Food and Agriculture Organization
of the United Nations

Sustainable Food Systems for Healthy Diets and Improved Nutrition in the Near East and North Africa

REPORT

A joint FAO/WHO Regional Symposium for the Near East and North Africa

in collaboration with UNICEF and WFP

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Muscat, Oman

11-12 December 2017

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Rome, 2018

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Contents

Abbreviations

ADG	Assistant Director General
ACSAD	Arab Centre for the Studies of Arid Zones and Dry Lands
AOAD	Arab Organization for Agricultural Development
APACU	Arab Peasants & Agricultural Cooperative Union
APN	Arab Group for the Protection of Nature
AUB	American University of Beirut
CFS	Committee on World Food Security
CSA	Commissariat à la Sécurité Alimentaire
CSO	Civil society organisation
ESA	FAO Agricultural Development Economics Division
ESCWA	Economic and Social Commission for Western Asia
ESN	FAO Nutrition and Food Systems Division
FAO	Food and Agriculture Organization of the United Nations
FDA	Food and Drug Administration
FfA	Framework for Action
FIES	Food Insecurity Experience Scale
GCC	Gulf Cooperation Council
GCP	Government Cooperation Programme
HLPE	High Level Panel of Experts on Food Security and Nutrition
HQ	Headquarters
IBFAN	International Baby Food Action Network
ICN2	Second International Conference on Nutrition
IFPRI	International Food Policy Research Institute
KSA	Kingdom of Saudi Arabia
LAS	League of Arab States
LDC	Least developed countries
MEFOSA	MENA Food Safety Associates
MENA	Middle East and North Africa
MoA	Ministry of Agriculture
MoH	Ministry of Health
NCD	Non-communicable disease
NENA	Near East and North Africa
NTD	Neural tube defects
OACP	Oman Association for Consumer Protection
PAFN	Public Authority for Food and Nutrition
PoU	Prevalence of undernourishment
RAAPA	Algerian Network of Small Scale Fishing Organization
RNE	Regional Office for the Near East and North Africa
SDG	Sustainable Development Goal
SSN	Social Safety Net
SUN	Scaling up Nutrition
TTT	Technical Task Team
UAE	United Arab Emirates
UN	United Nations
UNICEF	United Nations Children's Fund
WFP	World Food Programme
WHO	World Health Organization

Abstract

The Regional Symposium on Sustainable Food Systems for Healthy Diets and Improved Nutrition in the Near East and North Africa, held in December 2017 in Muscat, Oman, was organized by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO), in collaboration with the United Nations Children's Fund (UNICEF) and the World Food Programme (WFP).

The regional symposium provided follow-up to the Second International Conference on Nutrition (ICN2), its Rome Declaration and its Framework for Action (FfA). The symposium also contributes to the implementation of the 2030 Agenda for Sustainable Development and the United Nations (UN) Decade of Action on Nutrition (2016–2025).

The symposium highlighted the major regional challenges for food security and nutrition and the roles of all relevant state and non-state actors in improving diets and nutrition in the region. This document summarises the outcomes of the symposium's deliberations and recommendations.

Introduction

Background: Nutrition Transition

Malnutrition impacts human health and well-being and has negative social and economic consequences for communities and countries. Different forms of malnutrition, such as undernutrition (stunting and wasting), over-nutrition (overweight and obesity) and micronutrient deficiency, can co-exist within the same population across the life course.

Nutrition starts with what we eat, which is not entirely based on our personal choices (knowledge, attitudes, beliefs and preferences). Nutrition is also largely determined by people's food environment, meaning the foods that are available, affordable, convenient and desirable. This food environment is, in turn, affected by the food system, which includes all the conditions and activities that go into food being produced, distributed, prepared and eaten. It also includes the outcomes of these efforts – the impact on people's health as well as bigger issues like a country's socio-economic growth, equity and environmental sustainability.

Food systems today are increasingly challenged to provide adequate, safe, diversified and nutrient-rich foods for a healthy diet. Sustainable food systems are critical to improving food security and nutrition as they play an important role in increasing resource efficiency, more sustainable use of resources, and building resilience to food insecurity.

Around the world, food systems are undergoing rapid transformations. These changes are driven by a host of factors, including rising incomes, changing consumer demand, agricultural industrialisation, technological innovations, population growth, urbanisation and climate change. The transformation of food systems is part of the "nutrition transition" from a diet based on grains, legumes, vegetables and fruits to one with higher consumption of meat, processed foods, sugar, salt and fat. This transition has had benefits, such as greater food security, more diverse diets and the availability of more convenient foods for a large part of the world. However, when combined with the more sedentary lifestyles associated with urbanisation, it has led to a rising incidence of obesity, even in countries burdened by undernutrition.

