WHO-EM/NUT/243/E

Report on the

Regional workshop on national nutrition policy and plan formulation and implementation

Cairo, Egypt
27–30 November 2006

World Health Organization

Regional Office for the Eastern Mediterranean

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1. INTRODUCTION

A regional training workshop to develop national capacity in nutrition planning and plan formulation was held in Cairo from 27–30 November 2006. The workshop was organized by the World Health Organization's (WHO) Regional Office for Eastern Mediterranean, in collaboration with the Department of Nutrition for Health and Development, WHO Geneva and the Regional Offices of the Food and Agriculture Organization of the United Nations (FAO), World Food Programme (WFP) and United Nations Children's Fund (UNICEF). The workshop was attended by representatives of Bahrain, Egypt, Islamic Republic of Iran, Iraq, Jordan, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Sudan and Yemen. The objectives of the workshop were to strengthen national capacity to review, update and strengthen national intersectoral food and nutrition action plans and policies.

The opening remarks of Dr Hussein A Gezairy, WHO Regional Director for the Eastern Mediterranean, were delivered by Dr Mohamed Jama, Deputy Regional Director, WHO/EMRO. In his message, Dr Gezairy noted that the 'double burden' of malnutrition was not restricted to population groups with particular cultures, traditions or dietary habits, but cut across all strata of society, involved all age groups and was present in both the developed and the developing world. Additional evidence had emerged to show that under-nutrition in the fetal stage and in early childhood may enhance an individual's susceptibility to chronic, noncommunicable diseases in later life.

The traditional approach to addressing nutrition problems in the developing world had been to focus on reducing the prevalence of under-nutrition in children under the age of 5 years and micronutrient deficiencies in young children and pregnant and lactating women. He pointed out that programmes following this approach had resulted in indifferent achievements and it was now being widely perceived that more comprehensive and aggressive approaches were needed to overcome not only the traditional forms of under-nutrition, but those arising from the nutrition of indulgence and leading towards chronic diseases such as diabetes and cardiovascular disease. Problems associated with under-nutrition and nutrition of indulgence were not simply related to food or nutrition issues, but may have resulted from a plethora of causes that encompassed agriculture, commerce, food industry, trade, education and finance sectors.

The World Declaration and Plan of Action for Nutrition adopted by the International Conference on Nutrition (ICN) in 1992 had provided a technical framework to Member States for the preparation of national plans of action through nine strategies. These strategies involved the various sectors of government, international agencies, nongovernmental organizations and the private sector. It had also become clear, he said, that improving the nutrition of the population rested not simply with the health and nutrition sector, but required the concerted and cohesive efforts of numerous other government sectors, such as agriculture, commerce, trade, finance and planning.

The World Food Summit in 1996 had reinforced the validity of goals and strategies identified at the ICN. It had also provided an exceptional opportunity to reaffirm the commitment to achieving food and nutrition security for all, to build on the efforts already made in implementing the ICN World Declaration and Plan of Action for Nutrition and to invest resources

effectively at national, regional and global levels to accelerate the translation of national nutrition plans into meaningful action and visible results. A large number of Member States had committed themselves to follow up on the recommendations of the ICN and the World Food Summit.

Dr Gezairy said that the experience of WHO in supporting Member States to develop and implement national nutrition policies and plans had shown that, even when political commitment was present, there was little involvement of the senior officials, particularly outside the health and agriculture sectors. This was compounded by significant capacity gaps in understanding and in the response to the increasing complexity of food and nutrition needs of the national population. He pointed out that WHO had been providing support to Member States through technical consultations and training in equipping policy-makers to develop, evaluate and modify existing food and nutrition policies in light of the changing food and nutrition situation and to critically analyse the existing food and nutrition responses.

Mr Charles Parks, UNICEF, delivered the opening remarks on behalf of UNICEF. He said that UNICEF had collectively made significant progress over the last decade and more in advancing the nutritional status of vulnerable groups, most notably children. However, child malnutrition represented a major challenge in the Region and the technical consultation on national nutrition policy held jointly by WHO and UNICEF had shown the need for supporting country offices to formulate national nutrition policies. He pointed out that Sudan had recently developed a national nutrition policy and he expressed his hope of working closely with WHO in supporting other Member States in this important venture. He referred to the fact that breastfeeding, the most cost-effective child survival intervention, had been declining in the Region and said he looked forward to addressing the issue of infant and young child feeding jointly with WHO and partner agencies and that the Ending Child Hunger and the Under Nutrition Initiative, a joint WFP/UNICEF initiative, needed to be implemented and adopted in the Region.

The Chairmanship was shared on a rotating basis between Dr Sayed Morteza Safavi (Islamic Republic of Iran), Dr Fatima Hachem (FAO), Dr Anne Callanan (WFP), and Dr Habiba Wassef (Egypt). Dr Nadia Gharib (Bahrain) and Dr Riffat Ayesha Anis (Pakistan) were elected as Rapporteurs for the sessions. The agenda, programme and list of participants are included as Annexes 1, 2 and 3. Country nutrition plans of action are included as Annex 4.

2. TECHNICAL PRESENTATIONS

2.1 Objectives and mechanics of the meeting

Dr Kunal Bagchi, WHO/EMRO

The first intercountry workshop "Towards a national nutrition policy" for countries of the Eastern Mediterranean Region was held in Alexandria, Egypt in November 1989. The guidelines *Towards a national nutrition policy* for countries of the Region were published in 1990. The preparation of a nutrition strategy in the health sector is the first step towards a national nutrition policy; however, rushing to formulate a national nutrition policy based on general impressions and intentions is a mistake, as such a policy cannot be put into operation. Some of the recommendations arising from the WHO technical report included the need for the:

- establishment of a database;
- analyses of existing problems and their major determinants;
- identification of the nutritional implications of all sectoral policies and plans of action;
- setting of objectives, targets and time frames for each sectoral plan of action.

An intercountry meeting on nutritional plans and current national nutrition activities in the Region was organized in Damascus, Syrian Arab Republic in November 2000. The recommendations and proposed steps to be taken between 2001 and 2003 included to:

- increase governmental support and commitment;
- strengthen intersectoral collaboration;
- translate strategic goals into operational plans;
- develop effective nutrition education programmes for health personnel, school students, teachers and parents, agricultural workers, etc.
- develop and enact appropriate food and nutrition legislation;
- reinforce the need and importance of establishing national intersectoral food and nutrition committees through international organizations;
- conduct a follow-up meeting after 3 years to review progress.

Countries of the Region can be grouped into four categories in terms of their nutritional situation. Category 1 countries, such as Bahrain and Oman, experience advanced stages of over-nutrition (overweight/obesity) and dietary risk factors for chronic diseases. They also have moderate levels of under-nutrition and micronutrient deficiencies among certain population groups. Category 2 countries, such as Egypt and Jordan, contain moderate levels of over-nutrition (overweight/obesity) and dietary risk factors for chronic diseases. There are moderate levels of under-nutrition in specific areas and among certain population groups and widespread micronutrient deficiencies. Category 3 countries, such as Pakistan, experience significant under-nutrition (both acute and chronic child and maternal malnutrition) and emerging over-nutrition among specific population groups, such as the affluent urban, and widespread micronutrient deficiencies. Category 4 countries, such as Afghanistan and Djibouti, experience severe child and maternal under-nutrition and widespread micronutrient deficiencies.

The current regional training workshop to develop national capacity in nutrition planning and policy formulation is a collaborative effort between the regional and country offices of WHO, WFP, FAO and UNICEF. Its objectives are to build on what has already been achieved by Member States and to enhance the capacities of the Member States to review, update and strengthen national intersectoral food and nutrition action plans and policies. Individual assignments will involve participants developing national operational food and nutrition plans of action and the plenary sessions will focus on:

- key concepts in policy planning/strategy;
- systems and programmes;
- agriculture and nutrition;
- food security and food safety;
- nutrition in emergencies and food aid;

- policy initiatives in child health;
- advocacy, alliances and partnerships;
- global experiences in nutrition policy formulation;
- country experiences in nutrition policy/strategy formulation.

The expected outcomes of the current workshop are to develop a clear understanding of nutrition strategy and policy, the steps involved in the formulation of nutrition strategy/policy, and the importance of partnerships, alliances and advocacy. The workshop also aims to identify constraints and areas of strength, to develop national operational food and nutrition strategies/policies and to establish a framework for follow-up action including the monitoring of progress.

2.2 Overview of the activities of the World Food Programme's Operations Department in 2006

Dr Anne Callanan, WFP

The World Food Programme (WFP) Operations Department Cairo (ODC) has 14 country offices involved in active ongoing operations and three support offices. The support office in Dubai is also the base for WFP's ICT support unit known as Fast Information Technology and Telecommunications Emergency Support Team (FITTEST). The focus of work of the regional bureaus and cooperating organizations are the:

- preparation of eight operations/programmes (new/extension);
- participation of regional bureau staff in activity review, after action review and evaluation;
- conducting of studies and missions on the role of markets in emergencies and needs assessment in conjunction with WFP operations;
- strengthening of interagency cooperation in emergency response and the development of WFP contingency planning strategy in non-represented countries;
- initiation of the emergency response to the Lebanon crisis and follow-up on implementation of operations;
- development of a regional strategy for HIV/AIDS in cooperation with the UN and nongovernmental organizations;
- implementation of a national staff project;
- regional procurement in order to try to get food as close to beneficiaries as possible;
- implementation of creative advocacy media activities;
- strengthening of ICT support to countries.

WFP faces constraints such as under-funding and the diversion of regional bureau staff from work with cooperating organizations on planned activities. WFP is focusing on improving and expanding its knowledge base in terms of early warning, emergency preparedness and contingency planning; improving the capacity of regional bureau and country office staff in the assessment and analysis of nutrition needs; formulating comprehensive exit strategies for most ODC countries; strengthening partnerships with UN regional organizations; and enhancing the measuring of results and accountability.

2.3 The regional child health policy initiative

Dr Suzanne Farhoud, WHO/EMRO

The regional child health policy initiative (CHPI) was launched by the Child and Adolescent Health Unit of WHO Regional Office in October 2003 to assist Member States to develop national child health policy documents. As children are at the core of any nations' development there is a need to meet their needs and rights and countries have expressed this commitment towards children on many occasions, such as in the Fifty-first Regional Committee, and as expressed in the targets of the MDGs and in WHO resolutions (EMRRC50.R.4 and EM/RC50.R14). A great deal of effort has been made to improve child health, and yet, experience has shown that the status of child health in the Region is still unacceptable and that most deaths are still occurring as a result of preventable causes.

Countries often have policies concerning specific aspects of child care such as breastfeeding promotion, immunization and the control of diarrhoeal diseases, etc. but few countries, if any, have a child health policy document that provides a holistic view and a unified approach to child health. The objective of the regional CHPI is the development of a national child health policy written document that is endorsed at the highest possible political level. The development of a written policy document ensures commitment and continuity over time to bring all elements of child health into one document to ensure consistency, promotion, standardization and the maximum use of available resources. It will also serve as a reference for all partners, provide indicators of child health in the long term and outline orientated directions and priorities, in line with countries' available financial and human resources. Through the development of a national child health written policy greater importance and credibility is given to the policy ensuring greater compliance, with less chance of misinterpretation, mechanisms of coordination are identified, implementation through the selected procedures/strategies is guided and indicators and mechanisms are incorporated to monitor implementation.

The three phases of development of a national child health policy document are: situation analysis, the policy document development phase and the official policy document adoption phase. The objectives of the situation analysis are to describe the current situation of child health care within the political, demographic, socioeconomic, educational and health system context of the country, to critically analyse the situation in order to identify strengths and weaknesses with special emphasis on policy issues to be addressed by the policy document and to select specific priority issues that can be addressed realistically in the mid term.

The second phase of policy document development requires a great deal of analysis, criteria for the prioritization of issues to be included in the policy document and the collaboration of many partners. Although different designs are followed by countries in terms of the sections of the policy document, all include the following: an introduction or rationale, a summary of policy issues, policy statements, mechanisms of implementation, monitoring and evaluation and an annex on existing policies.

The initiative was launched in October 2003 and five countries have since joined: Egypt, Morocco, Sudan, Syrian Arab Republic and Tunisia. There have been joint WHO/Ministry of Health orientation and planning workshops on the initiative in four countries and plans of action have been developed. In addition, there has been the development of a guide on national child health policy produced in three languages and an intercountry regional workshop was held to review the progress of the five countries in the situation analysis phase in Damascus in July 2004. There has been close, continued follow-up and technical/financial support for all phases of development of child health situation analysis reports and four countries have finalized the situation analysis phase.

A second intercountry workshop was held on the CHPI to share experiences with other countries (Iraq, Jordan, Lebanon, Oman, Pakistan) and to develop plans of action for the second phase. Tunisia was the first country in the Region to finalize the child health policy document in November 2006. An upcoming third intercountry workshop in December 2006 will celebrate the official signing of the Tunisia document and share the Tunisian experience. Advocacy activities organized by the Regional Office have included joint WHO/UNICEF Regional Directors' meetings, Regional Committee Meetings, World Health Days, and participation in country events such as orientation workshops and public health days.

Lessons learnt have shown the importance of collaboration between various partners, ownership and commitment, initial momentum with strong commitment and a good outcome (a first draft), and have demonstrated the low perception of decision-makers about the key role of the situation analysis to inform the policy and the unrealistic expectations concerning the time required for the whole process. There can be no policy formulation without in-depth situation analysis and the involvement of key decision-makers from the beginning and throughout the process which facilitates and accelerates implementation.

2.4 National health policies and plans: experiences from the Eastern Mediterranean Region

Dr Sameen Siddiqi, WHO/EMRO

The interrelationship between health systems, programmes and determinants is important in determining health outcomes. Aspects of health systems include governance, financing, resource creation, information and service provision. Health programmes are promotive, preventive, curative or rehabilitative and determinants of health include social, cultural, economic, environmental and political determinants. Policy formulation requires establishing policy and plans for strategic directions (priority setting) and resource mobilization, allocation and resource creation. Provision, monitoring and evaluation, regulation, persuasion (demand creation), and partnership (loose affiliation or legally binding) are tools for policy implementation.

Nutrition policy is important as unhealthy eating and physical inactivity are the leading causes of death, and diet and inactivity-related disabilities lead to a reduced quality of life. Rates of obesity are skyrocketing in some countries, while in others malnutrition continues to be a major health problem. The scope of a nutrition policy must cover nutrition (malnutrition, under-nutrition, obesity), food (production, safety, security, consumption), implementation

guidelines (programmes and systems) and its relationship to the health, population, agriculture and social welfare sectors and municipalities.

A comprehensive situation analysis requires: contextual analysis (socioeconomic, cultural, demographic, geopolitical); epidemiologic assessment (burden of risk/disease of nutrition and burden of disease-related problems of nutrition); system analysis (accessibility, efficiency, quality, equity of food and nutrition services, intersectoral cooperation, interagency cooperation); the involvement of the public and private sector (food and nutrition programmes, resources available or allocated); and the identification of priority problems in food and nutrition. Policy-making is profoundly a political process and it is necessary to determine who the stakeholders are, whether there been wide consultation and whether there is consensus (or compromise) on broad policy issues. It is also important to determine who has initiated the policy process (health, social welfare, food, agriculture, municipal government) and who has ownership. In terms of policy content, the priority areas of nutrition, food and agriculture are major components of the policy as are strategies to address the problems, including the production of guidelines for implementation and monitoring, and the strengthening of health and nutrition systems.

