are mindful of the environment and are conducive to better nutrition and health for present and future generations. The multifunctional roles of agriculture, especially with regard to food security, nutrition, sustainable agriculture and the conservation of natural resources, are of particular importance in this context. We must implement at family, household, community, national and international levels, coherent agriculture, animal husbandry, fisheries, food, nutrition, health, education, population, environmental, economic and social policies and programmes to achieve and maintain balance between the population and available resources and between rural and urban areas.

7. Slow progress in solving nutrition problems reflects the lack of human and financial resources, institutional capacity and policy commitment in many countries needed to assess the nature, magnitude and causes of nutrition problems and to implement concerted programmes to overcome them. Basic and applied scientific research, as well as food and nutrition surveillance systems, are needed to more clearly identify the factors that contribute to the problems of malnutrition and the ways and means of eliminating these problems, particularly for women, children and aged persons.

8. In addition, nutritional well-being is hindered by the continuation of social, economic and gender disparities; of discriminatory practices and laws; of floods, cyclones, drought, desertification and other natural calamities; and of many countries inadequate budgetary allocations for agriculture, health, education and other social services.

9. Wars, occupations, civil disturbances and natural disasters, as well as human rights violations and inappropriate socio-economic policies, have resulted in tens of millions of refugees, displaced persons, war-affected non-combatant civilian populations and migrants, who are among the most nutritionally vulnerable groups. Resources for rehabilitating and caring for these groups are often extremely inadequate and nutritional deficiencies are common. All responsible parties should cooperate to ensure the safe and timely passage and distribution of appropriate food and medical supplies to those in need, in accordance with the Charter of the United Nations.

10. Changing world conditions and the reduction of international tensions have improved the prospects for a peaceful solution of conflicts and have given us an opportunity as never before to redirect our resources increasingly towards productive and socially useful purposes to ensure the nutritional well-being of all people, especially the poor, deprived and vulnerable.

11. We recognize that the nutritional well-being of all people is a pre-condition for the development of societies and that it should be a key objective of progress in human development. It must be at the center of our socio-economic development plans and strategies. Success is dependent on fostering the participation of the people and the community and multisectoral actions at all levels, taking into account their long-term effects. Shorter-term measures to improve nutritional well-being may need to be initiated or strengthened to complement the benefits resulting from longer-term development efforts.

12 Policies and programmes must be directed towards those most in need. Our priority should be to implement people-focused policies and programmes that increase access to and control of resources by the rural and urban poor, raise their productive capacity and incomes and strengthen their capacity to care for themselves. We must support and promote initiatives by people and communities and ensure that the poor participate in decisions that affect their lives. We fully recognize the importance of the family unit in providing adequate food, nutrition and a proper caring environment to meet the physical, mental, emotional and social needs of children and other vulnerable groups, including the elderly. In circumstances where the family unit can no longer fulfil these responsibilities adequately, the community and/or government should offer a support network to the vulnerable. We, therefore, undertake to strengthen and promote the family unit as the basic unit of society.

13 The right of women and adolescent girls to adequate nutrition is crucial. Their health and education must be improved. Women should be given the opportunity to participate in the decision-making process and to have increased access to and control of resources. It is particularly important to provide family planning services to both men and women and to

provide support for women, especially working women, whether paid or unpaid, throughout pregnancy and breast-feeding and during the early childhood period. Men should also be motivated through appropriate education to assume an active role in the promotion of nutritional well-being.

14 Food aid may be used to assist in emergencies, to provide relief to refugees and displaced persons and to support household food security and community and economic development. Countries receiving emergency food aid should be provided with sufficient resources to enable them to move on from the rehabilitation phase to development, so that they will be in a position to cope with future emergencies. Care must be taken to avoid creating dependency and to avoid negative impacts on food habits and on local food production and marketing. Before food aid is reduced or discontinued, steps should be taken to alert recipient countries as much in advance as possible so that they can identify alternative sources and implement other approaches. Where appropriate, food aid may be channeled through NGOs with local and popular participation, in accordance with the domestic legislation of each country.

15 We reaffirm our obligations as nations and as an international community to protect and respect the need for nutritionally adequate food and medical supplies for civilian populations situated in zones of conflict. We affirm in the context of international humanitarian law that food must not be used as a tool for political pressure. Food aid must not be denied because of political affiliation, geographic location, gender, age, ethnic, tribal or religious identity.

16 We recognize the fact that each government has the prime responsibility to protect and promote food security and the nutritional well-being of its people, especially the vulnerable groups. However, we also stress that such efforts of low-income countries should be supported by actions of the international community as a whole. Such actions should include an increase in official development assistance in order to reach the accepted United Nations target of 0.7 percent of the GNP of developed countries as reiterated at the 1992 United Nations Conference on Environment and Development<sup>2</sup>. Also, further renegotiation or alleviation of external debt could contribute in a substantive manner to the nutritional well-being in medium-income countries as well as in low-income ones.

<sup>2</sup> "Developed countries reaffirm their commitments to reach the accepted United Nations target of 0.7 percent of GNP for ODA and, to the extent that they have not yet achieved that target, agree to augment their aid programmes in order to reach that target as soon as possible and to ensure prompt and effective implementation of Agenda 21. Some countries have agreed to reach the target by the year 2000. Those countries that have already reached the target are to be commended and encouraged to continue to contribute to the common effort to make available the substantial additional resources that have to be mobilized. Other developed countries, in line with their support for reform efforts in developing countries, agree to make their best efforts to increase their level of ODA. ..." (Report of United Nations Conference on Environment and Development, Rio de Janeiro, 1992, paragraph 33.13).

17 We acknowledge the importance of further liberalization and expansion of world trade, which would increase foreign exchange earnings and employment in developing countries. Compensatory measures will continue to be needed to protect adversely affected developing countries and vulnerable groups in medium-and low-income countries from negative effects of structural adjustment programmes.

18 We reaffirm the objectives for human development, food security, agriculture, rural development, health, nutrition and environment and sustainable development enunciated in a number of international conferences and documents<sup>3</sup>. We reiterate our commitment to the nutritional goals of the Fourth United Nations Development Decade and the World Summit for Children<sup>4</sup>.

<sup>3</sup> The World Food Conference, 1974; the Alma Ata Conference on Primary Health Care, 1978; the World Conference on Agrarian Reform and Rural Development, 1979; the Convention on the Elimination of All Forms of Discrimination Against Women, 1979, especially articles 12 and 13; the Innocent Declaration on the Protection, Promotion and Support of Breastfeeding, 1990; the Montreal Policy Conference on Micronutrient Malnutrition, 1991; the Rio Declaration on Environment and Development, 1992.

<sup>4</sup> See Annex.

19. As a basis for the Plan of Action for Nutrition and guidance for formulation of national plans of action, including the development of measurable goals and objectives within time frames, we pledge to make all efforts to eliminate before the end of this decade:

- famine and famine-related deaths;
- starvation and nutritional deficiency diseases in communities affected by natural and man-made disasters;
- iodine and vitamin A deficiencies, We also pledge to reduce substantially within this decade:
  - starvation and widespread chronic hunger;
  - undernutrition, especially among children, women and the aged;
  - other important micronutrient deficiencies, including iron;
  - diet-related communicable and non-communicable diseases;
  - social and other impediments to optimal breast-feeding;
  - inadequate sanitation and poor hygiene, including unsafe drinking-water.

20. We resolve to promote active cooperation among governments, multilateral, bilateral and non-governmental organizations, the private sector, communities and individuals to eliminate progressively the causes that lead to the scandal of hunger and all forms of malnutrition in the midst of abundance.

21. With a clear appreciation of the intrinsic value of human life and the dignity it commands, we adopt the attached Plan of Action for Nutrition and affirm our determination to revise or prepare, before the end of 1994, our national plans of action, including attainable goals and measurable targets, based on the principles and relevant strategies in the attached Plan of Action for Nutrition. We pledge to implement it.

## Annex

### Nutrition goals of the Fourth United Nations

#### Development Decade

Member States must give effect to agreements already reached to make all efforts to meet four goals during the decade:

- (a) To eliminate starvation and death caused by famine;
- (b) To reduce malnutrition and mortality among children substantially;
- (c) To reduce chronic hunger tangibly;
- (d) To eliminate major nutritional diseases.

#### Nutrition goals of the World Summit for Children (to be reached by the year 2000)

- (a) Reduction in severe, as well as moderate malnutrition among under-five children by half of 1990 levels;
- (b) Reduction of the rate of low birth weight (2.5 kg or less) to less than 10 percent;
- (c) Reduction of iron deficiency anemia in women by one-third of the 1990 levels;
- (d) Virtual elimination of iodine deficiency disorders;
- (e) Virtual elimination of vitamin A deficiency and its consequences, including blindness;
- (f) Empowerment of all women to breast-feed their children exclusively for four to six months and to continue breast-feeding, with complementary food, well into the second year;
- (g) Growth promotion and its regular monitoring to be institutionalized in all countries by the end of the 1990s;
- (h) Dissemination of knowledge and supporting services to increase food production to ensure household food security.

<http://www.fao.org/docrep/u9920t/u9920t0a.htm>

## Plan of Action for Nutrition <sup>1</sup>

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## **I. Introduction**

### **1. GENERAL**

1 Despite considerable progress in recent decades, the world still falls far short of the goal of adequate food and nutrition for all. Over 780 million people, mainly in Africa, South Asia and Latin America, do not have enough food to meet their basic daily needs for energy and protein. More than two billion people subsist on diets that lack the essential vitamins and minerals required for normal growth and development and for the prevention of premature death and disabilities such as blindness and mental retardation. At the same time hundreds of millions suffer from diseases caused or exacerbated by excessive or unbalanced dietary intakes or by the consumption of unsafe food and water.

2. Eradicating hunger and malnutrition is within the reach of humankind. Political will and well-conceived policies and concerted actions at national and international levels can have a dramatic impact on these nutrition problems. Many countries, including some of the poorest, have adopted and taken measures to strengthen food, nutrition, agriculture, education and health and family welfare programmes, which have dramatically reduced hunger and malnutrition. The current challenge is to build upon and accelerate the progress already made.

3. This global Plan of Action for Nutrition is designed to provide guidelines for governments, acting in partnership with non-governmental organizations (NGOs), the private sector, local communities, families and households and the international community, including international organizations, multilateral financing institutions and bilateral agencies, to achieve the objectives of the World Declaration on Nutrition adopted by the International Conference on Nutrition (ICN) It contains recommendations on policies, programmes and activities that resulted from an intensive ICN consultative process involving country-level preparations of national plans and regional consultations that included country representatives. It also represents the drawing together of a wide range of expert opinion from around the world on the many facets of problems that must be vigorously attacked to achieve proper nutritional status for all on a sustainable basis. Thus, this Plan of Action builds upon preceding work and represents a major step in preparing and implementing national nutrition improvement plans in coming years.

4 Coherent and effective action at local, national and international levels to achieve nutritional well-being is imperative However, resources, needs and problems vary between and within countries and regions of the world. Therefore, the situation in each country and region needs to be assessed in order to set priorities for formulating specific national and regional plans of action, giving tangible expression to policy-level commitments to improve the nutritional

well-being of the population. This should entail considering nutritional impacts of overall development plans and of all relevant sectoral development policies and plans. These plans should identify short- and long-term priority areas for action; specify goals, which should be quantified where feasible, to be achieved within specified time frames, define the roles of relevant government ministries, local communities and private institutions, and, as appropriate, include estimates of resources that are required. The plans should take into account the goals set forth in the World Declaration on Nutrition and be formulated by governments with the active participation of academic and local communities, NGOs and the private sector.

## **2. Overall objectives**

### ***Ensuring continued access by all people to sufficient supplies of safe foods for a nutritionally adequate diet***

5 To achieve satisfactory nutritional status, it is essential to ensure continued access to sufficient supplies of a variety of safe foods at affordable prices and of safe drinking-water so that all people, especially the poor and vulnerable groups, can have nutritionally adequate and safe diets. This is an issue of supreme importance to the many millions of people worldwide who currently suffer from persistent hunger, malnutrition and micronutrient deficiency diseases and to those others who are at risk of suffering in the future.

### ***Achieving and maintaining health and nutritional well-being of all people***

6. Good nutritional status is dependent upon each person having appropriate intakes of macronutrients and micronutrients, combined with adequate health and care and access to safe drinking-water. Nutritional status also depends on the availability of sufficient knowledge about appropriate diets, taking into account local food habits to prevent problems of undernutrition and of diet-related non-communicable diseases. Healthy and properly nourished people are both the result of successful development and contributors to it. Nutritional well-being should be adopted as a key objective in human development and must be at the centre of development strategies, plans and priorities.

### ***Achieving environmentally sound and socially sustainable development to contribute to improved nutrition and health***

7. Development policies and programmes in developed and developing countries should be sustainable and environmentally sound and lead to improved nutrition and health for both present and future generations. Equally important is the implementation of agricultural, food, health, family welfare, population, education and development policies that will achieve and maintain a balanced relationship between population needs and available resources as well as between rural and urban areas.

### ***Eliminating famines and famine deaths***

8. Food emergencies that deteriorate into famines are, in many cases, an indication of a lack of emergency preparedness. While the development of national early warning systems and the existence of emergency food reserves can help to avoid famines, other factors, such as open political environments at local and central levels and a free press, are crucial.

## **II. Major policy guidelines**

### ***Commitment to promoting nutritional well-being***

9. Each country should make firm social, economic and political commitments to achieving the objective of promoting the nutritional well-being of all its people as an integral part of its development policies, plans and programmes in the short and long run. At the same time, agriculture, health, education and social welfare, as well as all other relevant sectors and ministries, should consider and, where appropriate, incorporate nutrition objectives into their plans, programmes and projects.

They should also strengthen their capacity to foster public awareness and social responsiveness as well as to implement and monitor the progress of these programmes and projects. Equally necessary is ensuring coordination through adequate mechanisms to harmonize, promote and monitor programmes of different ministries, NGOs and the private sector to improve nutritional status.

### ***Strengthening agricultural policies***

10. Agricultural and overall economic policies should seek to preserve and enhance the productive capacity of agriculture where appropriate, to foster the sustainable growth of agricultural productivity and to create conditions that enable the agricultural sector to fulfil its multifunctional role as a source of food, employment, income and natural products delivered through sound natural resource management. Problems of local food shortages should be addressed through a judicious combination of production, trade and appropriate levels of national, regional and local stocks, with due regard given to the principles of an open international economic system.

### ***Environmentally sound and sustainable development***

11. Assuring access to adequate and safe food supplies, health care, education and related services can and must be achieved by using sustainable measures that are environmentally sound. This requires careful planning and utilization of natural resources to meet the nutritional and other needs of the growing world population on a lasting basis without jeopardizing the capacity to meet the needs of future generations. Providing incentives and motivating farmers to adopt sustainable and efficient practices are essential.

### ***Growth with equity: the need for both economic growth and equitable sharing of benefits by all segments of the population***

12. Development strategies to reduce poverty and ensure better nutrition for all should be oriented towards achieving economic growth with equity, ensuring social justice and protecting and promoting the well-being of all, particularly of vulnerable groups. Policies that discriminate against people on the basis of gender, age, ethnic or tribal group, religion, political affiliation or other grounds militate against social justice. All people in all societies must have equitable access to economic resources and opportunities, adequate and safe food, healthy living conditions and health services, clean water, sanitation and education and related services since these are basic requirements for nutritional well-being.

### ***Priority given to the most nutritionally vulnerable groups***

13 Infants, young children, pregnant and nursing women, disabled people and the elderly within poor households are the most nutritionally vulnerable groups. Priority must be given to protecting and promoting their nutritional well-being. Towards this end, their access to adequate care within the household and to health, education and other basic social services, such as family planning, maternal and child health (MCH) clinics and social security schemes, should be ensured. Special attention must be given to the nutritional, health and educational needs of female children and adolescents, which have often been overlooked in the past. Other groups that may be at risk include some indigenous populations, refugees and displaced persons, and these groups may require particular care and services to ensure their nutritional well-being.

