

**General Assembly**

Distr.: General
10 August 2012
Original: English

Sixty-seventh session

Item 26 of the provisional agenda*

Agriculture development and food security**Report of the Secretary-General*****Summary***

This report examines the challenges of achieving food and nutrition security and provides an update on progress in implementing sustainable agricultural policies and practices in line with the Rome Principles. Main challenges include low productivity and low investment in smallholder agriculture, worsening land degradation and water scarcity in many agricultural areas, intensifying effects of climate change on agricultural production, and resultant chronic or periodic supply shortfalls. There has been some progress since 2008 in raising agricultural investment rates in developing countries, notably in Africa, and in strengthening social protection of vulnerable groups, including through initiatives aiming not only at tackling hunger but at ensuring balanced nutrition. Still, long-term challenges to productivity and food security from resource degradation are only beginning to be addressed, with one encouraging development the support in the Rio+20 outcome for a global goal aimed at tackling land degradation.

* A/67/150

Contents	Paragraphs
I. Introduction	1-4
II. Overview	5-20
III. Current and emerging challenges to enhancing global food and nutrition security	21-26
IV. Progress in fostering coordination, cooperation, and effectiveness	27-37
V. Progress in implementing a twin-track approach	38-54
VI. Progress in ensuring means of implementation	55-59
VII. The way forward	60-67

I. Introduction

1. At its sixty-sixth session, the General Assembly adopted resolution 66/220 entitled “Agriculture Development and Food Security” in which it requested that the Secretary-General report to the General Assembly at its sixty-seventh session on developments related to issues highlighted in the resolution and on progress in implementing the outcomes of the 2009 World Food Summit under the item “Agriculture development and food security”. The present report has been prepared in response to this request.

2. Food and nutrition security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.¹ Food and nutrition security therefore covers availability, access, utilization and stability issues, and—because of its focus on the attributes of individuals—also embraces their energy, protein and nutrient needs for life, activity, pregnancy, growth and long-term capabilities. Food security is a precondition for the full enjoyment of the right to food².

3. The Five Rome Principles for Sustainable Global Food Security, adopted in November 2009 by the World Summit on Food Security in Rome, provide a strategic underpinning for coordinated action by all stakeholders at global, regional and country levels while embracing a twin-track approach to fighting hunger. They call on the international community to:

(a) invest in country-owned plans, aimed at channelling resources to well-designed and results-based programmes and partnerships;

(b) foster strategic coordination at national, regional and global levels to improve governance, promote better allocation of resources, avoid duplication of efforts and identify response gaps;

(c) strive for a comprehensive twin-track approach to food security;

(d) ensure a strong role for the multilateral system by sustained improvements in efficiency, responsiveness, coordination and effectiveness of multilateral institutions; and

(e) ensure sustained and substantial commitment by all partners to investment in agriculture and food and nutrition security, with the provision of necessary resources in a timely and reliable fashion, aimed at multi-year plans and programmes.

4. This report examines the challenges of achieving food and nutrition security and provides an update on progress in implementing sustainable agricultural policies in line with the Rome Principles. Inputs from the Secretary-General’s High level Task Force (HLTF) on Global Food Security, including contributions from the Food and Agriculture Organization of

¹ World Food Summit, 1996.

² <http://www.ohchr.org/Documents/Publications/FactSheet34en.pdf>.

the United Nations (FAO), the International Fund for Agricultural Development (IFAD), and the World Food Programme (WFP) have enhanced its content.

II. Overview

A. Current state of food and nutrition insecurity in the world

5. Currently, there are 1.4 billion people living in extreme poverty, including close to 925 million who suffer from hunger and more than 200 million children under five who suffer from malnutrition. In addition, micronutrient malnutrition, often referred to as “hidden hunger”, affects approximately two billion people worldwide—more than one-third of the global population. Close to 10 million children die before their fifth birthday every year as a consequence of malnutrition.

6. The food crisis of 2007-2008, followed by the financial and economic crisis in 2009, drew stark attention to the daily challenges faced by millions of families around the world in their attempt to overcome hunger and poverty and seek stable livelihoods that support a dignified way of life. Despite the efforts of many, and the commitment of the international community in the Millennium Declaration to reduce by half the proportion of people who suffer from hunger by 2015, persistent hunger and malnutrition remain the norm for millions of human beings.

7. An estimated 60 percent increase in agricultural productivity—100 percent in developing countries—is necessary by 2050 if hunger and food insecurity are to be overcome. However, the world’s ecosystems, biodiversity and associated goods and services are also under increasing pressure from loss of crop diversity, over-exploitation of fish stocks, deforestation, degradation and losses of arable land and aquatic ecosystems, growing competition for increasingly scarce water, and the impacts of climate change. Responsible environmental stewardship as well as greater fairness in food management and distribution are important contributors to achieving universal food security and nutrition.³

B. Current economic situation

8. Following many decades of decline, food prices have trended upward for most of the last decade and become increasingly volatile, and are likely to remain high and volatile due to many complex factors. While some large countries were able to deal with the worst of the world food crisis between 2006 and 2008, people in many small import-dependent countries experienced large price increases with adverse effects on their food consumption that, even when only temporary, may have permanent effects on their future earnings capacity and ability

³ FAO 2012. Towards the Future We Want: End Hunger and Make the Transition to Sustainable Agricultural and Food Systems
<http://www.fao.org/docrep/015/an894e/an894e00.pdf>

to escape poverty.⁴

9. Climate change and associated adverse effects on agricultural production, increased linkages between energy and agricultural markets due to the growing demand for biofuels, and increased financialization of food and agricultural commodities all suggest that price volatility is here to stay, and may actually increase.⁵

10. There are also challenges due to declining rates of yield growth for some crops. According to IFPRI, even without climate change, the prices of rice, maize, and wheat are projected to increase by 25 percent, 48 percent, and 75 percent, respectively, by 2050, in a business-as-usual scenario.⁶