In terms of strategic planning it is necessary to establish whether policy is driving planning or vice-versa. Strong central planning units are either managed by health professionals, nutritionists, economists, or by newly-democratically elected ministers of health, food and agriculture. Both models are acceptable if policy is evidence-based, has involved wide consultation and there are clear implementation strategies. Policy represents a formal statement or procedure within institutions (notably government) that defines priorities and the parameters for action. Strategic planning is a process of setting agreed priorities and direction for the health sector in the light of given resource constraints, and strategy refers to the combination of interventions employed in order to achieve a given objective.

For the strategic planning process it is necessary to determine the starting point, the objectives, the methods of reaching those objectives and whether the objectives have been met. This requires situation analysis and priority setting, the setting of objectives and targets, the establishment of strategies and interventions and determining indicators and sources of information. The planning cycle involves: situation analysis, priority, goal and objective setting, option appraisal, programming, implementation and monitoring and evaluation. The product of the strategic plan is a general statement of health sector priorities in terms of a nutrition strategy or nutrition policy. The policy document requires an in-built mechanism for updating according to circumstances and resource availability and the finished product relies on implementation periods of 5–15 years, objectives, targets, strategies, risks and assumptions and allocated resources.

The links between strategic and operational plans are that the strategic plan outlines the direction with broad guidance as to implications for service action; the operational plan is a plan of activity detailing precise timing, methods and modes of implementation. Characteristics of strategic and operational plans are allocative planning, activity planning, long-term vision, strategic direction, management focus, economic appraisal and implementation levels.

Some of the issues and challenges in regard to technical issues involved in health planning include:

- lack of capacity (individual, institutional);
- weak or absent planning units;
- inadequate contextual analysis;
- weak health and nutrition information systems;
- poor operationalization of plans;
- insufficient monitoring and evaluation.

Issues and challenges in terms of political and administrative issues are the lack of political commitment and the political motivation of priority setting and the fact that effective planning is only taking place in the public sector.

Discussion

Participants discussed the importance of identifying all social determinants of health and of nutrition problems. They raised the need to focus on the health promotion aspect in addressing nutrition problems rather than focusing on only behavioural analysis. Participants discussed the work and guidelines of the Commission on Social Determinants of Health. They stressed the need to link the guidelines on social exclusion (malnutrition) and lifestyle (obesity) as these problems are occurring side by side. The increasing problem of obesity in the Region was discussed and the increasing prevalence of obesity as a result of dietary habits and factors. Participants raised the links between child feeding and adult obesity as evidence has emerged to show that under-nutrition in the fetal stage and in early childhood may enhance an individual's susceptibility to chronic, noncommunicable diseases in later life. It was also discussed that in terms of regional obesity, it was necessary to examine the policy of supplying specific foods, such as oil, sugar and flour, which are contributing to the problem.

Policies for breastfeeding were discussed and how to promote breastfeeding and the strategies which could be used to address this issue. Exclusive breastfeeding in the Region is unacceptably low and represents a challenge to be addressed through, if existing, current legislation. The importance of working with doctors and nurses to promote breastfeeding was stressed and the need to improve health workers' knowledge. Participants expressed concern that the message is not getting through to paediatricians. The WHO Regional Office's plan to address the problem was discussed and how it was intended through determining new approaches of working with religious leaders and health care providers, and including ministries, academia and mass media, the promotion of breastfeeding could be incorporated into media messages and promoted through television shows. The importance of working with the community was stressed. The point was made that the importance of culture is being neglected in messages and needs to be addressed in order to reach secondary and tertiary audiences. It was also emphasized that in the Region the practice of exclusive breastfeeding had never occurred and so it was not something that people were used to.

The need for comprehensive policies on child health was stressed. Participants discussed the problems and obstacles of vertical programmes in which policies are pursued on paper but implementation is either problematic or forgotten.

2.5 Food, agriculture and nutrition: a regional perspective

Dr Fatimah Hachem, FAO

According to FAO latest estimates, there were 852 million people undernourished in the world in 2000–2002. Of these, 815 million were living in developing countries. The largest numbers of undernourished people live in Asia and the Pacific, however, expressed as a percentage of the population, the prevalence is by far highest in sub-Saharan Africa at approximately a third of the population. Some progress has been made towards reducing hunger although progress is slow. The World Food Summit in 1996 set the target of halving the absolute number of undernourished people by 2015. The Millennium Summit in 2000 set a less ambitious target of halving the percentage of the hungry by 2015. The target date is drawing near but the targets themselves are not and reaching either of these two targets requires an acceleration of progress against hunger and poverty.

Hunger reduction is vital for achieving the targets of most of the eight MDGs, which address hunger and poverty, education, gender equality, child mortality, maternal health, HIV/AIDS and other diseases, environmental sustainability and partnerships for development. North Africa, South-East Asia, Latin America and the Caribbean and East Asia are on track for hunger reduction and are also making progress on the highest number of the other MDG targets. The situation is quite different for western Asia, south Asia, Oceania and sub-Saharan Africa. These subregions are not on track to achieve the targets to reduce hunger although some are making progress on a smaller number of other MDG targets. Although in the case of sub-Saharan Africa no progress is being made to achieve the targets. Without rapid progress in reducing hunger, reaching the targets of the other MDG will be difficult, if not impossible.

Hunger and malnutrition are the main cause of 5–6 million child deaths every year. In addition to the persistence of chronic hunger, food emergencies also continue to be far too frequent. As of October 2005, the number of countries facing serious food shortages throughout the world stood at 39, with 25 in Africa, 11 in Asia and the Near East, 2 in Latin America and 1 in Europe. The causes are varied and include both conflict and natural disasters of various types.

Global crop and livestock production has increased over the past 2 years at rates above the average of the previous four decades. In 2004, global output growth accelerated further and reached almost 4%. At the global level, per caput food production has been increasing steadily over the past 30 years. Over the last decade, the average annual growth rate has reached 1.2%. Per caput food production has been expanding more rapidly in the developing countries than in the developed countries. Almost all the developing country regions have shared, to various degrees, in this long-term progress in per caput food production. Only in sub-Saharan Africa has food production failed to keep up with population growth and per caput food production has actually declined over the period from 1970 to the early 1980s. Today, per caput food production in the Region remains well below the levels attained in the

1970s. Fortunately, rising food imports and food aid have enabled the African region to increase per caput consumption during that period in spite of stagnating per caput production.

Cereals provide close to 50% of global calorific intake although the share has declined over time. After several years of stagnation, global cereal output grew strongly in 2004 to reach a record level of 2057 million tonnes. In the marketing year 2004–2005, production exceeded utilization for the first time since 1998–1999. Latest information points to a likely reduction in global cereal production this year. It is worth noting that the global stock-to-use ratio has also declined during this period. As a result of improved communication and transportation systems, the globalizing world grain economy has nevertheless managed to avoid excessive price volatility.

An ever-larger share of agricultural output is traded internationally. Since the beginning of the 1990s, developing countries have seen their agricultural trade surplus shrink. FAO projects that as a group the developing countries will move further into a rising net agricultural trade deficit. This trend is particularly evident in the least developed countries. This deficit represents a major challenge for the poorest countries that need to either reduce this gap by increasing the competitiveness of their domestic agriculture or be able to finance the deficit through non-agricultural exports. In most of these countries, the first of these two options is more promising. Focusing on increased domestic food production can also contribute decisively to poverty reduction as most of the poor live in rural areas.

Many of the least developed countries face severe supply constraints. FAO has therefore always emphasized that freer trade alone is not a sufficient condition for these countries to participate more fully in international trade. To become more competitive they also need to build capacity and invest in rural infrastructure and agricultural productivity growth. The alternative for the poorest countries will be increased reliance on external assistance and increased indebtedness. The FAO has been assisting developing countries to be well prepared for the forthcoming ministerial conference of the World Trade Organization (WTO) in Hong Kong. The positive link between agricultural and rural development and food security has been given explicit recognition in paragraph 46 of the outcome document of the recent World Summit of the General Assembly.

Agricultural production is growing strongly in developing countries and agricultural trade is expanding, however, progress on hunger reduction must be accelerated if the targets of the MDGs and the World Food Summit are to be reached. Food emergencies remain pervasive. Looking to the future it must be concluded that more rapid progress towards hunger reduction is needed and this will also assist in reaching the other targets of the MDG. Greater resources for agriculture and rural development are required, particularly for the countries most in need. Least developed countries, in particular, face a rapidly growing net agricultural trade deficit. They need to increase their competitiveness and overcome supply side constraints to meet their growing food demand. Reducing food insecurity requires a focus on rural people and agricultural development and increased investment in agriculture and agricultural trade can play a significant role. Success also depends on policy reform and adequate institutions, market infrastructure, social safety nets and peace and stability.

2.6 National vulnerability and food aid

Dr Anne Callanan, WFP

Nutrition relates to four out of five of the WFP's objectives. The Organization's strategic priorities are to:

- save lives in crisis situations;
- protect livelihoods in crises situations and enhance resilience to shocks;
- support improved nutrition and the health status of children, mothers and other vulnerable people;
- support access to education and reduce gender disparity in access to skills and education;
- help governments establish and manage national food assistance programmes.

WFP's programmes that impact on nutrition include general food distribution, including food fortification and other strategies to address micronutrient deficiency diseases and selective feeding programmes covering supplementary and therapeutic feeding. Nutrition-related programmes with a developmental focus include vulnerable group and school feeding programmes.

The WFP is a responsive and highly effective organization that relies on results-based management. Management decisions, organizational improvements and programme adjustments are based on high-quality information gained from operational WFP programmes. Assessment and analysis of monitoring and evaluation ensures an effective, efficient and consistent approach across countries and makes accurate and comprehensive operational results information available to WFP managers and partners. Programmes start with an assessment and analysis of underlying causes and available resources and programme operationalization involves the planning, design and implementation of programmes and monitoring and evaluation.

Market analysis of food aid can potentially contribute to increased food security in two major ways: 1) by increasing the availability of food; and 2) increasing household access to food through direct distribution. However, food aid need not enhance food security. Food aid imports can act as a disincentive for domestic production both through short-term effects on food markets and long-term disincentives on public and private investment in agriculture. Vulnerability studies, baseline and follow-up surveys assist improved assessment and analysis.

The WFP country office in Egypt conducted extensive nutrition surveys in coordination with the National Nutrition Institute (NNI) covering more than 17 governorates which assisted the Government in reviewing vulnerability analysis and mapping. The findings of the nutrition studies helped the Government to redesign the national food subsidy programme and the national school feeding programme and in providing support to vulnerable groups. WFP was the first specialized agency to conduct a nutrition survey in Sinai and to bring the attention of donors to the vulnerable Bedouin communities. A vulnerability and mapping study conducted in Yemen targeted recommendations and identified most food insecure areas,

designed sector-specific indicators for nutrition and education and aligned targeted areas with operational feasibility based on updated selection criteria.

In Iraq, WFP assisted in strengthening the capacity and knowledge base of Iraq's appropriate national institutions and in the establishment of a consolidated unit within the Central Organization for Statistics and Information Technology (COSIT) of the Ministry of Planning and Development Cooperation (MoPDC). COSIT's food security unit will be solely responsible for coordinating and performing food security analysis and monitoring activities, including the creation and building of a food security knowledge base in Iraq. The WFP country office conducted extensive food security surveys including nutrition surveys and in 2004, WFP and COSIT published a survey examining the food security situation in Iraq. The 2004 WFP/COSIT survey was a first such attempt in Iraq. In 2006, a follow-up survey report was published on the food security and nutritional status of the population and identified possible future actions to address the nutritional needs of the population. The updated survey looked at 98 districts and 22 050 households across all 16 governorates in Iraq.

WFP offers development assistance which focuses on the education, agriculture and social sectors in Egypt, Jordan, Pakistan, the Syrian Arab Republic and Yemen. Emergency operations are implemented in the occupied Palestinian territories, Iraq and the Russian Federation (Chechnya and Ingushetia). Protracted relief and recovery operations are implemented in Armenia, Azerbaijan, Georgia, Tajikistan and the occupied Palestinian territories. WFP targets poor and food-insecure internally displaced populations as well as those affected by ongoing conflicts. WFP is also developing a regional strategy for HIV/AIDS in cooperation with the UN and nongovernmental organizations.

In terms of improved programming in partnership WFP has provided support to the national flour fortification project in Egypt, in cooperation with the Government, and received US $3 million from the Global Alliance for Improved Nutrition (GAIN). The objective of this project is to fortify 100% of wheat flour used in making *baladi* (local) bread with iron and folic acid; 6.5 million metric tonnes are produced annually in 143 mills. The project will be implemented in coordination with the NNI and minimum operating security standards (MOSS).

The WFP places a huge emphasis on monitoring and the Organization follows a common monitoring and evaluation approach and has implemented a humanitarian benchmarking initiative. The Council for Mutual Economic Assistance (CMEA) will have succeeded when the following benefits are realized by WFP.

- strengthened monitoring and evaluation designs aligned with project logic;
- easier, faster and more automated monitoring and evaluation implementation;
- reduced need for regional bureaus and countries to invest in monitoring and evaluation systems and training;
- more consistent, accurate, timely and useful information for management and accountability;
- results information that can be aggregated and compared;
- improved management capabilities, at all levels;

- ability to attract more donors and partners with accurate information on WFP's performance;
- increased staff motivation and learning due to evidence of the results of their work.

A new corporate initiative impacting nutrition is the Ending Child Hunger and Under-nutrition Initiative, which is being undertaken jointly with UNICEF and WHO, and although it has not yet been mobilized it is currently being used as an advocacy tool. The initiative targets underweight children under 5, estimated to be 146 million. It is intended that the vast majority of hungry and undernourished children in the world will have access in their households to an essential package of interventions. The objective of the initiative is to mobilize the political, financial, technical and other resources required to strengthen developing countries' own efforts sufficiently to dramatically impact on child hunger and under-nutrition with the ultimate goal of eliminating the problem within a generation.

The initiative presents an opportunity to improve and expand the knowledge base in terms of early warning, emergency preparedness, contingency planning and to improve the capacity of regional bureaus and country staff in the assessment and analysis of nutrition needs and to formulate comprehensive exit strategies for most countries to ensure that governments take over WFP activities.

2.7 Food safety: issues, concerns and implementation

Dr Mohamed Elmi, WHO/EMRO

Issues in food safety in the Region include the organization of the food safety control system, the harmonization of food safety systems and legislation of food safety. The conclusion of the Uruguay Round of Multilateral Trade Negotiations in Marrakech led to the establishment of the World Trade Organization (WTO) on 1 January 1995, and to the coming into force of the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and the Agreement on Technical Barriers to Trade (TBT). Both these Agreements are relevant in understanding the requirements for food protection measures at the national level and the rules under which food is traded internationally. The SPS Agreement confirms the right of WTO member countries to apply measures to protect human, animal and plant life and health. The Agreement covers all relevant laws, decrees, regulations, testing, inspection, certification and approval procedures and packaging and labelling requirements directly related to food safety. Member States are asked to apply only those measures for protection that are based on scientific principles, only to the extent necessary, and not in a manner which may constitute a disguised restriction on international trade. The Agreement encourages use of international standards, guidelines or recommendations where they exist, and identifies those from Codex (relating to food additives, veterinary drugs and pesticide residues, contaminants, methods of analysis and sampling and codes and guidelines of hygienic practices), to be consistent with the provisions of the SPS. Thus, the Codex standards serve as a benchmark for comparison of national sanitary and phytosanitary measures. While it is not compulsory for Member States to apply Codex standards, it is in their best interests to harmonize their national food standards with those elaborated by Codex.

