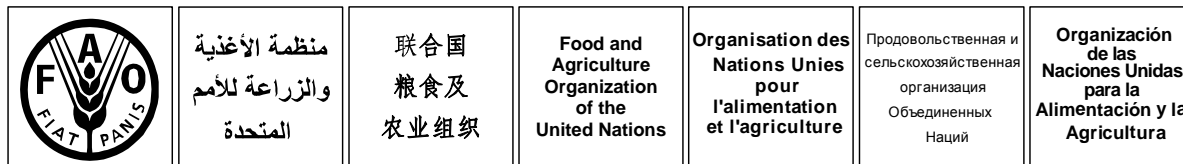


November 2013



# FAO Regional Conference for Asia and the Pacific

<b>Thirty-second session</b>
<b>Ulaanbaatar, Mongolia, 10–14 March 2014</b>
<b>Round table on the double burden of malnutrition</b>

## Table of Contents

	Paragraphs
I. Background.....	1 – 8
A. Global and regional scenario.....	1 – 3
B. The importance of good nutrition.....	4 – 6
C. Causes of malnutrition.....	7 – 8
II. Addressing the double burden of malnutrition.....	9 – 22
A. Policy and institutions.....	10 – 13
B. Food systems.....	14 – 15
C. Data and statistics.....	16 – 17
D. Education and awareness.....	18 – 20
E. Partnerships and coordination.....	21 – 22
III. Double burden of malnutrition in the Pacific subregion.....	23 – 24
IV. Proposed round table discussion topics.....	25 – 26

### I. Background

#### A. Global and regional scenario

1. The theme of this round table – the double burden of malnutrition – is critically important. According to the latest estimates from the Food and Agriculture Organization of the United Nations (FAO), almost 842 million people worldwide (representing 12 percent of the global population or one out of every eight people) are undernourished in terms of dietary energy supply. The situation persists

*This document can be accessed using the Quick Response Code on this page;  
a FAO initiative to minimize its environmental impact and promote greener communications.  
Other documents can be consulted at [www.fao.org](http://www.fao.org)*



mj302e

despite the fact that globally there is enough food for all. Further, an estimated 26 percent (about 165 million) of the world's children are stunted, and almost 30 percent of the world's population suffers from one or more micronutrient deficiencies as a result of diets that are deficient in staple and micronutrient-rich foods (e.g. vegetables, legumes, fruit and animal-source foods) that are essential for healthy growth and development. This issue is particularly critical in the Asia and the Pacific region, which accounts for nearly 63 percent of the world's chronically hungry people. In South Asia, around 39 percent of children under the age of five are stunted, and nearly three-quarters of people with micronutrient deficiencies live in Asia.

2. At the same time, there are emerging concerns about unhealthy consumption patterns stemming from poor awareness about proper nutrition. Many people in the Asia-Pacific consume excessive amounts of sugar and fats, as well as foods with few or no valuable nutrients, which leads to obesity and poor health. Currently there are about 1.4 billion overweight adults worldwide, of which 500 million are obese, which increases their likelihood of incurring various non-communicable diseases (NCDs) and health problems including cardiovascular disease, diabetes, various cancers and osteoarthritis.

3. These two types of malnutrition – undernutrition (which includes micronutrient deficiencies) and overnutrition (overweight and obesity) – may coexist within the same country, household or individual. Together they are referred to as the double<sup>1</sup> burden of malnutrition, a burden that affects most countries. There is great urgency to address this malnutrition challenge.

## **B. The importance of good nutrition**

4. Good nutrition is the foundation for human health and well-being, physical and cognitive development and economic productivity. Overweight and obesity increase the risk of NCDs which are associated with increased absenteeism, low labour productivity and increased medical costs. Deficiencies in micronutrients can slow intellectual and physical growth among children, reduce adult labour productivity and lead to disease, premature death and increased maternal mortality (UNICEF and The Micronutrient Initiative, 2004).

