THE UNITED NATIONS SECRETARY-GENERAL'S HIGH-LEVEL TASK FORCE ON GLOBAL FOOD AND NUTRITION SECURITY - HLTF -

ADVISORY NOTES BY THE HLTF WORKING GROUPS TO RESPOND TO THE 5 “ZERO HUNGER CHALLENGE” ELEMENTS
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## ZERO HUNGER CHALLENGE

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The Zero Hunger Challenge – Advisory notes for action

Background

The United Nations Secretary-General (SG) launched the Zero Hunger Challenge (ZHC) in June 2012 during the Rio+20 World Conference on Sustainable Development. The Zero Hunger vision calls for a world in which everyone has stable access to adequate food and nourishment all year round; no child less than 2-year-old is stunted; smallholders’ productivity and incomes are at least doubled; all food systems are sustainable; and food loss and waste are eliminated.

The Zero Hunger Challenge was launched to inspire a global movement towards a world free from hunger within a generation. Developed in consultation with United Nations agencies, civil society organizations, representatives of the private sector and the Executive Office of the Secretary-General, the Zero Hunger Challenge is based on the Comprehensive Framework for Action (CFA) developed by the High Level Task Force on Global Food and Nutrition Security (HLTF). The Zero Hunger Challenge is organized around five elements, which taken together, will end hunger, eliminate the cruelest forms of malnutrition, contribute to the eradication of rural poverty, and build inclusive and sustainable food and agricultural systems.

The Zero Hunger Challenge has been successful, together with other initiatives in inspiring action at country and regional levels and ensuring that food and nutrition security remains high on the global development agenda. It has also been key, in ensuring that these issues were reflected in the 2030 Agenda for Sustainable Development. Currently, one hundred thirty countries and fifty other organizations and private companies have committed to the Challenge. Forty-five countries are putting in place specific food and nutrition security plans inspired by the Zero Hunger Challenge. Thousands of civil-society organizations support the Zero Hunger vision.
The High Level Task Force on Global Food and Nutrition Security and the Zero Hunger Challenge

This strong commitment by multiple actors has been accompanied by a call for coordinated support from the United Nations System. Since 2014, the Secretary-General’s High-Level Task Force on Global Food and Nutrition Security comprised of 23 United Nations departments, agencies, funds and programmes and the Bretton Woods Institutions, the OECD and WTO, has reoriented its work to support the Zero Hunger Challenge.

Over the past 12 months, the HLTF Coordination Team established and supported five working groups on each of the Zero Hunger Challenge elements. The participants in the groups from HLTF entities created a thriving community of specialists who held about 50 group meetings. A final retreat of all group coordinators was also organized in Milan in July 2015 with the aim of ensuring alignment across the groups and capturing cross-cutting opportunities.

The aim of this exercise was to provide guidance that supports the efforts of countries already responding to the Challenge. The working groups developed advisory notes for action and policy to ensure conceptual coherence, facilitate implementation, and monitor progress. The advisory notes can also help others who are developing policies and implementing activities for Zero Hunger.

In the working groups, the HLTF entities achieved concordance on: i) a shared definition of each element; ii) the policy frameworks necessary to help achieve the final objectives; iii) the metrics for each objective; and iv) key messages for stakeholders other than the United Nations.

The proposed concepts and frameworks can be used to approach the five elements of the Zero Hunger Challenge so that individual actions collectively contribute to eliminating hunger. Each working group focused on how policy instruments could be modified and adjusted to have positive outcomes on food and nutrition security and on how they could generate synergies with each other. In addition, the five elements have policy frameworks and institutional mechanisms for enabling concerted action and governance.

The HLTF working groups explored the challenges and interdependencies of each of the five elements. They reviewed the potential of each element to contribute to the objective of achieving Zero Hunger, identified policy measures pertaining to different elements, and uncovered links and synergies between elements.

The Zero Hunger Challenge promotes an integrated approach that responds to the multiple, inter-connected causes of hunger and malnutrition. Each of the elements identified in the Zero Hunger Challenge supports the others, and the Zero Hunger vision recognizes that achieving the objectives of any element will depend on progress in the others.
The way forward – Zero Hunger Challenge and the Sustainable Development Goals

This set of advisory notes constitutes a knowledge base that the HLTF members can use to support countries as they deliver the vision of zero hunger set out in the 2030 Agenda for Sustainable Development. It also constitutes a resource for non-United Nations actors. To move from policy to action, however, the cooperation of many other stakeholders and coordination of all stakeholders will be needed.

The 2030 Agenda for Sustainable Development, similarly to ZHC, makes explicit reference to the need for an integrated approach and for an improved cooperation among all stakeholders. The Agenda’s goal is to grant universal access to safe, nutritious and sufficient food throughout the year; to end all forms of malnutrition, with a focus on child stunting; to double the productivity and incomes of small-scale food producers; to ensure that all food production systems are sustainable; to maintain plant and animal genetic diversity; and to reduce food losses and food waste. In this regard, the 2030 Agenda for Sustainable Development and the five pillars of the Zero Hunger Challenge are fully aligned.

Given the similarities in terms of approach and in terms of contents between ZHC and 2030 Agenda, the HLTF entities could decide to expand in the future the scope of this exercise to include: countries' experience in developing food security and nutrition programs; governance issues; the amount and types of investments needed to strengthen local policy and institutional environments to improve food and nutrition security, etc..

The guidance should be flexible, non-prescriptive, presenting alternative policy and program approaches for different experiences and different stakeholders. The United Nations system can help provide knowledge and experience to help to fill the gaps.

There is a large policy and investment agenda for each element of the Zero Hunger Challenge. The public budget constraints and the starting conditions in each country will guide the support provided on each element. For some countries, more policy attention and public expenditure allocations may be needed for productivity growth, in others more focus may be needed on reducing stunting. The distance of each country from achievement of each of the 5 elements can help guide prioritization, which will vary across countries and regions.

This highlights the need to focus further on the benefits that accrue from appropriately harmonized actions across the different International Organizations. The HLTF offers a convening space for its entities to coordinate action and develop guidance for country-led implementation of the 2030 Agenda for Sustainable Development. The ultimate decision-making power on implementation lies with national governments and local and regional authorities; nevertheless, the United Nations system, the Bretton Woods Institutions, the OECD and WTO can present a common approach, increase effectiveness and reduce time lags in the decision support process.
Working Group Composition – Participating Agencies
Co-Chairs: FAO, UNICEF, WFP, WHO

This compendium summarizes the outcome of the work done by the twenty-three High level Task Force of Global Food and Nutrition Security entities, coordinated by the HLTF Coordination Team from October 2014 to October 2015.

This report outlines the main features of this specific Zero Hunger Challenge element, including suggested metrics to monitor progress, as a guide to all stakeholders willing to join the challenge. The report is articulated around four sections. Each section explains the approach used, bottlenecks encountered, alternatives considered and all the information necessary for the reader to understand how the group reached its conclusions.

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Concordance reached by the HLTF entities

Countries can eliminate stunting in our lifetimes. Sustainable investments and multi-sector, multi-stakeholder cooperation are key to succeed. There is increased country, regional, and global action to eliminate stunting. The United Nations system agencies support collaborative efforts such as the 2030 Agenda for Sustainable Development, the Second International Conference on Nutrition (ICN2), the World Health Assembly nutrition targets, and the Scaling Up Nutrition (SUN) Movement. The United Nations Secretary-General’s Zero Hunger Challenge prompts countries to invest in nutrition and implement policy measures.