11. Higher prices incentivize increased production, and are positive for farmers who are able to benefit from access to markets. For consumers, however, particularly those that are poor, the effects can be daunting. Many of those classed as being in extreme poverty spend nearly 70 per cent of their incomes on food. The roughly one billion undernourished are joined by several billion others at the margins of food insecurity who are vulnerable to food price increases, and are poorly served by or cannot access safety nets. Rising food prices have been key elements of destabilization and civil unrest in a number of countries in recent years, with serious disturbances and food-related riots affecting Bangladesh, Burkina Faso, Cameroon, Egypt, Ethiopia, Mexico, Morocco, Mozambique, Philippines, Senegal, Uganda and Zimbabwe, among others.⁷

12. Overall, increasing incomes and access are likely to provide better long-term solutions than artificially trying to keep domestic prices low with price controls and restrictions, which can be negative for rural areas, reduce incentives to provide the needed increase in production, and have negative spillover effects on international markets. Yet the structural causes of hunger and malnutrition often prevent progress, and efforts to overcome them require high level political commitment and prioritization of the fight against hunger and malnutrition.

C. Structural causes of hunger and malnutrition

13. The structural causes of hunger and malnutrition are linked to the lack of economic and social empowerment, natural resource degradation and scarcity, climatic pressures, demographic and social issues and governance.⁸ Protracted political crises or conflicts are the most devastating, destroying crops and laying waste to natural resources, preventing provision

⁴ FAO 2011 State of Food Insecurity in the World 2011: How does international price volatility affect domestic economies and food security? <http://www.fao.org/publications/sofi/en/>.

⁵ FAO, SOFI. 2011.

⁶ IFPRI 2011, Global Food Policy Report.

⁷ Giovannucci et al. 2012, Food and Agriculture: The future of sustainability, Sustainable Development in the 21st Century (SD21), UN-DESA.

⁸ Global Strategic Framework for Food Security and Nutrition (GSF), Consolidated version agreed in the plenary of the CFS Intergovernmental Open-Ended Working Group for GSF, Rome, 27-29 June and 19 July 2012. Final version will be submitted to the 39th CFS Plenary in October 2012.

of food assistance, and undermining progress in sustainable development. In addition, transboundary threats such as plant pests, animal diseases, and food safety can also sources of concern.

14. Hunger and malnutrition also persist due to the lack of economic and social empowerment experienced by millions of people worldwide. The rural poor often lack secure access to productive resources such as fertile land, water, agricultural inputs, credit, and knowledge, while irregular low-wage employment or unemployment are commonplace among the urban poor.

15. Demographic pressures play an important role in persistent hunger and malnutrition. These are exacerbated by the lack of effective social protection systems, including safety nets, particularly with regard to women and the many forms of legal and cultural discrimination they suffer. This includes the particular nutritional vulnerabilities of women and children that are often not adequately addressed. Marginalization and discrimination exists against vulnerable groups including indigenous peoples and internally displaced persons or refugees, contributing in many cases to food insecurity and malnutrition.

16. Natural and human-induced disasters, degradation of ecosystems, and depletion of natural resources are also major causes of food insecurity. The environmental integrity of many ecosystems is either currently challenged or faces the risk of progressive breakdown in productive capacity due to the combined effects of excessive demographic pressure and unsustainable agriculture use and practice. The food insecure, many of whom live in marginal areas, are disproportionately exposed to natural hazards and are least able to cope with the effects of crises and shocks.

D. Environmental impacts on agriculture and food security

17. The world's cultivated area has grown by 12 percent over the past 50 years. The global irrigated area has doubled over the same period, accounting for most of the net increase in cultivated land. Meanwhile, agricultural production has grown between 2.5 and 3 times, thanks to significant increases in the yields of major crops. However, global achievements in production in some regions have been associated with degradation of land and water resources, and the deterioration of related ecosystem goods and services, including biodiversity, biomass, carbon storage, soil health, water storage and supply. As a result, agriculture productivity growth has slowed in many parts of the world⁹.

Climate-related extreme weather events

18. Agriculture is the human endeavor likely to be most affected by changes in climate. The Intergovernmental Panel on Climate Change has noted that farmers in developing countries, particularly sub-Saharan Africa, will be hit the hardest by the impacts of climate change.

⁹ Cf. P. Kumar and S. Mittal (2006), "Agricultural Productivity Trends in India: Sustainability Issues", *Agricultural Economics Research Review*, Vol. 19 (Conference Number), 71-88.

Climate-related extreme temperature and weather poses many threats to agriculture, including reduction of productivity, production stability and incomes. To address the challenges ahead, there will be need of additional funding for agricultural research on climate-related adaptation and adaptation projects in developing countries. Currently, financing for such projects from the Global Environmental Facility remains a small fraction of what is invested in Clean Development Mechanism and other carbon market projects.¹⁰

Land degradation

19. Fully one quarter of global land resources are currently ranked as highly degraded, with another eight percent moderately degraded, 36 percent stable or slightly degraded and 10 percent ranked as improving.¹¹ The definition of degradation extends beyond soil and water degradation to include an assessment of other aspects of affected ecosystems, such as biodiversity loss. Worldwide, large parts of all continents are experiencing land degradation, with particularly high incidences along the west coast of the Americas, across the Mediterranean region of Southern Europe and North Africa, across the Sahel and the Horn of Africa, and throughout Asia. Although land degradation is a generalized risk, some 40 percent of the world's degraded lands are found in areas with the highest incidence of poverty.