### ***Focus on Africa***

14. The dramatic deterioration of the nutrition situation in Africa is of serious concern and demonstrates the vulnerability of much of the African population. It calls for tangible and sustained support from the international community. In this context, support should be given to the proposals for combating drought and desertification in Africa and in other countries facing similar situations adopted by the United Nations Conference on Environment and Development in 1992. This support must also be given to proposals to promote and protect agriculture and farmers' organizations. The initiative of the OAU, in cooperation with FAO, WHO, UNICEF and other relevant international organizations, to develop a Regional Nutrition Strategy emphasizing the need for the implementation of national plans of action is strongly commended and should be concretely supported.

### ***People's participation***

15. People-focused policies for nutritional improvement must acknowledge the fact that people's own knowledge, practices and creativity are important driving forces for social change. Local community involvement, including that of families and households, is a prerequisite for improving food production and sustaining access to food and for instituting adequate nutrition improvement programmes and projects. The importance of the informal sector in the processing and distribution of food should be recognized. Special efforts must be made to ensure the genuine participation of all people, particularly the poor and the marginalized, in the decisions and actions that are of concern to them in order to improve self-reliance and assure positive results. All relevant sectors of government should act in concert with communities and, as appropriate, with NGOs. Community involvement should lie not only in their indicating their perceived priorities but also in planning, managing and evaluating community-based interventions. Communities must be empowered to achieve sustained nutrition development. People's needs should be the focus for all partners in development in the identification of problems and in the planning, implementation and evaluation of intervention.

### ***Focus on women and gender equality***

16. Women are inherently entitled to adequate nutrition in their own right as individuals. They need to constantly balance their reproductive, nurturing, educational and economic roles, which are so important to the health and nutritional well-being of the household and of the entire community. Indeed, they are the main providers of meals, care and nutrition information in the household and they have a fundamental role in assuring improved nutritional status for all. Women play a key role in the socio-economic development of rural areas and in many societies they are also the main producers of food. Special attention should

be given to the nutrition of women during pregnancy and lactation. All forms of discrimination including detrimental traditional practices against women must be eliminated in accordance with the 1979 Convention on Elimination of All Forms of Discrimination Against Women. In order to promote and ensure meaningful equality between men and women, women's roles in the community must be understood. This will facilitate the sharing of their workload and responsibilities with other household members. Equity in the allocation of food between girls and boys must be promoted. Women and girls should be afforded equitable access to economic opportunities and to educational and training opportunities. Legal measures and social practices should guarantee women's equal participation in the development process by ensuring their access to and right to utilize productive resources, markets, credit, property and other family resources. Women and men should have equal access to programmes on family life education, which among other things would enable couples to plan the spacing of their children. In addition to improving education of women, and taking into account the role of men in controlling resources and in determining the nutritional status of household members, the nutrition education of men and boys should be enhanced. FAO and WHO have been requested to participate actively in the Fourth World Conference on Women to be held in Beijing, the People's Republic of China, in 1995 and to provide documentation for that conference, in close collaboration with the World Bank, UNDP, UNICEF and other relevant UN bodies, on the importance of women's and young girls' nutritional well-being and health for their own development and for the social and economic development of their countries.

### ***Development of human resources***

17. Nutritional well-being is a prerequisite for the achievement of the full social, mental and physical potential of a population so that all people can lead fully productive lives and contribute to the development of the community and the nation with dignity. This implies that improving access to food supplies and to health, education and social services contributes to the development of people. It is also necessary to develop and strengthen capacities for planning, managing and evaluating activities, as well as for providing services, through the training of adequate numbers of personnel in relevant disciplines, particularly in food and nutritional sciences. It is also necessary to strengthen the teaching of nutrition in universities, medical and agricultural faculties, schools of health sciences and other concerned educational institutions.

### ***Population policies***

18. Population policies need to have pride of place in the strategy for ensuring adequate nutrition for all, at all times. Countries should devise appropriate population policies, programmes and family planning services to allow prospective parents to freely and knowingly determine the number of their children and the spacing of their births, taking into account the interests of present and future generations. Relevant international organizations are encouraged to participate actively in the World Conference on Population and Development to be held in Cairo, Egypt, in September 1994.

### ***Health policies***

19. Health is an essential element of human development requiring the action of many social and economic sectors in addition to that of the health sector. The gross inequality in the health status of people now existing between developed and developing countries as well as within countries is unacceptable and requires urgent political, social and economic attention.

Inadequate health care can have serious adverse effects on nutritional status. Governments have a responsibility to protect and promote the health of their people and should formulate national policies, programmes and services in accordance with the strategy for Health for All<sup>2</sup>.

<sup>2</sup> *Global strategy for Health for All by the year 2000*, Health for All Series No. 3, WHO, Geneva, 1981.

### ***Promoting nutritional well-being through strengthened economic and technical cooperation among countries***

20. Increased economic and technical cooperation among countries can be of particular importance in promoting nutritional well-being. Regional discussions that were part of the preparations for the ICN highlighted the value of increased cooperation among developing countries and within and between regions in tackling common problems, in learning from each other's experiences and, where possible, in channeling regional resources to regional problems in the spirit of economic and technical cooperation among developing countries. Such cooperation exists in many regions and must be strengthened with appropriate support from international organizations. Increased economic and technical cooperation among developed and developing countries is also essential to decrease the existing disparities in the use of food resources.

### ***Allocating adequate resources***

21. To achieve the objective of nutritional well-being, it is essential that adequate financial, technical and in-kind resources for implementing necessary programmes and projects are provided. Each country should therefore make all efforts to allocate the resources needed for this purpose. As some of the programmes might need resources that are currently beyond the capacity of many developing countries, the international community, particularly bilateral agencies, multilateral financing institutions and international organizations, should support country efforts in this direction. Important ways in which the international community can assist include an increase in official development assistance in order to reach the accepted UN target of 0.7 percent of the GNP of developed countries as reiterated at the 1992 UN Conference on Environment and Development.

Economic assistance measures should be designed in such a way that they promote the long-term financial and economic stability of a recipient country.

## **III. Intersectoral issues**

22. Improved nutrition requires the coordinated efforts of relevant government ministries, agencies and offices with mandates for agriculture, fisheries and livestock, food, health, water and public works, supplies, planning, finance, industry, education, information, social welfare and trade. It also requires the cooperation of universities and research institutions, food producers, processors and marketers, the health care community; educators at all levels; the media and NGOs involved in all of these sectors. Therefore, national intersectoral coordination mechanisms are needed to ensure the concerted implementation, monitoring and evaluation of policies, plans and programmes. Community involvement is imperative in all aspects of planning and execution of nutrition improvement activities.

23. Many intersectoral issues must be addressed in policies and programmes to improve nutrition, with close cooperation and coordination by all. Among these issues are:

(a) creating, building and strengthening government institutions and community and private infrastructure to address nutritional problems, with special attention given to management and training skills;

(b) carrying out a wide range of nutrition training in the agriculture, health, economic and education sectors;

(c) using mass media to increase awareness and promote better nutrition;

(d) strengthening relevant research on identified problems and developing effective interventions through, *inter alia*, the building of institutional capacity and the provision of adequate financial support to research,

(e) strengthening educational systems and social communication mechanisms to improve and implement nutritional knowledge, especially at the individual, family and community levels,

(f) creating better monitoring and surveillance systems and mechanisms related to food, nutrition, health and education to assure positive policy and programme responses to surveillance and monitoring.

24 These common and essential issues are discussed as appropriate in the thematic areas in the following section of this Plan of Action.

#### **IV. Strategies and actions**

25 The basic goal of protecting and promoting nutritional well-being for all will be achieved only through a combination of policies involving various sectors at various levels of responsibility. Based on the worldwide consultations held in preparation for the ICN, actions to be considered by governments in their efforts to improve nutrition are presented below. These are grouped under nine action-oriented themes, allowing each sector and actor to determine how it can best address nutritional problems, taking into account the specific needs and conditions in each country.

##### **1. Incorporating nutritional objectives, considerations and components into development policies and programmes**

26. Significant improvements in nutrition can result from the incorporation of nutritional considerations into the broader policies of economic growth and development, structural adjustment, food and agricultural production, processing, storage and marketing of food, health care, education and social development. Such policies have an impact on nutrition through food availability and prices, incomes, environmental conditions and health status, care and feeding practices and other socio-economic factors. Development policies and programmes can also have varying impacts on the nutritional well-being of different population groups.

27. Efforts to improve nutritional well-being should be based on the recognition of improved human welfare in harmony with the environment and nature as the primary goal of social and

economic development. While a population's nutritional status is determined by an array of social, economic, environmental and biological factors that affect its ability to acquire, consume and effectively utilize food adequate for its needs, a healthy well-nourished population is also essential for successful social and economic development. Improving nutrition should therefore be seen both as a goal of development in its own right and as a means of achieving it. Recognizing that the sustainable development of food and nutrition security needs to be addressed simultaneously with economic growth, governments, in collaboration with all parties concerned and supported where necessary by appropriate legislative measures, should:

(a) Analyze the effects of macro-level policies and sectoral or integrated development plans on nutritional well-being, especially of the most vulnerable population groups. This would entail the elaboration of a common understanding of the relative importance of various determinants of nutritional status for different population groups and of how various policies may affect nutrition through their impacts on food security, health status, care and feeding practices.

(b) Increase awareness among policy-makers and planners of the extent and severity of nutritional problems and of their causes, of the economic benefit of interventions and of how activities under their control can affect the nutritional status of different socio-economic groups,

(c) In countries where it is appropriate to do so, incorporate clear nutrition goals and components in national development policies and sectoral plans, programmes and projects, particularly in the areas of food and agriculture, livestock, fisheries, forestry, rural and urban development, commerce, infrastructure, credit, water and sanitation, health, education, environmental and social welfare, and adopt benchmarks of success with clear time frames and budget allocations, as appropriate.

(d) In countries where the operation of the market as a mechanism for the coordination of production and the consumption of food is relied upon, develop education and communication programmes so that nutrition objectives may be achieved through appropriate consumer choice, based on enhanced consumer awareness and knowledge, and encourage the development of social welfare policies that will enable the more vulnerable population groups to exercise informed dietary choice.

(e) Develop or strengthen the technical capacities of, and institutional mechanisms within, each relevant ministry and at intermediate levels of government to identify nutritional problems and their causes and to improve the planning, management and evaluation of programmes and development projects that affect nutrition. Links with appropriate research and training institutions should be strengthened as well.

(f) Establish a flexible national mechanism with strong technical support to promote effective intersectoral cooperation, to keep the nutrition situation in the country under continuous review and to facilitate the development of national nutrition policies and programmes.

(g) Encourage and support the full involvement of communities and the participation of the people in the identification of their own nutritional problems as well as in the implementation, monitoring and evaluation of development programmes.

(h) Encourage the private sector, including small-scale producers and processors, industry and NGOs to promote nutritional well-being by considering the impact of its activities on nutritional status.

(i) Assess the impact of new development programmes and projects on nutrition to clearly identify the potential benefits for or risks to nutritional well-being, particularly among vulnerable population groups.

(j) Develop and use relevant indicators of nutritional well-being to monitor progress in social and economic development and establish appropriate mechanisms to regularly provide information on the population's nutritional status and factors affecting it, especially that of vulnerable groups, to policy-makers and planners and all interested sectors, both private and public.

(k) Incorporate appropriate and relevant elements of nutrition in school curricula starting from primary school.

(l) With a view to improving nutrition, direct additional investment into agricultural research where necessary to:

- address the problem of seasonality through diversification in food production, including fruits and vegetables, livestock, fishery and aquaculture;
- promote environmentally sound and economically viable farming systems to increase crop production and maintain soil quality, to encourage resource management and resource recycling;
- encourage the development of safe biotechnology in animal and plant breeding and facilitate the exchange of new advances in biotechnology related to nutrition;
- develop techniques that decrease post-harvest crop losses and improve food processing, storage and marketing;
- develop and disseminate technologies that respond to women's needs and ease the workload of women;
- improve extension services to cooperate more effectively with farmer and consumer communities in identifying research needs;
- improve training methods at the international, national and local levels to ensure dissemination of new technologies;
- address the needs of small and poor farmers including those dependent on poor quality or fragile land;
- develop technology and systems applicable to small-scale agriculture;
- encourage intensive food production at the farm and household levels, taking account of prevailing local conditions;

- develop more effective techniques for the traditional production of food at the household and community levels.

28. International, bilateral and regional agencies should assist and strengthen national capabilities to incorporate nutritional considerations into national development in countries where it is appropriate to do so.

## **2. Improving household food security**

29. Food security is defined in its most basic form as access by all people at all times to the food needed for a healthy life. Achieving food security has three dimensions. First, it is necessary to ensure a safe and nutritionally adequate food supply both at the national level and at the household level, Second, it is necessary to have a reasonable degree of stability in the supply of food both from one year to the other and during the year. Third, and most critical, is the need to ensure that each household has physical, social and economic access to enough food to meet its needs. This means that each household must have the knowledge and the ability to produce or procure the food that it needs on a sustainable basis. In this context, properly balanced diets that supply all necessary nutrients and energy without leading to over-consumption or waste should be encouraged, It is also important to encourage the proper distribution of food within the household, among all its members.

30. The right to an adequate standard of living, including food, is recognized in the Universal Declaration of Human Rights. Food security should be a fundamental objective of development policy as well as a measure of its success. Household food insecurity affects a wide cross-section of the population in both rural and urban areas. The food-insecure socio-economic groups may include: farmers, many of them women, with limited access to natural resources and inputs; landless laborers; rural artisans; temporary workers; homeless people; the elderly; refugees and displaced persons; immigrants; indigenous people; small-scale fishermen and forest dwellers; pastoralists; female-headed households; unemployed or underemployed people; isolated rural communities; and the urban poor, Increasing the productivity and incomes of these diverse groups requires adopting multiple policy instruments and striking a balance between short-term and long-term benefits. The choice of policies must be attuned to the characteristics of a country's food security problem, the nature of the food-insecure population, resource availability and infrastructural and institutional capabilities at all levels of government and communities. Breast-feeding is the most secure means of assuring the food security of infants and should be promoted and protected through appropriate policies and programmes.

31. Bearing the above in mind, in countries where the food-chain is not secure and household food insecurity is a problem, governments, NGOs and non-profit organizations, the private sector and international organizations should, as appropriate, work in a collaborative manner to:

(a) Adopt development strategies to create conditions for economic growth with particular focus on the alleviation of poverty, food security and sustainable agricultural systems.

(b) Strike an optimal balance between macroeconomic policy objectives and food security needs, minimize the possible adverse impact of structural adjustment programmes on the food security of the poor and, where some negative effects are unavoidable, introduce appropriate measures to alleviate these hardships. In the countries concerned, governments and international organizations should promote programmes that will increase food production

and, where appropriate, agricultural trade, so that poor countries and poor segments of a population have improved access to food. International lending practices should be re-examined and long-term action must be planned to maintain food supplies at those levels required to meet the needs of growing populations.

(c) Adopt and implement land-use policies where appropriate to enhance food security through the setting aside of adequate areas of agricultural lands and aquatic and other natural resources for the production of food and other sources of nutrition.

(d) Adopt policies and programmes to strengthen local leadership, including balanced gender training; enhance community involvement; promote people's participation; develop rural areas to stem rural-urban migration; and empower women, both as producers and consumers. Women and women's organizations are often very efficient, effective and fundamental in improving household food security.

(e) Adopt special programmes that will enhance productivity with a view to reducing costs and increasing and stabilizing production and incomes of the poor. Such programmes could include improving the access of small-scale producers to inputs, credit and other essential services, as well as to markets through improved infrastructure. The role of agricultural cooperatives and effective extension services in increasing production and producer incomes should be stressed.

(f) Improve access to work opportunities or production factors for urban and rural workers, female heads of households, those employed in the informal sector and unemployed and underemployed people by stimulating the creation of jobs, increasing their skills, providing credit on easy terms and increasing the availability of improved technologies, other inputs and means of production.