Jordan, the Islamic Republic of Iran and Saudi Arabia have established a food and drug administration that is responsible for the enforcement of food and drug legislation. Morocco created a central regulatory authority responsible for food control activities. Kuwait, Oman, and the Syrian Arab Republic have interministerial committees known as food control councils. Tunisia has established a national agency for the control of food and environmental safety and members countries of the Gulf Cooperation Council (GCC) have harmonized their food safety systems. Any product imported or produced in one country of the GCC can be freely circulated in another.

Many countries are revising their food legislation and food safety legislation guidelines have been developed to guide countries when updating or revising their food legislation. There is inadequate consumer awareness in the Region of food safety. Many countries in the Region share specific habits and foods but most countries do not have consumer protection laws (not only for food, but for clothes and a whole range of goods). Inspection is driven for import and export and there are limited human resources in food control and limited facilities. Another problem exists in the lack of coordination between various sectors and the fact that countries have limited budgets for food safety measures. There is limited research in food safety and weak public health systems.

The regional plan of action to address the issue of food safety was adopted by the Regional Committee in October 1999. The plan of action is based on four steps that include the preparation of a country profile, the development/or strengthening of the national food safety programme, the implementation of the national food safety programme and continuous monitoring and evaluation of all food safety activities. In that plan there is also emphasis of foodborne disease surveillance. Member States need to carry out research and data collection, including foodborne disease surveillance, to be able to cope with the new demands of risk analysis in ensuring food safety at all levels.

Collected data on epidemiological information should include the prevalence and incidence of foodborne diseases, the prevalence of micronutrient deficiencies, the quality of data gathering, coverage estimates and coordination between agencies. The fifty-third World Health Assembly adopted a resolution on food safety in 2000. Foodborne diseases seriously affected peoples' health and well-being and have economic consequences for communities and countries. The work of the Codex Alimentarius Commission was recognized as being important for the protection of the health of consumers. There is a need for integrated action in foodborne disease surveillance and data is needed on farm soil, feed, animal and plant health and human health. In the Region diarrhoea and fever are seen as facts of life, self-medication is common and medical attention is sought too late. Data on foodborne disease incidence are limited in the Region as there is no systematic surveillance and inadequate reporting mechanisms of foodborne diseases.

Regional challenges include poor epidemiological characterization of food hazard and its direct and indirect impact on public health, inadequate public health infrastructure and the weak leadership role of the health sector in food safety policy development. Other regional challenges include the lack of data on the full spectrum of foodborne pathogens in the Region, chemical contamination and antimicrobial resistance and the general lack of awareness in the

Region. In terms of zoonoses there is inadequate intersectoral coordination (no coordination between health and agriculture sectors), foodborne diseases surveillance systems are reactive and do not protect people before they become sick.

In terms of household food safety, home-setting foodborne disease data are limited. A mechanism to reach households is needed and improved food hygiene at home needs to be encouraged. Recommendations include that Member States should:

- enhance their capacity to plan and carry out a national foodborne disease surveillance programme;
- enhance their ability to collect data on the incidence of contaminants in food;
- undertake risk assessments on food safety hazards of particular importance to their country, or develop the capacity to do so if needed;
- develop mechanisms to facilitate communication and cooperation between all relevant food control authorities;
- create a mechanism for implementing necessary corrective measures to reduce the load of foodborne diseases and improve human health;
- develop scientific and technical capacity to prevent, control and manage transboundary risks to human, animal and plant health; and
- create a rapid foodborne diseases alert system.

2.8 Regional overview of food consumption patterns

Dr Fatimah Hachem, FAO

Countries in the Near East have witnessed many changes in the past 40 years, including a tremendous increase in the population and an improvement of income, as well as socioeconomic and political changes that have influenced to a great extent the way people eat in this Region. Many countries were food insecure in the 1960s, as is shown by the FAOSTAT Daily Energy Supply (DES) figures and the numbers of the undernourished. The situation has improved greatly since then and the DES has increased in all countries, reaching that of the industrialized countries for some. The share of total energy of proteins and fats has also increased, but has stayed within the international recommendations of 10%–15% for proteins and less than 30% for fat, except for Lebanon, Syrian Arab Republic and some GCC countries in which fat contribution to total calories exceeded the recommended 30%.

A closer look at the composition of DES by macronutrients reveals that for most countries the contribution of proteins stayed almost unchanged with vegetable proteins being the main contributor to total protein calories. On the other hand, the fat contribution to total caloric supply remained unchanged for most countries except for Kuwait, Lebanon, Saudi Arabia, Syrian Arab Republic and the United Arab Emirates. Here again, the major increase came from vegetable fats.

Supply of major food groups per capita has also seen an increase, which was more pronounced in some countries than others. Countries which are identified as low income have seen the lowest increase in food supply per capita.

The structure of food supply shows that minor changes have occurred among major food groups. However there have been major changes in some countries in the composition of these food groups. This has been particularly evident in the group of oils, where some countries have seen the introduction of new types of oil, such as palm oil, or the substitution of traditionally used oils, such as olive oil, by soybean oil. Similar trends have also been observed within the group of cereals. In addition, countries that witnessed a decrease in their per capita supply of cereals have also witnessed an increase in their per capita supply of oil.

The contribution of sugar to total caloric supply increased slightly in a few countries, but remained at around 10% of DES for all of the countries.

Many factors specific to the Region could explain these minor structural changes in the food patterns in the countries of the Region. Income is often associated with major changes in diet. While is true for most countries, the increase in income was not always concomitant with an increase in the per cent contribution of animal protein to DES. The increasing inequality in the distribution of incomes in many countries could be one of the reasons to explain this observation. In addition, the engagement of women in paid activity is the lowest in the world in this Region, which could explain to a certain extent the slower change in food patterns. Cultural habits could also explain the high expenditure on fruits and vegetables as a per cent of total food expenditure seen in some countries of the Region. On the other hand, food policies and food aid shape consumption patterns in these countries to a great degree. A few countries still use food subsidies as a means of protecting the less privileged in their societies. Mainly cereals, oils and sugar are subsidized. In combination with the policies of subsidizing cereal producers this contributes to the availability of these foods at lower prices to consumers all across society. In addition to all of the above, the food industry and supermarkets are increasing in number in many of these countries, but their impact on food habits has not yet been assessed.

It should be noted that the most populated countries are still practising policies that place a great deal of restrictions on imports, including food items. This has recently started to become less strict in some countries, which might influence food habits in the long run.

While food balance sheets are invaluable for studying trends over time and for an overview of food patterns in a certain country, their use is limited when it comes to studying variations at the individual level including gender, regional variations, or socioeconomic differences. With the increase in the number of those living under the poverty line in many countries in this Region, local food consumption surveys are required to obtain information at the micro level. Such information would be fundamental in advising policies and interventions.

2.9 Accelerating country progress towards sustained elimination of iodine deficiency: UNICEF experience

Dr Magdy El Sanady, UNICEF

The global commitment towards the sustained elimination of iodine deficiency has been manifested over the last 10 years by the World Summit for Children 1990, the Conference on

Hidden Hunger 1991, the International Conference on Nutrition 1992, WHO/UNICEF Joint Committees on Health Policy 1994, the World Food Conference 2002, formation of the global network for iodine deficiency disorder (GNIDD), the International Council for the Control of Iodine Deficiency Disorders (ICCIDD), WHO resolutions, the Fifty-eighth WHA and in the targets of the MDGs. However, there are 16 countries with a high number of unprotected newborn infants, which have low levels of salt iodization and large salt export activities and which require special advocacy and need professional support to renew strategies of their national IDD elimination programmes.

A regional consultation on iodine deficiency was organized by UNICEF in Dubai in May 2006. The objectives of the consultation were to:

- discuss political and programmatic challenges, gaps, lessons learned and needs;
- identify specific strategies and actions needed to achieve universal salt iodization in countries;
- develop time-bound plans to accelerate efforts in each country;
- ensure coordination and synergy of support by all partners at country level.

Participants included: the Bill and Melinda Gates Foundation, Canadian International Development Agency (CIDA), the Global Alliance for Improved Nutrition (GAIN), ICCIDD, Kiwanis International, the Micronutrient Initiative (MI), WFP, United States Agency for International Development (USAID), UNICEF, WB, WHO, members of the IDD network and UNICEF. The challenges which were identified in almost all of the countries included the weakness and scope of legislation, the lack of, or weak and inconsistent, monitoring systems, the lack of quality assurance and a lack of public awareness. UNICEF stressed the need for advocacy, building partnerships and alliances, policy development, technical and programme guidance and monitoring and evaluation. To sustain achievements the universality of iodized salt needs to be guaranteed and salt iodization needs to be accepted by the industry as the norm. Quality assurance systems at production/importation level and legislation and continued enforcement and monitoring system are also needed. Key issues identified for discussion between countries and with donors included:

- policy advocacy and framework of legislation;
- how to deal with competing priorities and competing messages;
- communication strategies for public awareness;
- how to handle the problem of small producers/temporary producers;
- quality assurance and monitoring at production/importation;
- monitoring and control parameters;
- coverage of the food industries;
- how to protect the iodate from evaporation.

The outcomes of the consultation were the production of 5-year country plans of action to achieve and sustain the elimination of IDD. Cross-cutting interventions included: advocacy, legislation and enforcement, communication/social marketing, IDD surveys/research, the updating of the database, capacity building, system support (monitoring, quality assurance) and resource mobilization. UNICEF's Department of Policy and Planning is currently

overseeing multiple indicator cluster surveys (MICS) in 50 countries and will produce the latest data on household access to iodized salt by the end of 2006. A report on the achievement of global IDD elimination by 2005 will be released in early 2007 which will highlight global lessons learned, best practices, suggested new strategic approaches in difficult and emergency situations and joint programmes being conducted with WHO, WFP and ICCIDD.

Discussion

The WFP representative discussed the work of the WFP as planning interventions according to evidence-based data using fortification of food as a tool to address nutritional health problems. The issue of the certification of food products shipped to WFP offices was also raised.

The problem of anaemia was discussed and the fact that the condition is becoming a chronic problem in certain countries of the Region, such as Egypt. The issue of food and soil safety and the use of chemicals was discussed, particularly in relation to the nutritional problems being experienced in Egypt. Participants discussed UNICEF's salt iodization programme and highlighted the need for more information on how salt is used in the home. The representative from Oman made reference to the fact that in 2005, the Ministry of Health in Oman had conducted a survey to monitor salt iodization following the implementation of the salt iodization programme in 1997, and it had become evident that, in terms of iodization, it was important to look at not only coverage, but also balance. The composition of dietary intake has not changed substantially and participants discussed the increases in stunting and under-nutrition but also the increasing prevalence of obesity in cities and the fact that differences inside countries were not being captured by national averages. The point was made that in Egypt there has been a decline in calorific intake in certain areas and yet there is increasing prevalence of obesity because obesity is not only a phenomenon linked to diet.

Participants discussed emerging public health issues such as avian flu. They also discussed the standards of the Codex Alimentarius Commission and reiterated that while it was not compulsory for countries to apply Codex standards, it was in their best interests to harmonize their national food standards with those elaborated by Codex. Cultural issues relating to food and food hygiene were highlighted and it was felt that there was a need to introduce training in cooking during the early stages of education. The point was made that many mothers are unaware of how to prepare formula correctly and the fact that certain preparations contained high levels of milk while others did not.

2.10 What is food and nutrition policy?

Dr Chizuru Nishida, WHO/HQ

Various definitions of food policy exist, such as: "Food policy encompasses the collective efforts of governments to influence the decision-making environment of food producers, food consumers, and food marketing agents in order to further social objectives" (Food Policy Analysis, World Bank (WB), 1983); "A balanced government strategy regarding the food economy, which takes account of the interrelationships within the food sector and

between it and the rest of the national and international economy" (Food policy, Organisation for Economic Co-operation and Development, 1981); "Food policies (are) intended to be coherent bodies of measures. There are two main goals: first, to prevent illness and to further public health by informing people about the importance of a 'prudent diet', … second, a food policy purports to guarantee the safety of food products, which means issuing and enforcing rules and regulations for food producing, food processing and food distributing companies" (The Sociology of Food, Mennell, Murcott and van Otterloo, 1992); "Food policy is about the decision-making process which affects who eats what, when, where and on what conditions. In the sphere of food policy, we are interested in the distribution of power over food, this vital means for human subsistence" (Food Policy for the 21st Century, Lang, 1997); and "The basic aims of food policy (are) the provision of a safe, secure, sustainable, sufficient, nutritious diet for all, equitably" (The Food System, Tansey, 1995).

Measures to improve diet-related health may be very varied. They range from health education to taxation and setting regulations. A food and nutrition policy refers not so much to those measures themselves as to the setting of desired public goals. It is the application of public policy to the area of food and nutrition in order to lead to more concerted intersectoral action. Today, 144 countries (that is approximately 75% of WHO Member States) have drafted or finalized their national plans of action. An additional 15 countries are in the process of developing (or strengthening) their plans.

The international context of macro-policy on food and nutrition has changed a great deal since the 1974 World Food Conference. At the World Food Conference, the emphasis was on food production. Therefore, efforts were made to investigate ways and means to increase food production and improve socioeconomic development. It was believed that the projected rapid socioeconomic development would mean that nutrition would take care of itself. By the beginning of the 1980s, a new perspective was introduced and it was then argued that hunger was more a problem of distribution and access to food. An increasing number of studies in 1980s have indicated that hunger problems go beyond food availability and even raising household incomes did not improve nutritional well-being. At the beginning of the 1990s, hunger and malnutrition were considered as priority issues to be addressed. In 1990, the World Summit for Children set nutrition-related goals and in 1991, the Ending Hidden Hunger Conference addressed the issues of micronutrient malnutrition. In 1992, the International Conference on Nutrition examined three underlying causes (i.e. food, health and care) and addressed malnutrition in all its forms through nine action-orientated strategies. In 1996, the World Food Summit reaffirmed the commitment to achieving food and nutrition security for all.

2.11 Advocacy overview and profiles

Dr Mickey Chopra, WHO/EMRO

There is a need for advocacy as scientific evidence alone is rarely enough to achieve a policy change; evidence may be necessary but is not sufficient. Policy change cannot and should not be a technical fix alone, it has to be a public process with awareness building and public participation as essential components. The process involves different activities which may not necessarily be recognized as advocacy efforts which occur at all stages in a project

cycle. To gain support for, and commitment to, the desired change being advocated for requires upfront and strategic planning.

A step-by-step approach to planning an advocacy campaign involves the following steps:

- identifying the issue requiring advocacy;
- defining advocacy goals and objectives;
- conducting a stakeholder analysis;
- identifying the target audience;
- conceiving strategies and campaigns;
- developing the advocacy message;
- building support;
- creating an action plan;
- conducting monitoring and evaluation.

An advocacy goal is a long-term target that describes the social change that one wishes to achieve. Its achievement is reliant on the involvement of a range of stakeholders and organizations. Advocacy goals are usually formulated as outcomes that can be directly linked to some form of policy change. In practice, in planning an advocacy campaign, an advocate will often develop a shorter-term advocacy goal that describes the desired outcome or proposed advocacy solution to a specific issue and which serves as the vision of the advocacy campaign. An advocacy objective is a relatively short-term target that contributes towards achieving the longer-term advocacy goal or vision. It is an incremental step toward achieving the goal.