Reporting on the six World Health Assembly (WHA) targets — including stunting — is done through biennial reports to the WHA and through the annual Global Nutrition Report. A Global Monitoring Framework on Maternal, Infant and Young Child Nutrition (GMF) was adopted by the World Health Assembly in May 2015. It will create an internationally accepted approach to monitoring progress towards nutrition targets. This framework is based on the WHA Global Nutrition Targets and refers to children under 5-years. Stunting data on children under 2-years is more difficult to obtain. Nevertheless, new global and regional estimates for stunting could be available by the end of 2015, as stunting data for children under 2-years is ongoing.

Countries can use the WHO/UNICEF/EC target tracking tool to set national targets and monitor progress toward stunting reduction. Business and civil society support stunting reduction efforts through the Scaling Up Nutrition Movement, ICN2, the Committee on World Food Security (CFS), and Nutrition for Growth.

The 17 Sustainable Development Goals and 169 targets have been adopted by the 193 Members of the UN General Assembly. Stunting reduction is mentioned in Target 2.2; it is linked to the WHA target to reduce stunting in children less than 5 years of age by the year 2025. Adaptation to the 2030 time frame was proposed by WHO and needs to be further developed. Currently, the stunting indicator seems to be clearly included in the SDG monitoring framework; however continuous and urgent advocacy is needed to ensure several appropriate nutrition indicators are added.

The number of natural and man-made emergencies have increased. In response to the rising scale and changing nature of needs for humanitarian assistance, emergency response funding reached a record high in 2015, totalling USD 24.5 billion. Emergencies can strain or overwhelm food and health systems, disproportionately affecting vulnerable communities, and reducing progress toward eliminating stunting. Stronger links between humanitarian and development systems is urgently needed.
I. Definition

Concordance reached by the HLTF entities

**Stunting,** or being too short for one’s age, is defined as a height or length for age more than two standard deviations below the World Health Organization (WHO) Child Growth Standards median.

Zero stunted children less than two years: 2.3 percent is the maximum level of stunting prevalence, in order for a country to have achieved zero stunting.

(As validated by the United Nations Secretary-General Ban Ki-moon at the 11 March 2015 HLTF Principals Meeting).

Explanation

Target 1 of the World Health Assembly targets, adopted in 2012 (WHA resolution 65.6) is to reduce by 40 percent the number of children under 5 years of age who are stunted by 2025. Sustainable Development Goal 2, recently adopted by the General Assembly, under its target 2.2 aims “By 2030, [to] end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.” Global and national reporting on stunting focuses on the age group of children under 5 years of age. The ZHC focuses on children under 2 years of age. It can be a challenge to obtain additional data on stunting reduction rates for children less than 2 years of age. The WG recognizes the need for flexibility regarding this target group on stunting.
II. **Policy measures**

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| Stunting has many causes. It is the outcome of multiple household, environmental, socioeconomic and cultural factors. This is both a challenge and an opportunity: stunting is an excellent marker for human development, yet stunting reduction requires multi-sectoral policy measures and action.  

Policy recommendations have been made in the WHO Stunting Policy Brief, the ZHC Regional Guiding Framework for Achieving Zero Hunger in Asia and the Pacific and the ICN2 Framework for Action.  

Stakeholders are working to reduce stunting. The Private Sector and Civil Society have active platforms both in the SUN Movement and the Committee on World Food Security (CFS). The UN Agencies with a mandate in nutrition have endorsed the UN Global Nutrition Agenda (UNGNA) — a broad framework providing strategic directions for the next five years. The REACH partnership has refocused its work on stunting reduction. |

- Dissemination of multi-sectoral policy guidance on stunting reduction

Nutrition is a multi-sectoral issue. For addressing the immediate, underlying and basic causes of malnutrition, including stunting, effective nutrition-specific interventions, implemented at scale e.g. through community-based programmes, are required. The Lancet Nutrition Series of 2013 highlighted that nutrition-sensitive interventions and programmes in agriculture, social safety nets, early child development, water and sanitation, and education can sustainably enhance the scale and effectiveness of nutrition-specific interventions.

WHO's policy briefs can guide national and local policy-makers on what actions should be taken at scale in order to achieve the global nutrition targets. There are evidence-based, effective interventions that can produce results.

For stunting there is a programmatic focus on the first 1,000 days from conception to the child’s second birthday.

Given that wasting — linked with recurrent episodes of infectious disease — increases the cumulative risk of stunting, programmes for the prevention and management of diarrhoea and severe acute malnutrition can contribute to stunting reduction.

Similarly, maternity protection policies and legislation to promote and protect adequate breastfeeding and complementary feeding choices and practices are beneficial to stunting reduction. In this regard, countries should take advantage of available regulatory instruments such as the International Code of Marketing of Breast-Milk Substitutes, and food safety regulations in compliance with the Codex Alimentarius, to protect infant and young child nutrition.

1 http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60843-0/abstract  
2 http://www.who.int/nutrition/global-target-2025/en/  
3 http://www.who.int/nutrition/topics/globaltargets_stunting_policybrief.pdf  
To the extent that maternal anaemia prevention is integrated in a holistic maternal health care package that improves overall maternal nutrition and health, efforts to address this problem will also contribute to reductions in low birth weight and stunting.

Countries should begin with a situation analysis to establish how many children under 5-years (based on ZHC, focus is on under 2 years) are stunted, where they live and what the determinants of stunting in specific geographical and social contexts are, so that actions taken are tailored to specific needs. A deliberate equity-driven policy targeting on the most vulnerable populations is an effective strategy to reduce national stunting prevalence.

Actions to reduce stunting include:

1. Support policies and/or strengthen interventions to improve maternal nutrition and health, beginning with adolescent girls (weekly iron and folic acid supplementation, prevention and treatment of infections and nutrient supplementation during pregnancy and maternity protection policies\(^5\) for pre- and postnatal care).

2. Protect and promote early initiation of exclusive breastfeeding for the first six months of an infant’s life, followed by continued breastfeeding for 2 years or more, to provide “secure” nutrition and protect infants from gastrointestinal infections.

3. Support policies and investments that help meet the nutrient requirements and promote consumption of healthy, diversified diets including high-quality, nutrient-rich foods\(^6\) in the complementary feeding period (6 to 23 months), including support for nutrition-sensitive agriculture and social protection programs.

4. Improve micronutrient intake through food fortification, including complementary foods, supplements when needed, and encouraging diversification of food production (to include horticultural products, legumes, livestock, and fish at small scale, underutilized crops, and bio-fortified crops).

5. Foster safe food storage and handling practices to avoid infections from microbial contamination and mycotoxins.

6. Strengthen community-based interventions to protect children from infections (diarrhoea and malaria), intestinal worms and environmental causes of sub-clinical infection through improved water, sanitation and hygiene (WASH).

7. Support incorporation of linear growth assessment in child health routines to provide critical, real-time information for target setting and progress monitoring.

8. Better integrate nutrition in health promotion strategies and strengthen service delivery capacity in primary health care systems and community-based care to prevent stunting and acute malnutrition, supported by social protection programmes.

The UN Regional Thematic Working Group on Poverty and Hunger in Asia and the Pacific has developed a Regional Guiding Framework for Achieving Zero Hunger in Asia and the Pacific\(^7\).

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\(^5\) ILO Maternity Protection Convention, 2000 N° 183

\(^6\) Animal source foods are the best sources of high-quality nutrients. In vegetarian diets where cereals and legumes are the main sources protein, nutrient supplements or fortified foods can fill gaps

For stunting, this Framework has established the outcome of “universal access to nutritious food in the 1,000-day window of opportunity between the start of pregnancy and a child’s second birthday, supported by sustainable nutrition-sensitive health care, water, sanitation, education and specific nutrition interventions that enable empowerment of women, as encouraged within the Movement for Scaling Up Nutrition and the Renewed Efforts Against Child Hunger and Malnutrition”.