(g) Improve access to land and other natural resources by introducing and implementing agrarian reforms and, in particular, through the effective implementation of tenancy reforms and the promotion of efficient utilization of agricultural resources and resettlement in new lands, wherever feasible. Such actions must be taken in full compliance with applicable international laws and agreements.

(h) Increase employment opportunities, particularly in rural areas, by encouraging the private sector to augment such opportunities in agriculture, industry, handicraft and business.

(i) Stabilize food supplies through adequate stockholding in the form of strategic food security reserves as a first line of defence in emergencies; improve post-harvest handling, packaging, storage, preservation, transport and distribution of food to reduce losses at all stages; enhance animal health and production possibilities including fish farming and attention to fisheries resources; ensure a stable supply of fuel for cooking meals; carry out research and introduce measures to improve production, utilization and preservation of indigenous and traditional foods; improve rural food processing technologies; increase marketing facilities at the village, cottage and industrial levels to smooth the food supply flow throughout the year; introduce a variety of cropping strategies, such as crop rotation, mixed cropping, biological inputs and planting of perennial fruit-bearing trees, and develop other agroforestry approaches; ensure an adequate supply of clean and safe water; promote household and community gardens; and ensure the sustainability of food supplies by employing production and marketing systems based on safe and renewable resources that protect the environment and biodiversity.

(j) Improve emergency-preparedness planning through: effective early warning and other information systems; food security reserves; preparation of contingency plans of action to meet emergencies; and enhancing the entitlement of affected people through, for example, public-works programmes; as well as introduce measures to prevent natural disasters, such as irrigation schemes, flood control schemes, etc. In this respect, the international community can play an important role by providing timely and well-targeted food aid and other technical and financial assistance, particularly in the form of food-for-work programmes and for rehabilitation. Coordinated action of relevant organizations of the UN system is of particular importance in this context. Food aid should not interfere with, or be considered as a substitute for, local food production. The special needs of refugees and displaced persons, who include people affected by wars, civil unrest or natural disasters, should be given priority attention in food aid programmes. The provision of food supplies should strive to meet minimal nutritional requirements. NGOs can also provide significant help through effective and appropriate disaster management training at all levels, early warning, food and nutrition surveillance schemes, nutrition education, resource mobilization and action-oriented programme implementation.

(k) Strengthen planning of food-related assistance programmes so that they reach the population in need without disrupting the local economy or local food habits including food production and marketing. Such programmes could include food distribution systems, particularly for the poor and unemployable, and income transfer schemes, such as targeted food subsidies, food stamps and feeding programmes for vulnerable groups with a view to promoting nutritionally adequate diets. In particular, introduce self-targeting food distribution and income transfer schemes for those foods consumed primarily by the poor by locating public food distribution centres in areas where the poor live, taking into account that these populations should be able to select nutritionally adequate diets from the range of foods available.

(l) Strengthen the coping mechanism of the household to meet emergencies by improving its capacity to protect itself from the impact of an emergency through, for example household and community food storage; group savings and credit schemes, diversification of income and employment sources, and improved marketing infrastructures. Action could also include helping the household when the emergency occurs, for example, by supplying seeds for growing short-term crops, by providing food aid, livestock feed and water and, when the emergency is over, by introducing rehabilitation measures to help the household recover from adverse effects of the emergency.

(m) Adopt or strengthen a public sector policy supporting labor-intensive public works programmes and programmes to reduce geographical isolation, especially in sub-Saharan Africa where priority actions are needed to quickly alleviate acute nutritional problems. Labor-intensive infrastructure programmes are one of several valuable instruments that may be used to improve employment, income and access to food. They transfer and stabilize benefits, thus decreasing the risk of consumption shortfalls among the poor, and can strengthen needed infrastructure, such as roads, to facilitate better trade and movement of foods from rural to urban centres, promote resource conservation or irrigation and land development or combat such problems as desertification.

(n) Encourage necessary research by governmental, international and private institutions to promote household food security through better food production, handling and storage and prevention of food losses, crop and genetic diversity, and improved food processing, preservation and marketing. Research should be done on household handling of food and

interfamily food distribution to assure adequate food availability and to protect the nutritional value of food and prevent food losses and wastage. Such research can enhance rural employment and promote the role of women, in particular, in all aspects of food production, processing and marketing. Research should also be carried out on appropriate cost-effective indicators to measure household food security problems and to measure progress of appropriate programmes in solving those problems.

(o) Promote better general and nutritional education to eliminate illiteracy and improve knowledge in the selection of a safe and adequate diet and of food production, processing, storage and handling techniques at all levels, especially the household level. Programmes should be directed at household leaders, with particular focus on women, and should also include home economics education for both boys and girls. The awareness of men and women of the benefits of limiting household size and the advantages of family planning practices should be increased. The role of mass media in delivering positive nutrition improvement messages and eliminating harmful food taboos should be emphasized. It is important to develop and carry out public information campaigns to improve the quality of nutrition through better use of available food supplies by the households and to promote recognition of the fact that each member of a household should be able to share fairly in available food resources irrespective of sex, age or any other individual characteristic.

(p) International financial and specialized agencies should give high priority to assisting countries with their programmes for strengthening household food security. The nature of such support may be increased investment in production enhancement projects such as irrigation, soil fertility improvement and soil and water conservation, intensification of agriculture or assisting countries undertaking structural adjustment. Assistance should also include technology transfer adapted to the local conditions in developing countries to improve food production and processing while protecting intellectual property rights as appropriate; the training of personnel at all levels, and the establishment of a suitable economic environment to improve the competitiveness of developing countries.

### **3. Protecting consumers through improved food quality and safety**

32. A safe food and water supply of adequate quality is essential for proper nutrition. The food supply must have an appropriate nutrient content and it must be available in sufficient variety and quantity. It must not endanger consumer health through chemical, biological and other contaminants and it must be presented honestly. Food safety and quality control ensures that the desirable characteristics of food are retained throughout the production, handling, processing, packaging, distribution and preparation stages. This promotes healthy diets, reduces food losses and encourages domestic and international food trade. Food quality encompasses the basic composition of foods and aspects concerning food safety. Consumers have the right to a good quality and safe food supply, and government and food industry actions are needed to ensure this. Effective food quality and safety control programmes are essential and may comprise a variety of measures, such as laws, regulations and standards, together with systems for effective inspection and compliance monitoring including laboratory analysis. Where appropriate, governments, in close collaboration with other interested parties, should:

(a) Adopt and strengthen comprehensive measures to cover the control of food quality and safety with a view to protecting the health of consumers and producers and ensuring sound production, good manufacturing and fair trade practices. Where measures exist they should be regularly reviewed and updated, as appropriate, for better producer and consumer protection.

(b) Establish measures to protect the consumer from unsafe, low quality, adulterated, misbranded or contaminated foods. Measures should include provisions for minimum acceptable levels of food quality and safety, for differences in the ways in which food is produced, processed, packaged, labeled and stored, as well as for the conditions under which it is presented and purveyed. Food regulations should also cover the fortification of foods with micronutrients and should fully take into account the recommended international standards of the Codex Alimentarius Commission. Food labels should be clear and easy to understand and attention should be given to harmonizing labeling requirements; better information on nutrient analysis and food composition is needed for this task. Measures to assist individuals with food intolerance's should be considered. Claims in food labelling or advertising should be carefully controlled and false or misleading claims should be prohibited. FAO and WHO should encourage greater involvement of developing countries in Codex activities and review avenues to facilitate such participation and they should find appropriate means of making contact with concerned food control institutions and provide them with information and technical knowledge in this field.

(c) Give high priority to establishing food safety and quality control infrastructures, including food inspection, sampling and laboratory facilities to enforce the law and regulations, to ensure that food products comply with applicable requirements for domestic consumption or export.

(d) Give consumer and producer organizations rights of consultation with advisory and decision-making bodies and facilitate open and transparent access to information and participation in the establishment of food safety, quality control and labeling standards. Also, establish or strengthen mechanisms to resolve consumer problems with the food supply. Cooperation should be fostered among the food sector, government and consumers.

(e) Establish effective working relationships with the food industry, including producers, processors and purveyors of food, in order to ensure that food industry quality control systems are adequate to secure compliance with requirements of the law and regulations. Primary responsibility for production, manufacturing and distribution of the food supply rests with the farming, agricultural processing and retailing sectors. Thus the food industry should provide safe, wholesome, nutritious and palatable foods so that the health of consumers is protected.

(f) Support international and multilateral efforts to extend and enhance food standards and food-labeling programmes. Developing countries should be provided with international technical assistance to improve their food safety and quality programmes for domestic markets and international trade.

(g) Develop the human resources required for designing, implementing and monitoring food and water quality control systems. Education and training in the safe handling of agrochemicals are essential for farmers and for food handlers, both commercial and domestic.

(h) Implement, through national legislation, regulation and other appropriate measures, existing international agreements on the marketing and distribution of agrochemicals, such as the International Code of Conduct on the Distribution and Use of Pesticides.

(i) Promote the development of sustainable and ecologically sound agricultural practices and integrated pest management and strengthen research and extension programmes that help facilitate their adoption. Techniques that help reduce the use of agricultural chemicals should be encouraged.

(j) Support consumer education to contribute to an educated and knowledgeable public, safe practices in the home, community participation and active consumer associations. FAO and WHO should provide member countries with material on food quality and safety for use in consumer education programmes.

(k) Promote research on food quality and safety, including weaning products and street foods, taking into account the socio-economic conditions of production, handling and storage technologies.

(i) Develop surveillance and monitoring programmes for food-borne diseases and contaminants.

(m) Ensure that foods for emergency feeding programmes for refugees and displaced persons are of good quality and safe for consumption. Mechanisms should be established to monitor specific problems such as pest infestation, contaminants and product age and to promote the exchange of relevant information.

#### **4. Preventing and managing infectious diseases**

33. The interaction of infection and malnutrition has an overwhelming impact on health status, particularly in lower socio-economic groups. It is a major cause of death, sickness and disability in infants and young children and an important contributor to women's ill health and reproductive problems. Preventing, controlling and correctly managing infections improves nutritional well-being and markedly enhances the productivity of the adult population. Governments, in cooperation with all concerned parties, should:

(a) Adopt or strengthen, as appropriate, measures to ensure that safe food and safe water supplies are readily available in sufficient quantities to provide adequate environmental sanitation for all and to improve waste disposal systems.

(b) Prevent food-borne and water-borne diseases and other infections in infants and young children by encouraging and enabling women to breast-feed exclusively during the first four to six months of their children's lives.

(c) Promote sound weaning practices by encouraging the use of nutritionally adequate, safe and appropriate locally available foods.

(d) Provide or strengthen, as appropriate, specialist education for health workers and general education and specific nutrition and health information for communities, parents and individuals, enabling them to provide safe and adequate diets and effectively prevent and manage infections. This would include providing training and information on food, sanitation and primary health care, particularly the management of diarrhoea, and on dietary needs throughout the life cycle, including periods of illness, for relevant health, agriculture and other extension workers at all levels to prevent, control, eliminate and/or eradicate infectious, parasitic and other communicable diseases, including those spread by animal vectors, by improving the environment and ensuring adequate primary health care services, including immunization programmes, diarrhoeal disease control, control of acute respiratory infections and extending AIDS prevention and control programmes to all populations.

(f) Encourage intersectoral collaboration between agriculture, health and other relevant sectors to prevent and control infectious diseases, especially zoonoses. Close collaboration with NGOs and the private sector should be ensured.

(g) Ensure and support nutrition management, where shown to be effective, in the prevention and reduction in severity of infectious diseases.

(h) Promote research on nutrition-related aspects of transmission and management of infectious diseases, taking into account all socio-economic aspects, and ensure the application of relevant findings.

## **5. Promoting breast-feeding**

34. Breast-feeding provides infants and young children with the ideal nutrition. Together with its many beneficial effects, such as those on child spacing and the prevention of disease, it is the most inexpensive form of infant feeding. All women should be enabled to breast-feed their babies exclusively for the first four to six months, and, while giving appropriate supplementary food, to continue breast-feeding for up to two years or more. In order to do so, the international community needs to create awareness and provide maximum support to women to breast-feed, and governments and concerned parties of the private sector should:

(a) Support and encourage mothers to breast-feed and adequately care for their children, whether formally or informally employed or doing unpaid work. ILO conventions and regulations covering this subject may be used as a starting-point for the. States that agree with these conventions and regulations.

(b) Make all efforts to have maternity facilities take part in the "Baby Friendly Hospital Initiative" of WHO and UNICEF, incorporating the good practices described in the joint WHO/UNICEF statement on protection, promotion and support of breast-feeding through improved maternity services. These sound practices should also be used as a guideline as adapted to home deliveries.

(c) Encourage and support collaboration between health care systems and mother-support networks, including the family and the community, if necessary by promoting the establishment of mother-support groups.

(d) Take actions to give effect to the principles and aim of the International Code of Marketing of Breast-Milk Substitutes, as adopted by the 1981 World Health Assembly and reconfirmed by subsequent World Health Assembly resolutions.

(e) Ensure that health and other care providers receive high quality training in breast-feeding issues, using updated training material, and that they are informed about relevant national marketing regulations or policies.

(f) Ensure as far as possible that information disseminated on the feeding of infants and young children is consistent and in line with current scientific knowledge and take steps to counteract misinformation on infant feeding.

(g) Consider with utmost care issues regarding breast-feeding and human immunodeficiency virus (HIV) infection on the basis of the most up-to-date, authoritative scientific advice and referring to the latest WHO/UNICEF guidelines, and request that WHO, in close cooperation

with UNICEF, breast-feeding and other experts, convene technical meetings on a regular basis to review the latest scientific publications on these issues and update the guidelines.

## **6. Caring for the socio-economically deprived and nutritionally vulnerable**

35. Care refers to the provision in the household and community of time, attention, support and skills to meet the physical, mental and social needs of socio-economically deprived and nutritionally vulnerable groups. Among these groups the growing child is the most vulnerable, but others include women, the elderly and the mentally, physically and sensory disabled. Among the socio-economically deprived are refugees, displaced persons, some indigenous peoples, those in isolated communities, the landless, the unemployed, recent immigrants, orphans and children in difficult circumstances. Individuals most at risk of malnutrition are those who are both physiologically vulnerable and socio-economically deprived. Countries should recognize that the skills and abilities of the care giver, who is usually the mother, are crucial to the quality of care, particularly the selection and preparation of food for the family, including the mother herself, the children and other dependents.

36. In general, the provision of care is primarily a responsibility of the family. However, society also has an obligation to assist those who cannot care for themselves. The role of government should be to provide a supportive environment for family- and community-based care and to provide direct services when additional care is needed. Care within the family includes support during and after pregnancy, breast-feeding, providing security, reducing child stress, providing shelter and clothing, feeding and bathing, preventing and treating illness and showing affection and respect. Care facilities outside the family include curative and preventive health clinics, prenatal and maternal care centres, traditional healers or members of extended family networks, community and government social and economic support systems and programmes for income generation. Caring should recognize the dignity and rights of vulnerable people. Actions to improve the care of the socio-economically deprived and nutritionally vulnerable will be most successful if they are sensitive to the particular needs and traditions of a local community and respond to these. Governments are encouraged to work in a collaborative manner with local community groups, the private sector and NGOs. Governments, in cooperation with other concerned parties, should:

(a) Ensure that all infants and young children, particularly children in difficult circumstances, have access to adequate, well-balanced and safe diets, health care and education to enable them to attain and maintain their full physical and mental growth potential and proper nutritional status. Particular attention should be given to care for the female child.

(b) Promote sound weaning practices, including timely introduction of supplementary foods, adequate quantity and quality of weaning foods and improved feeding practices, such as more frequent and supervised feedings.

(c) Enhance the legal and social status of women from birth onwards, assuring them of respect and equal access to caring, education, training, land, credit, equity in wages and remuneration and other services, including family planning services, and empower them economically so that they have better control over the family resources.