Water scarcity

20. With more than 70 percent of global surface and groundwater extraction being used for production of food and other agricultural products, the agriculture sector is the biggest single use of water.¹² Intensive groundwater withdrawals in the key cereal producing areas around the world are drawing down aquifer storage and removing the accessible groundwater buffers relied upon by rural communities.¹³ Water use has been increasing globally at more than twice the rate of population growth over the last century, and an increasing number of regions are nearing the limit at which water services can be sustainably delivered. Lack of water is a major cause of famine and undernourishment. By 2025, it is expected that 1.8 billion people will be living in countries or regions with absolute water scarcity and two-thirds of the world population could be under stress conditions.¹⁴

III. Current and emerging challenges to enhancing global food and nutrition security

A. Growing demand for food crops to produce energy

21. Global agriculture is increasingly linked to energy markets. Oil price projections

¹⁰ Giovannucci et al.

¹¹ FAO. 2011d. The State of the World's Land and Water Resources for Food and Agriculture: Managing systems at risk.

¹² International Water Management Institute, 2007.

¹³ Countries in the Middle East, Northern Africa and Central Asia are already withdrawing water in excess of critical thresholds.

¹⁴ FAO defines *absolute water scarcity* as less than 500 m³ per year per capita, and *stress conditions* as between 500 and 1000 m³ per year per capita).

contained in the macroeconomic assumptions of the 2012 OECD-FAO Agricultural Outlook are on average about USD 25 above those used last year, ranging from USD 110 to USD 140 per barrel over the outlook period. These higher oil prices are a fundamental factor behind the higher agricultural commodity price projections, affecting not only oil-related costs of production but also increasing the demand for biofuels and the agricultural feedstocks used in their production. Support for biofuels in 2009 was estimated at USD 20 billion, the bulk of it in the USA and EU; and is projected to rise to USD 45 billion by 2020.¹⁵ Global production of bio-ethanol and bio-diesel is projected to almost double by 2021, heavily concentrated in Brazil, the United States, and the European Union. Biofuels are based mainly on agricultural feedstocks and are expected to consume a growing share of the global production of sugarcane (34 percent), vegetable oil (16 percent), and coarse grains (14 percent) by 2021. Commodity prices tend to be linked with global energy prices; as energy prices fluctuate and trend upwards, so do food prices.¹⁶ The high dependence of the global food sector on fossil fuels is also a rising concern.¹⁷

B. Evolving patterns of food consumption

22. Shifting dietary demand for livestock products in developing countries is creating significant new pressures for grains and water. Recent increases in food consumption per capita are mainly due to overall economic progress of developing countries, although world figures are decisively influenced by significant gains made in some of the most populous among them, especially China, Indonesia, Brazil and Mexico. As per capita food consumption has increased, there has been a parallel change in dietary patterns in the countries that experienced such growth. Demand for livestock products has considerably increased since the 1970s in developing countries, and the resource inputs of land, water, grains and energy required to produce them have risen accordingly.¹⁸

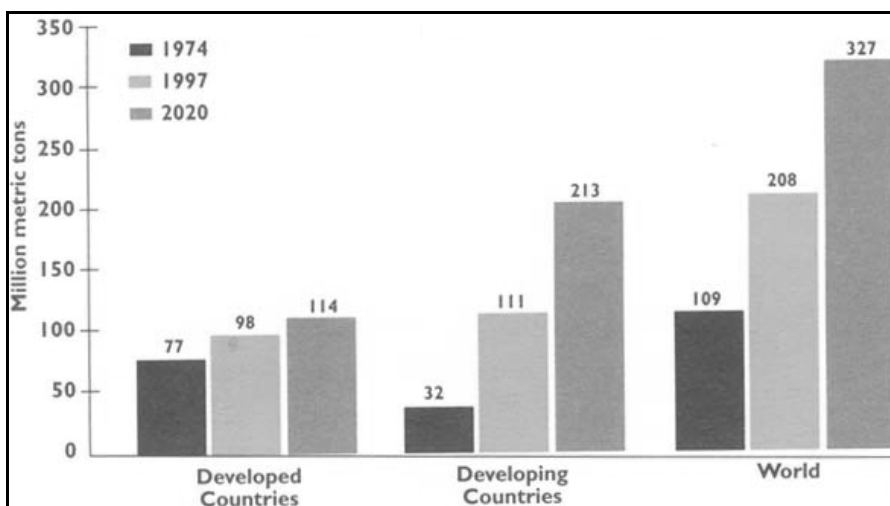
¹⁵ International Energy Agency. *World Energy Outlook 2010*.

¹⁶ OECD-FAO 2012. OECD-FAO Agricultural Outlook 2012-2021. <http://www.oecd.org/site/oecd-faoagriculturaloutlook/>.

¹⁷ FAO. 2011c, Energy-smart food for people and climate. Issue brief. <http://www.fao.org/docrep/014/i2454e/i2454e00.pdf>.

¹⁸ Giovannucci et al.

World Demand for Meat



Source: IFPRI IMPACT projections, June 2001, and FAOSTAT for 1974 data

C. Food losses and waste

23. Roughly one third of the food produced in the world for human consumption every year—approximately 1.3 billion tons—is lost or wasted.¹⁹ Losses and waste happen all along food chains, with important differences according to regions and products. This loss and waste corresponds to more than 10 percent of the world's total caloric energy consumption.²⁰ Food losses and waste occur in both high- and low-income countries, although following different patterns. In medium- and high-income countries, food is largely wasted at the consumption stage. In low-income countries, it is lost mostly during the early and middle stages of the food supply chain; much less is wasted at the consumer level. The causes of food losses and waste in low-income countries are mainly connected to financial, managerial and technical limitations in harvesting techniques, storage and cooling facilities in difficult climatic conditions, infrastructure, packaging and marketing systems. Given that many smallholder farmers in developing countries live on the margins of food insecurity, a reduction in food losses could have an immediate and significant impact on their livelihoods.