The Near East and North Africa (NENA) region that comprises 19 countries[1] is characterised by a 'double burden" of malnutrition. That is, different forms of malnutrition coexist within the populations of these countries. The states in the region are at very different levels of development, ranging from high levels of development in Gulf Cooperation Council (GCC)[2] countries, to moderate levels in middle income countries of Maghreb and Mashreq, and to very low levels in the three least developed countries (LDCs) of the region (Mauritania, the Sudan and Yemen). Accordingly, nutritional problems and the ability of the various countries to cope with the burdens of malnutrition also differ across the region. Undernutrition persists in the LDCs, while obesity and diet-related diseases are accelerating in the other countries of the region. Stunting that impacts physical growth and neural development of children remains a problem in some of the NENA countries. Levels of anaemia and vitamin A deficiency in the region as a whole are moderate, although several poorer countries of the region (Yemen, Mauritania, the Sudan and Egypt), as well as high-income countries like Oman and Saudi Arabia, have severe levels of anaemia in children under five years old. Undernourishment represents a heavy burden in the region, particularly in the countries that have been affected by conflicts in recent years. Prevalence of undernourishment (PoU), which measures absolute food deprivation, is six times greater in the conflict countries[3] of the region such as Yemen,

[1] The NENA Region comprises Algeria, Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, the Sudan, the Syrian Arab Republic, Tunisia, the United Arab Emirates and Yemen

[2] The GCC includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates

[3] Measured through the prevalence of level of undernourishment

Iraq, the Sudan, Syria and Libya than that in non-conflict countries and the level of severe food insecurity[4] in the conflict countries is twice that in other countries.[5]

Commitment to addressing malnutrition

In November 2014, 162 member states met at the Second International Conference on Nutrition (ICN2), co-organised by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO), to propose an institutional framework for addressing the major nutrition challenges of the foreseeable future. ICN2 highlighted a series of fundamental policies with high potential to address all types of malnutrition, such as raising the nutrition sensitivity of food systems and their sustainability, improving policy coherence and synergy across relevant sectors with impact on nutrition, and strengthening nutrition governance and accountability. The conference adopted the "Rome Declaration on Nutrition" and its "Framework for Action", which sets out a common vision for global action to end all forms of malnutrition. The ICN2 Framework for Action (FfA) provides a set of voluntary policy options and strategies for governments, to guide the implementation of the commitments in the Rome Declaration on Nutrition.

In 2015, a year after ICN2, heads of state and government and high representatives adopted the 2030 Agenda for Sustainable Development, a plan of action to shift the world to a sustainable and resilient development path. The Sustainable Development Goals (SDGs) reiterated and reinforced the commitments made at ICN2, namely committing member countries to end all forms of malnutrition and ensure sustainable food production systems by 2030.

To assist member countries in defining policies to meet their commitments under ICN2 and Agenda 2030, FAO and WHO organised a global symposium, "Sustainable Food Systems for Healthy Diets and Improved Nutrition", which was held in Rome on 1-2 December 2016. The Symposium focused on the global situation of food system transformation, with examples from countries in all regions showing that the global community has the knowledge, experience and evidence to bring about transformational change in our existing food systems. The global symposium is part of the United Nations Decade of Action on Nutrition 2016-2025 and focuses on Sustainable Development Goal #2: Zero Hunger.

Stemming from the global symposium, five regional follow-up events were organised in 2017 to provide a vision for addressing nutrition issues through a food-systems approach at the regional and country levels, taking into consideration their unique contexts and realities. Unlike the ICN2 and the Agenda 2030, the regional symposia are technical meetings designed to assist country stakeholders in defining the appropriate policies for reshaping food systems for healthier diets.

Specifically, the Regional Symposia aimed to:

- Take stock of the regional dimension/specificity of food security and nutrition challenges.
- Share key features of food systems in countries in the region, and how these influence dietary patterns and nutrition outcomes.
- Identify major regional policy processes, institutions, partnership initiatives and innovative programming for tackling nutrition issues through a food systems approach.
- Identify experiences and practical entry points for intensive policy and programmatic action with a view to feeding these into FAO Regional Conferences in 2018.
- Facilitate the development of policy actions in line with the ICN2 Framework for Action and the Decade of Action work plan.

[4] Measured through Food Insecurity Experience Scale (FIES)

[5] Food and Agriculture Organization of the United Nations (2017) *Regional Overview of Food Security and Nutrition in the Near East and North Africa* (Cairo, FAO).