The framework includes (a) five direct nutrition interventions:

1) Exclusive breastfeeding.
2) Continued breastfeeding together with appropriate and nutritious complementary food up to 2-years and beyond.
3) Use of growth curves for early detection of malnutrition.
4) Effective management of severe acute malnutrition (SAM) and moderate acute malnutrition (MAM).
5) Nutrition education.

And (b) four nutrition-sensitive interventions:

1) Local production of nutritious foods.
2) Direct provision of extra nutrients and fortified foods.
3) Access to clean and adequate water and sanitation.
4) Access to health services.

The Second International Conference on Nutrition (ICN2) was held in November 2014. Nine side events were held including a well-attended event organized by the United Nations System Agencies on “healthy children, growing societies: the United Nations Nutrition networks’ support to countries’ stunting efforts.” The ICN2’s outcome documents committed Member States to eradicate stunting⁸ and proposed a set of policy recommendations.⁹

- Contribute to the analysis of nutrition policies and reporting through the Global Nutrition Report

The Global database on the Implementation of Nutrition Action (GINA)¹⁰, hosted by WHO, provides information on nutrition policies and interventions. WHO is preparing a second global nutrition policy review to be finalized in 2016¹¹. The second Global Nutrition Report¹², released on 15 September 2015, also reported on countries’ nutrition policies.

- Support to and from Private Sector and Civil Society

The SUN Business Network (SBN) is one of the four global networks that support SUN countries (along with the United Nations, civil society and donor networks). The Global Alliance for Improved Nutrition (GAIN) and the United Nations World Food Programme (WFP) are co-facilitating the SBN and an Advisory Group of senior business leaders also supports it. The SBN was established to mobilize and intensify business efforts in support of the SUN movement and to ensure all people realize their right to good food and nutrition security. The SBN has produced a guide on business engagement and provides advice to SUN country policy-makers. Increasingly, SUN countries are developing plans to engage business in national plans. In 2014, there were business representatives engaged with 22 country multi-stakeholder platforms.

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⁸ Rome Declaration on Nutrition, paragraph 15. a) http://www.fao.org/3/a-mi542e.pdf
¹⁰ http://www.who.int/nutrition/gina/en/
¹¹ http://www.who.int/nutrition/publications/policies/global_nut_policyreview/en/
The SUN Civil Society Network (SUN CSN) is comprised of national and international organizations working in various fields, including women’s empowerment, humanitarian aid, and trade unions. At the country level, the SUN CSN supports civil society’s efforts to advocate for nutrition within the national context and to align the strategies, efforts and resources of civil society with national plans to scale up nutrition. The civil society network also encourages grassroots contributions to develop national plans for scaling up nutrition so that these reflect and are adapted to the needs and reality of the communities suffering from multiple burdens of malnutrition.

Both SBN and CSN were represented in the Second International Conference of Nutrition (ICN2) non-state actors group, together with business and civil society mechanisms of the Committee on World Food Security (CFS). These groups provided inputs into the conference outcome documents (Rome Declaration on Nutrition and the Framework for Action) and held ICN2 pre-conference events. Outcomes of those events were presented in a plenary session during the ICN2.

- Harmonized global support to countries in policy formulation and scale up

HLTF members, including FAO, IFAD, UNICEF, WFP and WHO, have been working to ensure that the United Nations System’s global-level mechanisms and platforms are fit for purpose to eliminate stunting in our lifetime. In March 2015, the Renewed Efforts Against Child Hunger and Undernutrition (REACH) Partnership, which had previously focused on addressing underweight, was refocused to achieving the target of a 40 percent reduction in the number of stunted children by 2025. This revalidation of REACH included adding additional responsibility of acting as the Secretariat for the United Nations Network for SUN, to greater harmonize and strengthen the effectiveness of United Nations support to 55 SUN countries in evidence-based policy formulation and scaling up of nutrition interventions. These efforts were also complemented by the recently endorsed United Nations Global Nutrition Agenda (UNGNA) version 1.0, which proposed a broad framework for the United Nations agencies working in nutrition, including long-term strategic directions and short-term priority actions.

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III. Metrics

Concordance reached by the HLTH entities

New global, regional and national stunting estimates for children under 5 years of age are available from 1990 to 2014, showing that stunting has declined from 39.6 to 23.8 percent but that progress is uneven in regions and by income group. A tracking tool to assist countries set targets and monitor progress is available. The new SUN Movement strategy includes a SMART target on stunting.

A Global Monitoring Framework on Maternal, Infant and Young Child Nutrition includes a core set of 21 indicators and has been approved by the WHA.

The 2030 Agenda for Sustainable Development — including its 17 goals and 169 targets — was adopted by the UN General Assembly on 25 September 2015. An indicator framework for the monitoring of the goals and targets is under development. Continued advocacy to include several appropriate nutrition indicators is urgently needed.

- Analysis of data from the global database on stunting prevalence by country, regional and global levels; mapping the establishment of targets at country level.

On 30 June 2015, the WHO, UNICEF and the World Bank updated the joint dataset of weight and height measurements. All surveys that ended in 2014 and passed a quality control check were included. New global and regional estimates for stunting were released on 22 September 2015. It is now possible to extract data for the under-two age subgroup.

A tool to track the achievement of the WHA target to reduce stunting has been developed by WHO, UNICEF and the European Commission (EC). The web-based tracking tool is meant to assist countries in setting national targets and monitoring progress (www.who.int/nutrition/trackingtool). The tracking tool allows users to take into account different rates of progress for the six WHA global nutrition targets and the time left to achieve these goals by 2025. This tool complements existing tools on nutrition interventions, impact and costing.

The stunting reduction target established by the SUN countries is in the SUN Movement Annual Progress Report. The new SUN 2.0 strategy (2016-2020), recently endorsed by the SUN Lead Group, includes a stunting target: “The SUN Movement will have contributed to significant improvements in nutrition in all SUN countries, so that by 2020 all SUN countries will have reduced the number of children under 5 who are stunted by 30 percent”.

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The Global Nutrition Report 2015\(^\text{16}\) indicates that 39 of 114 countries with data are on course to meet the global target, compared with 24 in 2014. In 2015, 60 countries are off course but making some progress. The number of countries making no progress on stunting in 2015 was 15, compared with 19 in 2014. Nearly all states in India showed significant declines in child stunting between 2006 and 2014.

- **Organization in May 2015 of a consultation with Member States and UN Organizations on a global nutrition monitoring framework**

  The purpose of the Global Monitoring Framework (GMF) on maternal, infant and young child nutrition is to create an internationally accepted approach to monitor progress toward nutrition targets at both the national and global levels. The GMF will inform the design of country nutrition surveillance systems and help policy-makers decide on policies to reach global nutrition targets.

  The GMF includes tracer indicators at different stages of the nutrition results chain: (1) primary outcome indicators that measure the six global nutrition targets; (2) intermediate outcome indicators that monitor how specific diseases and conditions affect countries’ trends towards the six targets; (3) process indicators which monitor programme and situation-specific progress and (4) policy environment and capacity indicators which measure the political commitment within a country. Primary outcome indicators have been approved by the World Health Assembly in May 2014 and other indicators were approved in May 2015.

  The GMF includes a core set of 21 indicators: 7 outcome, 5 intermediate outcome, 6 process and 3 policy environment and capacity indicators. Each indicator is separated should be disaggregated by gender, geographic and socio-economic variables, such as urban or rural, and by age.