(d) Promote support of care givers to preserve their physical and mental health and enhance their skills and knowledge to improve nutrition. Decrease women's workload by supporting research and extension services on time- and energy-saving devices, where applicable.

(e) Adapt nutrition, health and education support services to adolescent girls and boys to prepare them to fulfil their future roles as well-nourished, productive adults and parents.

(f) Prepare and motivate adult males to fully participate in and take responsibility for the nutritional well-being and support of their families, as well as to be sensitive to women's needs in protecting and promoting family well-being.

(g) Foster recognition of the contribution that the elderly make to the household and community activities. Promote caring of the elderly through traditional forms of family support and through the introduction of special measures where needed.

(h) Provide care for disabled individuals to enable them to reach their potential and become self-supporting, ensuring their opportunities in education, employment and housing.

(i) Enhance the nutritional status of the indigenous people through the development and implementation of culturally acceptable strategies that involve the community.

(j) Encourage and foster community awareness, organization and leadership to promote and ensure its own nutritional development including adequate care of its vulnerable households and individuals, such as female-headed households.

(k) Enhance food and nutrition programmes directed at urban poor and especially street children.

37. Among refugees and displaced populations, high rates of malnutrition and micronutrient deficiencies associated with high rates of mortality continue to occur. The magnitude of the problem has grown over the last decade. Increased political commitment to and accountability for the protection and promotion of the nutritional well-being of refugees, displaced populations, those under occupation, prisoners of war and other affected groups are urgently required in accordance with international humanitarian law. Governments, in collaboration with the international community, should:

(a) Provide sustainable assistance to refugees and displaced persons and work to monitor and ensure their nutritional well-being, giving high priority to the control of diseases and to the prevention of malnutrition and outbreaks of micronutrient deficiency diseases. Wherever feasible such assistance should encourage their ability to support themselves rather than increase their dependence on external assistance. The food provided should be nutritionally adequate and safe.

(b) Identify, within civilian populations situated in zones of conflict, refugee and displaced populations and groups needing special care including the disabled, the elderly, children, mothers and other nutritionally vulnerable groups in order to plan to provide for their special needs.

(c) Promote the basic human rights of refugees and displaced persons.

(d) Ensure a rapid, coordinated and appropriate response by improving communications with the international community, including concerned entities of the United Nations as well as NGOs.

(e) Work to ensure the safe and timely passage of the totality of food and medical supplies to those in need in conflict zones, and the creating and using of "humanitarian corridors of tranquillity" where available.

(f) Ensure assistance to refugees returning to their home countries until they are reintegrated into society.

(g) Make efforts to develop policies that ensure stability so as to avoid the massive migration of refugees and displaced persons, which causes additional pressure on any community.

## **7. Preventing and controlling specific micronutrient deficiencies**

38. Micronutrient deficiencies are a matter of major public health concern. They are widespread, although the prevalence of a particular deficiency can vary considerably within and between countries. Deficiencies of vitamin A (including beta-carotene), iodine and iron are especially important because of their serious health consequences, wide geographic distribution and the existing global commitment to their control.

39. Vitamin A deficiency and its consequences, including blindness, poor growth, increased severity of infections and death, are fully preventable, making its control one of the most effective child health and survival strategies that governments can undertake. The protection, promotion and support of breast-feeding is an effective way of preventing vitamin A deficiency in infants and young children.

40. Over one-fifth of the world's population lives in iodine-deficient areas, Iodine deficiency is the most common preventable cause of mental retardation. Additional consequences of iodine deficiency are reproductive failure, goitre, increased mortality and economic stagnation. Children, adolescent girls and women are particularly vulnerable. The means for its correction are readily available and provide an exciting opportunity for its elimination by the year 2000.

41. Iron deficiency and/or anemia is the most common micronutrient deficiency, especially affecting young children and women of reproductive age. Uncorrected anemia can lead to learning disabilities, an increased risk of infection and diminished work capacity and to death of women during pregnancy and at childbirth. Thus, iron deficiency has an impact on all segments of society.

42. Deficiencies of other micronutrients such as folate and other B-complex vitamins, vitamin C, selenium, zinc and calcium also significantly affect health and may merit increased attention by governments in countries where deficiencies exist.

43. Recognizing the international, regional and national resources, coordination and support required, governments, in collaboration with international agencies, NGOs, the private sector/industry, other expert groups and the community, should adopt an appropriate combination of the following strategies:

(a) Assess the extent and epidemiology of micronutrient deficiencies and develop a national policy for prevention based on their distribution and cause, the severity of deficiency and available resources.

(b) Accelerate efforts to achieve the elimination of vitamin A and iodine deficiencies and a reduction in iron deficiency in accordance with the year 2000 goals of the World Summit for Children and the Montreal Conference on Micronutrient Malnutrition.

(c) Formulate and implement programmes to correct micronutrient deficiencies and prevent their occurrence, promoting the dissemination of nutrition information and giving priority to breast-feeding and other sustainable food-based approaches that encourage dietary diversification through the production and consumption of micronutrient-rich foods, including appropriate traditional foods. Processing and preservation techniques allowing the conservation of micronutrients should be promoted at the community and other levels, particularly when micronutrient-rich foods are available only on a seasonal basis.

(d) Implement the most appropriate combination of the following measures: improved food availability, food preservation, food and nutrition education and training, dietary diversification, food fortification, supplementation and pertinent public-health measures such as primary health care, promotion of breast-feeding and safe drinking-water. International and regional cooperation in the sharing of resources to enable economies of scale should be encouraged.

(e) Ensure that sustainable food-based strategies are given first priority particularly for populations deficient in vitamin A and iron, favoring locally available foods and taking into account local food habits. Supplementation of intakes with vitamin A, iodine and iron may be required on a short-term basis to reinforce dietary approaches in severely deficient populations, utilizing primary health care services when possible. Supplementation should be directed at the appropriate vulnerable groups, especially women of reproductive age (iodine and iron), infants and young children, the elderly, refugees and displaced persons. Supplementation should be progressively phased out as soon as micronutrient-rich food-based strategies enable adequate consumption of micronutrients.

(f) Ensure and legislate for the fortification of foods or water with necessary micronutrients, where feasible, when existing food supplies fail to provide adequate levels in the diet. Fortification should be regularly evaluated for various reasons. Where iodine deficiency is a significant public health problem, the iodization of all salt for both human and livestock consumption is required, recognizing that this is the most effective long-range measure for correcting iodine deficiency.

(g) Ensure that nutrition education and training programmes are implemented at the community, school and national levels to provide information on proper food preparation, nutritional value and bio-availability and other factors that affect micronutrient status, especially of the young, and to promote the consumption of foods that are rich in micronutrients.

(h) Strengthen micronutrient surveillance capabilities and activities by devising indicators to monitor the above strategies for achieving national goals related to coverage, compliance and effectiveness in targeted populations.

(i) Support research on the role of micronutrients in health and disease, on the development of inventories and food composition tables of existing and potentially significant food sources of micronutrients, including *inter alia* green and yellow vegetables and fruits, palm oil, fish and other locally available food sources of micronutrients, on weaning foods, on factors affecting the bio-availability of nutrients in food, on indigenous methods of food processing and

preparation affecting micronutrient availability, on nutrition education; and on the improvement of existing techniques for the assessment and correction of micronutrient deficiencies.

(j) Develop sustainable institutional capacities and human resources, including training of professionals, non-professionals and community leaders, in order to achieve the goals of micronutrient deficiency control and prevention.

(k) Consider, as appropriate, coordinating micronutrient deficiency control activities under the direction of a national committee, with the appropriate political support, authority, legislation and infrastructure that reflects national commitment.

(l) Encourage FAO, WHO and all other concerned international agencies and NGOs to provide assistance in combating all aspects of micronutrient deficiency problems, through monitoring and surveillance, research and production and consumption of micronutrient-rich foods.

(m) Recognize that refugees and displaced persons, as well as being susceptible to iodine, vitamin A and iron deficiencies, are also susceptible to other deficiencies, particularly vitamin B<sub>1</sub> deficiency (beriberi), niacin deficiency (pellagra) and vitamin C deficiency (scurvy) Donor countries and involved organizations must therefore ensure that the nutrient content of food used for emergency food aid meets nutritional requirements, if necessary through fortification or ultimately through supplementation. To the extent possible, such foods should be culturally appropriate.

## **8. Promoting appropriate diets and healthy lifestyles**

44. Non-communicable diseases related to unhealthy lifestyles and inappropriate diets are becoming increasingly prevalent in many countries. With greater affluence and urbanization, diets tend to become richer on average in energy and fat, especially saturated fat, have less fibre and complex carbohydrates and more alcohol, refined carbohydrates and salt. In urban settings exercise and energy expenditure frequently decrease, while levels of smoking and stress tend to increase. These and other risk factors, as well as increased life expectancy, are associated with the increased prevalence of obesity, hypertension, cardiovascular diseases, diabetes mellitus, osteoporosis and some cancers, with immense social and health care costs. Dental caries is also an important diet-related condition in some regions.

45 While generally positive, urbanization, particularly in developing countries, can lead to severe economic and social stresses among poor populations. Often, too rapid urban growth results in heavy demands on urban facilities, resulting in large numbers of poor people living in crowded slums with limited access to clean water, sanitation facilities, health care and food. Excessive urbanization, particularly rural-urban migration, may also contribute to the fragmentation of society and the breakdown of traditional values and care and feeding practices. Dietary and lifestyle changes following migration to more affluent areas can affect health status in positive and negative ways, often exposing immigrants, particularly minorities, to an increased risk of diet-related non-communicable diseases. Both primary and secondary prevention of these diseases are important. Governments, together with other groups, should:

(a) Assess the dietary intake and nutritional status of the population (see section 9 below).

(b) Assess the strength of evidence of links between diet and disease in the context of their own situation, taking into account international and other national assessments and current scientific findings. Consider which dietary targets are appropriate in the context of the prevalence of deficiency and diet-related chronic diseases.

(c) Develop comprehensive policies for improved food supplies and nutrition, adapted to local conditions in each country, and support and encourage home gardens, traditional food production and consumption patterns that support nutritional well-being.

(d) On the basis of energy and nutrient recommendations, provide advice to the public by disseminating, through the use of mass media and other appropriate means, qualitative and/or quantitative dietary guidelines relevant for different age groups and lifestyles and appropriate for the country's population.

(e) Implement and support the design of appropriate community-based nutrition education programmes in conjunction with appropriate communication strategies, such as nutrition labelling, that enable individuals and families to choose a healthy diet, and give high priority to ensuring that these programmes reach target groups.

(f) Encourage the adaptation of nutrition and consumer information and intervention programmes to differences in socio-economic conditions, language barriers and cultural beliefs and attitudes regarding foods, health and disease.

(g) Promote from an early age a knowledge of food and nutrition, food safety, food preparation, healthy diets and lifestyles through the curricula of schoolchildren, teachers, health professionals, and the training of personnel involved in agricultural extension.

(h) Encourage institutionalized food services and the catering sector to provide and promote healthy diets.

(i) Take appropriate actions to discourage smoking, drug and alcohol abuse.

(j) Sponsor and promote exercise programmes to all, targeting children and high-risk groups, and provide recreation and sporting facilities with the participation of community, public and private organizations.

(k) Promote employment and better living conditions in rural areas to prevent excessive migration to cities.

(l) Support special nutrition and consumer education, nutrition interventions and follow-up activities for those groups of immigrants that may need special attention.

## **9. Assessing, analysing and monitoring nutrition situations**

46. Information on the nature, extent, magnitude and severity of different types of nutritional problems, as well as their causes, resources and how they are changing over time, is essential for the development, implementation, monitoring and evaluation of effective policies and programmes to improve nutrition. Information is also needed to provide early warning of impending nutritional emergencies and for ongoing programme management. The basic aim should be to provide relevant and accurate information that can be utilized efficiently. Therefore, information must be timely, relevant to the decision-makers and communicated

effectively at the appropriate levels. These levels range from the individual and household level, through the community and national levels, to the international level. Open access to information regarding the nutritional situation must be ensured for all interested parties. Utilization of information may be facilitated by the establishment or strengthening of specific bodies or mechanisms. Data collection and analysis have costs that must be balanced against the overall resources available for the programme. Governments, in close cooperation with all parties concerned, should:

(a) Identify the priority nutritional problems in the country, analyse their causes, plan and implement appropriate remedial actions and monitor and evaluate efforts to improve the situation. This would include selecting appropriate indicators and methods for assessing and monitoring problems of food security and undernutrition, micronutrient deficiencies and overnutrition.

(b) Establish or strengthen data collection, analysis and reporting systems within appropriate institutional frameworks in a sustainable fashion in order to meet the relevant priority information needs of planners, policy-makers, programme managers and communities as they address nutritional problems.

(c) Provide basic and ongoing training of personnel in relevant ministries and institutions for data collection, analysis, presentation and utilization.

(d) Make maximum use of existing data sources and information systems to avoid duplication of efforts and to encourage a coordinated multisectoral approach for taking action. Relevant sources of data could be in particular the ministries responsible for agriculture, health, education, commerce and trade, finance and planning, scientific research and social welfare, as well as universities, the private sector and NGOs. Data could include information on mortality, morbidity, anthropometry, food availability, food intake, food prices, breast-feeding, food quality and safety, along with information on knowledge, attitudes and practices, family size and income, rainfall and landholding.

(e) Encourage the development and use of innovative approaches such as risk mapping, sentinel sites and rapid appraisal techniques for information gathering and utilization. Establish a system for the exchange of information between developing countries (South-South) and also between developed and developing countries for training and research.

(f) Promote community-based information systems to support local problem identification analysis and action.

(g) Develop and strengthen growth monitoring and promotion and nutrition surveillance within primary health care systems.

(h) Promote the strengthening of research and training of personnel in nutrition, especially for food sciences, nutrition, biology, food toxicology, epidemiology, human and social sciences and related interventions.

(i) Cooperate with other governments, research institutions, NGOs and international organizations to promote and support regional and international collaboration in gathering food and nutrition information and in surveillance and early warning activities. This should also include the building of capacities within countries and promoting the establishment of focal points for training and research at national and regional levels.

(j) Support and encourage, where appropriate, the development and use of local food composition information.

## **V. Responsibility for action**

47. The goals of the World Declaration on Nutrition as well as the recommendations of the Plan of Action for Nutrition need to be translated into priority actions in accordance with the realities found in each country and must be supported by action at the international level. Taking these into account, governments should prepare national plans of action, coordinated as appropriate with follow-up activities related to the World Summit for Children, establishing priorities, setting up time frames and, where appropriate, identifying the resources needed and those already available. The strategies for achieving the objectives may vary from country to country, and the responsibilities rest with a variety of agents, from government institutions to individuals.

### **1. At the national level**

(a) All governments should establish appropriate national mechanisms to prioritize, develop, implement and monitor policies and plans to improve nutrition within designated time frames, based both on national and local needs, and provide appropriate funds for their functioning.

(b) Within the context of the national plans of action, governments should formulate, adopt and implement programmes and strategies to achieve the recommendations of the Plan of Action for Nutrition, taking into account their specific problems and priorities. In particular, in countries where it is appropriate to do so, ministries of agriculture, fisheries, food, health, social welfare, education and planning, as well as other concerned ministries, should formulate concrete proposals for their sectors to promote nutritional well-being.

(c) Governments at the local and provincial levels, as well as NGOs and the private sector, should be encouraged to participate in the process.

(d) All sectors of society should be encouraged to play an active role and to assume their responsibilities in implementing related components of the national plan of action, with appropriate mechanisms for coordination. Households, communities, NGOs, private institutions - including industry, small-scale producers, women farmers and trade and services, as well as social and cultural associations - and the mass media should be mobilized to help individuals and population groups achieve nutritional well-being in close association with government and technical service sectors.