Background and Proceedings of the NENA Regional Symposium

Preparation and Participation

The Regional Nutrition Symposium for the NENA region took place on 11-12 December 2017, in Muscat, Oman. As with the ICN2 and the Global Symposium, the NENA Symposium was a joint FAO/WHO event organised in collaboration with the United Nations Children's Fund (UNICEF), the International Food Policy Research (IFPRI), the World Food Programme (WFP) and the League of Arab States (LAS). Like all other regional symposia, the NENA symposium focused on the nutrition challenges of the region, bringing together experts in the field of nutrition, health, agriculture, water and sanitation and other related fields, to contribute to the agenda of improving health and nutrition through sustainable food systems. Special attention was given to the participation of government representatives, specifically technical officers responsible for nutrition, academic and research institutions, civil societies and private-sector participants from multiple disciplines.

The Symposium gathered a total of 76 participants, including state representatives (31) from 17 countries in the region, non-state experts (18), UN agencies (19) and other organisations (8) [see Annex I].

To build upon already existing regional efforts, the Regional Nutrition Symposium for the NENA region used the FAO/RNE Regional Multi-Stakeholder Workshop on Food Security and Nutrition platform. This is an annual platform for policy dialogue that provides the opportunity for member countries, donors, financial institutions, regional organisations, civil society organisations (CSOs), the private sector, the UN System, and academia and research institutions to discuss food security and nutrition challenges in the region and to propose solutions.

The Symposium was developed and delivered by a regional technical task team (TTT), comprising three to four recognised regional experts in the field of nutrition and food systems, drawn from FAO, WFP, WHO, UNICEF and IFPRI. The FAO Representation in Oman and the Regional Office for Near East and North Africa (RNE) organised the event, while the FAO Nutrition and Food Systems Division (ESN) participated in an advisory capacity in the TTT and provided technical support.

The Symposium resulted in a discussion of policy options for tackling regional nutrition issues through a food-systems approach.

Opening Remarks

Participants of the opening session included: His Excellency Munir Hussain Ali Al Lawati, Director General of Planning and Development, Ministry of Agriculture and Fisheries of the Sultanate of Oman; Abdessalam Ould Ahmed, Assistant Director General (ADG) and the Regional Representative of FAO-RNE; Akjemal Magtymova, WHO Oman Representative; Carl Paulsson, Senior Program Advisor, WFP Regional Office (Cairo); Lana Wreikat, UNICEF Country Representative in Oman and Jose Luis Figueroa, Associate Research Fellow, IFPRI, Cairo office.

In his opening remarks, the FAO-ADG stressed that the symposium was innovative in the sense that: a) it was a part of a UN and Consortium of International Agricultural Research Centres (CGIAR) partnership and a follow-up to two FAO-WHO international conferences on nutrition; b) the event was the first of its kind in the region in the way it approached food security and nutrition policies; c) the symposium was tailored to discuss nutrition issues specific to the NENA region. The ADG stressed that this symposium was a reflection of how the UN system is supposed to work under the 2030 Agenda for Sustainable Development to address Sustainable Development Goal 2; that is, by promoting an integrated approach towards working with governments to solve real-world nutrition issues of the region.

Structure of the Symposium

The Symposium consisted of two full days of presentations, plenary discussions and a panel discussion, focusing on six thematic areas:

- food systems for healthy diets;
- social protection programmes for improving nutrition;
- approaches to address overweight and obesity in the Near East;
- nutrition in fragile settings and protracted conflicts;
- food systems governance and equity;
- maternal and child nutrition in NENA region.

The symposium consisted of seven sessions, including 13 presentations and a panel discussion. Two sessions were devoted to the first thematic area and a session for each of the remaining five thematic areas.

The first session of the meeting was chaired by Nora Ourabah Haddad, FAO Country Representative in Oman. Fatima Hachem, Senior Nutrition Officer, ESN, FAO-Headquarters, chaired the second session. Jose Luis Figueroa, IFPRI, Cairo, chaired the third session. The fourth session was chaired by Samia Al Ghannami, Nutrition Director, Ministry of Health (MoH), Oman. The fifth session was convened through a panel discussion, and the sixth session was chaired by Khaled El Taweel, Chair of the Open Ended Working Group on Nutrition of the Committee on World Food Security (CFS). Conclusions and wrap-up sessions were facilitated by David Sedik, Senior Policy Officer, FAO RNE Office.

Discussions and Recommendations

Thematic Area 1: Food systems for healthy diets

Six presentations were given on this topic in two sessions. The first session focused on the importance of the food systems approach to nutrition and highlighted the main dietary patterns in the NENA region, the basic drivers of malnutrition and challenges with policy implementation. The keynote presentation was delivered on the topic: “Food systems for healthy diets: A new paradigm”. The presentation stressed that the food systems approach to nutrition is key for addressing multiple forms of malnutrition as it takes into account the determinants of healthy diets while considering system influencers and constraints.

The second presentation in this session highlighted the rapid nutrition transition in the region from low to high calorie intake levels, the overall imbalanced diet with very high consumption of cereals and rising sugar consumption, the existence of the ‘triple burden’ of malnutrition in the region as a whole (undernutrition, overweight/obesity and micronutrient deficiencies), rising levels of diabetes and the existence of large differences in the quality of the diet within the region, suggesting different dietary outcomes and policy challenges. The basic drivers of malnutrition in the NENA region were also highlighted, including high population growth, urbanisation and an ageing population.