24. Most losses are avoidable to some degree, and some types of waste could be almost entirely eliminated. In developing countries, investments and other measures to improve the processing, storage and transport infrastructure should address much of the problem of waste from post-harvest losses. In developed countries, possible avenues for policy action could include engaging with the private sector to increase awareness and develop voluntary

¹⁹ FAO. 2011b. Global food losses and food waste, extent, causes and prevention, by J. Gustavsson, C. Cederberg, U. Sonesson (Swedish Institute for Food, and Biotechnology) and R. van Otterdijk and A. Meybeck (FAO). Rome.

²⁰ Food losses refer to the decrease in edible food mass available for human consumption throughout the different segments of the supply chain. Food losses resulting from decisions to discard food that still has value to others are referred to as food waste.

agreements, reviewing regulations that may inadvertently generate avoidable waste, supporting research to improve storage or prolong shelf life and better detect deterioration, and implementing public education campaigns.

D. Adapting to climate change

25. The impacts of climate change are reducing productivity and leading to greater instability in production in the agricultural sector in communities that already have high levels of food insecurity and environmental degradation and limited options for coping with adverse weather conditions²¹. Strengthening resilience of the agricultural sector to climate change is a high priority for agricultural research. Adaptation measures involving organic soil nutrient enhancement and other ecologically sound methods can also contribute to reducing greenhouse gas emissions from agriculture²² – an approach popularly known as climate-smart agriculture. Conservation agriculture, agroforestry, improved livestock and water management, integrated pest management and ecosystem approaches to fisheries and aquaculture can all make important contributions to enhancing food and livelihood security and generating environmental benefits simultaneously.

E. Protracted crises and conflicts

26. Countries in protracted crisis require special attention. They are characterized by long-lasting or recurring crises and limited capacity to respond, exacerbating food insecurity problems. The Horn of Africa and the Sahel are the two most serious hotspots of protracted crises, food insecurity, hunger and malnutrition in the world, with a combined population of nearly 300 million, most of whom live on less than USD1 a day. These countries largely depend on agriculture, with livestock contributing up to 20 percent of the economy in a very fragile and drought-prone environment.

IV. Progress in fostering coordination, cooperation, and effectiveness

A. The Secretary-General's High-Level Task Force on the Global Food Security Crisis

27. The High-Level Task Force (HLTF) was established by the United Nations Chief Executives Board in April 2008, bringing together the Heads of the UN specialized agencies, funds and programmes, as well as relevant parts of the UN Secretariat, the World Bank, the International Monetary Fund, the Organization for Economic Cooperation and Development and the World Trade Organization. The primary aim of the HLTF is to promote a comprehensive and unified response to the challenge of achieving global food security. A

²¹ D. Lobell, W. Schlenker and J. Costa-Roberts (n.d.), "Climate Trends and Global Crop Production since 1980", Policy Brief, Program on Food Security and the Environment, Stanford University, CA. .

²² See High-Level Panel of Experts, Committee on Global Food Security (2012), "Food Security and Climate Change", HLPE Report #3, June.

Comprehensive Framework for Action (CFA) was agreed in 2008 by the HLTF to set out the joint position of HLTF members, and aims to be a catalyst for action by providing governments, international and regional organizations, and civil society groups with a menu of policies and actions from which to draw appropriate responses.

28. The CFA was updated in 2010 to better reflect the evolving context and new elements considered necessary for a comprehensive approach, such as gender, climate change, price volatility and sustainability. The HLTF's Updated Comprehensive Framework for Action (UCFA) is the UN system-wide coordinated approach for supporting country action that leads to sustainable and resilient rural livelihoods and food and nutrition security for all. The UCFA reaffirms the realization of the right to food through the twin track approach of responding to the immediate needs of the most vulnerable people through effective safety nets while simultaneously building longer-term livelihood and food production resilience. In August 2011 the HLTF prepared a Summary of the UCFA, which has been widely disseminated during 2012.²³ The HLTF is currently undertaking internal review and external evaluation of its achievements and outcomes, to provide evidence and guidance for reorienting the HLTF to focus on the five objectives of the Secretary-General's Zero Hunger Challenge and guide a coherent UN system approach to food and nutrition security.

B. The Zero Hunger Challenge

29. The Zero Hunger Challenge is the UN Secretary-General's vision for a future free from hunger. Launched at the UN Conference for Sustainable Development (Rio+20), it envisions an ideal world where everyone enjoys the right to adequate food, women are empowered, food systems are sustainable and resilient, support to family farming is increased, poverty is reduced through agriculture and rural development, and good nutrition is assured from the start of pregnancy through every child's second birthday. It is an advocacy platform, with five objectives:

- (a) 100 percent access to adequate food, all year round
- (b) Zero stunted children under 2 years
- (c) All food systems are sustainable
- (d) 100 percent growth in smallholder productivity and income
- (e) Zero food is lost or wasted

30. The Zero Hunger Challenge is an invitation to all stakeholders to take action towards achieving zero hunger. It is rooted in current processes such as the Committee on World Food Security and the HLTF, but seeks renewed commitment to promises already made, builds on existing work being undertaken, and encourages greater focus on food and nutrition security by all.²⁴

C. The Committee on World Food Security

²³ UCFA Summary. <http://www.un-foodsecurity.org/node/842>

²⁴ Secretary-General's Zero Hunger Challenge. <http://www.un-foodsecurity.org/node/1356>.

31. The reformed Committee on World Food Security (CFS) is a new model of governance for global food security based on multilateral and multi-stakeholder engagement. An essential part of the CFS reform was the creation of the High Level Panel of Experts (HLPE) on food security and nutrition, an innovative science–policy interface to advise CFS and provide evidence-based analysis and advice on issues of importance to the Committee for better-informed policy debates. The 2009 reform of CFS envisioned the Committee as the foremost platform for a broad range of committed stakeholders working together in a coordinated manner based on principles of inclusiveness, country ownership, and flexibility in implementation in order better to correspond to regional and country circumstances. Similar multi-stakeholder platforms and alliances are envisaged at regional and national levels. In May 2012 the CFS endorsed the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, the first comprehensive, global instrument on tenure and its administration prepared through intergovernmental negotiations.