**Indicators**

**Primary outcome indicators, monitoring progress towards the six global nutrition targets**

| PO1 | Prevalence of low height-for-age (stunting) in children under 5 years of age |
| PO2 | Prevalence of haemoglobin <12 g/dL (anaemia) in non-pregnant women |
| PO3 | Prevalence of haemoglobin <11 g/dL (anaemia) in pregnant women |
| PO4 | Prevalence of infants born <2500 g (low birth weight) |
| PO5 | Prevalence of weight-for-height >2 SD (overweight) in children under five years of age |
| PO6 | Prevalence of exclusive breastfeeding in infants aged six months or less |
| PO7 | Prevalence of low weight-for-height (wasting) in children under five years of age |

**Intermediate outcome indicators, monitoring conditions on the causal pathways to the targets**

| IO1 | Prevalence of diarrhoea in children under 5 years of age |
| IO2 | Proportion of women aged 15-49 years with low body mass index (BMI of <18.5 kg/m²) |
| IO3 | Number of births during a given reference period to women aged 15-19 years/1000 females aged 15-19 years |
| IO4 | Proportion of overweight and obese women aged 18+ years of age (BMI >25 kg/m²) |
| IO5 | Proportion of overweight (> 1SD body mass index for age and sex) in school-age children and adolescents (5-19 years) |

**Process indicators, monitoring programme and situation specific progress**

| PR1 | Proportion of children 6 to 23 months of age who receive a minimum acceptable diet |
| PR2 | Proportion of population using a safely managed water drinking service |
| PR3 | Proportion of population using a safely managed sanitation service |
| PR4 | Proportion of pregnant women receiving iron and folic acid supplements |
| PR5 | Percentage of births in baby-friendly facilities |
| PR6 | Proportion of mothers of children 0-23 months who have received counselling, support or messages on optimal breastfeeding at least once in the last year |

**Policy environment and capacity indicators, measuring political commitment**

<p>| PE1 | Number of trained nutrition professionals per 100,000 population |
| PE2 | Country has legislation/regulations fully implementing the International Code of Marketing of Breast-milk Substitutes (resolution WHA 34.22) and subsequent relevant resolutions adopted by the Health Assembly |</p>
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The 193-member United Nations General Assembly formally adopted the 2030 Agenda for Sustainable Development on 25 September 2015, along with a set of 17 bold new Sustainable Development Goals and 169 targets to end poverty and hunger, fight inequality, and tackle climate change over the next 15 years. The Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) has to develop a framework to monitor the goals and targets of the 2030 Development Agenda at the global level, and to support its implementation. The United Nations System Agencies, in collaboration with civil society and academia, under the umbrella of the United Nations System Standing Committee on Nutrition has developed a policy brief on priority nutrition indicators\(^\text{17}\). Sustained advocacy efforts are needed to ensure that several adequate nutrition indicators are included in the framework.

IV. Messaging

**Overall concordance reached by the HLTF entities**

The ICN2 focused global attention on addressing malnutrition in all its forms and committed Member States to eradicate hunger and prevent all forms of malnutrition worldwide, including stunting. The new SDGs 2030 Development Agenda includes a goal on zero hunger and a target 2.2 to “end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons”. The HLTF should draw attention to the comprehensiveness, the multi-sectoral nature, and the global scope of this nutrition agenda.

A solid set of nutrition indicators for the SDG indicator framework is needed and advocacy needs to continue to ensure this.

Even under challenging contexts of natural and man-made disasters and conflict situations, the ZHC aspirations need to be realized. Malnutrition in all its forms needs to be addressed and eradicated in any context.

The Second International Conference on Nutrition (ICN2), held in Rome from 19 to 21 November 2014, was a high-level intergovernmental meeting that focused global attention on addressing malnutrition in all its forms. The meeting was co-organized by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). The participating 162 Member States, one associate member and the European Union endorsed the Rome Declaration on Nutrition and the Framework for Action. The Rome Declaration states that “chronic malnutrition as measured by stunting has declined, but in 2013 still affected 161 million children under five years of age.” The declaration commits Member States to eradicating hunger and preventing all forms of malnutrition worldwide, particularly undernourishment, stunting, wasting, underweight and overweight in children under five years of age. Recommendations 36 and 37 of the Framework for Action include actions to address stunting.

With regard to preventing stunting and other forms of under-nutrition, The Cost of Hunger in Africa (COHA) Study — which is led by the African Union Commission (AUC) and the New Partnership for Africa’s Development (NEPAD) Planning and Coordinating Agency, with support from the UN Economic Commission for Africa and WFP — published the first phase of its reports on the social and economic costs of under-nutrition in Africa. Country studies have estimated these costs to range from 1.9 percent of Gross Domestic Product (GDP) lost in Egypt to 16.5 percent of GDP lost in Ethiopia.

The 2014 and 2015 Global Nutrition Reports highlight the particular concern of nutrition’s under-representation in the current SDG framing: of the total 169 draft targets, only one target is

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18 [http://www.fao.org/3/a-mm531e.pdf](http://www.fao.org/3/a-mm531e.pdf)
explicitly related to malnutrition. The report’s authors advocate to work with allies to embed nutrition indicators in other SDGs and targets. In response, the United Nations System Standing Committee on Nutrition (UNSCN) Secretariat has developed, in collaboration with experts and partners a policy brief on priority indicators for the Sustainable Development Goals (SDG) framework, including a stunting indicator. It has furthermore published the SCN News edition 41 featuring “Nutrition and the Post-2015 Development Agenda” which includes 2 feature papers and an opinion piece on the nutrition targets and indicators including stunting.

As the United Nations Statistical Commission will work until March 2016 to develop the SDG monitoring framework proposing the SDG indicators until March 2016, it is important to keep highlighting . The 2030 Agenda for Sustainable Development can highlight the importance of nutrition in the 2030 Agenda for Sustainable Development and advocate for all eight proposed nutrition indicators in the framework.

The 2030 Agenda for Sustainable Development also presented the opportunity for the ZHC participating agencies to highlight the importance of reaching the world’s most vulnerable, which are often living in crises or emergency situations. The Global Nutrition Report 2015 and the SDGs both emphasized the risks posed by climate change, such as climate-related disasters and increased climate variability.

Meanwhile, the SUN movement is trying to improve the support to fragile and conflict-affected countries. Emergencies can exacerbate food and health systems that are already weak, and disproportionately affect the most vulnerable, including women and children suffering from hunger. Given that the 1,000-day window is so short, it is important to address nutrition throughout this window even in humanitarian emergencies. This can help ensure that children are healthy, with stronger immune systems, more resilient to withstand future crises, and more likely to achieve their potential in life. Better coherence between humanitarian and development systems and financing for preparedness, resilience-building and social protection can help to improve focus on enabling environments and prevention of under-nutrition in emergencies.

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V. Conclusion

Stunting can be eradicated in our lifetime. Commitments have been made (WHA targets, ICN2, SDGs), the indicators are identified, the tools for tracking are available for countries, the resources are being increasingly mobilized, and stakeholders are working to achieve this common goal.

Stunting reduction success stories are emerging in different regions and settings: Ethiopia, Rwanda, Tanzania, Burkina Faso, Niger (see box 1 and 2) and the Indian State of Maharashtra are striking examples. We need to continue on this path to achieve the target of ‘zero stunted children’ by working together efficiently at all levels. The ZHC is a continued beacon of inspiration and aspiration to get the job done by 2030.

Branca et al. argue that to reach the 2025 WHA global target of a 40 percent reduction in the number of stunted children — from 171 million in 2012 to 102 million in 2025 — the annual average rate of reduction (AARR) is 3.9 percent. With concerted efforts to decrease stunting prevalence, such as through the Scaling Up Nutrition movement, combined with reduced rates of population growth, it should be possible to maintain or accelerate this rate of improvement by 5 years (i.e. to 2030).