In the second session, challenges to the sustainability of diets in the Arab region were discussed, considering natural resource scarcity, land degradation and high import dependency. Diets in the Arab states are characterised by high consumption of harmful foods (e.g. high levels of red meat consumption in Algeria, Kuwait and the United Arab Emirates) and low consumption of more healthy foods (e.g. legumes). It was stressed that a transition towards more healthy diets requires the adaptation of agricultural strategies and the political will to facilitate this transition. The Mediterranean diet was presented as a model of a sustainable diet with a positive impact on nutrition and health as well as on the environment and natural resources.

There are numerous issues confronting the NENA region that make this transition essential. These include the economic instability of many countries, growing population, food loss and waste, and a series of interconnected environmental challenges spanning from climate change to biodiversity loss to land degradation. However, during plenary discussions, there was a consensus that the NENA region was rapidly transitioning towards a western diet, which was taking a huge toll on the already fragile environment of the region. In the context of environmentally-sustainable diets, the concept of “green proteins” (plant-based protein sources) was put forward as an alternative to red meat consumption. This movement is taking off in some western countries but has yet to reach the NENA region.

Experiences in the field of sustainable food systems in Tunisia and Oman were also presented. Tunisia presented the challenges facing the country regarding nutritional outcomes associated with the population’s diets and lifestyle and the policies that are being developed to fight the growing national epidemic of obesity. These policies include the promotion and production of healthy foods, physical activity, improved dietary habits and access to treatment for obesity. An Oman case study discussed the approaches taken in the country to achieve sustainable food systems and highlighted the major challenges the country is facing regarding water scarcity and high import dependency.

Thematic Area 2: Social protection programmes for improving nutrition

Two presentations were made in this session to discuss the importance and efficacy of regional social protection programs for healthy diets and improved nutrition. IFPRI made a presentation on the impact of social protection programs on nutrition and proposed mechanisms for making social safety net (SSN) programs more nutrition-sensitive. In many countries, the social protection sector is disconnected from the health/nutrition sector. SSNs have not been successful in improving diets and reducing malnutrition and, therefore, require

greater nutrition sensitivity to increase nutrition returns. The proposed actions to improve the performance of SSNs are to develop programs according to the nutrition problem of the target group, to lower subsidies for sugar and vegetable oil, and to use school feeding programs as a platform for nutrition interventions.

SSN programs in the NENA region focus mainly on the major nutrition problems of the past (primarily undernourishment), even though today's key nutrition challenges are different (overweight/obesity, non-communicable diseases and micronutrient deficiencies). Social protection is often intertwined with other government support systems. For example, social assistance programs in Egypt include food subsidies, energy subsidies, public transport subsidies, free school meals and others. These programs could be better harmonised and coordinated between ministries to create a stronger enabling environment in support of nutrition goals. In terms of the effectiveness of the modality of SSNs (food vs cash-based programs), this does not necessarily determine performance in coverage, targeting accuracy, impact or other dimensions.

The ensuing discussions revolved around issues such as fortifying food products with micro-nutrients (e.g. salt iodisation, etc.), the need for appropriate infrastructure to ensure that all in need are reached and whether public programmes such as those in Egypt inhibit private sector initiatives. It was noted that these programmes should also target refugees and displaced people as well as food producers who may suffer from nutrition problems themselves. The need for greater regional collaboration and cooperation was stressed, given that countries of the region are at different stages of development and face differing nutrition-related issues from under-nutrition in low-income countries to over-nutrition in middle and high-income countries.

Thematic Area 3: Approaches to address overweight and obesity in the Near East

Three presentations were delivered on this topic, of which two were country-specific (Kuwait and Saudi Arabia) cases. The WHO presented the facts and figures related to the prevailing problem of obesity in the region and several tools and policy guidelines that the WHO regional office has developed to address overweight and obesity. Based on the WHO country grouping, the NENA region ranks second highest in terms of obesity burden and the first highest in terms of the burden of diabetes. More than 70 percent of the population in the GCC countries and Egypt is either overweight or obese. Qatar, in particular, has the highest burden of obesity and diabetes in the region. Proposed policy priorities include fiscal measures (use of judicious taxes and subsidies to promote healthier diets), policies for the procurement and provision of healthy food in public institutions, addressing issues of trade to improve the national and local food supply in the region. They also include promoting health-enhancing physical activity, and designing context-specific government-led programs to eliminate trans fats and reduce saturated fat, salt, sugars, energy and portion size.