Stakeholders are those involved in the decision-making process with power and authority, those with influence, those who have an interest or a stake and those who are affected/disadvantaged. Types of stakeholders include: targets, allies, partners and opponents. Targets are decision-makers or influential bodies that the campaign needs to influence in order to obtain support. Allies are potentially sympathetic elements who need to be sensitized and made supportive of your campaign. Partners are members of your advocacy coalition whose interests need to be kept in mind and opponents are those with vested interests or bodies likely to oppose the issue and who need to be neutralized. In identifying the stakeholders it is necessary to determine who has a responsibility for working on your issue, which networks are involved in the issue (nongovernmental organizations, civil society, interest groups), who is researching the issue and who has data and which regional, national or global organizations can support your issue.

Identifying your target audience helps to plan strategically and focus efforts on individuals, groups or institutions that have the greatest capacity to take action and introduce the desired change. A primary target audience are politicians at local, provincial and national level. A secondary target audience includes influential people, speech writers, spouses of politicians, political party subcommittees, labour organizations, practitioners and professional associations, faith-based organizations, community groups, multinational corporations, donors, academics, media, opinion-leaders and voters. Understanding your target audience

requires assessing the knowledge, attitudes and beliefs about the issue, their level of interest in the issue, their involvement and previously demonstrated support of the issue and how the campaign could benefit them.

The range of advocacy strategic approaches involves: informing stakeholders, shaping public discourse, sensitizing organizations and fostering coalitions, influencing decision-makers through an ‘expert role’, through a campaign or by social action. Strategic communication requires informing, motivating, persuading and moving people to action. The five elements of an advocacy message are content, language, the messenger, the format and the communication channel.

In terms of building alliances an advocacy network is a group of individuals and/or organizations willing to assist one another or to collaborate in reaching a common goal. A coalition is a group of individuals and/or organizations working together in a coordinated way to achieve a common goal. Coalitions may be permanent, temporary, formal and informal and joint. Developing an advocacy action plan relies on what wants to be achieved (goals and objectives), the stakeholders who ought to be targeted in the process and the advocacy approach and/or actions that need to be taken in relation to each objective. Monitoring is continuous, it tracks ongoing progress, focuses on activities, requires self assessment by the team and alerts advocacy organizers to any problems. Evaluation is periodic, requires in-depth analysis of actual versus planned achievement of objectives, focuses on how and why results were achieved, future impacts, it can be an internal and/or an external exercise and it gives the advocacy team strategy and policy options.

Some of the factors for successful advocacy efforts include the following: the involvement of ministries and effective coordination between ministries, the collection of data, effective monitoring and evaluation, community involvement, the cooperation of religious leaders, use of the mass media and the role of international agencies in highlighting problems. Country representatives were asked to select an issue for advocacy and they prioritized the following:

- reducing levels of obesity among the population (Bahrain, Yemen);
- developing public/private partnerships to promote food fortification (Egypt);
- reducing the high levels of iron deficiency anaemia among the population (Iraq);
- implementing an action plan to implement strategies and policy action (Jordan);
- establishing a coordinating body to deal with the fragmented approach to nutrition policy (Pakistan);
- addressing the lack of political commitment to nutrition (Sudan).

3. COUNTRY PRESENTATIONS

3.1 Nutrition plans and strategies in Bahrain

Dr Nadia M. Gharib, Ministry of Health

In terms of food production, Bahrain has low food self-sufficiency as 95% of food is imported. The emphasis is on banking and not agriculture and fisheries. There is high

consumption of heavily subsidized red meat and poultry and low consumption of fish as it is expensive and has witnessed decreased production. General nutrition education is provided in schools but there is no specific nutrition education in the curriculum. Basic courses in nutrition are conducted by some colleges and universities and research on nutrition is conducted by the Ministry of Health, Bahrain University and the Bahrain Research Centre.

Nutrition-related problems among preschoolers include stunting (8%), wasting (6%), low body weight (8%) and iron deficiency anaemia (26%). Among schoolchildren the problems include stunting (1%) and thinness (12.6%) and iron deficiency anaemia (24%). Forty (40%) per cent of pregnant women have iron deficiency anaemia and 31% of adults and 24% of schoolchildren suffer from over-nutrition and obesity. The leading causes of mortality are: cardiovascular diseases (19.5%), neoplasms (12%) and endocrine, nutritional and metabolic (diabetes) (10.5%).

A national food and nutrition committee was formed in 1994 but follow-up on the International Conference on Nutrition (ICN) has been limited. National programmes include a school nutrition and health programme, the promotion of healthy food choices and other intervention programmes. A nutrition surveillance system has been established and an obesity control programme which has led to the creation of specialized obesity clinics. New guidelines are currently under development and a national community board for obesity has been developed. There is also a breastfeeding programme and support for baby-friendly hospitals. Other programmes include micronutrient control programmes, nutrition education programmes, a screening and surveillance system, food fortification and supplementation programmes, nutrition support and collaborative programmes. National food-based dietary guidelines, a national food database and a nutrition website have been created.

In Bahrain the main difficulties and obstacles have been identified as the increasing trend of nutrition-related health problems (obesity, iron deficiency anaemia, etc.) and the lack of effective coordination between different sectors. In general, there are a lack of focused intervention programmes and limited technical, human and financial resources. There is a weak focus of the media on health and diet-related issues and a lack of clear nutrition policy. Strategic directions include reforming the national multidisciplinary advisory committee, reinforcing healthy eating practices and supporting nutritionally-vulnerable populations and nutrition research.

3.2 Response to the emergency crisis in Darfur

Dr Mohamed Ali Yahia Elabbasi, Federal Ministry of Health

Prior to the crisis in Darfur there were recurrent droughts, chronic food insecurity and poor social and economic infrastructure. The impact of the crisis has been massive population displacement resulting in 1.8 million internally displaced people and 200 000 refugees in Chad, with a further 2 million to 2.5 million residents potentially affected by the crisis. The crisis has also resulted in the destruction and damage of villages, leading to loss of assets, livestock and food reserves. Cultivated areas between 2004 and 2006 have been reduced by almost 50% and food prices have increased by 60%, while levels of household incomes have been declining.

At federal level there has been coordination between the Federal Ministry of Health, UNICEF, WHO, the WFP and representatives of nongovernmental organizations in Khartoum who have agreed on priority interventions, developed a joint plan, distributed responsibilities and monitored implementation. At State level there has been coordination between the state ministries of health, UNICEF, WHO, the WFP and representatives of nongovernmental organizations with partners coordinating and monitoring implementation of programmes and providing weekly reports to partners at federal level.

Programmes addressing health have included the Integrated Management of Childhood Illness (IMCI), the Expanded Programme on Immunization (EPI), reproductive health, primary health care support, emergency preparedness, malaria, HIV/AIDS, health education, water and sanitation and nutrition. Nutrition interventions include:

- food distribution (WFP);
- supplementary and therapeutic feeding programmes (state ministries of health, UNICEF, nongovernmental organizations);
- treatment and prevention of micronutrient deficiencies;
- capacity building, i.e. harmonization of guidelines and approaches (Federal Ministry of Health, WHO and UNICEF);
- rapid assessment, nutrition surveys and surveillance (Ministry of Health, WFP, UNICEF, WHO, FAO, Ministry of Agriculture, Health Action in Crises (HAC) and nongovernmental organizations);
- nutrition education (Ministry of Health, UNICEF and nongovernmental organizations);
- provision of logistics and supplies (UNICEF, WHO and WFP).

Changes in patterns of child malnutrition among children between the ages of 6 and 59 months show that global acute malnutrition has decreased from 21.8% in 2004 to 13.1% in 2006, and severe acute malnutrition has decreased from 3.9% in 2004 to 2.0% in 2006. There is 90% to 95% of vitamin A coverage for children under the age of 5. Postpartum vitamin A coverage in 2006 was at a rate of 19.4% and iron and folic acid supplementation was 30.8%. Results from the iodine deficiency survey conducted in 2004 showed that 25.9% of women had goitre. The figures for iodized salt coverage showed the rates for the following areas: west (75.5%), north (62.1%), south (82.4%) and nationally (73.1%). Overall, 91.5% of those using iodized salt received the salt from food aid.

To date, a total of 56 therapeutic feeding centres and 86 supplementary feeding centres have been established, and on average, between 2000 and 7000 children have been admitted monthly to the centres respectively. The average recovery rate for children is about 65%. Nutrition surveillance has provided guidance on nutrition survey guidelines, developed tools for surveillance and surveys and created food security and a health and nutrition information sharing forum at state level.

Challenges and constraints include the time constraints of establishing a nutrition surveillance system in an emergency situation and up-to-date, timely and accurate nutrition information from the initial stages is essential for appropriate intervening. The prospect of longer-term food security for the internally displaced population represents a challenge.

Underlying causes of malnutrition are not being adequately addressed and the shortage of nutrition partners in implementing programmes from the onset of the crisis has represented a problem. There is a lack of capacity within the Ministry at state level and within nongovernmental organizations. There is inaccessibility to some locations as a result of insecurity and weather conditions and the continued influx of people results into pockets of high malnutrition. Donor fatigue has led to reductions in the number of staff at field level and there is a high turnover of nongovernmental organization staff and inadequate handover procedures. There is also concern that free distribution of food will lead to dependency among the population.

Discussion

Representatives from Sudan explained how the national nutrition plan was initiated through a process of development including improvements in data collection and improvements in the use of iodized salt. They discussed the involvement and importance of the WFP in Darfur and the improvements that had been made in training. They highlighted the fact that previously Sudan had used both WHO and WFP guidelines but now had implemented a standard set of guidelines. In terms of policy they stressed that the issue of nutrition had gained importance and was gradually being given higher priority. The Government has formed a task force headed by the deputy Minister of Health and Population which has incorporated all sectors and which works closely with the core committee. Sudan has also asked donors and partners to recruit a national focal point for nutrition and holds focus group discussions at several centres. Policy documents submitted by the core group are reviewed by all partners. Sudan is hoping to form a national committee on nutrition but stressed that this requires not only strong political will but also the involvement of politicians for success.

3.3 Egypt's national nutrition policy and strategy

Dr Azza Gohar, Director of the National Nutrition Institute

The current national food and nutrition policy and strategy (2005–2015) is based on the commitment of the Egyptian Government to achieve the targets of the MDGs. The plan was formed in 2005 by the Ministry of Health and Population to guarantee the quality of foods available for consumption, to promote healthy dietary practices, to prevent and control nutritional disorders and to guarantee universal access to adequate food.

The purpose of the policy document is to assist policy-makers and programme planners to understand and initiate and/or reinforce coordinated strategies and activities to control malnutrition. In addition, it presents information on the planning and implementation of different approaches that can be used to support the training of community level workers and gives attention to specific vulnerable groups with special problems and special needs. The following policy areas are covered:

- promotion of intersectoral collaboration for universal access to adequate food and nutrition;
- incorporation of nutrition objectives to achieve the targets of the MDGs;

- monitoring of the national food and nutrition situation;
- improvement in household food security;
- improvement in the quality and safety of food and food-related services to protect consumer health;
- promotion of healthy dietary practices and lifestyles;
- protection and promotion of breastfeeding;
- protection of the nutritionally and socioeconomically vulnerable;
- prevention and control of micronutrient deficiencies;
- prevention and control of noncommunicable/chronic diet-related diseases;
- prevention and control of nutrition-related infectious diseases; and
- capacity building and development at community, institutional and authority levels.

Many individuals from different ministries and organizations were invited to be members of the meeting and working groups. Outlines of the policy/strategy included addressing the current situation, determining a problem definition/identification, recognizing determinants, risk factors, setting goals and objectives, identifying activities, determining the resources required, identifying responsible authorities, establishing a time frame and conducting monitoring and evaluation.

The National Nutrition Institute (NNI) requested support from WHO Regional Office to conduct a national workshop to develop national food and nutrition policy. A high committee was formed to oversee the development, implementation and follow-up of the policy. WHO provided financial support and expert review documents and a national workshop was conducted in October 2005 at the Institute, and experts, scientists and officials from all relevant sectors were invited to attend for approval of the policy areas.

Several meetings were held by each group after the workshop who used the established guidelines/templates with meetings facilitated by selected facilitators from the NNI. The process continued for several months until each group handed their finalized policy area to the working group facilitator. A small committee then reviewed the various policy areas and edited and finalized the policy document. The document is currently being reviewed for adoption by members of the standing committee on nutrition within the Ministry of Health and Population and will be reviewed and adopted by the National Nutrition Committee from the Academy of Scientific Research. Following approval by the Minister of Health and Population, the document will be translated into Arabic and circulated to all involved Ministries for adoption. Follow-up on the different activities will be conducted by the NNI and other relevant sectors to monitor implementation of the national policy and strategy until 2015.

The written policy document brings together all nutrition-related elements and factors affecting nutritional status into one document and serves as a reference/guideline for all parties involved. It indicates long-term outcome-orientated directions and priorities in line with available resources and outlines the mechanism for coordination, guideline implementation through selected strategies and activities and is planned in three phases. The determinants of health and nutrition were important considerations, as was the ownership of the different parties. The scope of the document ranges from nutrition to food to

implementation. The document is a combination of a general statement and a finished product due to the transitional stage Egypt is experiencing in terms of nutrition and government structure, policies, regulations, systems, etc. The document also takes into consideration the role of the private sector and public (multisectoral) and international policies and directions.

3.4 Introducing the Islamic Republic of Iran's nutritional programmes

Dr Sayyed Morteza Safavi, Ministry of Health and Medical Education

Although many organizations and institutions participate in nutrition programmes in the country, the nutrition department in the Ministry of Health is responsible for policy-making, implementation and evaluation and supervision of national nutritional programmes. The mission of the nutrition department is to:

- improve the nutritional status of vulnerable groups in the community;
- expand effective interventional programmes at provincial and national level and develop successful interventions as part of the national plan;
- design suitable intervention programmes to reduce nutritional problems (such as deficiencies, nutritional imbalance and overeating);
- adopt new policies in the field of food and nutrition with inter and intrasectoral collaboration; and
- develop nutritional protocols and guidelines for different age groups during health and sickness.

Strategies for achieving the goals include reducing protein energy malnutrition (PEM), particularly among children under 5 years of age and providing an appropriate amount of micronutrients for all people in order to prevent and control micronutrient deficiencies. Programmes also aim to improve the nutritional knowledge of the community in order to reduce the prevalence of nutrition-related diseases and to conduct regular monitoring of changes occurring in the food and nutritional status of the community. Appropriate policies in the food industry are adopted in order to improve the nutritional health of the community, to improve the nutritional status of patients in hospitals and to improve methods of preparing and supplying foods in public places.

Programmes for reducing malnutrition have included the anthropometric and nutrition indicators surveys conducted on children under 5 years of age in urban and rural areas to determine anthropometric indices and to determine levels of mothers' awareness, use of supplements and complementary feeding practices. A multisectoral programme to reduce malnutrition among children under 5 was designed to decrease malnutrition in the three rural areas of Ilam in Ilam province, Bardsir in Kerman province and Borazjan in Boushehr province. These provinces were chosen based on the capabilities of their management system and on the interest of their governors. A plan known by the acronym of *meshkat salamat* focuses on ten major strategies which include:

- improving environmental health (clean water, sewage, etc.);
- promoting breastfeeding (exclusive breastfeeding for 6 months and continuing with complementary feeding until 2 years of age);

- conducting growth monitoring (teaching mothers about the growth chart and its interpretation);
- providing water and liquids for diarrhoea;
- promoting complementary feeding practices;
- encouraging vegetable farming at home;
- promoting dairy products and advocating for greater consumption;
- encouraging diversity in people's diet;
- educating people on the benefits of consuming fruit;
- providing family planning methods and education.