(e) Programmes aimed at improving the nutritional well-being of the people, in particular that of the groups at greatest risk, should be supported by the allocation of adequate resources by the public and the private sectors so as to ensure their sustainability.

(f) Governments, academic institutions and industry should support the development of fundamental and applied research directed towards improving the scientific and technological knowledge base against which food, nutrition and health problems can be analysed and solved, giving priority to research concerning disadvantaged and vulnerable groups.

(g) In most countries, high priority should be given to the development of human resources and training of personnel needed in all sectors to support nutrition-related activities.

(h) National governments, in cooperation with local authorities, NGOs and the private sector, should prepare periodic reports on the implementation of national plans of action, with clear indications of how vulnerable groups are faring.

## **2. At the international level**

(a) International agencies - multilateral, bilateral and non-governmental - are urged to define, in the course of 1993, steps through which they can contribute to the achievement of those goals and strategies set out in the World Declaration and Plan of Action for Nutrition, including the promotion of new partnerships of economic and technical cooperation among countries.

(b) The governing bodies of FAO, WHO, UNICEF, the World Bank, UNDP, Unesco, ILO, WFP, UNFPA, UNHCR, UNU, IFAD and other concerned international organizations should, in the course of 1993, decide on ways and means of giving appropriate priority to their nutrition-related programmes and activities aimed at ensuring, as soon as possible, the vigorous and coordinated implementation of activities recommended in the World Declaration and Plan of Action for Nutrition. This would include, as appropriate, increased assistance to the member countries. FAO and WHO, in particular, should strengthen within available resources their programmes for nutritional improvement, taking into account the recommendations put forth in this Plan of Action.

(c) Regional offices of UN organizations and regional intergovernmental organizations are requested to collaborate on and to facilitate the implementation and monitoring of the Plan of Action for Nutrition by supporting horizontal and interregional cooperation, especially among developing countries. In particular, this would involve collaboration based on the aims and principles of the Plan of Action for Nutrition for the formulation of overall regional strategies for improved nutrition and, when requested, for assisting governments in formulating national plans of action.

(d) Regional institutions for research and training, with appropriate support from the international community, should establish or reinforce collaborative networks in order to foster the human resource development needed - particularly at the national level - to implement the Plan of Action for Nutrition, to promote intercountry collaboration and to exchange information on the food and nutrition situation, technologies, research results, the implementation of nutrition programmes and resource flows.

(e) As leading specialized agencies of the UN system in the fields of food, nutrition and health, FAO and WHO are requested to prepare jointly, in close collaboration with UNICEF and other UN entities, a consolidated report on their implementation of the World Declaration and Plan of Action for Nutrition and also on its implementation by their member countries and other international organizations for review by their governing bodies by 1995. The governing bodies can then make decisions on the timing of future reports.

(f) UN agencies have a special responsibility for follow-up. All concerned agencies and organs of the UN system are urged to strengthen their collaborative and cooperative mechanisms in order to fully participate at international, regional, national and local levels in the achievement of the objectives of the Plan of Action for Nutrition. The ACC/SCN should facilitate coordination of these efforts and, in close collaboration with its participating agencies, prepare periodic reports on their activities in implementing the World Declaration and Plan of Action for Nutrition for consideration by the ACC for submission, through ECOSOC, to the UN General Assembly.

## VI. Recommendations for the follow-up of the conference

48. Governments are urged to promote continued work by relevant ministries and the strengthening or establishment of the ICN focal points where appropriate, and, with other concerned parties, to improve nutritional status, including the following:

(a) To prepare or improve, as early as possible and not later than the end of 1994, national plans of action and policies based on the principles and strategies enunciated in this World Declaration and Plan of Action. These need to be based on an analysis of the country situation and developed with the active participation of all relevant ministries, local governments and communities, non-governmental and research organizations and the private sector.

(b) To allocate and mobilize the financial and human resources necessary for implementation.

(c) To prepare, where appropriate, specific proposals for research priorities and capacity building, establishing links between government, non-governmental sectors, appropriate organizations and academic institutions.

(d) To develop coordinated intersectoral mechanisms for implementing, monitoring and evaluating the agreed national plan of action.

(e) To disseminate to the public, which may include parliamentary bodies, information on the principles and objectives of the World Declaration and Plan of Action for Nutrition as well as on the progress made and targets reached.

(f) To strengthen collaboration with NGOs, community agencies, local private sector representatives and citizens on the design and implementation of the country action plan.

49. The international community, including bilateral, international and multilateral agencies, and institutions providing capital and/or technical assistance are urged as soon as possible and to the extent their mandates and resources allow to allocate assured and increased funds to recipient countries, institutions and NGOs, as appropriate, for the preparation and implementation of national plans of action.

50. The governing bodies of FAO and WHO and other relevant international organizations are requested to give specific consideration during 1993 to determining ways and means of strengthening their capabilities towards implementing this World Declaration and Plan of Action. FAO and WHO are requested to consider the inclusion of periodic reports on the overall follow-up of the ICN on the agenda of the regular FAO regional conferences and WHO regional committee meetings.

51. UN organizations and other concerned parties are requested to prepare and disseminate information for the public on the World Declaration and Plan of Action.

52. In conclusion, the ICN should be viewed as a milestone in the continuing process to eliminate hunger and malnutrition, especially in the developing countries, and at the same time to prevent an increase in the incidence of diet-related communicable and non-communicable diseases. The ICN preparatory process began at the national and regional levels and, to be effective, its follow-up must now be firmly anchored in national and regional commitment and efforts to protect and promote the nutritional well-being of all.

# Nutrition and development: a global challenge <sup>1</sup>

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[The scope and consequences of nutritional problems](#)

[Factors influencing nutritional status](#)

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<sup>1</sup> This article was adapted from *Nutrition and development - a global assessment*, written by FAO and WHO for the International Conference on Nutrition, 1992.

## The scope and consequences of nutritional problems

As we approach the twenty-first century, hunger and malnutrition remain the most devastating problems facing the world's poor. Although the proportion and absolute number of chronically undernourished people <sup>2</sup> has declined worldwide, progress has been uneven among developing countries (Figure 1). For developing regions as a whole, the estimated number of people suffering from chronic malnutrition has declined from 941 million to 786 million people over the past two decades. The challenge facing the international community is to build upon the progress that has occurred and accelerate the processes that improve nutrition.

<sup>2</sup> Defined as those people whose estimated daily energy intake over a year falls below that required to maintain body weight and support light activity.

*Estimate of chronically undernourished people in developing regions (number and percentage of total population). - Estimation de la sous-alimentation chronique dans les régions en développement (nombre de personnes sous-alimentées et pourcentage de la population totale). - Estimación de las personas crónicamente desnutridas en las regiones en desarrollo (número y porcentaje de la población total).*

In Asia and the Pacific striking improvements have occurred in the last 20 years, the proportion of the population affected by undernutrition declined from 40 percent to 19 percent. Nevertheless, the highest number of chronically undernourished people, 528 million, live in this region. The region with the largest proportion of the population affected by undernutrition, 33 percent, is Africa. The actual number of Africans affected by undernutrition has increased dramatically, rising from 101 million people in 1969-71 to 128 million in 1979-81 and reaching 168 million in 1988-90.

## Undernutrition

The consequences of malnutrition are varied and far-reaching. Undernutrition can retard growth and development, reduce physical activity, impair resistance to infection, increase morbidity and lead to disabilities and death. Approximately 192 million children under five years of age suffer from acute or chronic protein-energy malnutrition. During seasonal food

shortages and in times of famine and social unrest, this average number increases. The percentage of underweight children under five years of age has declined in the last 15 years, but the absolute numbers have remained fairly stable because of population increases (Table 1).

### **Micronutrient deficiencies**

Lack of specific nutrients within the diet causes serious health problems in many countries (Table 2). Over 1000 million people are at risk of iodine deficiency, often because little iodine is present in local soils. Severe or moderate iodine deficiency during pregnancy or early childhood can lead to neurological or hyperthyroid cretinism, resulting in deaf-mutism, impaired motor coordination, growth failure, severe mental defects and increased rates of abortion and stillbirths.

An estimated 40 million people are affected by insufficient intake of vitamin A. Vitamin A deficiency occurs when fruit and vegetable consumption and, in some cases, fat intake are low. This deficiency is the most common cause of preventable childhood blindness. It may also lead to night blindness, decreased resistance to infections and increased morbidity and mortality rates from various infections, especially diarrhoeal and respiratory infections and measles.

Poor nutritional status in general is associated with increased prevalence of anemia, pregnancy and delivery problems, and increased rates of intrauterine growth retardation, low birth weight and perinatal mortality. In adults, undernourishment and anemia, can lead to poor health, can impair productivity because of reduced physical and intellectual performance and can constrain community and national development. Over 2000 million people, primarily women of child-bearing age and young children, are affected by the lack of iron.

Deficiencies of zinc, selenium and other trace elements affect large numbers of people in certain areas. Outbreaks of beriberi, pellagra and scurvy occur in refugee camps and among other deprived populations. Finally, rickets affects significant numbers of children.

**TABLE 1**

**Prevalence and number of underweight children under five years of age, by region.**

**Prévalence de l'insuffisance pondérale chez les enfants de moins de cinq ans par régions.**

**Prevalencia y número de niños menores de cinco años con falta de peso, por regiones.**

Region	Percentage underweight			Number underweight( <i>millions</i> )		
	1975	1990	2005	1975	1990	2005
<b>Continental Africa</b>	26	24	22	19.7	27.4	36.5
North Africa	20	13	11	3.1	3.0	2.7
East Africa	25	24	22	5.7	8.7	12.4
Central Africa	24	22	19	1.8	2.7	3.6
Southern Africa	16	13	10	0.7	0.7	0.7
West Africa	35	32	29	8.3	12.2	17.0

Sub-Saharan Africa <sup>c</sup>	28	26	24	17.4	25.4	34.9
<b>Americas</b>	<b>12</b>	<b>9</b>	<b>8</b>	<b>7.8</b>	<b>6.8</b>	<b>6.2</b>
North America	4	2	1	0.7	0.3	0.2
Caribbean	18	15	14	0.6	0.5	0.5
Central America	14	12	8	2.0	1.6	1.5
South America	15	11	10	4.4	4.3	3.9
<b>Asia <sup>d</sup></b>	<b>49</b>	<b>44</b>	<b>41</b>	<b>163.1</b>	<b>154.7</b>	<b>149.3</b>
Eastern Asia	33	21	17	47.4	25.4	18.5
Southeastern Asia <sup>e</sup>	48	38	32	24.6	21.6	18.4
Southern Asia	68	62	57	91.0	107.6	112.3
<b>Near East <sup>f</sup></b>	<b>22</b>	<b>15</b>	<b>12</b>	<b>2.9</b>	<b>2.9</b>	<b>3.1</b>
<b>Average</b>	<b>47.5</b>	<b>40.8</b>	<b>37.8</b>			
<b>Total</b>				<b>193.6</b>	<b>191.9</b>	<b>195.2</b>

<sup>a</sup> Underweight is defined as weight-for-age less than minus 2 SD of the WHO reference.

<sup>b</sup> Population projections for 1990 and 2005 are based on the medium variant from the UN.

<sup>c</sup> East, West, Central and southern Africa, and including the Sudan from North Africa.

<sup>d</sup> Excluding the countries of the former USSR and the Near East (01 western Asia), for which the data are tabulated separately.

<sup>e</sup> Including Papua New Guinea and Vanuatu.

<sup>f</sup> Excluding Gaza Strip and Cyprus.

## **Diet and non-communicable diseases**

The emergence of obesity and various non-communicable diseases, including heart disease, hypertension, non-insulin-dependent diabetes and some cancers may be linked to changing dietary patterns and lifestyles. Dietary imbalances for instance inadequate intakes of dietary fibre or excessive energy intakes have been associated with these diseases. There is concern that the prevalence of diet related non communicable diseases will increase among younger segments of the population as well as the elderly. This would place additional burdens on health services and development.

### **TABLE 2**

**Population at risk of and affected by micronutrient malnutrition (millions).**

**Populations menacées et affectées par des carences en oligo-éléments (*en millions*).**

**Población a riesgo y afectada por malnutrición debida a carencia de micronutrientes (*millones*).**

Region <sup>a</sup>	Iodine deficiency disorders		Vitamin A deficiency <sup>b</sup>		Iron deficiency or anemia
	At risk	Affected (goitre)	At risk	Affected (xerophthalmia)	
Africa	150	39	18	1 3	206
Americas	55	30	2	01	94
Southeast Asia	280	100	138	100	616
Europe	82	14	-	-	27
Eastern Mediterranean	33	12	13	1 0	149
Western Pacific <sup>c</sup>	405	30	19	1 4	1 058
<b>Total</b>	<b>1005</b>	<b>225</b>	<b>190</b>	<b>138</b>	<b>2150</b>

<sup>a</sup> WHO regions.

<sup>b</sup> Preschool children only

<sup>c</sup> Including China

## Factors influencing nutritional status

Current understanding of nutritional problems involves awareness of a broad range of complex issues. The various influences on nutritional status can be grouped in the categories of food health and care.

### Food

By the late 1980s roughly 60 percent of the world's population lived in countries that had more than 2 600 kcal available per person per day. At the same time 123 million people resided in countries where dietary energy supplies <sup>3</sup> were grossly insufficient at less than 2 000 kcal per person per day (Figure 2). The average per caput food supplies in the developing countries increased in the 1980s although at a slower rate than in the 1970s. In sub-Saharan Africa food supplies reached critical levels because of severe drought coupled with civil unrest in some countries. By 1990, approximately 18 million people were affected and in urgent need of emergency assistance.

<sup>3</sup> Dietary energy supply (DES) is an estimate of the average daily per caput energy available for human consumption in the total food supply during a given period. DES figures do not indicate actual consumption or the distribution patterns of the available supplies.

Stable food availability at the national, regional and household level can bring profound nutritional benefits. Even when the first priority of agricultural development is raising aggregate production of selected food and nonfood commodities, increasing consumption levels of poor households and generating sustainable livelihoods should be explicit goals; otherwise the nutritional benefits may not be attained. Often who produces, what they produce, how they produce and where they produce may be as important as how much is produced.

The mix of staple, secondary and non-food cash crops influences access to food in rural areas. Cash crops can complement food crops and provide income to purchase food. In addition to

increasing foreign exchange earnings, cash crops can raise and perhaps stabilize household incomes, either directly or through jobs created on or off the farm. Better production technologies which are often adopted for cash crops may spread to the food crop sector, raising food production as well.

Improvements in dietary intake will not occur if the earnings from new crops are spent on items not related to food. Women's participation in new enterprises and control of the income is important if nutritional benefits are to be realized. When a mother has a controlling hand in household expenditures, children usually receive more benefits.

*Agro-industries, such as this food-processing firm in Costa Rica, provide employment-a basic step towards solving nutrition problems. - Les agro-industries, comme cet établissement de transformation des denrées alimentaires au Costa Rica, fournissent des emplois - ce qui contribue de façon fondamentale à résoudre tes problèmes nutritionnels. - Las agroindustrias, como esta industria de elaboración de alimentos en Costa Rica, generan empleos, un elemento fundamental para la solución de los problemas nutricionales.*

*Change in dietary energy supply by region. - Evolution de la disponibilité énergétique alimentaire par régions. - Cambios en el suministro de energía alimentaria por regiones.*

The full nutritional benefits of commercialized agriculture can only be realized if prices of food in local markets remain affordable and a diversity of food crops is attained. When planners contemplate introducing cash crops or other farm enterprises, the socio-economic effects must be carefully assessed, and counteracting interventions must be made where needed to assure food security, especially for poor households.

Approximately two-thirds of the population of developing countries live in rural areas where crop and animal production, fisheries and forestry are direct sources of food and income. The employment requirements of agriculture may be key determinants of nutritional well-being. The high amounts of energy spent in farming and household activities can be significant. Labor-saving technologies may be beneficial, but in areas of high unemployment they should not be labor displacing. When the wages of landless laborers are irregular and uncertain, the threat of food insecurity may be great. In countries where land reforms are needed, the tenants on small farms form another highly vulnerable group.