The Kuwait case study presentation discussed the problem of non-communicable diseases (NCDs) in the country and the need to tackle obesity in the system. In the Saudi Arabia case study, diet, physical inactivity and hypertension were highlighted as major drivers of obesity. However, Saudi Arabia has developed an obesity control program to halt the rise in obesity by 2025 through the prevention of risk factors.

Thematic Area 4: Nutrition in fragile settings and protracted conflicts

This session was conducted through panel discussions, which revolved around two subjects:

- What can be done in conflict situations to improve nutrition?
- What can be done in development contexts to improve nutrition?

Several issues were discussed, including the challenges associated with food and cash interventions during and after conflicts, the nutrition information gap, and what measures national governments and UN agencies can employ to prevent nutrition crises.

- Food assistance programmes in conflict situations focus on saving lives through therapeutic or supplementary feeding programs. Sometimes cash or earmarked cash assistance is also provided. Cash distributions allow people to buy the food they are used to and are effective in supporting local markets and local producers. However, there are numerous challenges associated with both food and cash programmes. Nutrition interventions need to adapt to local tastes. Monitoring cash programmes during conflict is challenging. Also, the capacity of beneficiaries to select nutritious food needs to be developed. There is a need for greater engagement with local producers and local providers in order to rebuild local food systems after conflicts.
- Food interventions for preventing malnutrition among refugees are undertaken in camps (Iran, Darfur and Egypt), although most refugees in this region live outside the camps and still require support. Although food distributions are often carried out in host communities, chronic malnutrition persists in areas with refugees living outside camps (e.g. the case of Brunei Darussalam). The need for capacity-building activities targeting long-term refugees, such as the Kurds and Palestinians, was highlighted. These activities should focus on improving their farming skills and raising respect for the environment to address the problem of pollution.
- The issue of a gap in the information needed to design appropriate and cost-effective interventions was flagged. For example, the government of Kuwait continued to subsidise food during the food price surge, which is very costly, despite the lack of information on the nutrition situation. There is no baseline data on the nutritional status of people in Libya, which creates difficulties when defining the scope of interventions. Some helpful information sources were highlighted such as the Arab information system on the IFPRI website as well as the WHO nutrition landscape system.
- Interventions need to be adjusted when transitioning from relief to development. Countries need to have both nutrition policies and a nutrition-sensitive disaster preparedness plan. Policies should extend from farm to fork and should tackle such issues as farm-level diversity, food fortification, food safety and nutrition education and awareness raising for the population and for caregivers (including infant feeding in emergencies), considering that poor people lack access to nutrition education. Other issues, including the need for policies on nutrition education in schools, nutrition emergencies, working with the private sector, the inter-sectoral committee on food and nutrition policy (which includes private sector and government), were also discussed.

Thematic Area 5: Food systems governance and equity

Presentations on this topic were delivered by the CFS, the LAS, the Scaling up Nutrition (SUN) movement and FAO-Egypt.

CFS highlighted its role as the foremost inclusive international and intergovernmental platform for all stakeholders (government, private sector, civil society and UN) to work together to ensure food security and nutrition for all and support national and regional nutrition priorities through policy coherence and convergence. The High Level Panel of Experts on Food Security and Nutrition (HLPE), a scientific arm of the CFS, aims to improve the robustness of policy-making and produces publications on various topics at the request of CFS. The presenter stressed certain problems in the NENA region, such as obesity, food safety, water scarcity and conflicts. However, certain challenges go beyond national borders. These include climate change, water resource issues, and trade. While food is generally available in the NENA region, financial access to food is a problem in Mashreq countries.

LAS highlighted its wide mandate to support food security and nutrition in all countries of the NENA region. The organisation works with international agencies to promote healthy diets. Other principal institutions in the Arab region that tackle food security and nutrition issues

include the Arab Organization for Agricultural Development (AOAD) and The Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD), based in Syria, as well as FAO, the United Nations Economic and Social Commission for Western Asia (ESCWA) and WHO, at the international level. It was pointed out that the main policy objectives in food systems to protect and promote healthy diets in the region span across all stages of the value chain: a) promoting healthy soil, b) protecting biodiversity, c) selecting inputs and what to produce, d) food storage, e) transport efficiency, f) transfer and g) marketing.

The SUN movement, as a network with multiple stakeholders, led by governments, provides a platform for country-led efforts to improve nutrition, supporting nutrition analysis, policy papers, interventions, etc. SUN countries in the region include the Sudan, Mauritania and Yemen.

FAO-Egypt: The presentation focused on the FAO project for improving household food and nutrition security in Egypt by targeting women and youth. The triple burden of malnutrition (over-nutrition, stunting and vitamin A deficiency) in Egypt was highlighted, with Upper Egypt being in the worst situation in this regard due to high rates of poverty, unemployment and poor education. The FAO project empowers women with the nutritional knowledge, skills, tools and financial backing to enable them to take matters into their own hands and ensure better nutritional outcomes for their families, especially for children under the age of five years, while raising household income and improving living standards.