Programmes for reducing micronutrient deficiencies have included the national integrated micronutrients survey mainly aimed at determining the level of iron, zinc, vitamin A and vitamin D deficiencies. The results of the survey showed the relatively high prevalence of micronutrient deficiencies among most age groups of all areas and the need for measures to overcome them. The Islamic Republic of Iran was also appointed by WHO as the host country for a regular regional course on the monitoring and evaluation of national IDD elimination programmes in the 23 countries of the Region. Two training courses were held in Teheran in 2001 and 2002.

Achievements of the country's nutritional programmes have included the distribution of vitamin A and D drops for children aged between 15 days and 24 months through primary health care clinics free-of-charge and the distribution of vitamin A capsules among children under 5 in selected rural and urban areas during national immunization days (NIDS) in 1996 and 1997. For the prevention and control of iron deficiency and iron deficiency anaemia, there is a flour fortification programme in collaboration with the food industry and collaboration with the oil industry in order to improve the formulation and production of oils containing low saturated and trans fatty acids. There has also been cooperation between the Ministry and the food industry to produce eggs high in omega-3 (Columbus egg) and with the beverage industry to produce probiotic beverages in favour of carbonated drinks.

Programmes have also been implemented to improve nutrition in hospitals, public places and schools. New postgraduate courses have been designed in nutrition covering nutritional epidemiology, community nutrition and molecular-cellular nutrition. A registered dietitian course has also been designed. Despite the successes achieved the main obstacles facing current nutrition programmes are insufficient funding, insufficient human resources (in certain areas) and insufficient inter and intrasectoral collaboration.

3.5 Nutrition in Iraq

Dr H Shehab, Ministry of Health

Food security in Iraq is ensured through the public distribution system (PDS). The system is well-established and distributes selected items of food to the general population to ensure that people receive an adequate amount of daily calories. The main institutions responsible for nutrition programmes and strategies are the Nutrition Research Institute (NRI) and the Ministry of Health. According to the results of the baseline food security survey conducted in 2005, malnutrition among children was manifested by wasting (9%), stunting

(25.9%) and low body weight (15.7%). Four (4) million people or 15.4% of the population are food insecure. Eight point three (8.3) million people or 31% of the population would be rendered food insecure if they were not provided with a PDS ration of wheat, rice, sugar, vegetable oil, tea and pulses. Some selected food items are imported by the Ministry of Trade and by the private sector but there is a lack of control of national food production (industries and agriculture), which has been affected dramatically by sanctions and wars and international organizations supplies.

Iraqi families consume three staple meals and depend mainly on rice and bread. Tea consumption directly after meals is one of the nation's bad habits. PDS fat is of plant origin (unsaturated fat) as ischemic heart disease is one of major causes of deaths in Iraq. Canned food consumption has increased due to unplanned importation and nutrition awareness is weak due to poor nutrition education in the country. The nutrition education programme is inactive as it is not currently considered a priority by decision-makers and this has led to a weakness in planning and implementing successful nutrition programmes. The food safety programme is also inactive as plans are only partially implemented due to security problems and the shortage of nutrition laboratories.

Nutrition programmes include a targeted nutrition programme to control malnutrition and protein-energy malnutrition, a wheat flour fortification programme, a salt iodization programme, a vitamin A deficiency control programme, a school feeding programme and a food safety programme. The targeted nutrition programme is being implemented in cooperation with UNICEF. It covers malnutrition as a result of micronutrient deficiency and protein-energy malnutrition among children under 5 and pregnant and lactating women. It has created nutrition rehabilitation centres and community-based care centres and provides high-energy biscuits to the population.

The objective of the wheat flour fortification programme is to decrease the prevalence of anaemia in Iraq, although instability plays a major role in delays and in limiting the governorates' coverage rates. The vitamin A deficiency control programme distributes vitamin A capsules to children at 9 months (50000 international units (iu)), children at 18 months (100000 iu), school-age children (200000 iu) and lactating mothers (200000 iu) during the first month, but its coverage rate is poor due to shortages of vitamin A capsules and ignorance to the importance of the programme. The salt iodization programme has been implemented to control iodine deficiency disorder and potassium iodide is used although again the coverage rate is poor at less than 50%. There are no effective evaluation and monitoring programmes and no baseline data are available on IDD.

As a result of the 2003 baseline food security survey, WFP launched a 1-year emergency operation targeting the most vulnerable groups in Iraq—primary schoolchildren, pregnant and lactating mothers and tuberculosis patients. This programme started in 2004 and involved 100 000 primary school students who received high-energy biscuits and vitamin-flavoured milk. From 2005–2006, 2 million students were targeted by the programme. The Ministries engaged in food security include the Ministries of Health, Planning, Agriculture, Industry, Trade and the Environment.

Discussion

Participants discussed the need to establish the credibility of sources ensuring food safety in countries. In the Islamic Republic of Iran, a pilot study initiated 5 years ago resulted in collaboration between the public and private sector and led to the protection of eggs laid by hens fed with a special diet. Studies have been conducted and are ongoing and country representatives expressed the country's intention of sharing the results of research. Participants discussed the importance of intersectoral collaboration and of recognizing the need for an acknowledgement of partners' common platform and shared interests in promoting good nutrition and in providing effective interventions. The representative from the Islamic Republic of Iran discussed the flour fortification programme in the country and the problems associated with the short shelf-life of the product. Participants stressed the importance of undertaking effective SWOT analysis to determine organizational strengths and weaknesses and in identifying external opportunities and threats. The representative from Bahrain made reference to the fact that Bahrain was in the process of writing proposals for their national plan and were keen to include all sectors, and to establish whether the national committee should form a technical body. All participants stressed the need to learn from the mistakes of past and of ensuring that these mistakes were not repeated. It was also suggested that countries with effective working committees could provide guidance to those countries currently without, such as Iraq.

3.6 Food and nutrition policies experiences in Jordan

Dr Adnan Ishaq, Ministry of Health, Dr Mohamad Rahahleh, Ministry of Agriculture, Ms Tatyana El-Kour, Nutrition Adviser

The main objective Jordan's strategy is to provide strategic directions and to coordinate action on important food, nutrition and public health nutrition issues and scale up measures to attain the recommended policy action and reach the nutrition-related targets of the MDGs. In 1996, Jordan produced its national plan of action but it was not endorsed or implemented as a result of inadequate inter and intrasectoral collaboration and the low priority given to the importance of the topic and the lack of political leadership. In 2002, WHO, the Ministry of Health and the Ministry of Agriculture reviewed existing food and nutrition programmes and consensus was reached that an immediate nutrition situation analysis was needed and a comprehensive food and nutrition policy plan should be developed. This formed the basis to include a project on food and nutrition policy in the collaborative programme between WHO and the Government of Jordan.

In 2002, the situation analysis revealed that many new maternal and child health centres had been established, iodized salt was available and baking flour fortified with iron and folic acid was available. Jordan has neither food-based guidelines nor recommendations regarding intake of nutrients although nutrition education in medical and nursing schools appears to be adequate. There is serious stunting in children under the age of 5 and there remain problems with iodine intake based on the prevalence of goitre and anaemia and signs of sub-clinical vitamin A deficiency in some areas. The body weight of Jordanians is increasing and also the prevalence of diabetes.

Mortality statistics reveal that cardiovascular diseases and cancer, the two leading causes of death, are increasing. Physical activity patterns among Jordanians are inadequate and municipal/town planning does not encourage physical activity. Smoking is common, particularly among men, and there is extensive advertising of cigarettes. Multi-vitamin B2, B6, B12, C and D supplementation is provided in schools and the distribution of enriched biscuits with iron and vitamin A to schoolchildren has been implemented in some high-risk areas. There are periodic public nutrition education campaigns promoting family planning and breastfeeding and periodic financial and food-assistance campaigns to vulnerable groups. The food control system has become more efficient and a new law on food control has been approved. There is partial governmental subsidy of wheat corn used for human consumption but there have been no governmental assistance programmes including subsidies for other staple foods or infants' or children's foods in the last 10 years.

Stakeholders involved in the development of Jordan's strategy included: WHO, the Government of Jordan represented by the Ministries of Health, Agriculture, Education, Higher Education and Department of Statistics, Jordan Food and Drug Administration (JFDA), FAO, the National Council of Family Affairs, academia (University of Jordan and Jordan University of Science and Technology), public health professionals in various sectors, including the media and private sectors, health educators, health promotion specialists, administrators and physicians.

The development of the strategy began with a national seminar held in May 2002 in which a group of national experts participated, to examine and discuss the current status of national food and nutrition policies and programmes, the health status of Jordanians and to develop a situational analysis paper. In January 2003 another national seminar was held, including governmental and nongovernmental sectors in Jordan, to discuss the situational analysis paper and to identify major issues and challenges. Later that year, a further seminar was held to discuss priorities and to identify policy objectives and strategic directions and a final seminar in 2005 was held to review the outcome and conclusions of the previous three seminars and to develop the policy document. From January to June 2006, there were informal meetings with representatives of WHO for final review and to update the document, and in July 2006, the document was endorsed by the Government of Jordan. In August 2006, the policy document was published and circulated.

The policy document is divided into two parts. Part one outlines the current food and nutrition situation in Jordan and includes: country profiles, food and nutrition patterns, policies of food security, malnutrition, breastfeeding and micronutrient deficiencies and food safety. Part two outlines the current food and nutrition policy in Jordan and covers food and nutrition policy and proposed policy objectives and strategic directions.

The pre-requisites to the formation of Jordan's effective national policy have included: political will, a firm commitment from all relevant government sectors, coordination and harmonisation among various sectors, the development of strategies to reduce poverty and to ensure improved nutrition for all and local community involvement. Priority actions identified have included the need to identify responsibilities at the individual, community and governmental levels, to create a networking system for health care professionals, to develop

an intact monitoring and evaluation system and to develop a comprehensive and regional food and nutrition training module with updated and applicable examples and lessons learned from the Region and with a stronger emphasis on policy and advocacy.

Areas of government responsibility include: advertising, food labelling, fiscal policies, research policies, food standards for pre-school nurseries/school, public sector catering, health policy development, a new role for the public health sector and health education. Lessons learnt during the formation of the Jordan's national nutrition policy have included the need to recruit people with interest, knowledge and capability, to involve well-respected academics, to obtain political backing and support and to involve the media with a focus on human rights and health.

3.7 Nutritional status in Morocco

Dr Rekia Belahsen, Chouaib Doukkali University

Morocco experiences the double burden of undernutrition and overnutrition. Nine per cent (9%) of children under the age of 5 are moderately to severely underweight and 1.8 per cent of children under the age of 5 are severely underweight. The prevalence of anaemia among women and children is 45% and 39.3% respectively. The total prevalence of iron deficiency among the population is 22% and the rate of household iodized salt use is 41%.

There is an emerging global epidemic of obesity and in Morocco, the prevalence of obesity among women between the ages of 15 and 49 years of age is 16% of women are obese and 29% of women are overweight. In Morocco the prevalence of hypertension, diabetes and metabolic syndrome is hypertension (35.8%), diabetes (14%) and metabolic syndrome (15%).

Strategies to combat micronutrient deficiencies set the following objectives to be achieved by 2015.

- reduction of a third of iron deficiency anaemia compared to its level in 1995;
- elimination of vitamin A deficiency and its effects;
- elimination of iodine deficiency disorders in newborn infants;
- provision and sustaining of 80% of national vitamin D coverage.

Components of the strategy include supplementation of children with vitamin A, supplementation of women with vitamin A (postpartum), nutrition education and a range of public health messages. Nutrition education includes promoting the consumption of food naturally rich in or enriched with micronutrients and promoting the avoidance of bad dietary habits. Fortification includes the fortification of staple foods with vitamins A and D, iron and iodine to allow strengthening of global nutritional contents. Morocco is in nutritional transition with increasing rates of obesity and the persistence of nutritional deficiencies. As a result an integrated strategy in the country is recommended.

3.8 Nutritional status in the Libyan Arab Jamahiriya

Dr Laila Gashut, University of Alfatah

The Libyan Arab Jamahiriya is facing strong constraints in terms of the availability of water resources and of food self-sufficiency. The population is relatively young, mostly urban and concentrated in the coastal area. Agriculture is not sufficiently productive to meet the food needs of the population. The country's economy, largely state controlled, is heavily dependant on oil production and exports. The Government has invested in health care, sanitation and education, and as a result, levels of immunization among children are high, polio has been eradicated, access to improved water sources and sanitation is good and concerted efforts are made to combat the spread of HIV/AIDS. The food supply, characterized by a high availability of fruit and vegetables, has increased markedly over time, particularly since the late 1970s, and the dietary energy supply largely satisfies the population's energy requirements. Moreover, the three most important food groups—cereals, vegetable oil and sweeteners, provide almost three quarters of the energy supply. This diet, dense in energy and poor in micronutrients is conducive to overnutrition. Currently, the country is totally dependant on imports of cereals.

Some health indicators are very favourable, such as infant and under-5 mortality rates, which are low. According to the Pan Arab Project of Child Development (PAPCHILD) 1995 survey on mother and child health, approximately 81% of pregnant women received antenatal care, and 82% of children received complete vaccination with no significant difference between urban and rural areas, but only 17% of pregnant women were vaccinated for tetanus. Polio was eradicated in 2003. In September 2002, the Government launched a national programme for combating HIV/AIDS. A key component was the active participation of both the public sector and nongovernmental organizations and including mosques, sports clubs and communities. Detailed information on access to health services is lacking. Although the health system is quite well developed, UNICEF reports indicate that many Libyans seek medical services in neighbouring countries, particularly in Tunisia.

With very limited renewable water resources, the country relies heavily on imports to match food needs. In 2000, the importation of cereals, sugar and oil represented a large share of the national budget. Presently, food security at national level has been achieved although no data are currently available on the food security situation at subnational level. The food supply is abundant and the supply of major food groups has increased markedly over time. During the 1980s, for several food groups such as cereals, meat, milk and eggs, fruit and vegetables, there was a decrease in supplies due to changes in national policies that aimed to reduce imports and rely more on local production to meet the country's food requirements. The food supply is characterized by a high availability of fruit and vegetables, as compared to other North African countries.

Breastfeeding is a common practice in urban and rural areas and in 1995 it was estimated that more than 90% of children were breastfed. There is early initiation of breastfeeding as 73% of newborn infants are breastfed within six hours of birth and the medium duration for breastfeeding is 11 months. However, the duration of exclusive breastfeeding is short, on average 1.3 months. The national survey on mother and child health

carried out in 1995 is the only source of information available on the nutritional status of preschool children. The survey was conducted in seven geographical regions. In 1995, 15% of children were stunted and 5% were severely stunted. Stunting appeared at birth, with 10% prevalence among infants under 6 months.

The country is affected by the double burden of malnutrition with the simultaneous occurrence of chronic energy deficiency and a high prevalence of overweight and obesity. This nutrition transition is probably due to improved living standards and urbanization which has modified dietary patterns and led to a decrease in physical activity. The Libyan Arab Jamahiriya has established a nutritional policy aiming to provide for the basic food needs of people all over the country and by lowering food prices through subsidizing major food groups that supply energy such as cereals, vegetable oils and sugar. As cereals supply 45% of the dietary energy supply, strategies for cereal fortification with iron should be considered. As more than one quarter of the adult population in some provinces are overweight or obese, the relevance of subsidizing energy-dense but micronutrient-poor foods, such as sugar and vegetable oil, should be questioned.