The benefits of food crops such as roots and tubers, pulses and legumes are often not fully realized because of lack of research to improve production and storage, transport and processing problems. Since these traditional foods are well adapted to local environments, they can reduce the risk of food shortages. Increased cultivation of these crops by small producers could directly improve food supplies for nutritionally vulnerable households. Roots and tubers serve as staples in many diets, while legumes, oilseeds, vegetables and fruits are primary sources of oils, vitamins and minerals.

Improvements in post-harvest management can often significantly increase overall food availability and reduce costs for producers, distributors and consumers. The postharvest operations where major losses are most likely to occur are storage, marketing and food handling in the home. Adequate storage is essential in rural areas, particularly among semi-subsistence farming households which are directly dependent upon stored foods for their food security. It is also important in urban areas where retail food distribution and marketing occur.

Marketing facilities generally improve nutrition because they provide relatively easy access to cheaper and more diverse foods. Adequate transport and marketing facilities and liberal, non-interventionist domestic trading policies are essential for food markets to function well. Producers and consumers should be able to reach markets without excessive expenditures of time or money.

Indeed, reducing marketing inefficiencies and transaction costs may be a more cost-effective method for increasing food availability than increasing production. Such efforts may be relatively simple, for instance, policies on transport licenses can be liberalized or restrictions on movements of food commodities removed.

## **Health**

Good health and sanitation are essential for good nutrition, yet they are beyond the reach of the majority of the world's population. Infectious disease and inadequate diet act synergistically, each aggravating the effects of the other to produce the "malnutrition and infection complex". In malnourished persons, illnesses tend to be more frequent, more severe and prolonged. Nutritional requirements are higher during and following episodes of infection. Chronic infections or frequent acute infections make it almost impossible to maintain adequate nutritional status.

The mechanisms by which infections harm nutritional status include reduced food and water intake resulting from anorexia, diminished absorption and utilization of ingested food, increased nutrient and water losses, increased metabolic demands and therefore higher nutritional requirements, and alteration of metabolic pathways and the intentional withholding of food. Diarrhoeal diseases, measles, acute respiratory infections (ARI), tuberculosis and, more recently, acquired immunodeficiency syndrome (AIDS) have major effects on nutritional status. Among the parasitic infestations, malaria, hookworm, ascariasis, amoebiasis and schistosomiasis are most significant for nutrition.

Antenatal care, immunizations and curative services to shorten disease episodes can improve nutritional status. Health services can influence the initiation and establishment of breast-feeding. Growth monitoring of children and follow-up when faltering occurs are important public health actions to prevent undernutrition. In addition to improved health facilities, intersectoral and community-based approaches need to be promoted. Developing human resources and strengthening managerial capacity at national and local levels are essential to deal with nutritional problems effectively.

## **Care**

Adequate care and feeding practices require time, attention and support and are essential to meet the physical, mental and social needs of individuals. To assist children and others who may be unable to care for themselves because of disability or old age, resources must be used effectively. The knowledge, attitudes and practices of household members largely determine the nutritional status of the household. An incomplete understanding of the body's nutritional needs and lack of knowledge of how to meet those needs with available foods can lead to malnutrition. Food taboos and fads, inappropriate eating habits, poor food preparation techniques, inadequate understanding of health risks, special dietary needs and physiological states all contribute to poor nutrition. While changes are difficult to make, nutrition education can be an appropriate and effective means of preventing and correcting nutritional problems. Women who are educated are more likely to use health care services and have lower fertility.

rates and more child-centred care-giving behaviours. With increasing education, women have more influence and skills to manage household resources for their children's health and welfare.

*Maternal education influences family care practices: in Burkina Faso, mothers meet to discuss the importance of a varied diet. - L'éducation des mères permet d'améliorer tes soins domestiques. Au Burkina Faso, des mères se réunissent pour discuter du choix des aliments. - La enseñanza impartida a las madres influencia las prácticas de atención familiar. En Burkina Faso, las madres discuten sobre la necesidad de una alimentación variada.*

## Development policies and nutrition

It is only through concerted efforts to reduce social inequity and poverty, the root cause of malnutrition, that lasting solutions to nutritional problems will be found. The poor and disadvantaged are affected most by acute and chronic undernutrition and micronutrient deficiencies. Poor families not only need better incomes, they often live in marginal areas and unsanitary environments, and they lack education and information to improve their nutritional status.

### Economic growth and equity

National planners and policy-makers have often failed to give adequate attention to the nutritional implications of development policies. As a result, such policies have not achieved their potential to bring nutritional benefits, and in some cases they can have a negative impact on nutritional well-being. To ensure that nutrition interventions are effective, the context of general and sectoral development policies should be taken into account. A programme to improve food, health or care may be implemented successfully but may fail to show a measurable impact if the general policies are not favorable to nutrition.

National income growth can improve living standards and individual welfare including nutrition in several ways. As real incomes increase, demand for goods and services grows and more jobs become available, enabling more people to meet their needs for food, health care and safe and sanitary housing. However, specific government policies are needed to ensure that the poor and nutritionally vulnerable benefit from economic growth. Macroeconomic policies that discriminate against the food and agriculture sector or that reduce health services can adversely affect nutrition.

The burden of structural adjustment often falls disproportionately on the poor and nutritionally vulnerable. In the long run, however, it is the poor who would suffer most if macroeconomic imbalances were to continue. By making economic and social adjustments simultaneously and improving the targeting of interventions for the poor, "safety nets" can be created. Compensatory programmes (e.g. supplementary feeding, expanded health care, income-generating programmes) may be needed to help relieve the poor when negative effects occur.

In some countries the national income is high but inequitably distributed. In such situations if government spending in the social sector is relatively low, welfare indicators are often worse than those of other countries with similar per caput gross national product (GNP). In other countries, the governments have made strong commitments to providing for basic needs and the welfare indicators are better than their level of GNP would predict, Yet, without sustained

economic growth, the impact of redistribution of incomes and assets tends to be limited over time. Finally, there are countries that have promoted economic growth along with a more equitable distribution of income as well as higher investments in developing human resources and skills. There is a strong case in favor of emphasizing equity together with growth as an integral part of a development strategy.

### **Agricultural policies, trade and the debt burden**

Through its influence on development prospects and resource availability, the international trade environment can affect nutritional well-being in many countries. Foreign exchange earnings, employment and GNP are all affected by barriers to international trade. Trade liberalization, particularly in agricultural products, can have a favorable impact on the food security of developing countries overall. In countries that subsidize domestic production, agricultural imports are often relatively low, and when production exceeds domestic needs the surplus is sold abroad. This may constrain the volume and value of exports flowing from other countries, as an oversupply in the world market leads to depressed prices.

For developing countries that are primarily food importers, the industrialized countries' agricultural policies can provide food at low prices, as well as food aid. The availability of cheap food may allow the pursuit of programmes that increase access to food, particularly among urban populations, as well as relieving immediate balance of payment problems to some extent. However, if food self-sufficiency and trade-oriented self-reliance and rural development are the long-term solutions to a developing country's food problems, the impact of these policies is not positive.

Domestic prices are depressed when developing countries set farm prices in relation to world prices which are unduly low because of producer and export subsidies. In those circumstances, the profitability of investment in domestic agriculture decreases, productive resources are diverted to other less competitive sectors and the adoption of technologies and other measures to improve productivity is delayed. The long-term effect is perpetuation of dependence on imported food, which contributes to general deficits.

The external debt burden of the developing countries is critical. The ratio of debt servicing to exports remains at a high level for developing countries as a whole. There is a net outflow of debt-related resources from developing countries to creditors, which totaled US\$ 242000 million in the period 1983 to 1989. Severe external constraints, e.g. shrinking markets for their products, prevent many developing countries from coping with their debts. Some limited debt rescheduling and even reductions have taken place recently, but the overall impact has been small.

### **Population growth**

Providing for increasing numbers of people is a critical challenge in many developing countries, especially those where the population is expected to double in the next 20 to 25 years. To address population growth and migration successfully, more equitable economic development must be promoted and better access to education, health and family planning services should be provided. Many countries address high fertility levels through programmes to reduce the number of births and lengthen the intervals between pregnancies. Breast-feeding, especially when exclusive, favors pregnancy spacing and maternal health. Services for nutrition, maternal and child health and family planning will be more successful if linked and integrated.

## **Environment pressures**

The increasing number of people places pressures on the natural resources upon which survival depends. Every year, at least 11 million hectares of tropical forests are cut down. The loss of arable land through soil degradation is almost as widespread, Between five and seven million hectares of cultivable land are lost each year, most of it in the developing world. The long-term integrity of food supplies is jeopardized by poor land-use practices, threats to fish and other wildlife, excessive use of fuel and energy sources, urban growth and pollution of air and water. There is increasing concern about food contamination and water pollution resulting from unsafe and overly intensive agricultural production methods.

*FAO experts in Laos provide advice on the appropriate use of pesticides and their effects on food and the environment. - Au Laos, des experts de la FAO fournissent des avis concernant l'utilisation appropriée des pesticides et leurs effets sur les aliments et l'environnement. - Expertos de la FAO prestan asesamiento en Laos sobre el uso apropiado de los plaguicidas y sus efectos sobre los alimentos y el medio ambiente.*

Environmental degradation results in dwindling stocks of fuelwood, the principal energy source for cooking in most developing countries. Women and children in many countries must spend significant amounts of time and energy walking long distances to collect fuelwood.

In their daily struggle to survive, the rural poor adopt strategies that affect soil, woody biomass, pastureland and water, and their decisions about resource allocation may determine whether government actions to promote sustainable development succeed. Much environmental degradation arises because the rural poor are forced to employ damaging cultivation and pastoral practices. By increasing access to resources and technologies or providing alternative earning opportunities, environmental policies can address these basic issues.

The overall objective should be to create conditions in which it is more profitable to conserve resources than to destroy them. Sustainable production systems should be developed for various types and qualities of land and water resources, such as low- and high-potential agricultural lands, forests and fisheries. The need for sustainable technologies for marginal lands is an area that has largely been neglected by researchers in the past. Greater integration of nutritional, health, economic and environmental considerations is needed. For example, to reconcile environmental concerns with the need to increase food supplies and other agricultural commodities, alternative agricultural systems and technologies may need to be developed. Environmental concerns may create increased pressures for introducing new barriers to trade for products perceived to be "environmentally unfriendly". Other environmental issues such as possible global warming and loss of genetic resources need to be addressed to avoid adverse effects on nutrition over time.

## **Urban growth**

By the year 2000, it is expected that 51 percent of the world's population will live in urban areas. Urban households tend to be better nourished than rural families; they have more varied diets and better access to health and other social services. However, there are urban and periurban groups who are poorer, more vulnerable and more malnourished than their rural counterparts. Breast-feeding is less prevalent and of shorter duration in urban areas, and increased bottle-feeding, poor housing, inadequate water supplies and waste disposal and poor

food hygiene heighten the risk of diarrhoeal diseases, In cities, life-styles and dietary patterns change and efforts should be made to prevent new behaviors that have been linked to diseases.

In cities, people rely almost entirely on purchased food, much of it commercially prepared. They are more vulnerable to economic factors affecting commercial food markets, since they spend a high proportion of their budget on food and are dependent on wage labor. Currently many countries meet the needs of the city population by importing foods and subsidizing their prices, undercutting the domestic producers. This may be another motivation for rural people to move to cities, especially if food producers must sell at inadequate prices and farm incomes are kept low.

## **Policies and programmes to improve nutrition**

Strategies and actions to improve nutrition need to be developed according to the particular needs, resources and circumstances of each country. Nonetheless, the following common areas of action for protecting and promoting nutritional well-being have been identified.

### **Improving household food security**

Household food security depends on the ability of the household to produce or procure enough food to ensure an adequate diet for all its members at all times. Farmers living on marginal lands, landless or temporary laborers, pastoralists, small-scale fishermen and forestry workers and the urban poor are most vulnerable to food insecurity. They may experience chronic, seasonal or transitory food shortages. The food supply at both the national and the household level must be sufficient and reasonably stable throughout the year and from one year to another.

### **Protecting consumers through improved food quality and safety**

Food-borne diseases due to pathogenic bacteria, viruses, parasites or intoxication's caused by chemical contaminants are widespread, Food-borne diseases cause loss of income and work output and increased medical care costs. A country's reputation for poor food quality may result in a decrease in trade and export earnings, as well as in tourism if foodstuffs are contaminated. Proper food control measures also help to reduce food losses and assure a healthy diet. To ensure that food is safe and that food quality is maintained during production, handling, processing and packaging, an effective food quality control system is necessary.

Governments can advise consumers and the food industry about good agricultural, manufacturing and food-handling practices, measures to minimize food spoilage and actions to avoid contamination. Education in hygienic handling and processing of food is needed. Simple precautions can do much to keep food safe in the home, small shops and eating places. Education and training, backed up by well enforced codes of practice, can achieve similar results in the food industry.

## **GENERAL STRATEGIES TO ACHIEVE HOUSEHOLD FOOD SECURITY**

- Adopt overall development strategies and macroeconomic policies that create conditions for growth with equity

- Accelerate growth in the food and agriculture sectors and promote rural development that focuses on the poor
- Improve access to land and other natural resources
- Provide credit for poor households
- Increase employment opportunities
- Create income transfer schemes
- Stabilize food supplies
- Improve emergency preparedness planning
- Provide emergency food aid and strengthen the coping mechanisms of households

International standards protect the health of consumers and ensure fair trade practices; they should be part of national and international food security systems. In building their institutional capacity to implement comprehensive food quality programmes, low-income countries can receive assistance in the development of infrastructure and advice from international agencies and countries with existing practices. The standards of the Codex Alimentarius Commission can be used as models for developing legislation and regulations.

#### **ACTIONS TO IMPROVE FOOD QUALITY AND SAFETY**

- Create comprehensive legislation, regulations and standards and effective inspection systems
- Promote good manufacturing practices and strengthen food control procedures to meet basic standards of hygiene in commercial food handling and preparation
- Educate consumers regarding hygiene and sanitation as well as food laws, regulations and standards
- Establish food and nutrition labelling regulations and guidelines for advertising so consumers can make more informed decisions
- Integrate food quality and safety concepts into government-sponsored, nutrition-related programmes
- Monitor national incidence of food-borne diseases and contaminants
- Construct infrastructure to provide adequate water and basic sanitation in homes and retail food outlets
- In agriculture, promote safe use of pesticides, fertilizers and veterinary drugs as well as proper practices for postharvest storage, chemical use, handling and transport

*An effective food inspection and licensing system for vendors assures consumers in Panama that foods sold on the street are safe. - Au Panama, un système efficace d'inspection des aliments et d'octroi de licences pour les vendeurs est pour les consommateurs une garantie de l'Innocuité des aliments vendus sur la voie publique. - Un sistema eficiente de inspección de alimentos y concesión de licencias a los vendedores garantiza a los consumidores la inocuidad de los alimentos vendidos en las vías públicas de Panamá.*

### **Preventing specific micronutrient deficiencies**

With concerted efforts, the virtual elimination of iodine and vitamin A deficiencies and the substantial reduction of iron deficiency within this decade are attainable goals. Strategies and activities to tackle specific micronutrient deficiencies need to be formulated and implemented within the context of national plans to improve nutrition. Preventing micronutrient deficiencies involves public health measures and legislation to improve water quality, sanitation and food hygiene and promotion of essential services such as immunization programmes, control of endemic diseases, maternal and child health and primary health care programmes as well as health education and information.

Improving dietary diversity by stimulating the production and consumption of micronutrient-rich foods is the fundamental, sustainable approach for overcoming micronutrient deficiencies. In rural and urban areas there is great scope for improving direct household supplies of micronutrient-rich foods. Food and agricultural planning can promote the increased availability of micronutrient-rich foods, and targeted nutrition education programmes can help increase their consumption.