Thematic Area 6: Maternal and child nutrition in the NENA region

Three presentations were given in this session. One presentation discussed current nutrition problems in the region in general and maternal and child nutrition, in particular. The other two presentations focused on food fortification programs.

The first presentation highlighted that most regions have at least one country with increased rates (change from 1995 to 2011) of exclusive breastfeeding. However, the NENA region is the exception to this. Key nutrition trends in the region indicate declining stunting rates, stagnating wasting and emerging overweight, including overweight children. Anaemia represents a moderate (20.0-39.9 percent) public health problem in six countries of the region, including Syria, Algeria, Egypt, Libya, Morocco and Tunisia.

Food system-based strategies to address micronutrient deficiencies were highlighted, including universal salt iodisation as the preferred strategy for addressing iodine deficiency and food fortification (wheat, maize, rice, oil, milk, etc.). Food fortification was stressed as a cost-effective and successful strategy for the prevention of neural tube defects (NTD) and for improving pregnancy outcomes. However, flour fortification is most successful to achieve the desired health impact when (i) fortification of commonly consumed flour is mandatory (requires legislation); (ii) country standards align with global recommendations (standards on which nutrients are to be used and the levels of each nutrient); and (iii) monitoring is used to identify and correct problems (for example, checking paper records at flour mills, internal quality assurance and quality control at the mill and external monitoring by food safety authorities). The Oman case study presentation pointed out that Oman is the first country in the Middle East to make fortification of flour with folic acid mandatory through legislation. Flour fortification is successful in Oman as it is mandatory, aligned with global recommendations and has a monitoring system.

Based on the discussions above, the following recommendations were made:

- Enhance inter-sectoral coherence across the food system; ensure that policies address all areas of the food system based on context-specific analysis.
- Improve the efficacy of social protection programming in the region, by integrating nutrition–specific and/or nutrition-sensitive inputs in programs as relevant.
- Policies on diets should take a holistic approach rather than focusing on particular foods.

- Focus especially on school nutrition to curb the rising trend of overweight and obesity.
- Promote local food systems to manage impacts of conflicts on diets to achieve better nutrition.
- Undertake multi-ministry, multi-sectoral and multi-agency collaboration to overcome nutrition problems.
- It was recommended that UN agencies provide support to the countries in the following areas:
    - designing and implementing community empowerment projects for improving nutrition;
    - awareness campaigns focusing on obesity and NCD reduction;
    - development of nutrition and food policies;
    - moving from emergency support to income-generating support;
    - bio-fortification of wheat with iron, zinc and other vitamins and minerals;
    - strengthening the monitoring system for food fortification programs;
    - promotion of healthy diets among school-aged children;
    - support in developing the human capacity in nutrition.

Conclusions and way forward

The objective of the concluding session of the symposium was to touch on all aspects of sustainable food systems spanning from farm to fork and to obtain concluding notes from the delegates about sustainable food systems and major nutrition priorities in their respective countries and what role the UN agencies could play in supporting delivery against those priorities.

In this session, intervention areas of the UN agencies in the entire food chain were highlighted. It was noted that the FAO focuses on the production end of the spectrum, though it has been expanding into post-production, especially on the issue of food loss and waste. UNICEF, on the other hand, focuses mostly on processing whereas the WFP and IFPRI mostly concentrate on food distribution, among other interventions in different parts of the food chain. Finally, the WHO focuses its efforts around markets and retail.

Irrespective of where the UN agencies were able to intervene, it was agreed that all agencies and governments were concerned with nutrition emergency response planning, developing strategies to combat obesity, ensuring nutrition education and developing coherent policy and governance structures. Also, it was recognised that collaboration with the private sector offered opportunities for more efficient provision of nutritious and sustainable food systems.

In their concluding remarks, the delegates identified a number of nutrition priorities to be addressed by national governments, UN agencies and other non-state actors. The nutrition priorities mentioned by the delegates were the following:

GCC Countries: Kuwait noted the lack of coherent national nutrition policies and the lack of an informed policy framework. An essential component of such a framework is to ensure collaboration between ministries, especially those related to health, education, information, and trade and commerce. The need for up-to-date data to inform policies and help in developing action plans was also emphasised. Bahrain and the United Arab Emirates noted that their nutrition priorities were the same as those of Kuwait. Furthermore, the United Arab Emirates noted that engagement with the private sector would be necessary to ensure the effective implementation of any action plan. It was suggested that UN agencies provide technical expertise and support in assessing nutrition priorities.

Iraq noted promotion of healthy diets among schoolchildren as the national nutrition priority.

Palestine emphasised certain nutrition challenges, indicating that the key issue of these challenges is the lack of human resources in the area of nutrition. The need to establish a food basket and food exchange list throughout the West Bank and Gaza Strip was also mentioned.