The Ministries of Agriculture, Health and Education are involved in nutrition policy in addition to research centres, food inspection and quality control centres and universities. Most efforts are linked directly to governmental financial support from oil revenues and when the Government fails to provide the subsidies the level of food security declines. Strengths of the national strategy include the equal distribution of food commodities to all the population, increased food supply, increased dietary supply from imported major foods and the conducting of surveys and growth monitoring of children. Weaknesses include the lack of training programmes in nutrition, the lack of resources for extension services and the need to modify the objectives to coincide with the available resources.

Priority actions are extension, training, education and research. Recommendations include:

- strengthening of nutrition education and extension systems;
- training of nutrition workers;
- establishing national food and nutrition committees;
- establishing technical positions;
- improving school feeding;
- conducting of household consumption surveys;
- obtaining support from international agencies to assist in formulating overall policies and programmes;
- increasing fish production and promoting fish consumption.

3.9 Nutrition policy in Oman

Ms Deena Alasfoor, Ministry of Health

Oman participated in the International Conference on Nutrition in December 1992 and held a multisectoral consultation and national workshop to develop the national policy and plan of action in 1993. The workshop included representatives from the Ministries of Health,

Agriculture and Fisheries, Education, Social Development, National Economy, Commerce and Industry, regional and *dhofar* municipalities, customs, the Chamber of Commerce, universities and the community.

Nutrition was incorporated into the Ministry of Health's 5-year plan of action (2001–2005) with a focus on the prevention and control of PEM. Components of the national policy and plan of action are:

- food security;
- consumer protection through ensuring food safety and quality, healthy lifestyles and the prevention of chronic diseases;
- caring for economically and socially disadvantaged groups and the nutritionally vulnerable;
- control of malnutrition and micronutrients deficiencies;
- monitoring of the nutritional status of the population;
- integration of nutrition objectives into developmental plans;
- promotion of breastfeeding.

3.10 Pakistan's national nutrition strategic plan

Dr Muhamed Ayub, Federal Ministry of Health

Pakistan's national nutrition strategic plan represents a comprehensive vision for improved nutrition that relies on a multisectoral approach with a collaborative mechanism to implement nutrition interventions. It provides new indicators of malnutrition and will assist in the preparation of operational plans. The strategy development process was initiated in 2001 by the Ministry of Planning and Development but was not re-initiated until 2003, during a workshop supported by UNICEF, when the consultative process commenced. The Department for International Development (DFID) and the Technical Assistance Management Agency (TAMA) provided technical assistance during the process. A draft national strategic plan was prepared and was shared with provinces, districts, professionals, civil society representatives and development partners through a series of consultative workshops and meetings. Provincial feedback was incorporated and shared at a national workshop in Bhurban in 2004 and the final plan was approved in a joint meeting of the Technical Coordination Committee and National Fortification Alliance in 2005.

The plan is aligned with targets of the Poverty Reduction Strategy Paper (PRSP) and its multisectoral approach involves various stakeholders with the health sector as the lead coordinating body. The areas for interventions are social change communication, food safety and regulatory mechanisms, food fortification and supplementation and the institutionalization of nutrition. The national planning process is the responsibility of the national planning commission in the Ministry of Planning and Development, although WHO provides assistance in the development of national planning and policy in consultation with the private sector under the guidance of both the Ministries of Health and Agriculture.

At present, the national policy is operating within a 5-year framework covered by all sectors with all areas of nutrition integrated. The objectives are aligned with the targets of the MDGs and include:

- control of PEM;
- control of micronutrient malnutrition;
- food security and safety nets;
- nutrition education and information;
- food safety and quality;
- coordination of nutrition progress among all stakeholders.

3.11 Malnutrition in South Africa: A call for action

Dr Mickey Chopra, WHO/HQ

The Department of Health in South Africa has a vision for a healthy and self-reliant nation in this new millennium. Such a vision will rely on adequate human resources and will only be realized if the children being conceived and born today are given the opportunity to live to their full potential. Sadly, however, this opportunity may be outside the reach of most children in the country as a result of malnutrition. The enormous consequences of malnutrition are often unappreciated as they are hidden usually with no obvious signs and the victims themselves are silent and not aware of the problem. As a result, not enough attention is paid to under-nutrition.

In South Africa 10.3% of children under 5 years of age are underweight for their age. Expressed as a total figure, this translates into 450 000 children under 5 who are undernourished. In 2001, 6338 children died from under-nutrition. Studies have shown that under-nutrition is especially prevalent during the first 2 years of life. Whether we look at underweight or stunting, young children become progressively more malnourished during the first 2 years of life. By 2 years of age, all the damage has been done and there is little or no recovery. Under-nutrition is often accompanied by micronutrient deficiencies, namely vitamin A deficiency, iron deficiency and iodine deficiency.

Vitamin A deficiency and anaemia are problems that have the highest functional consequences in terms of low immunity, illness, death, mental impairment, and in the long term, reduced capacity to produce and contribute to the economy of a country. The increased levels of child deaths translate into human capital losses, higher fertility rates, maternal nutrient depletion, increased public health costs and missed productivity, in addition to other consequences.

In summary, we know that the functional impairment resulting from malnutrition has been done by the age of 2 years and that there is very little chance of recovery. The key features of this pattern are that growth faltering happens very early in life (in many cases starting even during pregnancy) and affects large numbers of children at 2 years of age and is permanent thereafter. The health of the child is closely intertwined with the health of the mother. Hence, intervention strategies to reduce child and maternal mortality must focus on improving the nutritional and health status of the mother and the child by improving the

nutritional status of women of reproductive age, particularly during pregnancy and lactation, and ensuring optimal nutrition from birth to 24 months. The need for an immediate and effective investment in nutrition is therefore crucial. Yet, in the past, actions to reduce child malnutrition in South Africa have been mostly food-based interventions, such as soup kitchens. These interventions have not been sustainable as they were neither optimally targeted nor integrated. They focused on cure rather than on prevention.

The integrated nutrition programme recognizes these shortcomings and outlines the following key strategic principles for nutrition interventions.

- Targeting (a focus on population groups most at risk, such as women, and children).
- Timeliness (targeting children and women when they are most vulnerable and when interventions are therefore likely to achieve greater impact. Children will be targeted from 0–24 months and women during pregnancy and lactation).
- Emphasis on prevention (as opposed to emphasis on cure and/or rehabilitation).
- Intersectoral integration (combining intersectoral activities to maximize impact).
- Community ownership (ensuring community participation and involvement in order to achieve sustainability).

The integrated nutrition programme identifies the following key focus areas:

- The promotion of good feeding practices, particularly during the first 24 months of age.
- The distribution of a high dose of vitamin A (200 000 iu) to all women within the first four weeks after delivery. This intervention restores maternal vitamin A stores, increases the vitamin A content of breast milk, reduces the frequency and severity of infant illness and improves infant growth.
- The distribution of iron-folate supplements to all pregnant women during the last two trimesters of pregnancy as a component of an essential antenatal package. Iron-folate supplementation will ensure the adequate expansion of the mother’s placenta and plasma volume and the optimal growth of the fetus. This intervention will prevent iron deficiency and anaemia, reduce maternal mortality, increase the iron transfer from the mother to the fetus, improve birth weight and enhance infant growth.
- An increase of food intake. All pregnant women need more calories to ensure the adequate weight gain needed for optimal fetal growth and favourable birth outcomes. Similarly, lactating mothers need more calories to meet the energy requirements associated with lactation. Pregnant and lactating mothers should be enabled and encouraged to consume the equivalent of an extra meal a day.

Finally, some key health interventions that would make a significant contribution to improving the nutritional status of children and women include immunization, access to safe water and environmental hygiene and sanitation. Measles, tuberculosis, polio, diphtheria, pertussis and tetanus can be effectively and inexpensively controlled through comprehensive immunization programmes. The concurrent reduction in illness will improve nutritional status and reduce the rates of child mortality. Contaminated water can transmit pathogens and parasites. Waterborne diseases, such as diarrhoea, impair the nutritional status of children by diminishing the capacity of the body to absorb macro and micronutrients, depressing the

appetite and weakening the immune system. Water must be present in both quantity and quality to satisfy human needs. Infrastructure programmes that construct safe water supply systems must be accompanied by education campaigns to disseminate proper water use and storage practices in the home. Improper disposal of human and animal faeces is one of the main causes of gastro-intestinal infections, a leading cause of illness and death in children. Unclean environments also provide nesting grounds for parasites and pathogens, increasing the likelihood of water and food contamination. The construction of latrines, proper hand-washing techniques and the protection of water from animal access and safe disposal of waste will help reduce the risk of hand-to-mouth contamination. This means improving environmental hygiene and sanitation and thus includes a combination of infrastructural and educational interventions.

In conclusion, it has been shown that the functional consequences of infant, young child and maternal malnutrition are severe. Decision-makers at all levels have three compelling reasons to combat malnutrition with renewed commitment. Firstly, there is no greater symbol of the inequitable distribution of resources such as food, health, and education than the death or disability of a child or a woman due to the failure to provide adequate amounts of nutrients. The right to food and nutrition is a human right. Secondly, beyond the unnecessary human suffering, malnutrition deprives children, women and communities of their full mental and physical potential thereby creating dependence and hindering development. Finally, affordable and cost-effective interventions are available.

3.12 Sudan's nutrition policy and strategic plan

Fatima Awad El-Karim El-Faki, Federal Ministry of Health

The National Nutrition Directorate (NND) was launched in 1967 as a department of the Ministry of Health and 22 departments have been established at state level. The mission of the NND is to maintain and promote the nutritional status of the Sudanese population with a focus on vulnerable groups, to contribute to the reduction of morbidity and mortality and to contribute to overall development in the country.

In Sudan, the global acute malnutrition rate is 18% and severe acute malnutrition is 7%, the percentage of children under the age of 5 who are underweight is 41% and the percentage of low-birth-weight infants in the north is 31%. There are no national estimates for anaemia, but in Darfur, 55% of children under the age of 5 and 28% of pregnant women have anaemia. Iron and folic acid supplementation is recommended for antenatal care but no up-to-date national information is available on the coverage for pregnant women. Twenty-two per cent (22%) of school-age children have goitre.

Iodized salt consumption is at less than 1%. There are no national estimates for vitamin A intake but in many areas localized surveys have shown the prevalence rates of night blindness range from between 1% and 4.8%. The percentage of children receiving two doses of vitamin A capsules through NIDS are between 80% and 90% but less attention is being given to postpartum women. There is a lack of strategy of vitamin A supplementation through routine health activities and no systematic routine growth monitoring or basic nutrition activities for children under the age of 5 or women in health facilities at community level.

Strategies and interventions include growth monitoring and promotion of the Infant and Young Child Feeding Programme (IYCF), and there are selective feeding programmes offering supplementary and therapeutic feeding and nutrition education and counselling. There is supplementation, fortification, diversification and public measures to address micronutrient deficiencies.

The background to the development of the policy and strategy for Sudan began with the Federal Ministry of Health initiative and health mandate for nutrition. A multidisciplinary approach was followed and the process of development included: the support of UNICEF, the involvement of consultants, meetings and discussions, the formation of a steering committee, the validation of the draft policy and strategy document in a workshop and approval by the Federal Ministry of Health. The key responsibilities of the NND were to develop the terms of reference, provide a working space and working materials for the consultants and to request the support of its partners for the development of the policy and the strategic plan. They were also responsible for setting up a steering committee comprising the nutrition partners, the key ministries (Health, Industry, Social and Welfare, Education and Agriculture) and UN agencies and for leading the recruitment of the consultants in collaboration with its partners.

Recurrent disasters, conflict, insecurity and poverty provide a context in which challenges are faced by Sudan. The specific challenges are to reduce acute malnutrition, stunting and underweight and control and prevent micronutrient deficiencies. The future does, however, look much brighter as a result of: the national strategy and country plan of action, oil, reform of policies and released capacities to support the implementation and the recognition of nutrition as a key element in ensuring development. Sudan’s vision is a commitment to promote nutritional well-being for all people and to make this commitment an integral part of all humanitarian and development policies, plans and effective programmes in the country.

The five key objectives of Sudan’s nutrition policy are to:

- reverse the current deterioration in the nutritional status of the population;
- sustain improvements brought about by emergency interventions through increasing local skills and developing adequate programmes;
- upgrade and expand capacities for managing emergency situations;
- expand nutrition resources at state and local level;
- build capacity at all levels and in various sectors.

The guiding principles underlying the strategy are an understanding for each sector’s contribution to nutrition, an integrated and whole population approach and a recognition of the impacts of food shortage, poor hygiene and sanitation, underemployment, stress of displacement and other marginalization in order to lead to well-focused programming for each group. It is also important that advocacy for nutrition resource allocation is conducted, that current and potential donors are encouraged to allocate financial resources on the basis of this policy, that there is the involvement of the private sector and that funding is planned and sought to upgrade and expand the capacities of local institutions.

3.13 Yemen's 5-year nutrition plan

Mr Nagib Abdulbaqi A. Ali, Ministry of Public Health and Population

Yemen's current 5-year plan for 2006–2010 focuses on:

- expanding the community-based nutrition programme to 75 districts;
- increasing the percentage of households consuming adequately iodized salt;
- continuing the training of health workers in hospitals on counselling on ideal breastfeeding and complementary feeding practices;
- introducing an appropriate clinical/hospital nutrition system to 15 hospitals;
- improving the capacity of 30% of health facilities in the management of cases of severe malnutrition;
- establishing a national framework for food safety;
- establishing a surveillance system for foodborne diseases.

Partners involved in the plan include the Ministry of Public Health and Population with the main support provided by UNICEF and with some support from WHO. The WFP also supports a project to distribute food commodities through selected health centres. The weaknesses of the plan are there are no high-level leadership for nutrition issues, nutrition is not a priority on the agenda of the Government, there is no local university/institute offer curriculum for specialization in the field of nutrition and support by government or donors toward building capacity is either limited or inappropriate. Nutrition indicators are not merely health indicators but direct development indicators. Nutrition is a development issue and should be among the highest-priority issues in the government development agenda.

3.14 Discussion on country presentations

Participants discussed why similar problems were being experienced across different countries of the Region and the impact of globalization and internationalism of trade. They raised the issue of complex emergencies being experienced by certain countries and discussed the range of problems that were being experienced as a result. The problem of obesity among certain population groups was raised and although this increasing trend may be explained by an increased standard of living the trend is also being seen in poorer countries. Data from member countries of the Gulf Cooperation Council (GGC) back up the idea that affluence promotes obesity. Data from Egypt show that obesity among poorer segments of the population is increasing. In Egypt, dietary patterns such as the consumption of fatty foods, fried food, subsidized foods are also adding to the problem as these foods contain sugar and are influencing people's diet. Sedentary lifestyles are also adding to the problem as are changes in food patterns. Participants suggested that controlled studies were needed to determine how changing food habits are adding to nutrition problems. They also expressed the need for more research and comparative research. Participants also discussed the need for greater research on the determinants of health and nutrition as they share many indicators, such as literacy rates, etc. They expressed the necessity of working in parallel with nutrition to deal with problems in the Region. Participants discussed food vulnerability and the need for mapping systems. It was acknowledged that even smaller affluent countries are experiencing problems, such as the Islamic Republic of Iran, where stunting and wasting is being witnessed

in particular areas such as Sistan. It was suggested that the solution to many problems was for greater in-depth examination of single issues and for countries to share experiences.