D. Cooperation among Rome-based agencies

32. Developing the joint response to the Horn of Africa and Sahel crises, coordination of Rio+20 and collaboration in the preparation of reports for the G20 provided clear impetus to strengthen cooperation among FAO, IFAD and WFP. The concept of resilience is key to ongoing collaboration in field operations. The joint response to the situation in the Horn of Africa and the Sahel demonstrated the range, scope and value of strengthened collaboration among the agencies. Collaboration is also deepening through projects adopting resilience-based approaches such as Purchase for Progress (P4P) and Purchase from Africans for Africa (PAA). These projects look for geographic overlap and development of a joint strategy on resilience, take stock of good practices in protecting and improving livelihoods, and have also explored possibilities for joint advocacy and fund raising, and developed joint messages for resource partners.

33. The three agencies continue to strengthen their collaboration with other institutions such as OECD, the World Bank and UNCTAD, in preparing inter-agency reports for the G20 and the G8 and actively promoting responsible agricultural investment, as well as with Bioversity – which fosters work on agricultural biodiversity – in the lead-up to Rio+20.

E. Coordination on nutrition

34. The Movement to Scale Up Nutrition (SUN Movement) was initiated in 2010 to encourage increased political commitment and programmatic alignment to accelerate reductions in global hunger and under-nutrition. The emphasis is on women and children under two years of age. The SUN Movement’s focus on the 1000 day window of opportunity between pregnancy and the child’s second birthday is important since this is the most critical time for fostering healthy physical and mental development of children. Partners in the Movement are increasing the resources made available to SUN countries and better aligning their support to national plans for implementing specific nutrition interventions that have been shown to be

effective. They are also helping countries implement their nutrition-sensitive development strategies through multiple sectors. The overall impact is that the potential of young lives – particularly the intellectual, physical and social progress of children – is increased, and this contributes to the economic development of nations.

35. Since it was initiated, Heads of State from 28 countries with high burdens of under-nutrition have committed to scale-up nutrition as members of the SUN Movement, and others are supporting their efforts. Those countries represent 53 million children younger than five who are stunted, or 27 percent of all stunted children, and include millions of women affected by anaemia in pregnancy and children who experience deficiencies of micro-nutrients. The G20 has expressed support for SUN, with both development partners and developing countries represented among the G20 member states.²⁵ Over 100 global, regional and national development partners from civil society, academia, bilateral and multilateral organisations support the SUN Movement, and the speed with which it has evolved in the last 18 months is an indicator of increasing political commitment to nutrition. In 2013, the 20-year review of the International Conference on Nutrition (ICN+21) will convene as the first high-level intergovernmental conference devoted to addressing the world's nutrition problems in the 21st century, and will ensure support for nutrition security actions.

F. FAO/UNEP Sustainable Consumption and Production

36. The FAO/UNEP Programme on Sustainable Consumption and Production (SCP) in Food and Agriculture is catalyzing partnerships among UN agencies, other international agencies, governments, industry, and civil society whose activities, together, can promote the essential transition to sustainability. The Programme promotes international cooperation on promoting policies, investments, production and consumption patterns that enhance food security while meeting economic and environmental needs. A meeting convened in May 2012 focused on key activity areas already identified by the Marrakech Task Force on SCP in Food and Agriculture, and featured panelists from Costa Rica, The Netherlands, Ghana, and Switzerland who shared their experiences on implementing activities on SCP in the food sector. FAO, with UNEP, will implement the Programme, which involves a Task Force comprised of Governments, UN agencies, representatives of the private sector and civil society.²⁶

G. G8 New Alliance for Food Security and Nutrition

37. The leaders of the G8 met in May 2012 and agreed to launch a New Alliance for Food Security and Nutrition, which aims to accelerate the flow of private capital to African agriculture, take to scale new technologies and other innovations that can increase sustainable agricultural productivity, and reduce the risk borne by vulnerable economies and communities in an effort to lift 50 million people out of poverty over the next decade. The New Alliance is guided by a collective commitment to invest in credible, comprehensive and country-owned

²⁵ Tracking Progress on Child and Maternal Nutrition. UNICEF 2008.

²⁶ At its third meeting in April 2012, the Task Force defined a pluriannual program of work and created four groups to implement it on four activity clusters: (1) information platforms; (2) communication; (3) enabling conditions; and (4) market-based approaches.

plans; develop new tools to mobilize private capital, spur and scale innovation, and manage risk; and engage and leverage the capacity of private sector partners, including women and smallholder farmers, entrepreneurs, and domestic and international companies.²⁷ It supports processes of the Comprehensive Africa Agriculture Development Programme (CAADP) designed to catalyze private sector investment, with USD 3 billion already committed.

V. Progress in implementing a twin-track approach

A. Short-term safety nets

38. The twin-track approach outlined in the UCFA and endorsed in the Rome Principles emphasizes four dimensions in its first track focusing on the social protection aspect of ensuring food security: availability, access, utilization and stability. Safety nets are critical to meet immediate needs of people who lack the purchasing power to access food. Employment guarantee programmes are a key element of Productive Safety Net Programmes (PSNPs) and have mitigated the impact of extreme food shortages in the 2010-2011 Horn of Africa drought-induced food crisis. The impact of the crisis was far less in Ethiopian communities, which had well developed PSNPs, than in neighbouring countries that lacked them. Such programmes require years of investment, capacity building and systems development. Within communities at risk of recurrent crisis, these systems should include PSNPs that can be scaled up rapidly.