If the same AARR rate of 3.9 percent continues until 2030, the estimated number of stunted children should not exceed 86 million. This translates roughly to a 50 percent reduction in numbers of stunted children compared to the 2012 baseline. With supportive and concerted UN efforts, increased investments and multi-sector, multi-stakeholder cooperation, countries can eliminate stunting in our lifetimes.

The UN SG Ban Ki-moon, in his opening address to the assembly, urged all “to look beyond national boundaries and short-term interests and act in solidarity for the long-term. We can no longer afford to think and work in silos.” The HLTF entities agree.

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Box 1: Scaling-up exclusive breastfeeding and other optimal infant and young child feeding practices in Burkina Faso (UNICEF, 2015)

Suboptimal infant and young child feeding (IYCF) are important contributors to the high prevalence of stunting — 33 percent — in Burkina Faso. Challenges include a lack of capacity of community health workers, the practice of giving water to infants before the age of six months resulting in diarrhoea and other water-borne diseases, poor dietary diversity, and low frequency of complementary feeding.

For the past decade, Burkina Faso has worked to improve nutrition by putting in place nutrition policies and legislative frameworks and coordination mechanisms to create an enabling environment for improving nutrition. Burkina Faso also joined the SUN movement in 2011, and a multi-sectoral road map was developed in 2012. Moreover, In Burkina Faso, media campaigns and communication for development activities carried out by non-governmental organizations (NGOs) and community-based organizations (CBOs) have raised awareness and influenced behaviour change in the country.

Nutrition investments over the past decade contributed to improvements in IYCF practices as well as fostered an ideal context from which to launch a plan to scale up optimal infant and young child nutrition in 2013. The Government, with the support of UNICEF, developed an ambitious ten-year plan to reduce child stunting, entitled “Scaling up optimal infant and young child feeding practices, 2013–2025.”

The overall goals of the scaling-up plan were to 1) increase rates of exclusive breastfeeding in children under six months from 38 percent in 2012 to 80 percent in 2025; and 2) increase the number of children aged 6–23 months receiving the minimum acceptable diet, an indicator that combines information about breastfeeding or milk feeds, dietary diversity and frequency of meals, from 3.5 percent in 2012 to 30 percent in 2025.

According to Burkina Faso’s 2014 annual nutrition survey and national estimated results: exclusive breastfeeding rates in infants under 6 months old increased from 38.2 percent in 2012 to 50.1 percent in 2014; early initiation of breastfeeding remained at 42 percent between 2010 and 2014; and the number of children aged 6–23 months receiving the minimum acceptable diet increased from 3.2 percent in 2012 to 11.4 percent in 2014.

By the end of 2014, 4,788 community health workers were trained in community-based IYCF interventions. A mother-to-mother support group approach is used as platform for community-based IYCF counselling, and to stimulate positive behaviour and social change. As part of the scale-up plan, each mother-to-mother support group includes 15 participants, supported by a community health worker, and provides an ideal entry point for multi-sectoral nutrition-sensitive interventions, such as homestead food production, home fortification, and optimal WASH practices promotion using a household model approach.

Burkina Faso’s scale-up plan is successful due to its participatory approach, planning and budgeting process which has attracted funding, and strong coordination among stakeholders. The nutrition investments made over a number of years have also culminated in an enabling environment for nutrition in general, which facilitated improved IYCF practices. The Burkina Faso experience with IYCF scale-up could provide a good model for other countries facing high stunting rates in the Sahel region.
Box 2: The 3N initiative in Niger: an example of a country-led, multi-sectoral approach to prioritizing nutrition (WFP, 2015).

3N, les Nigérien Nourrissent les Nigériens (Nigeriens Feed Nigeriens), is a high level, multi-stakeholder government initiative in Niger, presided over directly by the President. The initiative, which runs from 2012—2015, fights malnutrition while improving community resilience. It provides an overarching, common framework under which a variety of individual programs for nutrition are organized within and linked to. The 3N initiative includes a steering committee that is chaired by the Ministry of Public Health. Other ministries concerned with food and nutrition security are also represented in the 3N initiative. United Nations agencies (working directly as well as through REACH), donors, civil society, private sector and research and training institutions are also in the steering committee. The 3N strategy was finalized at the same time Niger joined the SUN movement.

Niger has high levels of acute malnutrition, and stunting has remained over 40 percent for over a decade. Niger’s food and nutrition security is frequently threatened by climate-related crises such as drought. In recent years, due to the collaboration facilitated by the 3N initiative, both treatment and prevention of under-nutrition through a mix of nutrition-specific and nutrition-sensitive interventions.

The focus on prevention of under-nutrition is relatively new in Niger and has developed alongside the recognition that a multi-sectorial response is needed, particularly for nutrition-sensitive actions in critical sectors such as agriculture and education. The 3N initiative helps this type of collaboration, which has been especially strong under the “communities of convergence” approach that WFP and UNICEF jointly advocated for including in the 3N. Here, communities themselves plan their nutrition-specific and sensitive interventions, which are then coordinated by government, United Nations agencies, and NGOs.

Niger has also made improvements in its use of data to inform programming and policy. WFP has provided technical input and support to Niger’s Agency for Food Crisis and Prevention, which manages the country’s food security crisis surveillance system, including on the integration of nutrition indicators within the agency’s assessments.

While challenges remain in continued scale up of implementation, and Niger is still off course to meet the WHA target for stunting; nevertheless, in less than 10 years it has gone from having no nutrition programming to recognizing nutrition as a national priority. The 3N initiative demonstrates that effective multi-stakeholder platforms are led by governments and require strong, high-level political support. Additionally, it has shown that multi-sectorial collaboration can improve responsiveness to community-identified needs and enable flexible packages of interventions, as seen in the “communities of convergence” approach, which WFP and UNICEF jointly supported with the Government.
Working Group Composition – Participating Agencies
Co-Chairs: FAO, WFP
Other Participants: DPA, IFAD, ILO, OHRLLS, UNCTAD, UNHCR, UNIDO, World Bank

This compendium summarizes the outcome of the work done by the twenty-three High level Task Force of Global Food and Nutrition Security entities, coordinated by the HLTF Coordination Team from October 2014 to October 2015.

This report outlines the main features of this specific Zero Hunger Challenge element, including suggested metrics to monitor progress, as a guide to all stakeholders willing to join the challenge. The report is articulated around four sections. Each section explains the approach used, bottlenecks encountered, alternatives considered and all the information necessary for the reader to understand how the group reached its conclusions.

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I. Definition

Concordance reached by the High level Task Force of Global Food and Nutrition Security entities

One hundred percent access to adequate food means physical, economic and social access to food for everyone at all times, and for nutritionally adequate diets, in terms of quantity, quality, and safety.

Barriers to physical access may result from systemic causes, such as inefficient infrastructure, policy induced trade impediments and other impediments to the movement of food, especially in security-related constraints induced by man-made or natural disasters.

Lack of economic access to adequate food and good nutrition affects all countries, influenced by low employment income or poverty. People suffering from chronic hunger often lack the means to access adequate food through their own production or purchases, leading to under-nutrition and micronutrient deficiency. Impediments to the movements of food mentioned above may not block physical access, but they may cause prices to rise so that poor households cannot afford the food. More nutritious foods may require more preparation, time, and money than less nutritious foods. This can contribute to overweight and obesity in many countries.

Social structures, norms and traditions also affect people’s access to food. Economic growth and rising incomes have contributed to reducing hunger at national level. However, inequalities (including inequitable distribution of available food within a household) and social exclusion (such as exclusion related to inequality, under-resourced social protection programmes, or targeting errors) often prevent economic growth benefits from reaching the most vulnerable and disadvantaged populations. Women often face challenges in access to assets and may have little or no control of how household income is spent.