Facilitators stressed the need for participants to initiate multisectoral processes to address problems in their own countries and to determine the starting points through the collection of baseline data. Participants were asked if they were doing this in their own countries. Representatives from Egypt made reference to their report which showed changes in the country over the last 20 years. The need for secondary analysis and research was stressed. Reference was made to household income and expenditure surveys which are often very useful for analysis and deriving indicators for food security and for other issues. Participants discussed the need for an examination of policies to see what is available or existing in countries to address the issue of nutrition and nutrition problems.

In terms of causes of malnutrition, it was stressed that countries should be divided according to prevalence, and the importance of using indicators such as literacy, but also poverty and income was stressed. The significance of culture was raised, for instance, in the south of Morocco, women are encouraged to gain weight as a symbol of health and fertility and so programmes and education to reduce levels of obesity will not work if these cultural factors are not addressed. In the Region, national diets are very similar and there are also commonalities in terms of religious behaviour and food preparation. The need to determine facts and to separate facts from fallacies was stressed. It was agreed that nutrition plans and strategies were not receiving enough political support despite the critical importance of nutrition.

Participants raised the issue of food safety outbreaks receiving all the attention of policy-makers, at the neglect of nutrition. The point was made that good nutrition leads to higher productivity but economic growth does not necessarily promote improved nutrition. The World Bank costed stunting in terms of productivity and it was agreed that this approach is effective in motivating policy-makers. It was acknowledged that nutritionists were not doing their jobs effectively in countries when the issue of nutrition is not being addressed in political agendas. The issue was raised of whether nutrition should be addressed separately on health agendas. Participants were reminded that in the Islamic Republic of Iran, Oman, and Pakistan, nutrition was still in the development planning phase, and that Jordan had a separate nutrition strategy. The need for advocacy was stressed, not only from the health sector but from various sectors, such as planning and agriculture. It was suggested that the impact of poor nutrition on productivity needs to be investigated. Reference was made to the fact that nutrition interventions take as long as 4 years to show evidence and that this is an issue in terms of advocacy. It was also felt that more qualitative studies are needed on the issue of culture in nutrition.

4. GROUP WORK

4.1 Putting plans into practice

Participants were asked to develop an operational food and nutrition action plan. For those countries with an existing national nutrition plan/policy, the instructions were to list the strategic goals identified in the existing national nutrition plan/policy, and to review these strategic goals for relevancy and to determine if any had been excluded. If so, they were asked to add them in the list. They were also asked to prioritize two to three key strategic goals taking into consideration: feasibility, resources, partnerships, impact on the vulnerable, acceptability, political will/opportunity and working out who will do that, where and when. They were asked to state where they wanted their national nutrition plan/policy to be in 1-year's time and how they would monitor and review the progress. Those countries without a national nutrition plan/policy were asked to review and consider existing/other relevant plans in order to plan the way forward in developing national nutrition plan/policy, including the identification of key partners, to state where they would want to be in 1 year's time and to state how they would monitor and review progress (see Annex 4 for country plans of action).

5. CONCLUSIONS

In the workshop, countries highlighted the importance of nutritional well-being for individual health, as well as for the societies and communities and nations as a whole. Although country situations in the Region are diverse, it was evident that the nutrition challenges being faced by the countries shared common features, i.e. the existence of the double burden of malnutrition (under-nutrition, micronutrient deficiencies and overweight/obesity/nutrition-related noncommunicable diseases) in the same country, communities and even within the same households.

The workshop examined the range of factors that affect people's diets and the nutritional status, reviewing emerging issues today, what the issues were like 20 years ago and what the situation might be in 20 years time. It then reviewed what food and nutrition plan and policy is and what needs to be included in a comprehensive food and nutrition plan and policy. It was further examined how national nutrition plans and policy should interrelate with other relevant national plans, policies and strategies, as well as regional and global polices and initiatives. In this context, the changing global macro-policy contexts related to food and nutrition were reviewed in order to remind participating countries of their governmental commitments, including the 1990 Child Summit, 1991 Ending Hidden Hunger Conference, 1992 International Conference on Nutrition, 1996 World Food Summit, 1999 UN Global Declaration (MDGs), 2001 WFS + 5, 2002 WHO Global Strategy on Infant and Young Child Feeding, 2002 WHO Global Strategy on Food Safety, 2004 WHO Global Strategy on Diet, Physical Activity and Health.

It was clearly established that developing an appropriate nutrition policy/strategy required extensive collaboration and coordination with other stakeholders, including

ministries of agriculture, health, commerce, trade, legislation, finance and planning; civil societies; research and academic institutions; professional associations; the private sector and the media. Experiences from some Member States indicated that national nutrition strategies and policies were included as part of the overall national health policies/plans of action while others have developed a separate national food and nutrition policy. However, the country situations govern whether the national nutrition policy is integrated into other policies, such as health or development policies.

Considerable progress had been made by several Member States in establishing clear strategies and policies for improving the nutritional status of their populations. However, these achievements would be further strengthened with the application of the information and techniques presented at the workshop. In particular, sessions focused upon key activities and capacities required to translate policies into successful large-scale interventions. These were identified to be:

- Supportive policies and vision: Senior management must provide support and framework for the implementation of nutrition programmes. This may sometimes require nutrition workers to advocate for increased resources and/or changes in policy.

- Focusing upon key activities: Food and nutrition plans are often very broad and ambitious. Experience suggests that success is mostly likely to be achieved when there is a prioritization of programme activities to allow a greater concentration of resources and capacity.

- Intersectoral collaboration: It is recognized that addressing the causes of malnutrition are the responsibility of many different sectors. Through collaborative and cooperative programmes resources are not only saved but they are also more effective.

- Targeting of the intervention: Programme beneficiaries must be properly targeted to ensure that those at highest risk benefit from the programme’s inputs and resources, as well as to maximize the programme’s cost efficiency and effectiveness. Most often this could mean targeting young children (under 3 years of age) and women, or focusing on specific nutrition problems, such as iron deficiency anaemia.

- Management: Programmes that have been thoroughly and clearly planned before implementation and have good supervision and management systems are more likely to succeed. This includes planning for adequate human and other resources.

- Support systems: Programmes quite often fail because of insufficient attention to the activities that support the main activity. For instance, a successful growth promotion programme requires good supervision, working scales, supply of drugs, etc.

- Monitoring and evaluation: This entails developing and further strengthening food and nutrition information systems to provide essential information on programme progress and impact. This information should be regularly reviewed by managers and supervisors and be used to address and rectify programmatic issues.

- Community participation: This is important in every step of planning, implementation and at all levels of decision-making. It is especially important to involve the community in participatory situation assessments.

In other Member States, where preparatory work on formulating national nutrition policy/strategy remained at an early stage or had not been attempted at all, the workshop provided a series of innovative and appropriate steps and approaches that would provide guidance on tasks leading to the formulation of national nutrition policy/strategy. The role of partner international organizations (as present during this workshop) could provide a catalytic effect in generating the necessary political awareness and support, ensuring sustained inputs of the responsible sectors and steering activities in the right direction.

The participants worked in country groups to assess where they wanted their nutrition policy and plans to be in one year's time. The countries with existing national nutrition plans and policies looked at areas of their plans and policies which needed modifying in view of the information that they had gained during the workshop. The countries without plans and policies considered how they could be developed. Country plans of action are included as Annex 4. Countries were at different stages with regard to their national plans, however the workshop provided an opportunity to learn from other countries' experiences.

6. RECOMMENDATIONS

To Member States

1. Countries should review, strengthen and update their existing national nutrition policy, strategy, and plans of action in relation to the information provided in the workshop.

2. Prevalent nutrition issues should be prioritized based on information and references provided at the workshop and appropriate actions identified. Work on the operational national food and nutrition plan, as presented at the workshop, would serve as the initial starting point.

3. In view of the importance of advocacy issues for obtaining political support to nutrition programmes and interventions, efforts should be made to improve the status of advocacy, communication and awareness activities of the current national food and nutrition programmes.

4. Countries should consider forming a regional or subregional collaborative network for experience exchange and technical support on food and nutrition.

To WHO, FAO and other concerned international organizations

5. International organizations should ensure that Member States receive the necessary support in their work on (re)formulating national nutrition policy/strategy.

6. The forthcoming joint meeting of the Regional Directors of WHO, UNICEF, FAO, WFP and UNFPA in early February 2007 should be utilized to further strengthen interagency collaboration in identifying the extent and nature of support to the Member States of the Eastern Mediterranean, Middle East and North Africa in their efforts in developing, strengthening and implementing national intersectoral nutrition policies and strategies.

7. Based on national needs and requests, national training activities should be organized along similar lines as the current workshop to facilitate work at country level, including the sharing of experiences.

8. International organizations should facilitate the development of a regional or subregional collaborative network.

Annex 1

AGENDA

1. Registration
2. Welcome and opening address
3. Objectives and mechanics of the training workshop
4. Regional child health policy initiative
5. National health policies and plans–experiences from the Eastern Mediterranean Region
6. Food, agriculture and nutrition: a regional perspective
7. Food vulnerability and food aid
8. Food safety: issues, concerns and implementation
9. Food consumption trends in the Region
10. Nutrition programmes: UNICEF experience
11. What is food and nutrition policy? Nutrition policy and plan formulation and implementation.
12. Advocating for action
13. Presentations of national nutrition policy/strategies
14. Conclusions and recommendations
15. Closing ceremony

Annex 2

PROGRAMME

Monday, 27 November 2006

08:30–09:00	Registration
09:00–10:30	Inauguration
	Message of Dr Hussein A. Gezairy, Regional Director, WHO/EMRO
	Message from UNICEF
	Message from FAO
	Message from WFP
	Introduction of participants
	Election of chairperson and rapporteur
10:30–10:45	Objectives and mechanics of the training workshop
	Dr Kunal Bagchi, Regional Adviser Nutrition, WHO/EMRO
10:45–11:00	Regional child health policy initiative
	Dr Suzanne Farhoud, Regional Adviser Child and Adolescent Health, WHO/EMRO
11:00–11:15	National health policies and plans–experiences from the Eastern Mediterranean Region
	Dr Sameen Siddiqi, Regional Adviser Health Policy and Planning, WHO/EMRO
11:15–12:00	Discussion
12:00–12:30	Food, agriculture and nutrition: a regional perspective
	Dr Fatimah Hachem, Regional Adviser Nutrition, FAO
12:30–13:00	National vulnerability and food aid
	Dr Anne Callanan, Senior Programme Adviser Nutrition, WFP HQ
13:00–13:30	Food safety: issues, concerns and implementation
	Dr Mohamed Elmi, Regional Adviser Food and Chemical Safety, WHO/EMRO
13:30–13:45	Food consumption trends in the Region
	Dr Fatimah Hachem, Regional Adviser Nutrition, FAO
13:45–14:00	Nutrition programmes: UNICEF experience
	Dr Magdy El Sanady, Health and Nutrition Officer, UNICEF
14:00–15:35	Discussion
15:30–16:00	What is food and nutrition policy? Nutrition policy and plan formulation and implementation
	Dr Chizuru Nishida, Nutrition Scientist, WHO/HQ
16:00–16:15	Instructions on country presentations
	Dr Leila Cheikh, Technical Officer Nutrition, WHO/EMRO

Tuesday, 28 November 2006

08:30–14:30	Country and state presentations
14:30–15:30	Discussion

Wednesday, 29 November 2006

08:30–08:45	Review of the second day
08:45–9:30	Advocacy overview and profiles *Dr Mickey Chopra, Temporary Adviser, WHO/EMRO*
9:30–10:45	Interactive discussion: Developing an advocacy strategy and selling your ideas
10:45–11:30	Putting plans into practice Review of current food and nutrition plans and policies and national needs
11:30–11:45	Instructions on individual assignments
11:45–16:00	Individual assignment: Developing consolidated operational national food and nutrition plans of action

Thursday, 30 November 2006

08:30–13:30	Presentation of national plans of action
13:30–14:30	Conclusions and recommendations
14:30–15:00	Closing ceremony

Annex 3

LIST OF PARTICIPANTS

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Dr Kunal Bagchi, Regional Adviser, Nutrition, WHO/EMRO
Dr Sameen Sidiqqi, Regional Adviser, Health Policy and Planning, WHO/EMRO
Dr Susanne Farhoud, Regional Adviser, Child and Adolescent Health, WHO/EMRO
Dr Mohammed Elmi, Regional Adviser Food Safety, WHO/EMRO
Dr Chizuru Nashida, Scientist, WHO/HQ
Dr Ulla Uusitalo, Technical Officer, Nutrition, WHO/HQ
Dr Leila Cheikh, Technical Officer, Nutrition, WHO/EMRO
Ms Nashwa Nasr, Secretary, WHO/EMRO
Ms Sam Ward, Temporary Adviser, WHO/EMRO

Table 1. Bahrain country plan of action

Goal	Objective	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to conduct monitoring (indicators)	Resource implication
To promote a healthy eating pattern among schoolchildren.	To reduce the phenomena of skipping breakfast among schoolchildren.	Conducting nutrition education campaigns for schoolchildren, teachers, parents. Initiating healthy food campaigns (fruit, dairy products). Conducting specific nutrition educational programmes at family level aimed at parents. Organizing a mass media campaign.	Ministry of Health (Nutrition Department), Ministry of Education.	Nutrition Department, school health programme, Ministry of Health, student services committee, Ministry of Education.	1–2 years.	Conduct two assessments every academic year and a major evaluation at the end of the second year of the programme.	Government and the private sector.

Table 2. Egypt country plan of action

Goals	Objectives	Activities	Key agencies	Lead (accountable agency)	Timeline	How to monitor	Resource implication
To raise schoolchildren's level of achievement and increase rates of school enrolment and retention.	To achieve implementation of nutrition-friendly school initiative in 50% of primary schools within 5 years.		Ministries of Education and Health and Population, the food industry, the international community and UN agencies.	Ministry of Education.	5 years.	The number of schools that have become accredited as nutrition-friendly schools. The increase in school enrolment rates. The number of school dropouts compared to the baseline number.	Government funds. International funds. The private sector.
To reduce rates of maternal and infant morbidity and mortality.	To achieve implementation of the baby-friendly hospital initiative in 50% of government hospitals within 5 years.		Ministry of Health and Population, private practices (gynaecologists, paediatricians), non-profit health services, legislative authorities.	Ministry of Health and Population.	5 years.	The number of hospitals accredited as baby-friendly hospitals.	Government funds. International funds. The private sector.

Table 2. Egypt country plan of action cont.

Goals	Objectives	Activities	Key agencies	Lead accountable agency	Timeline	How to monitor	Resource implication
	To reduce iron deficiency anaemia and other nutrition-related diseases among adolescent girls (12–18 years) by 50% within 5 years. To increase the participation of mothers in antenatal care and compliance with supplementation programmes by 50% within 5 years. To increase medically attended births by trained birth attendants by 50% within 5 years.					The prevalence of iron deficiency anaemia among adolescent girls. The prevalence of stunting among adolescent girls. The prevalence of overweight and levels of obesity among adolescent girls. The increase in the number of visits of pregnant women to health care services. The increase in compliance of pregnant women to iron and folic acid supplements during pregnancy.	

Table 2. Egypt country plan of action cont.

Goals	Objectives	Activities	Key agencies	Lead (accountable agency)	Timeline	How to monitor	Resource implication
						The number of attended births attended by trained birth attendants.	
To improve dietary habits and healthy lifestyles and reduce the incidence of noncommunicable diseases, particularly among adolescents.	–	–	–	–	–	–	–
To reduce foodborne illnesses.	To improve the reporting system of foodborne illnesses. To reduce the incidence of foodborne illnesses by 30% in 5 years. To license street vendors within 5 years.	To define a legal and social framework to create a corporate scientific structure related to risk assessment.	Ministries of Health and Population, Agriculture, Information Technology, Tourism, Electricity and Energy, the international community.	Ministry of Health and Population.	5 years.	List of applied inspections. Relation between the number of developed and planned inspections. Non-conforming products in the local market.	Government funds. International funds. The private sector.