39. The CFA reflected on the UN system's adoption of the Social Protection Floor initiative, which encompasses a set of transfers, services and facilities that all citizens everywhere should enjoy to ensure the realization of their human rights. In 2011, an ILO-WHO advisory group chaired by the Head of UN Women advocated for universal adoption of a Social Protection Floor (SPF) for fair and inclusive globalization; the SPF was agreed by the 2012 G20 leaders and is being endorsed within ILO conference processes.

40. These global processes create a context within which national policies for resilient food systems and nutrition security are being advanced along the two tracks. The SPF is now a critical element of policies for food and nutrition security in most countries, especially in those where resilience is undermined by recurrent crisis. Although they can be undermined by political instability and budget shortages, they are increasingly considered an essential element of long-term support, key to the long-term well-being of children, and insurance in the face of an unstable climate.

41. Experience in many communities affected by long-term instability suggests that most durable social protection floor and productive safety net schemes are built on traditional community-based support schemes, including those that are faith-based, which can continue to function when central government capacity is reduced. The 3N initiative in Niger is an example of a national programme explicitly focusing on the building of long-term resilience through a combination of agriculture, water, food systems, nutrition and social protection interventions,

²⁷ G8 Camp David Declaration. May 2012. <http://www.whitehouse.gov/the-press-office/2012/05/19/camp-david-declaration>.

grounded at all times in community-level realities and local institutions.

B. Medium and long-term actions to build resilience through sustainable agriculture

42. The second track in the twin-track approach involves building longer-term livelihood and food production resilience by eliminating the root causes of hunger, poverty and malnutrition.²⁸

Access and secure tenure for women

43. Fewer than 20 percent of landholders are women, due to a range of legal and cultural constraints regarding land inheritance, ownership and use. Providing women landowners with the same access to inputs as their male counterparts would increase their yields, raise total agricultural output in developing countries, and lift millions of people out of hunger.²⁹ The gender gap is strikingly consistent across countries and contexts: women have less access than men to agricultural assets, inputs and services and to rural employment opportunities. This gender gap is found for many assets, inputs and services and it imposes costs on the agriculture sector, the broader economy and society as well as on women themselves. Women in rural Africa and Asia are pooling millions of dollars to buy better seeds and tools, yet women farmers still receive only five percent of available credit. Designing more gender-responsive agricultural development programs would be a positive step toward reducing gender inequalities in agriculture.³⁰

Sustainably increasing agricultural productivity

44. Sustainable agricultural intensification is an immense challenge for the smallholder sector. In all agricultural production systems, the transition to more sustainable practices requires careful harnessing of ecosystem services. To utilize their full potential, agricultural ecosystems must be managed as part of wider landscapes. Reinforcing the natural resilience of landscapes is fundamental. Deforestation, degradation of catchments/watersheds, land degradation, depletion of reefs and coastal ecosystems – especially coral reefs and mangroves – all reduce nature’s productivity as well as its resilience and capacity to provide protection to human communities.

45. Aquaculture is the fastest-growing food sector, with an annual growth rate of nearly 8 percent for the past decade. It now supplies 60 million tonnes a year, or close to 50 percent of the global food fish supply.³¹ The need for an ecosystem approach to the intensification and management of the sector has been recognized as key strategy to integrate aquaculture with other food systems. Rice–fish farming and integrated multi-trophic aquaculture are good

²⁸ These outcomes are defined in both the U-CFA and the UNCSD outcome document “The Future We Want”.

²⁹ FAO, 2011. Women in agriculture: Closing the gender gap for development.

³⁰ Bill and Melinda Gates Foundation. Women in Agriculture.

³¹ FAO, 2012.

examples of sustainable integration as a base for intensification.

46. Diversification of varieties, breeds and production activities across agricultural landscapes is another way to sustainably increase resilience and productivity. Fifty percent of the increase in crop yields in recent years has come from new seed varieties, such as the fast-maturing New Rice for Africa (NERICA) that has transformed local economies in several parts of Africa.

47. Greater diversity in agricultural ecosystems may lead to healthier and more sustainable nutrition, which is an important consideration for producers whose consumption is largely drawn from their own production. More needs to be done, especially at the farm level, to build local capacities to conserve and use genetic biodiversity. Technical solutions exist, and research systems are focusing on better integration of rural resources and processes.³²

Enhancing market access

48. Further liberalization of agricultural trade remains a high priority for multilateral trade negotiations under the WTO. While on average OECD countries have lowered agricultural producer subsidies by around 44% since 2000, in many developed countries support for farmers continues to be significant (averaging 18% of gross farm receipts)³³. New agricultural trade issues have arisen following the 2008 food price spike, when a number of major food exporters introduced export restrictions, highlighting the need of greater attention to the concerns of food-insecure and food-importing countries.³⁴

49. Evidence shows that strong agricultural and food cooperatives contribute to improved food security and are highly resilient to financial, environmental, and other types of shocks and crises. They are able to provide a range of services to their members, particularly access to productive inputs, output markets, information and communication. They also allow their members to obtain access to and to manage natural resources, and enable their members to have a voice in the policy decision-making processes. However, cooperatives are able to thrive and act as a vehicle for inclusion and market integration only if they have an appropriate enabling environment. In the context of the 2012 International Year of Cooperatives (IYC), the international community is promoting the role of agricultural and food cooperatives in employment generation, poverty alleviation and improved food security.

Measures to manage the effects of food price volatility

50. The impact of world price changes on household food security and nutrition is highly context-specific and depends inter alia on the commodity, the national policies that affect price transmission from world markets to domestic markets, and the demographic and production characteristics of different households. This diversity of impacts, both within and between

³² IFAD, Rural Poverty Report, 2011.

³³ Downloaded from: http://stats.oecd.org/Index.aspx?DataSetCode=MON20113_1

³⁴ HLPE (2011), Price volatility and food security, HLPE Report #1.

countries, highlights the need for improved data and analysis so that governments can implement more effective policies.