Displacement and disruptions to markets and livelihoods caused by man-made or natural disasters also impair economic access. These disruptions require both immediate humanitarian response and recovery efforts to stabilize prices, rebuild production and markets, and support livelihoods. Vulnerable households, who may spend as much as 80 percent of their income on food, face resulting risks such as sudden price increases or crop failures, or lack adequate food on a seasonal basis.

II. Policy measures

Concordance reached by the High level Task Force of Global Food and Nutrition Security entities

Achieving 100 percent access to adequate food requires creating an enabling environment to allow and create incentives for key sectors and stakeholders to focus on food and nutrition security, including access to food. Strengthening access to food should be embedded in an overall strategy to eradicate hunger and malnutrition. Entry points include:

1) Policies and legal frameworks.
2) Programmes for inclusive food access.
3) Governance.
4) Human and financial resources.
Policy entry points for 100 percent access to food all year round:

Policies and legal frameworks: A comprehensive and coherent set of sectoral and cross-sectoral policies and legislation provide a critical foundation to address the underlying and immediate causes of inadequate food access. This includes:

- Reviewing policies and legislation for food and nutrition security in support of government efforts to improve food access; including Government considerations of social protection strategies and links to right-based approaches to enhance food access;
- Promoting pro-poor and gender-sensitive policies and legislation. Preventing discrimination in access and distribution of culturally appropriate food to women and vulnerable groups, financial inclusion, access to credit and land rights and using as much as possible local food systems.
- Improving access to food and addressing malnutrition in all its forms, increasing consumer awareness/behavioural change, especially related to the challenges of overweight and obesity, and links to food safety and food quality.

Programmes for inclusive food access: Enhancing market access, addressing market inefficiencies, building resilience, supporting livelihoods, implementing appropriate social protection mechanisms, and boosting consumer awareness and behavioural change campaigns are important elements for ensuring food access to end hunger and malnutrition in all its forms. This will require:

- Improving the nutrition-sensitivity of agriculture and food systems, such as includes food production and diversification, with attention to small-holders; food processing and fortification; trade and market infrastructure and access; and marketing; food consumption and diets);
- Increasing women’s control over and access to productive agricultural inputs and financial services. Reducing excessive food price volatility through open, fair and well-functioning markets and domestic and international trade are essential elements.
- Expanding local procurement for school feeding programs to raise producer incomes, promoting food diversification, fostering behaviour change, and supporting improved nutrition consumption for school-aged children.
- Supporting livelihoods and increasing access to decent and productive employment, including private sector employment and public works programmes.
- Promoting social protection measures, including conditional and unconditional cash, voucher, and food transfers. Dedicating attention to the most vulnerable — people living in crises (including protracted crises) and the rural and urban poor. Providing national social protection floors and wider social protection systems. Providing regular and predictable transfers to poor or transitional communities can stimulate demand for local agricultural production and local food processing;
- Facilitating access to universal health protection in the context of national social protection floors. This can address malnutrition and improve access to food by freeing up household resources previously spent on health care. Providing dietary
counselling and nutrition education in the context of health protection helps improve diets and overall food security.

- Implementing resilience-based approaches to ensuring food access, by mitigating the effects of shocks and stressors and recognizing the complex transitions between relief, recovery and development.

- Promoting consumer awareness on nutrition, including community-based approaches and education. Provide food subsidies to nutritious food to promote behaviour-change.

**Governance:** Establishing viable, inclusive, and coherent governance systems for food and nutrition security, including:

- Building mechanisms which coordinate and ensure coherence in food production, processing, and markets, nutrition, and social protection policies and enhance access to healthy and nutritious food. Reducing hunger and malnutrition (including the hidden hunger and micronutrient deficiencies).

- Building governance structures to support efficient, stable and fair markets. Reducing private as well as public corruption. Strengthening accountability of both public and private actors for actions which impact food access.

- Supporting mechanism to improve access to food for the most vulnerable groups.

- Promoting cross-cutting governance mechanisms to address the multi-faceted nature of food and nutrition security through inter-ministerial oversight instruments.

- Providing market information, public facilities, access to technologies and know-how, and other public goods to foster stable markets and improve adaptation to natural and man-made climate events.

**Human and financial resources:** Governments and development partners, and private actors should translate the food and nutrition security aspects of policies, legislation, and programmes into effective action by allocating the necessary financial, organizational and human resources and solid administrative capacity. This requires:

- Advocating for, and supporting the tracking resource allocations and expenditures by sectors and stakeholders. Supporting actions that have explicit and measurable impacts on food access.

- Promoting investments in sustainable agriculture and the food industry which adhere to the principles for responsible investments in agriculture and food systems and the voluntary guidelines on the governance of tenure of land, fisheries and forests in the context of national food security adopted by the Committee on World Food Security (CFS);

- Investing in education and skills training at all levels to improve workers’ productivity and incomes.

**Implementation:**

Implementation should be country-led, draw on inputs, support and participation by various levels of government, international agencies, the private sector, farmer organizations, food industry organizations, trade unions, guilds, civil society, consumer groups, and non-governmental organizations. Actions should build on existing initiatives. Specific activities and the level of
engagement (local, national, regional, or global) should be tailored as appropriate for each country and context. The principles for implementation to enhance food access include:

**Partnerships, coordination and inclusivity:** All concerned sectors and stakeholders should be able to take part in decision-making on food and nutrition security, and promote access to healthy food. Aspects include:

- Engaging stakeholders, including local communities, government and non-governmental actors (such as civil society and the private sector) in food and nutrition security consultations. This can help avoid conflicts of interest.
- Promoting partnerships and coordinated action across the broad range of actors at national and sub-national, national, and regional levels.

**Evidence-based Decision-making:** Policy, legislation, and program decision-making should draw on evidence generated through information systems. These systems should monitor trends, track, and map stakeholder actions, monitor progress, and assess impact in a manner that is timely, comprehensive and transparent. Lessons learned should be incorporated into the policy process for:

- Promoting food and nutrition security evidence and impact evaluations of policies and programmes in terms of their design, implementation, monitoring and evaluation.
- Developing technology that can be scaled up to promote data collection, analysis and projections.
- Ensuring adequate institutional and technical capacities to track and monitor changes in the food and nutrition security situation.

### III. Metrics

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The following indicators for food access will help monitor progress, long-term trends, diet quality, economic vulnerability and the effects of shocks.

1) **Prevalence of undernourishment — the country measure of sufficient access to food:** FAO’s prevalence of undernourishment (PoU) indicator is an established indicator used to monitor progress against the hunger target of the Millennium Development Goals. PoU is defined as the probability that a randomly selected individual from the reference population consumes less than his or her calorie requirement for an active and healthy life. This is a well-established measure for long-term chronic food insecurity national trends (FAO State of Food Insecurity in the World, SOFI).
2) Prevalence of people with inadequate access to food, as measured through the Food Insecurity Experience Scale (FIES): FIES is an experience-based metric of the severity of food insecurity. It relies on people’s direct and objective responses to eight questions regarding their experiences with inadequate access to food. The FIES measurement system builds on the content and experience of similar tools already used in the US and in Latin America. For worldwide application of the FIES (in more than 150 countries), FIES is using the Gallup® World Poll (GWP).

3) Prevalence of households with inadequate food consumption (Food Consumption Score): This indicator captures the dietary diversity and food frequency dimensions of food access. Data for this indicator is easy to collect, economic, is included in a number of national surveys and can monitor changes. This indicator has been extensively used by WFP in food security assessments for many years, and is included in a number of national Living Standards Measurement Surveys (LSMS) and monitoring surveys.