5. Child and maternal malnutrition impose by far the largest nutrition-related health burden globally, with more than 166 million DALYs (disability-adjusted life years) lost per year in 2010 compared with 94 million DALYs lost due to adult overweight and obesity. In Asia, there are five times more population-adjusted DALYs lost to underweight than to obesity and overweight. Even in Oceania, where the overweight problem is the worst, population-adjusted DALYs are greater for underweight children than for those who are obese and overweight.<sup>2</sup>

6. Malnutrition in all forms imposes very high social and economic costs on countries at all income levels. The cost to the global economy from lower productivity and direct health care costs if malnutrition persists at its current level for another year could amount to as much as US\$3.5 trillion. Investing just US\$1 in nutrition can result in a US\$30 return in increased health, schooling and economic productivity. Nutrition interventions could result in 46 percent higher wages with an estimated increase in GDP of at least 2-3 percent.<sup>3</sup> The Copenhagen Consensus, which includes the world's most distinguished economists, many of whom are Nobel laureates, has consistently ranked addressing malnutrition as the top intervention to improve the world.

## **C. Causes of malnutrition**

7. Malnutrition – undernutrition, micronutrient deficiencies, overweight and obesity – is caused by a complex interplay of economic, social, environmental and behavioural factors which prevent people from consuming and fully benefiting from healthy diets. However, the immediate causes of undernutrition are inadequate dietary intake in terms of quantity or quality with insufficient

---

<sup>1</sup> Also referred to as the triple burden of malnutrition: undernutrition, micronutrient deficiency and overnutrition/overconsumption.

<sup>2</sup> Global Health Risks – World Health Organization

<sup>3</sup> Scaling Up Nutrition – A Framework for Action

micronutrients such as vitamin A, iron, iodine and folate and infectious disease. Parasitic infections are also common in the region and are a leading cause of anaemia. Inadequate dietary intake weakens the immune system and increases susceptibility to infections which, in turn, reduce appetite, increase nutrient loss and nutrient requirements and further weaken the immune system.

8. The main cause of overweight and obesity is the excessive intake of food, especially foods high in fat and sugars and energy-dense, highly processed foods. This excessive energy intake combined with low levels of physical activity contributes to overweight, obesity and a variety of chronic diseases including diabetes and heart disease.

## **II. Addressing the double burden of malnutrition**

9. Addressing the double burden of malnutrition requires integrated and complementary actions and interventions. This section deals with some of the major issues.

### **A. Policy and institutions**

10. Implementing nutritional improvement programmes requires strong policy commitment and support at the highest levels. A key step towards creating a common vision is to bring the various sectors, stakeholders and institutions together and mainstream nutrition objectives and concerns into a country's broader health, agriculture, environment and development agendas. Sustained support from all these sectors for appropriate policies and programmes to address the double burden of malnutrition is fundamental for achieving nutrition goals and targets.

11. Advocacy is needed to bring and keep nutrition on the national agenda. In this respect, civil society, the media and academia all have key roles to play in giving visibility to nutrition issues.

12. Adequate technical, institutional, financial and human capacity is important in order to assess the situation, prioritize needs, design intervention strategies and provide operational and managerial support. There are insufficient numbers of qualified personnel at national, district, municipal and local levels. Community nutrition workers are few or non-existent. Agricultural extension workers and health staff receive only basic, if any, training in nutrition, and they are weak in communicating nutrition information to specific population groups.

13. Nutrition curricula are frequently outdated. Aligning academic and field materials with current scientific knowledge (e.g. plant selection and breeding to improve micronutrient levels) is integral to the application of nutrition policy objectives for maximum impact at community levels.

### **B. Food systems**

14. FAO has recognized and promoted a food-based approach to address malnutrition and improve nutrition. This approach focuses on improving nutrition through increasing the availability of, access to and consumption of a nutritionally adequate diet from a variety of foods, as opposed to medical-based interventions (e.g. vitamin and mineral supplements) which are short-term solutions to address specific dietary deficiencies. The food-based approach recognizes that every aspect of the food system impacts the availability and accessibility of diverse nutritious foods. Food-based nutritional interventions can be addressed in agricultural production (e.g. by selecting the variety of plant or breed of animal), in the food supply chain (e.g. from the farm gate to the retail stage, including post-harvest, processing, transportation, storage, distribution and retailing) and at the consumer level.