51. In June 2012, the G20 welcomed the progress made in implementing the 2011 Action Plan on Food Price Volatility and Agriculture adopted by the Ministers of Agriculture. Agriculture Vice-Ministers submitted a progress report on implementation of initiatives established in the Action Plan, including key findings and recommendations on sustainable agricultural production and productivity growth.³⁵ They welcomed progress made in the implementation of the Agricultural Market Information System (AMIS) and the launch of the “AgResults” Initiative which utilizes prize awards to incentivize innovation of new agricultural products and systems of particular importance to low-income countries. The first meeting of the Global Food Market Information Group had convened in February 2012 to review procedures and tools that individual country members use for drawing national supply and demand balances for AMIS commodities, and to establish the basis for an agreed methodology. The first meeting of the AMIS Rapid Response Forum was held in April 2012 and considered the market situation and outlook for AMIS commodities.

Biofuels

52. Expansion of biofuels production poses new challenges for food security insofar as there is a sizeable diversion of certain staple food commodities towards fuels markets that impacts on food affordability for the poor. The growing linkage between food and energy markets increases potential for shocks to be transmitted from one to the other. On the production side, sustainable intensification approaches and cutting waste are key measures for reducing agriculture’s dependence on energy-intensive inputs. On the demand side, measures such as removing subsidies or increasing flexibility in biofuel mandates have been proposed to reduce the pressure on food markets from biofuels—particularly first-generation biofuels from food crops. Opening international markets for both feedstocks and renewable energy products can shift production to where it is most economically efficient, but safeguards may still be needed in producing countries to encourage environmentally sustainable production. At the same time, efforts should be made to accelerate scientific research on second-generation biofuels that would compete less with food.³⁶

Promoting research, technology diffusion and transfer

53. Technology can facilitate the sort of swift adaptability that will be increasingly necessary as climate change and other pressures mount. Information and communications technology is enabling innovation to reach users in all but the most remote areas with information and a variety of services. The global diffusion of cellular and wireless communication technologies coupled with the increasing ubiquity of the Internet provide information on market pricing, supply and demand trends, and remote technical assistance to farmers. Creating more local capacity to access and use very low-cost information systems is

³⁵ G20 Leaders Declaration, Los Cabos, Mexico. June 2012. <http://www.g20.utoronto.ca/2012/2012-0518-agriculture.pdf>.

³⁶ FAO, 2011.

an area of broad consensus.

54. Globally integrated monitoring systems can now produce timely public information with forecasts of food sufficiency in every country around the globe. The utilization of GPS (Global Positioning Systems) technologies as the driver of precision agriculture has allowed growers to produce more, with less crop inputs and energy usage. Utilization of satellite-based remote monitoring and in-field sensing technologies greatly aid in the global and regional monitoring of crop productivity and weather-related impacts. As these technologies are integrated and as their prices decline, we are seeing the emergence of sustainable agriculture decision support tools that are being more widely deployed.³⁷

VI. Progress in ensuring means of implementation

55. Developing countries are sustaining their political commitment to increasing agricultural investment following the 2008 food security crisis, and many are increasing the share of their national budgets dedicated to agriculture and rural development. In 2010, the average share of national budgets spent on agriculture was around 6.5 percent, and seven African countries are allocating more than 10 percent of their national budgets to agriculture. Of the 30 countries that had signed CAADP National Compacts as of March 2012, 27 have developed an investment plan assessed with an independent technical review, and 24 have held Business Meetings with donors, civil society and the private sector. Of remaining African countries, eight have launched the CAADP process and 10 more are expected to formally do so during 2012.³⁸

56. According to recent OECD-DAC data,³⁹ total ODA for food and nutrition security⁴⁰ in 2010 stood at around USD11.7 billion—an increase of 49 percent in real terms since 2002. Most of this ODA has been allocated to long-term investments in agriculture development, which accounts for 61 percent for the period 2008-2010. At the regional level, Sub-Saharan Africa received 41 percent of ODA for food and nutrition security in 2009-2010, followed by Asia with 32 percent.

57. Half the amounts pledged for agriculture and food security at the L'Aquila Summit in 2009 have now been disbursed. The G8 countries have increased assistance for short-term food security needs and longer-term development over pre-AFSI⁴¹ levels by more than 25 percent.⁴²

58. The Global Agriculture and Food Security Program (GAFSP), set up in 2010 as one of

³⁷ Giovannucci et al.

³⁸ NEPAD-CAADP (2012): *Countries with compacts/Investment Plans – March 2012*. Accessible at www.nepad-caadp.net

³⁹ Mowlds, S., Nicol, W., O. Clerigh, E. (2012): *Aid for Food and Nutrition Security*. Development Co-operation Directorate, OECD

⁴⁰ Corresponding to the working definition used the L'Aquila Food Security Initiative, referred to data from the DAC Creditor Reporting System.

⁴¹ L'Aquila Food Security Initiative.

⁴² 2012 Camp David G8 Accountability Report.

the most important elements of the response of the international community for channelling long-term investments in food and nutrition security, has received pledges in 2012 for USD 1.2 billion (of which USD 917 million are pledged to its public sector window, 248 million to the private sector window, and USD 40 million pending assignment). A total of USD 752 million have already been received, of which USD 658 have been allocated to country-led programs of 18 countries. Projects supported in 2010 and 2011 are expected to impact 7.5 million beneficiaries. During 2012, six new countries will receive support from GAFSP: Burundi, The Gambia, Kyrgyz Republic, Malawi, Senegal and Tanzania. In September 2012, a new call for proposals is expected. The GAFSP includes a wide range of stakeholders in its governance structure, especially at the country level.