4) Prevalence of households with over 75 percent share of food expenditure over total consumption expenditure: This indicates economic vulnerability and data is available from national household and income surveys for most countries.

IV. Messaging

Concordance reached by the High level Task Force of Global Food and Nutrition Security entities

The world can achieve zero hunger by 2030, but it will require the individual and collective effort of all stakeholders. For this to be achieved, every person has to have adequate access to sufficient, diverse and nutritious diets that are sustainable. Moreover, economic and physical factors must not prevent consumers from obtaining adequate food. Food access must be universal and sustainable.

In striving to achieve food and nutrition security, the private sector and civil society have the power to mobilize resources and society. These stakeholders should therefore contribute to access to healthy food through promoting social, environmental and economic sustainability.

Public-private partnerships: The private sector needs to be engaged to support food and nutrition security. The private sector can turn government commitments into actions. Public-private partnerships should be assessed to ensure they will strengthen food and nutrition security (such as food production, processing, marketing, trade, consumption and diets). Public-private partnerships should sustainably support productivity, implement food and nutrition security policies and programmes, carry out emergency responses, and promote price stability. The private sector can give political support to national food and nutrition security plans. The private sector can also, where appropriate, help implement national programmes. Successful public-private partnerships can:

- Strengthen public-private dialogue to integrate, if appropriate, the private sector perspectives and requisites into national planning frameworks.
- Identify and implement sector specific regulatory reforms creating an enabling environment for business;
- Through innovation, technology and know-how, support governmental policies that promote social and financial inclusion. The private sector can help with social security systems, solidarity-based microcredit initiatives, recovery programmes. The private sector can also participate in food/non-food based support during emergencies for poor families through cash transfers or vouchers programmes.
• Improve supply chain efficiencies to cut costs. Contribute to making healthy food available and affordable.

• The private sector has data about consumer food purchases and food consumption. The private sector could potentially share some of this data with the public sector (for example, data that would not compromise corporate competitiveness), as appropriate, with those public sector institutions that have a mandate or responsibility, to help monitor food and nutrition security.

**Market access and development:** By enabling enhanced access to markets, the private sector can help healthy food reach vulnerable households and individuals at affordable prices. It could also increase incomes of family and small-scale farmers and food processors, which could lead to improved food access.

• Companies — such as distributors, purchasers and retailers — can support the development of local certified food products, especially sustainable production by small-scale producers.

• Food supermarket chains could sell nutritious food at affordable prices.

• Businesses could assist smallholder producers and processors by sharing improved storage technologies; developing warehouse receipt systems; and making better market information systems available;

• The private sector should include attention to enhancing productivity, incomes and food security of smallholders by developing proactive procurement procedures targeting inclusion of smaller scale producers in value chains and by providing incentives for diversifying food and commercial production. The private sector is encouraged to be involved with smaller and medium-scale agricultural enterprises, including input suppliers as well as food manufacturers, distributors and retailers, in order to develop locally adapted solutions and develop sustainable and inclusive food value chains through partnerships and inclusive business models. Businesses should increase shareholder value, and also value for consumers, suppliers, and business partners. Value is not only monetary, but can also be social or environmental.

• Supporting producers and processors by assisting and building capacities on food safety standards, labelling and marketing.

**Investments:** Investments which promote sustainable food systems (including producers, markets, and others along the value chain) to ensure access to nutritious food, complement social protection mechanisms and other public programmes and increase the resilience of vulnerable populations, will be critical for not only eliminating hunger and reducing overweight and obesity. Complementary innovative financing — through value chain financing, public private partnerships, catalytic funds, guarantee funds, and other financing mechanisms — is needed:

• Invest responsibly in sustainable and local food systems. This in accordance with the Principles for Responsible Investments in Agriculture and food systems of the Committee of World Food Security, creates decent employment opportunities, reduces poverty, fosters social and gender equality, ensures sustainable development, and improves access to adequate food.

• Invest responsibly in sustainable food systems requires respecting, protecting, and promoting equitable growth and human rights, including the progressive realization of the right to adequate food in the context of national food security. Such investments will yield greater and more viable economic growth.
• Responsible investment includes priority investments with smallholders — including family farmers, small-scale producers and processors, pastoralists, artisans, fishers, communities closely dependent on forests, indigenous peoples, and agricultural workers — and integrating smallholders into the food system.

• The viability of investments in the food system must respect functioning ecosystems and the sustainable use of natural resources.

**Employment:** Decent jobs and adequate incomes enable individuals and families to access food that is nutritious and diverse. If families have healthy diets and eating habits, they will usually have positive food and nutrition outcomes. The private sector can promote quality employment and inclusive business models in rural areas. The private sector can also link family farmers, smallholders, processors and producer organizations to modern value chains and urban and peri-urban areas.

• Create more and better jobs, in both rural and urban populations, to empower workers by guaranteeing their rights at work, ensuring decent levels of income and social protection, and securing a safe and healthy working environment, thereby strengthening their ability to access healthy and nutritious food.

• Invest in education and skills training at all levels to improve workers’ productivity and incomes. Particular attention could be paid to increasing the skills and employment potential of youth.

• Improve employment opportunities for women taking into account local customs and cultures. Provide equal pay, child-care, flexible working hours and options for part-time work, which enhance women’s participation and incomes and thus access to food. Close the gender gap in both rural and urban labour markets by ensuring equitable access of women and men to productive resources, skill development and services.

• Ensure that workers receive enough wages to provide for them and their family’s basic needs, including access to adequate and nutritious food.

**Civil society and farmers’ organizations**

• Advocate for active participation and raise awareness on the benefit of engaging all sectors of the society and farmers’ organization in the policy-making process for food and nutrition security, ensuring that the decision makers take their interest into consideration.

• Strengthen the partnership with civil society to build stronger public support. Give voice to the poor and ensure that their views are considered in the decision making process in view to addressing the causes of inadequate food access.

• Strengthen civil society mechanisms and promote inclusive governance systems for food and nutrition security to improve access to sufficient, diverse and nutritious food;

• Enhance civil society mechanisms to improve accountability and ensure that stakeholders meet their commitments.
V. Conclusion

The Zero Hunger Challenge will benefit from a greater coordination and links among the five pillars as well as a concrete discussion on how to leverage the strength of the Zero Hunger Challenge in support of the Sustainable Development Goals (SDGs). Work to-date on the five pillars pave way for more strategic partnerships among the United Nations agencies and development partners in order to create an enabling environment for ending hunger, achieving food security and improving nutrition (SDG 2).
ALL FOOD SYSTEMS ARE SUSTAINABLE

Working group composition – participating agencies
Co-Chairs: FAO, UNCTAD, UNIDO, World Bank
Other Participants: IFAD, UNEP

This compendium summarizes the outcome of the work done by the twenty-three High level Task Force of Global Food and Nutrition Security entities, coordinated by the HLTF Coordination Team from October 2014 to October 2015.

This report outlines the main features of this specific Zero Hunger Challenge element, including suggested metrics to monitor progress, as a guide to all stakeholders willing to join the challenge. The report is articulated around four sections. Each section explains the approach used, bottlenecks encountered, alternatives considered and all the information necessary for the reader to understand how the group reached its conclusions.

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I. Definition

**Concordance reached by the High level Task Force of Global Food and Nutrition Security entities**

A food system is defined as a system that embraces all the elements (environment, people, inputs, processes, infrastructure, institutions, markets and trade) and activities that relate to the production, processing, distribution and marketing, preparation and consumption of food and the outputs of these activities, including socio-economic and environmental outcomes.

A sustainable food system is a food system that delivers food and nutrition security for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised.

A sustainable food system is a dynamic process in which achieving food and nutrition security today should also contribute to food and nutrition security for future generations.