15. By identifying the critical points in the chain between food production and consumption, the nutritional value of food can be protected and promoted. It is important to understand and suitably design the different elements of the food system including research activities towards nutrition-specific and nutrition-sensitive food system interventions. Throughout the nutritional value chain, gender issues related to women's role in agriculture and food systems and environmental sustainability need to be explicitly taken into account.

### **C. Data and statistics**

16. Effective policy-making, accountability and advocacy depend on a correct assessment of the nutrition situation. Many countries lack basic data and appropriate indicators with which to evaluate and monitor the nutrition landscape. For example, countries generally have data on total energy consumption (which determines hunger or undernourishment) but often not on micronutrient consumption.

17. Limited research has been conducted on the nutrient content of foods in domestic food supplies and on the food intake of individuals and households, both of which are fundamental in determining the linkages between the food system and nutrition. Such data also are important to analyse the relationship between agriculture and nutritional status. Accurate and timely nutrition data also contribute to the effectiveness of interventions and advocacy initiatives. Collecting outcome data at regular intervals is important for building consensus and coordination, strengthening evidence-based policy-making, allocating funds and developing well-targeted programmes.

### **D. Education and awareness**

18. General education and nutrition-specific education are effective means of improving nutrition. Maternal education aimed at improving a mother's care for herself as well as her care and feeding of the family is particularly important. The critical window for adequate child growth and cognitive development is the first 1 000 days between conception and 24 months of age. If children are poorly nourished during this period, they do not grow or develop well physically or mentally. Early nutrition insults can predispose a person to NCDs later in life. In order to ensure good maternal and child nutrition, nutrition education must be a priority for teenage girls, women, mothers and grandmothers.

19. Education that occurs in conjunction with other interventions to improve access to diverse, nutritious foods can be particularly effective. Local diets need to be optimized and linked with food-security interventions (such as home or school gardens) to ensure access to foods that are critical for maternal nutrition and child health, especially micronutrient-rich vegetables, fruits, legumes and animal-source foods (e.g. poultry, meat, milk, fish, eggs). Also, intensive complementary feeding education on how to prepare nutritionally adequate and safe foods for young children is required in most low- and middle-income countries. Extension services can effectively promote nutrition education by linking to information about school gardens and the school curriculum.

20. Consumers' food choices influence their own nutritional status. Increasing urbanization has led to the emergence of a growing retail sector offering highly processed, energy-dense, micronutrient-poor foods which, along with an unhealthy lifestyle, may contribute to overweight or obesity. Emphasis on consumer education with the ultimate goal of changing consumers' behaviour in favour of healthier choices in terms of more nutritious diets may be effective. Food labelling in relation to nutritional content can also influence the behaviour of the consumer as well as processors and retailers. Countries may focus on consumer awareness and education for better levels of health and nutrition in their national food policies and strategies. Food-based dietary guidelines also can promote the consumption of healthy diets.

### **E. Partnerships and coordination**

21. Malnutrition has multiple causes, such as poor diets, unclean water, poor sanitation, illness and poor child care. Addressing malnutrition therefore requires a coordinated multisectoral holistic approach with integrated and complementary interventions in various sectors including agriculture, health, education, social affairs, economic development and trade, among others. As interventions need to cut across ministries, government institutions and agencies, and other stakeholders, it is important to work out a coordinated approach to address the problems.

22. Globally, there has been renewed interest in nutrition. Different agencies at global and national levels are increasingly working together on nutrition issues. New multisectoral collaboration platforms, such as Scaling Up Nutrition (SUN) and Renewed Efforts Against Child Hunger (REACH), have emerged, and the importance of existing joint efforts (e.g. the UN Standing Committee on

Nutrition, Emergency Nutrition Cluster) has been reinforced. These mechanisms can help foster collaboration among UN and other international agencies and also facilitate multisectoral and multistakeholder dialogue and collaboration.