59. While private investment in agriculture can be a boon to productivity, efforts to attract large-scale foreign investment pose risks where policies and institutions do not provide secure tenure and adequate safeguards to domestic smallholders and their communities. It is in response to a wave of such foreign investment following the 2008 food security crisis that a number of UN entities initiated discussions on the Principles for Responsible Agricultural Investment (PRAI) that are currently ongoing in the framework of the CFS.⁴³

VII. The way forward

60. World leaders at the Rio+20 Conference in June reaffirmed their commitments regarding the right of everyone to have access to safe, sufficient and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger. They further reaffirmed their commitment to enhancing food security and access to adequate, safe and nutritious food for present and future generations in line with the Five Rome Principles, including for children under the age of two, and through national, regional and global food security and nutrition strategies. They recognized that farmers, including small-scale farmers and fisherfolk, pastoralists and foresters, can make important contributions to sustainable development through production activities that are environmentally sound, enhance food security and the livelihood of the poor, and invigorate production and sustained economic growth.⁴⁴

61. One of the most important outcomes of the Rio+20 Conference was the decision to launch an inclusive and transparent intergovernmental process open to all stakeholders, with a view to proposing a set of global sustainable development goals (SDGs) to be agreed by the General Assembly.⁴⁵ The international community has begun to conceptualize how a goal related to advancing food and nutrition security could figure in the post-2015 development agenda, given that the first Millennium Development Goal has as target a halving of hunger by 2015 and that even if achieved this would leave the goal of completely eradicating hunger and malnutrition unfulfilled.

⁴³ <http://unctad.org/en/Pages/DIAE/G-20/PRAI.aspx>.

⁴⁴ A/CONF.216/L1*. *The Future We Want*. Outcome of the United Nations Conference on Sustainable Development, June 2012, para 108.

⁴⁵ A/CONF.216/L1*, para 248.

A. Build resilience

62. Given the increasing and multiple pressures on agriculture and on the natural resource base, business as usual is no longer an option. Climate-resilient agriculture that ensures food security and protects the environment must become a global priority.⁴⁶ In order to avert a food crisis we must continue advances in agricultural productivity in ways that are environmentally sustainable. Enhancing food system diversity generally strengthens resilience and the proper balance between diversity and specialization will need to be found for the local context. Even as local production is strengthened in countries now heavily dependent on food imports, agricultural trade will continue to play a critical role in ensuring global food security.⁴⁷

63. The reliability and timeliness of early warning systems needs to be improved, and capacity to develop and utilize them should be strengthened at both the national and regional level, with a focus on countries that are particularly vulnerable to price shocks and food emergencies.⁴⁸ Important areas of intervention, including social protection and risk reduction, are often underfunded. Food assistance can help build the basis for long-term food security, but to do so it is critical that it support as far as possible local and regional food producers. The use of a varied set of food assistance tools, complemented by innovations in how food is procured, will serve as a strong basis for food security in the longer term.

B. Close the gender gap

64. Although women comprise around 43 percent of the agricultural labour force in developing countries, ranging from 20 percent in Latin America to 50 percent in Eastern Asia and sub-Saharan Africa, women smallholders across all regions continue to have less access than men to productive resources and opportunities. The gender gap persists for many assets, inputs and services—land, livestock, labour, education, extension and financial services, and technology—and it imposes costs on the agriculture sector in terms of lower productivity, the broader economy and society, as well as on women themselves. Closing the gender gap in access to productive resources in agriculture is thus a high priority.

C. Address the food, water, energy, climate nexus more effectively

65. Sustainably increasing productivity in the face of a changing climate will require better management of land, water, soil and genetic resources through practices such as conservation agriculture, integrated pest management, agro-forestry and sustainable diets. Techniques to increase water efficiency are often the same as those used in sustainable crop production intensification. Transitioning to more sustainable diets and minimizing waste can also reduce demand for water—a 50 percent decrease in food losses and waste at the global level would

⁴⁶ McIntyre, Beverly, Hans Herren, Judi Wakhungu, Robert Watson (Eds.). 2009. International Assessment of Agricultural Knowledge, Science and Technology for Development. IAASTD, Washington, D.C.

⁴⁷ Giovannucci et al.

⁴⁸ FAO, IFAD, IMF, OECD, UNCTAD, WFP, World Bank, WTO, IFPRI & UN HLTF. 2011. Price volatility in food and agricultural markets: policy responses. An interagency report to the G20.

save 1,350 km³ a year. Recycling and reusing waste water both within agriculture and also from urban to agricultural uses can also contribute to solving the growing water shortages.⁴⁹

66. Besides water, food and agriculture are increasingly linked to energy policies, and the two sets of policies need to be coordinated in a fashion that ensures food security. Agriculture and food security are also increasingly impacted by climate change, calling for greater research on adaptation of agricultural systems in both developing and developed countries. Food and agricultural production methods and systems that can both enhance adaptation and contribute to mitigation are to be preferred.⁵⁰ Mechanisms that support improvements in energy efficiency and the use of renewable energy technologies in the food sector could be incorporated into existing policies to promote win-win situations and capitalize on potential co-benefits.⁵¹

67. Integrating agriculture development and food security into the post-2015 agenda through sustainable development goals will require that the eradication of hunger and the achievement of food security for all be sustainable over the long run. This in turn requires that agricultural practices of all farmers, large and small, become environmentally sustainable. In this regard, Member States have resolved in the Rio+20 outcome document “to strive to achieve a land-degradation neutral world in the context of sustainable development” (¶206). We must recognize that the many millions of people who manage agricultural systems—from the very poorest to the most commercialized producers—constitute the largest group of natural resource managers on earth. Their decisions, as well as those of the world’s seven billion consumers, will shape global food and nutrition security and the health of the world’s ecosystems into the future. The post-Rio+20 challenge is to support better decisions by building more inclusive and effective governance of agricultural and food systems.

⁴⁹ FAO 2012. *Towards the Future We Want*.

⁵⁰ IPCC, 2011.

⁵¹ FAO, 2011c, *Energy-smart food for people and climate*. Issue brief. <http://www.fao.org/docrep/014/i2454e/i2454e00.pdf>