Jordan's nutrition concerns prioritised women and children, a concern that could partially be addressed through increased participation of women in income-generating activities, particularly their increased involvement in agriculture.

The Sudan noted that addressing the prevalence of micronutrient deficiency and undernutrition in the country were key nutrition priorities.

As with the Sudan, **Syria** pointed to the challenge of micronutrient deficiency and undernutrition, especially in the post-conflict context where access to food is severely eroded.

For **Algeria**, the greatest concern was overall food security, given that the country imports most of its food. These challenges are only set to increase in the context of climate change.

Tunisia noted that its nutritional priority was the prevention of non-communicable diseases, particularly through the reduction of salt, sugar and trans-fatty acid consumption, increased physical activity and improved nutritional education. On the other hand, Tunisia is engaged in projects that aim to encourage the population to return to the Mediterranean diet and to move towards more sustainable consumption and production modes.

In **Lebanon**, addressing over-nutrition and obesity, especially among children, was mentioned as the key nutrition priority.

Iran identified several challenges, of which the prevention and control of overweight and obesity were the most significant. These challenges could partly be addressed through the reduction of salt, sugar and trans-fatty acid consumption. Introducing revisions in the current food fortification programme, particularly bio-fortification of wheat to include iron, zinc and other nutrients, was also mentioned.

Egypt noted several nutritional challenges that are being aggravated by the ongoing economic reforms and inadequate coverage of large numbers of vulnerable families under the existing protective social safety net programmes. Now is an opportune moment to act because the Ministry of Health and Population is currently leading the renewal of the national nutrition policy and strategy. Thus, the priority for Egypt is to receive balanced technical support from UN agencies to allow the adoption of a comprehensive vision of nutrition as an integral component of the interdependent food security, nutrition, and sustainable agricultural and food systems.

In his concluding remarks, Abdessalam Ould Ahmed, the FAO-RNE Representative and Assistant Director-General, emphasised that delegates' notes would be taken to the national ministry representatives at the FAO Regional Conference for the Near East and North Africa scheduled to take place in April 2018. Furthermore, these actions would be taken forward by the UN representatives in the countries of the NENA region. He concluded with the hope that this symposium would be the starting point from which the UN could support the development of guidelines for sustainable food systems in the region, indicating that the SDG-2 was a game-changer in this respect.

Appendix 1: Agenda of the Regional Symposium
Sustainable Food Systems for Healthy Diets and Improved Nutrition

11 - 12 December 2017
Muscat, the Sultanate of Oman
PROGRAMME

Day ONE: 11 December 2017

REGISTRATION	
08:30 - 09:00	Registration and Refreshments
09:00 – 10:00	**OPENING SESSION**
	Guest of Honour: Darine El-Khatib, FAO Special Goodwill Ambassador for Zero Hunger for the Near East and North Africa Ahmed Nassir Abdullah Al-Bakri, Under Secretary For Agriculture, Ministry of Agriculture and Fisheries Abdessalam Ould Ahmed, ADG, FAO RNE Carl Paulsson, Senior Programme Advisor, WFP Akjemal Magtymova, WHO Representative, Oman Lana Wreikat, UNICEF Country Representative, Oman Jose Luis Figueroa, Associate Research Fellow, IFPRI, Cairo
10:00 – 11:00	**FOOD SYSTEMS FOR HEALTHY DIETS**
	Chair: *Fatima Hachem, Senior Nutrition and Food Systems Officer, ESN, FAO, Rome* Keynote Presentation: Food systems for Healthy Diets: A New Paradigm, *Courtney Scott, Food Foundation (U.K.)* Dietary Patterns in NENA region: the need to move to a healthier diet and markets, *Josef Schmidhuber, Senior Economist, EST, FAO* *Discussion*
11:00-11:30	**COFFEE BREAK**
11:30 – 13:00	**FOOD SYSTEMS FOR HEALTHY DIETS: THE NEAR EAST AND NORTH AFRICA REGION**
	Chair: *Fatima Hachem, Senior Nutrition Officer, ESN, FAO, Rome* A sustainable Arab diet for mitigating natural resources scarcity, *Martin Keulertz, Faculty of Agricultural and Food Studies, Food Security Programme, American University of Beirut* Mediterranean diet as a model of the sustainable diets in the context of sustainable food systems, *Ivana Cavoski, C.I.H.E.A.M - Bari* The experiences of Tunisia in the field of sustainable food system, *Leila Alouane, National Institute of Nutrition, Tunis, Tunisia.* Toward sustainable food systems in Oman, *Naufal Rasheed, Agriculture Policy and Investment Advisor, Ministry of Agriculture, Oman* *Discussion*
01:00 – 14:00	**LUNCH BREAK**