Food fortification can add micronutrient, particularly potassium iodate, vitamin A and iron, to common foods. However, in developing countries the cost of fortification and the enforcement of relevant legislation can be problematic, especially where there are multiple small-scale producers. While supplementation with iodized oil (given orally or by injection), vitamin A (given in high-dose capsules or oral dispensers) and medicinal iron can be effective in some circumstances, this should only be considered as a temporary measure until long-term solutions can be implemented. Supplementation programmes are often expensive and unsystematic, and coverage may be poor. Frequently, the key target groups are different for each micronutrient, and operational constraints are severe.

### **Promoting appropriate diets and healthy lifestyles**

Excessive or unbalanced diets, often coupled with inadequate physical exercise, stress, excessive alcohol consumption and smoking, contribute to poor health and lead to the increased incidence of diet-related non-communicable diseases including obesity, hypertension, stroke, cardiovascular disease, diabetes mellitus and some cancers.

Promoting healthy diets involves motivating people and creating opportunities for behavioral change while recognizing individual preferences, life-styles and time constraints. Strategies include nutrition education and dietary guidance for the public; training of professionals in health and agriculture; creating guidelines for food services; and involving consumer groups and food industries in the endeavor. These efforts can reverse the trends of increased diet-related non-communicable diseases. They can also have implications for farming, industrial and social policies and international trade.

Generally, nutrition education has been effective when behaviour modification, rather than information diffusion, has been the goal. Social learning, social marketing and educational entertainment strategies for mass communication have improved nutritional status among low-income groups and others. In terms of cost-effectiveness, nutrition communication compares favorably with other nutrition interventions. Maintaining nutrition communication programmes over a long period is essential to sustain meaningful behavioral changes.

Formal and in-service training to teach health professionals, teachers, agricultural extension workers and other community workers to become effective communicators is crucial. Relevant school curricula and materials, teacher preparation, modification of the school environment and cooperation between schools, parents and the local health and social services are essential elements of nutrition education. Nutrition and health education in schools can have positive effects on entire households.

### **Preventing and managing infectious diseases**

Poorly nourished persons are more susceptible to many infectious diseases, and the prevention of infection and management of these diseases involves reducing their incidence, duration and severity. Early and adequate curative treatment at home or in clinics for acute respiratory infections, diarrhoea, malaria and childhood and parasitic diseases helps prevent malnutrition.

Environmental health programmes that lead to safe water, safe waste disposal and adequate housing can reduce morbidity from various water- and faeces-borne infectious diseases. Water- and food-borne diseases are important causes of diarrhoea, as are many other infections due to bacteria, viruses, mycotoxins and parasites.

The accessibility, acceptability and adequacy of health services strongly influence whether people will utilize and benefit from them and whether people will alter their behaviour to improve their health. Community-based health care ensures the community members' active participation in the planning and implementation of their own health care, generates health awareness, mobilizes the community and successfully prevents infections through environmental changes and modification of harmful health practices. Community-based growth monitoring and prevention activities coupled with effective immunization programmes can be particularly important in the management and control of infectious diseases.

### **Caring for the socio-economically deprived and nutritionally vulnerable**

Households and communities must be able to give the time, attention and support required to meet the physical, mental and social needs of children, the elderly and other family members. Each family member's knowledge, motivation and role within the household including his or her time constraints and control of resources, need to be considered in designing and implementing nutrition interventions.

In communities, adequate organization and caring capacity is an important determinant of the nutritional status of vulnerable groups and community efforts to address their own problems need to be encouraged and supported. Increased attention to new community care structures may be needed as urbanization and other social forces alter traditional patterns of family and community care. For instance, care is provided through voluntary and social welfare organizations. Other mechanisms include feeding programmes food subsidies and social security systems.

## **STRATEGIES TO ENHANCE SOCIETIES' CAPACITY TO PROVIDE CARE**

- Recognize the effectiveness of traditional support systems in reducing workloads, providing economic assistance increasing knowledge and offering emotional support
- Design and implement national programmes for breast-feeding protection and promotion, e.g. baby-friendly hospital approaches and training programmes
- Form child care centres, work groups, cooperatives or informal networks for sharing tasks
- Develop appropriate technologies and improved infrastructure to reduce the demands on women's time and efforts
- Ensure that women have access to the resources and the education they need to care for themselves and their families
- Through legislation, strengthen women's rights to property and income, and provide social security for women wherever possible
- Provide Job and skills training for the disabled to prevent dependency
- Promote family and community organizations that help people to cope with their disabilities
- Enlist international agencies to help refugees and displaced persons meet their basic needs and become self-reliant

Policies to improve care for nutritionally vulnerable individuals, such as infants, young children, mothers the disabled and the elderly, are needed. The implementation of such policies often requires strengthening of community, national and international capabilities and institutions.

### **Analyzing and monitoring nutrition situations**

Information related to nutrition is needed for a variety of purposes, such as identifying chronic nutritional problems and causes; predicting and detecting short-term or acute nutritional problems; targeting population groups for both short-term relief efforts and longer-term policy and programme development; and monitoring changes and evaluating the impact of interventions and development programmes.

Efforts to assess and monitor nutritional status and other nutritionally relevant factors must be cost effective, timely and directed towards specific goals such as preparation of development plans and budget decisions. Generally, the most practical approach to nutrition monitoring is to use a minimum number of indicators and to focus on those that lend themselves to regular assessment.

During food crises, timely commitment of resources for public works and food distribution is required. Often, the most important early warning signals are based on forecasts of food availability and price indicators. While assessing the food security status of specific households may be difficult, monitoring changes in food prices is relatively simple and can be a useful indicator in many national early warning systems.

Information about the implementation and cost-effectiveness of programmes aimed at resolving particular nutritional problems or targeted at a particular group or geographic area is important. An appropriate institutional capacity is central to nutrition monitoring. Many countries are establishing food and nutrition information systems, generally starting with data on food availability and childhood undernutrition. Often, with the use of established data sources and information systems, a more multifaceted system can be developed in accordance with a country's priorities and resources.

Food security is assessed at the global level with two objectives to advocate the allocation of resources to address hunger and malnutrition; and to alert donors of impending food crises. These assessments are based on various sources such as FAO's food balance sheet procedures and the Global Information and Early Warning System for Food and Agriculture (GIEWS).

*In the Horn of Africa, many have fled natural and human disasters and sought assistance at emergency feeding centres. - Dans la corne de l'Afrique, nombreux sont ceux qui ont fuites catastrophes naturelles et anthropiques et cherché assistance dans les centres d'alimentation d'urgence. - En el Cuerno de Africa son muchos los que han huido de las catástrofes de origen natural y humano y han buscado ayuda en los centros de alimentación para situaciones de emergencia. (Photo/Foto: E. Muehlhoff)*

## **DISPLACED PERSONS FACE SEVERE NUTRITION PROBLEMS**

Often the worst problems of protein-energy malnutrition (PEM) and micronutrient deficiencies are found among refugees and other displaced persons. Increasingly, drought and other environmental hazards, as well as internal or International social upheavals, cause people to flee their communities, Monitoring of areas that are especially vulnerable to food shortages and of populations considered to be nutritionally at risk is essential.

The total number of refugees dependent upon international assistance has increased rapidly over the past two decades. The Office of the United Nations High Commissioner for Refugees (UNHCR) estimated that there were 2.5 million refugees at the end of 1970 while there were 8.2 million ten years later. By 1992, the total number of assisted refugees had risen to an estimated 19.5 million.

Because of increasing difficulties, more refugees remain for longer periods of time in conditions of at least partial food aid dependency. Host countries may not be in a position to take responsibility for immigrants, and international organizations lack sufficient resources to provide full rations to meet their nutritional needs. Only the development of international policies, arrangements and resources can address these tragic situations.

## **MEETING THE NUTRITION CHALLENGE**

Governments, non-governmental organizations, local communities, the private sector and the international community, including international organizations, can contribute to meeting the nutrition challenge. Three main types of action can be developed: first, nutrition objectives and actions can be incorporated into national, sectoral and integrated development plans and the necessary human and financial resources can be allocated for achieving these objectives; second, specific nutritional interventions can be developed which are directed at particular problems or groups, and third, community-based actions for nutritional assessment of problems and the implementation of appropriate measures can be initiated.

Governments are involved primarily through sectoral activities, especially in the fields of agriculture, health, education and social welfare. Ministries could seek to enhance the nutritional impact of their policies, programmes or projects. Each country needs to evaluate its own experiences and processes of intersectoral cooperation and to strengthen them as necessary, in the light of their needs and resources.

Non-governmental organizations often foster innovative activities at the grassroots level. However, there are problems of replication of NGO projects and the need for generating a wider impact. NGOs should strive for full integration in the national system and cooperation with others.

Consumer organizations can initiate a dialogue with the food industry and distribution network agents. Most food and agricultural production is carried out by private farmers. The contribution of private industries in ensuring good food processing, food quality and safety and nutritious products as well as in supporting research in nutrition is significant. Although the government is responsible for legislation regarding the quality and safety of food and its labelling, marketing and advertising, the implementation and monitoring of these measures are primarily in the hands of the private sector and consumers. Discussion among the government, consumers and private industry is essential and cooperation is required for sustainable improvements.

Through UN agencies and bilateral organizations, the international community can support national efforts to address nutrition problems. Development assistance can be a powerful vehicle for attaining nutrition objectives, but amounts have remained disappointingly small relative to the need, and the extent to which aid will be allocated for poverty alleviation is not yet clear. Also, the efficiency of distributing aid and its effectiveness could be enhanced.

#### **PRINCIPLES FOR INCORPORATING NUTRITION INTO NATIONAL DEVELOPMENT**

- Pursue policies, for sustainable economic and social development, with emphasis on growth with equity
- Promote local community participation
- Strengthen technical and managerial capacities both at the community level and at intermediate levels of government
- Focus on human resource development and training
- Improve the status of women
- Foster intersectoral action and partnership among agencies
- Incorporate nutritional objectives in sectoral policies and programmes
- Enhance the role of consumers and consumer education
- Ensure commitment on the part of governments and the international community

The challenge to alleviate hunger and malnutrition is formidable, but the goal is attainable through concerted action by governments, local communities, NGOs and the private sector. What is needed is a mutual commitment to improving human welfare and the recognition that nutritional status is a fundamental indicator of development. The present trend towards grassroots democracy offers a precious opportunity for people to participate fully in development and to take initiative towards improving their nutritional situations.

## **SELECTED BIBLIOGRAPHY**

**Berg, A.** 1987 *Malnutrition - what can be done? Lessons from World Bank experience*, Baltimore, MD, USA, Johns Hopkins University Press for the World Bank.

**Chambers, R., Longhurst, R. & Pacey, A., eds.** 1981. *Seasonal dimensions to rural poverty*, London, Frances Pinter.

**Chen, L.C. & Scrimshaw, N., eds.** 1983. *Diarrhoea and malnutrition: interaction, mechanisms and interventions*, New York Plenum Press.

**Cornia, G., Jolly, R. & Stewart, F.** 1987; 1988. *Adjustment with a human face* Vol. 1 *Protecting the vulnerable and promoting growth*, Vol. 2 *Country case studies*. Oxford, UK, Clarendon Press.

**Demery, L. & Addison, T.** 1987. *The alleviation of poverty under structural adjustment*. Washington, DC, World Bank.

**Dreze, J. & Sen, A.** 1989. *Hunger and public action*. Oxford, Clarendon Press.

**FAO.** 1982. *Malnutrition: its nature, causes, magnitude and policy implications*. COAG/83/6 Rome .

**FAO.** 1984. *Integrating nutrition into agricultural and rural development projects: six case studies*. Nutrition in Agriculture No 2 Rome.

**FAO** 1985. *The Fifth World Food Survey*. Rome.

**FAO.** 1991. *Agricultural issues in structural adjustment programs*. FAO Economic and Social Development Paper No. 66. Rome.

**FAO.** 1992. *The State of Food and Agriculture 1991*. Rome.

**Gross, R. & Monteiro, C.A.** 1989. Urban nutrition in developing countries: some lessons to learn. *UNU Food Nutr. Bull.*, 11(2): 14-20.

**Heller, P. & Drake, W.** 1979. Malnutrition, child morbidity and the family decision process, *J. Dev. Econ.*, 6: 203-235.

**Lipton, M.** 1983. *Poverty, undernutrition and hunger*. World Bank Staff Working Paper No. 597, Washington, DC, World Bank.

**Lipton, M. & Longhurst, R.** 1989, *New seeds and poor people*. Baltimore, MD, USA, Johns Hopkins University Press.

**Longhurst, R.** 1984. *The energy trap: work, nutrition and child malnutrition in northern Nigeria*. Cornell International Nutrition Monograph Series No. 13, Ithaca, NY, USA, Cornell University.

**Maxwell, S., ed.** 1990. *Food security in developing countries*. *IDS Bull.*, Vol. 21, No. 3.

**McGuire, J. & Popkin, B.** 1990. *Helping women improve nutrition in the developing world: beating the zero sum game*. World Bank Technical Paper No. 114. Washington, DC, World Bank.

**Pinstrup-Andersen, P., ed.** 1988. *Food subsidies in developing countries: costs, benefits and policy options*. Washington, DC, Johns Hopkins University Press for IFPRI.

**Prema, K., Bamji, M.S. & Damodaram, M.** 1981. *Nutrition, fertility and mortality: a review*. Rome, FAO.

**Sahn, D.E., ed.** 1989. *Seasonal variability in Third World agriculture: the consequences for food security*. Baltimore, MD, USA, Johns Hopkins University Press.

**Sahn, D. & Alderman, H.** 1988. The effects of human capital on wages, and the determinants of labor supply in a developing country, *J. Dev, Econ.*, 29: 157-183.

**UN ACC/SCN.** 1987. *First report on the world nutrition situation*. Geneva.

**UN ACC/SCN.** 1989. *Update on the nutrition situation: recent trends in nutrition in 33 countries*. Geneva.

**UNDP.** 1991. *Human development report*. New York.

**UNICEF.** 1991. *State of the world's children*. New York.

**von Braun, J. & Kennedy, E.** 1986. *Commercialization of subsistence agriculture: income and nutritional effects in developing countries*. Washington, DC, IFPRI.

**WHO.** 1982. *Prevention of coronary heart disease*. WHO Technical Report Series No. 678. Geneva.

**WHO.** 1986. *Community prevention and control of cardiovascular diseases*. WHO Technical Report Series No. 732. Geneva.

## **Alleviating malnutrition in communities**

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## **FAO's evolving strategies**

### **E. Muehlhoff, F. Simmersbach, P. Baron and F. Egal**

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Since FAO was founded 50 years ago, the basic goals of its community nutrition programmes have remained the same: to raise levels of nutrition and improve the living standards of the rural poor. While the specific objectives of current projects are similar to many of those of the 1950s and 1960s, many of the strategies and approaches employed for solving nutrition problems are different today. They reflect the experience FAO has acquired overtime and the knowledge FAO is constantly incorporating into its community-based nutrition programmes.

## **EARLY PROGRAMMES**

During the early years of FAO, community programmes to alleviate malnutrition were supported independently by FAO and the World Health Organization (WHO). By the mid-1950s, both agencies realized that their nutrition activities in developing countries, mainly nutrition education and supplementary feeding programmes, had not brought the expected improvements.

## **APPLIED NUTRITION PROGRAMME**

From the late 1950s through the early 1970s FAO, along with WHO and the United Nations Children's Fund (UNICEF), embarked on a new approach to combat the diverse causes of malnutrition. The Applied Nutrition Programme (ANP) aimed to educate rural families to grow and use the foods needed to improve their diets, especially the diets of mothers and children, ANP projects were launched simultaneously in different regions; by 1961, 26 ANP projects had been established, and within five years 56 country projects were fully operational (McNaughton, 1975).