### III. Double burden of malnutrition in the Pacific subregion

23. The double burden of malnutrition is also a concern in many Pacific Islands countries. The prevalence of adult overweight in some Pacific Island countries is among the highest in the world. Over 80 percent of adults are overweight in the Cook Islands, Kiribati, the Republic of the Marshall Islands, Nauru, Tokelau, Tonga and Samoa. Adult obesity is also very high, at or above 60 percent, in Tonga and the Cook Islands, while Kiribati, the Republic of the Marshall Islands and Samoa have rates above 45 percent. An estimated 75 percent of all adult deaths in the Pacific are due to NCDs, with the majority of the deaths occurring in adults in the economically-active age bracket. There are huge economic losses due to NCDs, with resultant negative impacts on national health budgets and possibly on the region's ability to achieve the MDGs. At the same time, chronic undernutrition is still a serious public health problem in many Pacific Islands countries with rates above 40 percent in Papua New Guinea and 39 percent in the Solomon Islands, according to WHO classifications.<sup>4</sup> The prevalence of anaemia in children under the age of five years exceeds 40 percent in Papua New Guinea, Fiji, Nauru, the Solomon Islands and Tuvalu.<sup>5</sup> The prevalence of anaemia in pregnant women is above 40 percent in the Solomon Islands, Fiji, Nauru and Samoa, which indicates a severe public health problem.

24. Limited nutrition capacity compromises the ability of many governments to effectively plan, prioritise and implement nutrition initiatives. Many countries still do not have nutrition plans and nutrition is also not explicitly mainstreamed into their food security and agriculture policies, although efforts are ongoing to ensure this is the case as part of current policy development support. Limited knowledge and awareness about good nutrition and healthy diets, combined with insufficient nutrition education, is also a problem to be tackled. Given the double burden faced by many Pacific Island countries, there is an urgent need to develop nutrition plans and mainstream nutrition into agriculture and food security policies and programmes to effectively mobilize resources and direct activities to progress towards global targets.

### IV. Proposed round table discussion topics

25. The Round Table aims to provide a forum to share country experiences, learn from each other's attempts to address the double burden of malnutrition and identify possible policy options/approaches at national and regional levels to reduce both undernutrition and overnutrition. Discussions will be facilitated by a moderator who will promote interaction on relevant issues, challenges and potential solutions in order to generate concrete recommendations. To ensure maximum interaction among participants, each country is encouraged to contribute one or two concerns or comments reflecting recent experiences with the double burden of malnutrition and to articulate key issues that need to be addressed collectively.

26. Relevant discussion topics may include the following:

- There is an increased magnitude of overweight and obesity, but the importance of undernutrition in the region is still very significant. In view of this, what should be the region's focus: undernutrition or overnutrition?
- What measures need to be taken to strengthen the quality of data and statistics for evidence-based policy-making and better targeted programmes to reduce the double burden of malnutrition?

---

<sup>4</sup> WHO, World health statistics 2011, Geneva: World Health Organization; 2012

<sup>5</sup> UNICEF, State of the world's children 2012

- What key policy and institutional reforms are needed to strengthen the nutritional status of populations in countries of the region?
- What specific measures can be introduced at different stages of the food system to address malnutrition?
- What is the role of agrifood industries and what can countries and FAO do in that regard?
- What measures can be taken to strengthen partnerships and coordination for maximizing efforts to reduce the double burden of malnutrition at national and regional levels?
- What priority areas of technical assistance can FAO provide to address the double burden of malnutrition?
- What specific measures can be taken to strengthen education and awareness among different stakeholders, including women and young people?
- A major issue in the Pacific is overweight and obesity and resulting NCDs. What specific measures can be taken to address this issue?