14:00 – 15:00	**SOCIAL PROTECTION PROGRAMMES FOR IMPROVING NUTRITION**
	Chair: *Mr Jose Luis Figueroa, IFPRI, Cairo* Leveraging Social Protection Policies and Programmes for Promoting Healthy Diets and Improving Nutrition: The Global Perspective, *Oliver Ecker, Washington D.C., IFPRI* Exploring pathways for increasing the nutrition returns of Egypt's investments in social protection programmes, *Habiba Hassan-Wassef, National Research Centre, Egypt* *Discussion*
15:00– 15:30	**COFFEE BREAK**
15:30 – 17:30	**APPROACHES TO ADDRESS OVERWEIGHT AND OBESITY IN THE NEAR EAST**
	Chair: *Samia Al Ghannami, Nutrition Director, MoH, Oman* Global and regional strategies to address obesity and overweight, *Ayoub Aljawaldeh, WHO Regional Adviser on Nutrition*. Presented by *Akjemal Magtymova, WHO Representative, Oman* Regulatory actions for limiting consumption of Salt, Sugar and Saturated Fatty Acids: the case of Islamic Republic of Iran, *Gholamreza Asghari, Director of FDA, Iran* Public Authority for Food and Nutrition (PAFN): The Inevitable Challenge*, Nawal Al Hamad, Undersecretary, Deputy Director General PAFN*, *Kuwait* Obesity prevention initiative: the case of Kingdom of Saudi Arabia, *Shaker Abdel Aziz Alomary, Director General Of The General Directorate For Health Programs And Chronic Diseases*, *MoH, Saudi Arabia* The role of FDA to monitor the healthy diet, *Amjad Rashaideh, Director of Nutrition Directorate / FDA Jordan* The result of the national nutrition survey with more focus on issues related to prevalence of obesity and food consumption pattern in Oman, *Samia Ghannami, MoH, Oman* *Discussion*

Day TWO: 12 December 2017

08: 30 – 10:30	**NUTRITION IN FRAGILE SETTINGS AND PROTRACTED CONFLICTS: PANEL SESSION**
	Chair: *Lauren Landis, Director of Nutrition, WFP, Rome* Panel: Leila Alouane, National Institute of Nutrition, Tunisia Zahra Abdollahi, Director of Nutrition Improvement, Iran Lindsey Wise, Scaling Up Nutrition (SUN) Movement Vilma Tyler, UNICEF Regional Nutritionist *Discussion*
10:30 – 11:00	**COFFEE BREAK**
11:00 – 12:30	**FOOD SYSTEMS GOVERNANCE AND EQUITY**

	Chair: *Mark McGuire, Senior Food Security and Nutrition Officer, FAO* Supporting national and regional nutrition priorities through improved policy coherence and convergence: The work of the CFS, *Khaled El Taweel, Chair of the CFS Open Ended Working Group on Nutrition* The role of the League of Arab States in food governance and related food security policies*, Saied Shomakhi, First Attaché, General Secretariat, LAS* Scaling Up Nutrition (SUN), *Lindsey Wise, Liaison Officer, UN Network for SUN* Gender Nutrition in Food Systems Approach in Egypt, *Zahra Ahmed, FAO Egypt.* *Discussion*
12:30 – 13:30	**LUNCH BREAK**
13:30 – 15:30	**MATERNAL AND CHILD NUTRITION IN NENA REGION**
	Chair: *Vilma Tyler, Regional Nutritionist, UNICEF* Oman fortification experience, *Samia Al Ghannami, Nutrition Director, MoH, Oman* Three main lessons from global success, *Scott Montgomery, Food Fortification Initiative* Group discussions by country groups *Plenary discussion*
15:30 – 16:00	**COFFEE BREAK**
16:00 – 18:00	**WRAP UP AND THE WAY FORWARD**
	Chair: *Martin Keulertz, Faculty of Agricultural and Food Studies, Food Security Programme, AUB* Food Systems for Improved Nutrition: Lessons Learned, *David Sedik, Senior Policy Officer, FAO-RNE* Group discussions by country groups *Plenary discussion* Concluding Remarks: Carl Paulsson, Senior Programme Advisor, WFP Lana Wreikat, UNICEF Country Representative, Oman Jose Luis Figueroa, Associate Research Fellow, IFPRI, Cairo Akjemal Magtymova, WHO Representative, Oman Abdessalam Ould Ahmed, ADG, FAO-RNE

Appendix 2: List of Participants

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1	**Arab Republic of Egypt**	Shaaban Aly Salem, Director of Agricultural Economic Research Institute Ministry of Agriculture shaban1963@yahoo.com
2		Hamdy Dardir, Head of Central Administration of Environmental Affairs Ministry of Health Hamdy-dardery@yahoo.com
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EXPERTISE/NON-STATE		
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