Table 3. Islamic Republic of Iran country plan of action

Goals\products	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
To decrease the prevalence of obesity.	To collect baseline data. To provide nutrition education. To promote physical activity.	Anthropometric. Measurements. Adding two credits of healthy nutrition subjects to all levels of formal education. Conducting morning sessions in schools. Broadcasting messages via television and radio.	The Ministry of Health (nutrition department), National Nutrition and Food Technology Research Institute. The Ministry of Health (Nutrition Department), Ministry of Education, Ministry of Higher Education. Public health nutrition messages via radio targeted at women.	National Nutrition and Food Technology Research Institute. Ministry of Education. The Ministry of Health (Nutrition Department), Islamic Republic of Iran Broadcasting. Ministry of Education, Islamic Republic of Iran Broadcasting.	3 months. 2 years. The Ministry of Health (Nutrition Department), 1 year. 3 months.	Annually. Annually. 3–6 months. Annually. Annually.	Ministries of Health, The Management and Planning Organization, Health, Education, Islamic Republic of Iran Broadcasting.

Table 3. Islamic Republic of Iran cont.

Goals\products	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
			Ministry of Education, The Ministry of Health (Nutrition Department), sports organizations, Ministry of Education, Ministry of Health, Islamic Republic of Iran Broadcasting.				

* Cardiovascular diseases and micronutrient malnutrition including iron, vitamin A, iodine, and to a lesser extent vitamin D, calcium and zinc and PEM were identified as some of the priority issues. Nutritional programmes at national level include: supportive programmes for children under 5 years of age; improved nutrition in hospitals; micronutrient malnutrition programmes; school feeding programmes; nutrition and lifestyles programmes; PEM programmes.

After 1 year it is expected that this component of the national nutrition plan/policy will mobilize people to modify their lifestyle. In addition a satisfactory coordinated campaign will be created among all stakeholders.

Table 4. Plan to reduce iron deficiency anaemia in Iraq

Goals\products	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
To decrease iron deficiency anaemia to 20% within 1 year. To decrease iron deficiency anaemia to 10% within 2 years. To eliminate iron deficiency anaemia within 5 years.	To provide 100% coverage of target population (pregnant and lactating mothers). To fortify 100% wheat fortification distributed through the public distribution system. To raise the level of awareness of the importance of nutrition education.	Provision of a sufficient amount of ferrous folic tablets.	Ministry of Health, NRI, Department Of Drug Importation, UNICEF.	Ministry of Health, Primary health care division.	Objective.1: 2004–2010	Available data on IDA records from PHCC (patent no: Ferrous folate received by pregnant and lactating mothers. National micronutrient survey 2007. National micronutrient survey 2010.	A- Ministry of Health, UNICEF. B- Ministry of Health, Ministry of Trade, UNICEF, WHO.; C-UNICEF, Ministry of Health, Ministry of Commerce, Ministry of Education, Ministry of Higher Education.
		Distribution of a sufficient amount of ferrous folic tablets to pregnant and lactating women.	Ministry of Health, Primary Health Care Division, NRI, UNICEF.	Ministry of Health, NRI.			
		Feeders and premix distributed to all millers in Iraq.	Ministry of Health, NRI, Ministry of Trade, G.Co.Cer.Ind.	Ministry of Trade.	Objective 2: 2006–2008.	Available information on iron deficiency anaemia. in Iraq. Percentage of	

		Legislation and regulations to fortify wheat with iron.	Ministry of Health, NRI, Ministry of Trade, Ministry of Planning, UNICEF, WHO	Ministry of Health, NRI.		coverage of feeders and premix distribution . Quality control reports monthly from COMQC/MOP.. National micronutrient survey 2007/2010.	
		To involve the mass media (television and radio).	Ministry of Health, Ministry of Commerce, UNICEF, WHO.	Ministry of Commerce.	Objective 3: 2004–2010.	Annual assessment for community awareness regarding iron deficiency anaemia.	
		Printing and distribution of booklets, posters and folders) regarding iron deficiency anaemia information.	Ministry of Health, Commerce, UNICEF, WHO.	UNICEF.			
		Involving teaching courses subject to explain iron deficiency anaemia.	Ministries of Health, Education, Higher Education.	Ministry of Education, Ministry of Higher Education.			

		Conduct various conferences to explain iron deficiency anaemia at all levels.	Ministry of Health, nongovernmental organizations, community-based organizations, WHO, UNICEF.	Ministry of Health.			

Iraq intends to conduct a detailed meeting to discuss the national nutritional plan. Partners will include the Ministries of Health, Population, Trade, Agriculture, Education and Health, and UNICEF and WHO. A steering committee will be established following this meeting involving all partners who will conduct monthly meetings. Baseline data will be collected regarding IDA and wheat flour fortification. All requirements, such as ferrous folate tablets, premix and laboratory kits, will be reviewed and requests will be submitted. A monitoring and evaluation and a nutrition education programme on IDA will be implemented. A national micronutrient survey will also be conducted.

Table 5. Jordan country plan of action

Goal	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
To promote infant and childhood nutrition and prevent micronutrient deficiencies.	To reduce the prevalence of vitamin A deficiency among children.	To diversify dietary consumption of vitamin A rich foods. To disseminate supplementation programmes of vitamin A to target groups through the distribution of vitamin A supplements to infants at the time of measles and MMR vaccination.	Ministries of Health and Education, WHO, UNICEF, the mass media.	Ministry of Health (Nutrition Department).	0–3 years.	The percentage of infants who are breastfed for 2 years. The percentage of infants less than 6 months who are exclusively breastfed. The percentage of children under 5 years of age with biochemical evidence of vitamin A deficiency.	US$ 80 000.

Table 5. Jordan country plan of action cont.

Goal	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
		To provide one shot of vitamin A to every case of measles, and conducting a mass campaign to cover primary school children in under-privileged areas with two doses of vitamin A. To give postpartum women one dose of vitamin A within 6 weeks of delivery. To develop a communication strategy for behaviour change communication To conduct continuous monitoring and evaluation.				The percentage of children under 5 years of age and women of childbearing age with anaemia. Biochemical evidence of iodine deficiency among primary school children. Proportion of households using iodized salt. Prevalence of wasting among children under 5 years of age. Prevalence of stunting among children under 5 years of age. Frequency of eating meat, fruits and vegetable among families.	

Table 5. Jordan country plan of action cont.

Goal	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
	To reduce the prevalence of anaemia among the population.	To diversify consumption of iron-rich foods. To establish supplementation programmes to high-risk groups (iron, folic acid and vitamin B12 to pregnant women) and regular supplements of iron to all children under five years of age. To strengthen surveillance and control programmes for diseases like schistosomiasis, malaria, and parasitic infections.	Ministries of Health and Education, WHO, UNICEF, GAIN, the mass media, the Millers Union.	Ministry of Health, Nutrition Department.	0–5 years.		US$ 1.5 million.

Table 5. Jordan country plan of action cont.

Goal	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
		To establish communication and mass media strategy for behavioural change. To expand current flour fortification programme. To strengthen monitoring and evaluation through capacity building and research.					
	To eliminate iron deficiency disorder.	To achieve universal salt iodization. To strengthen monitoring of salt iodization programme. To establish a communication and mass media strategy for behavioural change.	Ministry of Health, WHO, UNICEF, the mass media, JISM, Jordan Food and Drug Administration.	Ministry of Health, (Nutrition Department).	0–2 years		US$ 25 000

Table 5. Jordan country plan of action cont.

Goal	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
	To reduce chronic malnutrition among children under five years of age and young schoolchildren in rural and underprivileged areas.	To promote exclusive breastfeeding and complementary feeding practices. To strengthen the assessment of growth and development programmes for children under 5 years of age and young schoolchildren. To strengthen maternal and child health services and promote implementation of the IMCI programme.	Ministries of Health and Education, WHO, UNICEF.	Ministry of Health (Nutrition Department).	0–3 years.		US$ 50 000.

Table 5. Jordan country plan of action cont.

Goal	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
To prevent diet-related noncommunic-able diseases.	To establish a surveillance system and monitoring nutritional patterns and noncommunic-able disease risk factors.						
	To initiate community intervention programmes for risk factor reduction.						
	To strengthen early detection and screening for common noncommunic-able disease risk factors.						

Table 5. Jordan country plan of action cont.

Goal	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
	To promote healthy eating patterns and ensure the availability and affordability of healthy food.						
	To address commercial interests which contribute to unhealthy dietary trends.						
	To establish an effective infrastructure for noncommunicable disease prevention by expanding the noncommunicable disease division in the Ministry of Health.						

Table 6. Morocco and the Libyan Arab Jamahiriya plan to reduce iron deficiency anaemia

Goals	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
To reduce iron deficiency anaemia.	To reduce the prevalence of iron deficiency anaemia by a third of the prevalence in 1995 (in Morocco). To raise the level of haemoglobin.	Supplementation (iron, folate). Fortification (iron and folic acid). Food diversification (green leafy vegetables, dry fruits, meats, liver). School education. Communication. Reduce infection: parasitic control. Reduce levels of lead poisoning.	Ministries of Health, Education, Agriculture, Trade, Communication, Environment, drug manufacturers, the food industry and international organizations.	Ministries of Health, Agriculture, Education.	2015 in line with the targets of the MGDs for Morocco and Libyan Arab Jamahiriya to reduce by a third the prevalence of iron deficiency anaemia in Morocco by 1995.	Monitoring and evaluation system: samples of women at health centres and hospitals and schoolchildren from schools to measure the impact of the strategy on anaemia and iron status.	Government and international agencies.

Table 7. Country plans to reduce obesity in Morocco and the Libyan Arab Jamahiriya

Goals	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
To combat obesity and chronic related diseases.	To reduce the prevalence of obesity. To limit the spread of obesity.	Food-based strategy: diversification (increase vegetables, fruits, and reduce sugar and fat intakes, focus on healthy food). Increase education and awareness of importance of body mass index. Information and communication (mass media). Promotion and motivation of physical activity.	Ministries of Health, Education, Agriculture, Trade, Communications and international organizations.	Ministries of Health, Education, and Communication.	1 year.	Anthropometric measurements and food habits and physical activity level). Using the same monitoring and evaluation system: samples of women at health centres, schools.	Governments and international agencies.

Table 8. Oman's plan to support food safety systems in coordination with other sectors

Goals\products	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor (indicators for process and also for impacts)	Resource implication
To review the national food law and facilitate the issue by concerned authorities.	-	Issue of Omani food law by concerned authorities.	Ministries of Health, Agriculture and Fisheries, Trade and Commerce, MORMEWR, Chamber of Commerce ROP, University.	MORMEWR.	3 years.	Use available data.	Government
To conduct a total diet study.		To create a database of chemical food contaminants.	Ministry of Health, Ministry of Agriculture and Fisheries, MORMEWR, Ministry of Trade and Commerce.	Ministry of Health.	5 years.	Use available data.	Government.
To establish a food control authority/system.		To implement the hazard analysis critical control points system in the hospitals.	Ministry of Health.	Ministry of Health.	1 year.	Use available data.	Government.
		To develop a system to control pesticide residues. To implement the avli import certification.	Ministry of Agriculture and Fisheries, MORMEWR.	Ministry of Agriculture and Fisheries MORMEWR.	4 years.	Use available data.	Government.

Table 9. Pakistan country plan of action

Goals\products	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor
To reduce/control micronutrient deficiencies.	To combat anaemia among the population.	Information, Education, Communication (IEC) activities. Supplementation. De-worming. Dietary diversification. Fortification. Biodiversification of food crops.	Ministries of Health, Agriculture, the private sector/public National Agricultural Research Centre (NARC).	Ministry of Health.	Ongoing. Ongoing. Ongoing. 2–3years. 2–3years. 5+ years.	Population coverage annually. Physical coverage/record. Physical coverage/record. Extension workers/media. The number of production units involved. The level of research.
	To eliminate iron deficiency disorder.	Supply of iodized salt. Marketing. Demand creation. Quality control/assurance.	The private sector, Ministry of Health, private sector/public.	Ministry of Health.	Ongoing.	Production/ consumption level. Number of samples tested.
	To control vitamin A deficiency.	IEC activities. Supplementation. Dietary diversification. Fortification.	Ministry of Health, private sector/public.	Ministry of Industry.	Ongoing.	Production/ consumption level. Number of samples tested.
To improve child health	To promote exclusive breastfeeding.	IEC activities. Extension workers.	Ministry of Health.	Ministry of Health, UNICEF.	Ongoing.	Information updated through surveys.

Table 9. Pakistan country plan of action cont.

Goals\products	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor
	To promote baby-friendly initiatives. To provide nutrition education.					
Food security	Food insecurity. Insufficient /imbalance dietary intake.	Social safety nets. Food security measures. National food-based dietary guidelines.	Ministries of Health and Agriculture.	Ministries of Health and Agriculture.	Ongoing.	Results from surveys/beneficiaries record.

Table 10. Sudan country plan of action

Goals\products	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
To increase the number of severely malnourished children who have access to appropriate therapeutics services in line with the national protocol.	To establish therapeutics feeding units in referral hospitals.	Provision of anthropometric equipment for growth monitoring and also therapeutic nutrition supplies for severely malnourished children. Printing of recording and reporting formats for growth monitoring and therapeutic feeding centres and supplementary feeding centres.	Federal Ministry of Health, UN agencies and nongovernmental organizations.	Ministry of Health (Nutrition Directorate).	1 year.	Percentage of operational therapeutic feeding centres per state. Percentage of cured rates in therapeutic feeding centres. Percentage of defaulter rate in therapeutic feeding centres. Percentage of mortality rate in therapeutic feeding centres.	Government and UN agencies.
	To improve management skills of health workers to implement the national protocol for the management of severe acute malnutrition.	Translation of the national severe and acute malnutrition guidelines.	Federal Ministry of Health.	Federal Ministry of Health/Nutrition Directorate.		The number of Ministry of Health staff possessing a training certificate in the management of severe acute malnutrition.	Government and UN agencies.

Table 10. Sudan country plan of action cont.

Goals\products	Objectives	Activities	Key agencies who should be involved	Lead (accountable) agency	Timeline	How to monitor	Resource implication
		Printing and distribution of the national guideline and manuals of severe and acute malnutrition. Publish translation and printing of severe and acute malnutrition guidelines/ training package. Conduct training courses on management of severe malnutrition for doctors, nurses and nutritionists. Provision of supplies and equipment.				The number of therapeutic feeding centres fully staffed with trained staff in all states.	

The key outcomes of national nutrition programmes have included: enhanced national policy development in the areas of infant and young child feeding, micronutrient deficiency control and emergency preparedness and response; enhanced skills of Ministry of Health staff on the management of severe acute malnutrition in paediatric hospitals in all states; improved nutrition information systems by maintaining the surveillance system in Darfur and conducting annual surveys in other states; improved maternal and child nutrition through integrated child survival interventions, including growth monitoring and the promotion of breastfeeding and complementary feeding practices in all states; increased vitamin A supplementation coverage to 95% of children under the age of 5 in all states; increased coverage of iron and folic acid to 30% of pregnant women; increased percentage of households in high-risk areas using iodized salt to 30%; and increased percentage of households in high-risk areas of Darfur receiving iodized oil capsules to over 95%.