The ANP projects sought to improve nutrition through a three-pronged approach of community action in agriculture, health and education. The main activities involved agricultural training to increase food production through community and school gardening; raising fish, poultry and other small animals; and providing materials and inputs such as tools, seeds and fertilizer. Nutrition education to teach better use of foods and healthy eating habits was provided to women's groups, schools, health centres and youth groups. Supplementary feeding of schoolchildren and preschool children often formed an integral part of the programme.

The integrated approach of ANP required cooperation among the health, agriculture, education and community development sectors; however, each project focused on one sector. When a country chose to give primary emphasis to agriculture for its project activities, FAO became the leading United Nations agency implementing the project. For example, in the Republic of Korea, village-level food production and utilization were prominent elements of ANP, so FAO provided technical assistance to the Ministry of Agriculture. In countries where

health was the focus of project activities, as was the case in Indonesia, WHO led the programme.

### **Assessment of the Applied Nutrition Programme**

The experiences of ANP projects varied from country to country, and after 20 years the results of the programme appeared to be mixed. While some projects were successful in terms of the adoption of nutrition gardens or small animal raising, it was sometimes difficult to identify any tangible improvement in the nutritional status of the beneficiary communities. Progress was confined to a limited area, as ANP was designed to foster pilot projects. The programme could not go beyond this phase owing to lack of sufficient funds. For example, in the Republic of Korea the project promoted hew practices which the target farmers adopted readily; however, only 1 percent of the villages participated in the project.

*In 1966, FAO trained Lesotho nutritionists to demonstrate food preparation to village women - En 1966, la FAO a formé des nutritionnistes au Lesotho pour qu'ils montrent aux villageoises comment préparer les aliments - En 1966, la FAO capacitó a nutricionistas de Lesotho para que hicieran demostraciones ante mujeres aldeanas sobre cómo preparar alimentos*

In retrospect, a major weakness of the programme was the failure to ensure the integration of ANP activities into national and local development plans from the time of their inception. This flaw, together with insufficient local and international financing, led to difficulties in expanding ANP pilot activities to full-scale projects. Coordination among the United Nations organizations as well as among government ministries was difficult and less effective than anticipated. Insufficient priority was given to agricultural extension, and at times the advice of nutrition educators was impractical or inappropriate.

In spite of these limitations, ANP did have many lasting beneficial effects: it stimulated governments' interest in nutrition; national staff became committed to the concept of applied nutrition; and nutrition improvement came to be seen as an important component of rural development.

*Senegalese schoolchildren learned to produce vegetables as part of the FAO/UNICEF Applied Nutrition Programme in 1968 - Des écoliers sénégalais apprennent à produire des légumes dans le cadre du Programme de nutrition appliquée FAO/UNICEF en 1968 - Los niños de las escuelas senegalesas aprendieron a producir hortalizas como parte del Programa de nutrición aplicada de FAO/UNICEF en 1968*

### **NUTRITION AND DEVELOPMENT STRATEGIES**

Throughout the 1960s and 1970s, developing countries made determined efforts to increase their food supplies, and attaining national food self-sufficiency was given top priority. Unfortunately, in many countries production gains were insufficient to meet rising demands for food. Despite enormous production increases as a result of the green revolution, in many countries the benefits were not distributed equally and many people remained food insecure. The FAO Committee on Agriculture noted that increased food production, while often necessary, did not guarantee a decrease in the number of malnourished people (FAO, 1979).

In the 1970s, FAO, along with other development agencies, emphasized that malnutrition affecting economically marginalized and socially disadvantaged people could only be

lastingly solved through increased food production, national economic growth, poverty alleviation, social development and education. The accepted wisdom of the time was that isolated nutrition programmes could not work and that nutrition activities should be integrated into agricultural and rural development programmes. Discussions and analysis of nutrition improvement focused increasingly on the underlying causes of global malnutrition, and it was hoped that this problem could be tackled through national food and nutrition policy and multisectoral nutrition planning.

## **PROGRAMMES DURING THE 1980S**

By the early 1980s, it had become abundantly clear that the national strategies were often overly ambitious and that nutrition concerns had been placed in competition with other aspects of socio-economic development. Access to nutritionally adequate diets and improvements in nutritional status were not seen, and poverty continued to be a major determinant of food insecurity at the household level. Poor families were still unable to produce enough food or to earn sufficient income to purchase the food they needed.

Despite continuing debates over development strategies and nutrition, it was widely agreed that those nutrition problems that can be solved with simple technology (for example, deficiencies of vitamin A, iron or iodine) should be tackled immediately at community level. During the past ten years, FAO has strengthened its advocacy of interventions to solve specific problems as rapid and direct ways to improve nutrition within a community. Such interventions offer a means of channelling resources quickly and effectively to nutritionally needy groups.

### **Vitamin A Programme**

Vitamin A deficiency was the first nutrition problem to be addressed by this new strategy. In 1985, the UN ten-year-action programme to control and prevent vitamin A deficiency, xerophthalmia and nutritional blindness was launched at WHO headquarters. In this programme the main technical agencies FAO, WHO, UNICEF, the United Nations Educational, Scientific and Cultural Organization (Unesco) and the United Nations Development Programme (UNDP) collaborated closely and provided technical as well as financial support according to their mandate to governments. While WHO and UNICEF assisted in addressing the immediate health-related problems of children and Unesco gave support to education, FAO emphasized and promoted food-based approaches to ensure sustainability of programmes and gave priority to prevention of vitamin A deficiency, FAO's major contribution to this programme has been to increase the production of vitamin A - and carotene-rich foods and to ensure their increased consumption. International non-governmental organizations (NGOs) also participated actively in this UN programme.

### **REDUCING VITAMIN A DEFICIENCY AND DIVERSIFYING DIETS IN THE NIGER AND VIET NAM**

Through the FAO Vitamin A Programme, the production and consumption of foods rich in this micronutrient began to be promoted in the Niger in 1992 (FAO, 1995a). The two-year pilot project was implemented by the Ministry of Agriculture in collaboration with the Ministries of Health and Education in six villages with a total estimated population of 2 100 households or 10 700 individuals. In the project, women were the principal producers and agents of behavioural change. The primary beneficiaries were the members of nine women's groups (ranging in size from 30 to 70 women) and their families, neighbouring households

and the village at large.

When the project villages were compared with others, an increase in the proportion of healthy children was noted in the project areas. The successful ingredients of this project appear to be a strong emphasis on nutrition education to promote available, underutilized foods such as green leaves and liver; the cultivation of traditional wild sources of vitamin A-rich foods; and the use of food preservation and solar drying to address the problem of seasonal shortages.

In Viet Nam, a programme to improve nutrition and reduce vitamin A deficiency was implemented in four pilot communes from 1991 to 1994 (FAO, 1995a). The major interventions were nutrition education, particularly for pregnant women and mothers of children under five years of age; and the promotion of home gardening, especially for the production of vitamin A-rich foods. A network of community volunteer educators ensured delivery of services at the grassroots level.

Over two years, mothers' knowledge about nutrition increased, with an associated increase in the use of vegetables in weaning foods. Home production increased, and consumption of vegetables rose, especially among children under five years of age. Overall food intake, average daily intake of energy per caput and protein and fat intakes increased as well. The prevalence of xerophthalmia decreased overall from 1.01 to 0.09 percent (night blindness from 0.55 percent to 0, Bitot spots from 0.40 to 0.09 percent, and corneal scarring from 0.06 percent to 0). The project had a positive impact on health, nutrition and household food security in the target communes. It is believed that this model can be self-sustaining and can be expanded within the limits of the existing resources of the country.

[\*Education materials developed by vitamin A projects in the Niger and Viet Nam - Matériel d'éducation développé par le projet vitamine A, au Niger et au Viet Nam - Materiales educativos elaborados por proyectos de vitamina A en Níger y Viet Nam\*](#)

FAO greatly increased its active support for community nutrition projects through its work on vitamin A-rich foods. In assisting governments, FAO emphasizes food-based actions since only they can promote prevention, sustainability and self-reliance. Foods that are rich in vitamin A and carotenes are widely distributed in the animal and plant world. Furthermore, the focus on foods gave attention to all the macro- and micronutrients they contain rather than vitamin A alone.

The Vitamin A Programme was very similar to the comprehensive Applied Nutrition Programme in that it called for support of community action. It involved home, school and community gardens; small animal raising; aquaculture; home and community food processing, preservation and storage; nutrition education; recipe development and cooking demonstrations; income generation for women; and training of field workers. Community action for micronutrient deficiency prevention and nutrition improvement required cooperation among different key ministries (agriculture, health, education, social affairs and rural development), various United Nations agencies, international and national NGOs and the participating communities. The Vitamin A Programme differs from ANP in that its projects were fully integrated in governments' nutrition and development plans and programmes.

While the UN ten-year action programme will be completed by the end of 1995, FAO will continue to work to eliminate vitamin A deficiency by the year 2000, a goal set by the World Summit of Children in 1990 and reiterated and confirmed by the International Conference on Nutrition (ICN) in 1992. FAO is adopting a broader approach; efforts to prevent vitamin A

deficiency are being implemented in the context of food-based programmes to alleviate micronutrient deficiencies and to improve overall nutrition.

### **Promotion of traditional food crops**

Another strategy to maintain adequate diets among the poor that gained attention in the 1980s was the promotion of traditional food crops such as vegetables, fruits, pulses and certain cereals and tubers that are habitually consumed in rural areas. With the strong emphasis on the production of staple cereals in earlier years, the so-called "minor crops" had been neglected. Encouraging production of these traditional foods is now recognized as a way to broaden the food base and ensure a minimum supply of food prior to the harvest. These foods add diversity to diets and help to prevent micronutrient deficiencies. They are especially important in poor households and for women, who tend to be the main producers and consumers of traditional food crops.

In 1985, the FAO Committee on Agriculture requested that assistance to governments be given for programmes to promote traditional food plants (FAO, 1985a). An expert consultation on broadening the food base with traditional food plants, held in November 1985 in Harare, Zimbabwe, made recommendations for the development of a programme to promote underexploited food plants (FAO, 1985b). Subsequently, FAO published a policy brief and several resource books on traditional foods.

It is now recognized that the promotion of underexploited foods should not be restricted to food crops, but that consideration should be given to animals and wild foods as well. To increase the consumption of these foods an intersectoral and interinstitutional approach is required to address constraints at all stages of the food chain (particularly at the stages of processing and consumer information). The promotion of underexploited foods should be considered systematically in most development projects and programmes rather than only in specific projects on the subject.

Currently, FAO gives priority to raising awareness among development institutions about the present and potential contribution of underexploited foods to household food security and nutrition, so that these foods can be considered in the design and implementation of development policies, programmes and activities. FAO encourages exchange of information among institutions and experts concerned with underexploited foods. In particular, a methodology was developed to promote a coordinated approach among all institutions operating at local level. It was tested at an interinstitutional planning and formulation workshop organized jointly with the International Fund for Agricultural Development (IFAD) in August 1992 in Luapula Province, Zambia.

### **RECENT APPROACHES AND STRATEGIES**

FAO is concerned with improving households' access to nutritionally adequate and safe food. However, ensuring the nutritional well-being of individuals requires additional measures, including improvements in health and sanitation, the provision of adequate supplies of safe water, nutrition education and appropriate care of vulnerable individuals in the household.

Collaboration among sectors (including agriculture, health, education, community development, industry and organizations) to achieve nutritional well-being has been given impetus especially by the ICN and the subsequent development of National Plans of Action for Nutrition. The participation of various public- and private-sector organizations that have a

stake in improving nutrition will contribute significantly to sharing of responsibilities for projects and programmes, which will enhance national commitment and the chance that programmes will be sustainable in the long term.

### **Participatory nutrition approach**

Malnutrition can be found in many places, for instance urban slums, densely populated rural areas or heavily degraded ecological zones. Because of the diversity of conditions, universally valid answers to nutrition problems are extremely rare. Existing technological solutions to food problems often need to be adapted to fit specific agro-ecological and socio-economic conditions (for example, poor smallholdings and women-headed households), and this requires people's participation.

The early 1990s saw a shift in FAO's approach to planning and implementing community nutrition programmes. New approaches involve a process of learning and dialogue among the farming community and international and local development agents such as experts, researchers and field staff. The participatory approach has become a prominent characteristic in nutrition improvement programmes. In this approach a partnership is formed between project personnel and the people in the community to ensure that nutrition interventions and activities respond to the community's needs and resources and can be sustained long after project funds and technical experts are gone.

FAO is assisting member countries in developing participatory nutrition approaches and projects. The Organization has published guidelines to help development staff working at the community level to facilitate the appraisal of local food and nutrition problems, the selection of feasible activities to address the constraints identified and the monitoring and evaluation of activities by the staff and members of the community (FAO, 1993). The Organization is developing an in-service training programme at district level for government and NGO staff involved in community development (for example, agriculture, health and education programmes) to introduce this approach.

The participatory nutrition approach has been effective in the identification of the poorest households in a community and the formulation of specific activities to address the food and nutrition problems they face. It encourages women to state their particular constraints and needs more actively, which is an important consideration in view of their special role in food production, processing, preparation and distribution (FAO, 1993).

### **Gender awareness**

In early nutrition projects, attention was given to the role of women in domestic activities such as selection and preparation of food and feeding of children, rather than to their role as agricultural producers and providers of food for family consumption. In the late 1970s and early 1980s quantitative data began to show the magnitude of women's involvement in food production, and the implications of their work for household food and nutrition security were fully recognized.

Today, FAO projects give full recognition to women as important partners in development, not only as mothers and home managers but also as agricultural producers and income earners. FAO projects stress enhanced access to credit, extension services and nutrition education for male and female farmers to improve their ability to produce a greater variety of foods for healthy diets and to generate income for their families. Although careful analysis is

needed to ensure that projects do not overburden women, activities can be designed and technologies developed and adapted so that the condition of women and the welfare of their families can improve.

*Women are active participants in community projects to grow food - Les femmes participent activement aux projets communautaires de production alimentaire - Las mujeres participan activamente en los proyectos comunitarios de producción de alimentos*

## **FUTURE DIRECTION**

The results, resolutions and recommendations of recent international conferences will determine the support that FAO will give to community nutrition programmes in the future. The implementation of the National Plans of Action for Nutrition that countries are developing following the ICN will provide a strong orientation for the design and implementation of community nutrition programmes. By 1995, FAO has assisted more than 95 countries in their preparation of these national plans, most of which include strategies to be carried out at the community level (FAO, 1995b).

As a contribution to the implementation of Agenda 21 of the United Nations Conference on Environment and Development (UNCED). FAO will promote traditional foods from animals and plants and will carry out environmentally sustainable, multidisciplinary strategies to alleviate food insecurity and to improve nutrition.

In light of the issues raised at the International Conference on Population and Development held in Cairo in 1994, FAO training programmes for field workers will continue to include discussions on the consequences of demographic changes (population growth, the AIDS epidemic, refugee movements) for natural resources, food production and household nutrition.

Other forthcoming international events, especially the Fourth World Conference on Women in Beijing in September 1995 and the World Food Summit to be hosted by FAO in Rome in November 1996, will undoubtedly influence the design of FAO community nutrition programmes in coming years.

## **References**

**FAO.** 1979. Nutrition in agricultural and rural development. In *Report of the fifth session of the Committee on Agriculture*. 18-27 April. Rome.

**FAO.** 1985a: The role of minor crops in nutrition and food security. In *Report of the eighth session of the Committee on Agriculture*. 18-27 March. Rome.

**FAO.** 1985b. *Broadening the food base with traditional food plants*. Report of the Expert Consultation, Harare, Zimbabwe, 16-23 November. Rome.

**FAO.** 1993. *Guidelines for participatory nutrition projects*. Rome.

**FAO.** 1995a. *The vitamin A programme. Fifth summary progress report, 1993-1994*. Rome.

**FAO.** 1995b. Follow-up to the International Conference on Nutrition (ICN) Plan of Action. In *Report of the 13th session of the Committee on Agriculture*. 27-31 March. Rome.

**McNaughton, J.** 1975. Applied nutrition programmes - the past as a guide for the future.  
*Food Nutr.*, 1(3): 17-23.