The definition demonstrates the importance of seeking sustainability in three dimensions — environmental, economic and social — at every stage of a food system, from agricultural production, processing, and retailing, to consumption. For example, agriculture not only suffers from the impacts of climate change, it but together with land use changes account for about a quarter of greenhouse gas emissions (GHG).

Agriculture has the potential to be an important part of the solution through mitigation (reducing and/or removing a significant amount of global emissions). Hence, a sustainable food system is climate-smart and simultaneously increases agricultural productivity, enhances climate resilience, and reduces GHGs for agriculture and related land use change.

In addition to agriculture production, food consumption and associated activities like transformation of certain crops/vegetables/fruits are another important dimension of sustainable food systems. Access to nutritious food which balances calories and micronutrients can help achieve food and nutrition security.
II. Policy measures

Concordance reached by the High level Task Force of Global Food and Nutrition Security entities
- A sustainable food system is a dynamic process, and context-dependent.

- The core objective of this ZHC element (all food systems are sustainable) is to transform the way we produce, process, exchange and consume food. Thus, obtaining food and nutrition security today will not compromise future generations’ capacity to achieve food and nutrition security.

- Transformative policy measures would need to influence the key determinants of a sustainable food system with a view to support an enabling environment for sustainable food systems.

- Policy measures for sustainable food systems, should increase agricultural productivity and gender-sensitive agriculture production, enhance climate resilience, reduce greenhouse gas emissions from agriculture and related land use change, improve nutrition, strengthen value chains and improve market access.

A food system’s sustainability is influenced by natural and human factors. These factors interact with each other within a food system. For example, the availability of water and land for food production is influenced by human actions, while human choices are influenced by environmental conditions.

Creating the enabling conditions for the shift to more sustainable food systems will require systems-based approaches that can consider the range and complexity of interactions prevalent in the production, distribution and consumption of food. These links between food production, distribution, consumption, and nutritional health and the underlying social-economic, biophysical and institutional elements, ultimately affect the quantity, quality and affordability of food, as well as health and wellbeing.

It is thus important that policy measures to achieve sustainability in food systems adopt a multi-dimensional, gender-sensitive and integrated approach in all the stages including transport, storage, processing, wholesale and retail, consumption (includes transformation of crops, fruits, vegetables, dairy products, fish and meat into food) and food waste management. Furthermore, changes in dietary practices, such as an increased consumption of animal-based and processed products, can result in higher demands for resources and more greenhouse gas emissions.

Also important is to ensure a fair, equitable and inclusive market mechanism at the national, regional and international levels for economic viability of rural livelihoods in general and small-scale farmers in particular.
### Key determinants of a sustainable food system

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<td>development, inclusive and</td>
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<td>(food, feed, plant-based or</td>
<td>efficient markets, enabling</td>
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<td>animal-based commodities/materials,</td>
<td>policies and infrastructure</td>
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<td>biofuels, etc.)</td>
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<td><strong>Natural resources</strong></td>
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<td>Land, oceans, water, genetic</td>
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<td>resources, forest resources,</td>
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<td>aquatic systems, nutrients,</td>
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<td><strong>Social services and conditions</strong></td>
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<td>Demographic changes, health,</td>
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<td>nutrition, urbanization, etc.</td>
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### III. Metrics

Concordance reached by the High level Task Force of Global Food and Nutrition Security entities

Environmental, social and economic conditions required for achieving a sustainable food system are country specific and associated metrics will need to be reflective of these country conditions. Guiding these metrics is a set of **principles** that every country will need to better align with in order to achieve sustainability in food and agriculture, as the following:

(i) **Improve efficiency of resource use** (such as land, water, fisheries and forests).

(ii) **Protect and enhance natural resources’ sustainability** (by reducing environmental externalities of agriculture such as methane emissions in the air and nitrous oxide in the soil).

(iii) **Protect and improve rural livelihoods, equity, women's empowerment, and social well-being.**

(iv) **Enhance people's, communities’ and ecosystems’ resilience.**

(v) **Ensure a responsible and effective governance** system, particularly with respect to the use and the protection of natural resources.
A sustainable food system is a dynamic concept, and the conditions that ensure sustainability in food systems can vary widely across countries and regions, as well as across different stakeholders (e.g. poor or marginal food producers who may chronically or seasonally lack productive capacity to cover own food needs, or urban low-income non-food producers).

Achieving sustainable food systems depends on the success of the other ZHC elements, such as zero food waste, 100 percent access to food and increasing smallholder’s income. The metrics suggested for these Zero Hunger Challenge elements can help monitor progress on achieving sustainable food systems.

Other indicators to measure progress on the related Sustainable Development Goals — particularly those in the Goals 2, 3, 5, 6, 9, 12, 14, and 15 — should be finalized in early 2016. These indicators could help monitoring progress on this ZHC element i.e. Sustainable Food Systems.

SDGs:
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
Goal 3: Ensure healthy lives and promote well-being for all at all ages.
Goal 5: Achieve gender equality and empower all women and girls.
Goal 6: Ensure availability and sustainable management of water and sanitation for all.
Goal 9: Build resilient infrastructures, promote inclusive and sustainable industrialization, and foster innovation.
Goal 12: Ensure sustainable consumption and production patterns.
Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat deforestation, and halt and reserve land degradation and halt diversity loss.

IV. Messaging

Concordance reached by the High level Task Force of Global Food and Nutrition Security entities
- A sustainable food system encompasses the production, distribution and consumption of food.

- Policy measures for sustainable food systems need to link food production, distribution, consumption, and nutrition. The policies must also address social-economic, biophysical and institutional elements. Policy measures should help increase agricultural productivity and gender-sensitive agriculture production, enhance climate resilience and reduce agricultural greenhouse gas emissions for agriculture and related land use change, improve nutrition, strengthen value chains and improve market access.

- Sustainable food systems need support from a vast range of stakeholders from the farmers to the final consumer, from governments to private sector to civil society.

Sustainable food systems embrace the interconnectedness of all the food-related activities and the environment within which these activities occur. The production, distribution and consumption of food is a dynamic process involving multiple inputs, outputs and stakeholders. Furthermore, sustainable food systems need to increase agricultural productivity, improve climate resilience, and reduce greenhouse gas emissions for agriculture and related land use change.
Food systems overlap and operate at local, regional, national, and global levels. They are very diverse and have multiple objectives. There is no one model of a sustainable food system, but a set of principles that constitute sustainability. Therefore, approaches to accelerating this shift should evolve from the particular contextual conditions of the food system under investigation.

The emphasis at an overarching level is therefore to assist in creating the policy-enabling conditions for sustainable food systems approaches to develop. It is important to promote multi-stakeholder dialogue for coordinated action at national level that considers interactions and outcomes across the food system.

V. Conclusion

The group focused on highlighting existing knowledge gaps and additional work needed at element or inter-element level. Furthermore the group highlighted the links between sustainable food systems and the sustainable development goals.

Creating the enabling conditions for the shift to more sustainable food systems will help hunger eradication in a sustainable manner. This requires a systems-based approach that can consider the complexity of interactions between food production, distribution, and consumption.

These links will ultimately affect the quantity, quality and affordability of food, as well as people’s health.

Creating the enabling policy conditions at a national level to support the transition to more sustainable food systems could be based on the following principles:

- Interdisciplinary thinking: Stakeholders across the food system need to be represented in, for example, a nationally convened dialogue, and, where possible, they should actively participate in developing SFS policy and action.

- Consensus building: Consensus-based participatory approaches to policy development can address causes rather than symptoms of food system sustainability.

- Mapping and assessment: Understanding the food system from production to nutritional outcomes helps discover priorities areas for action. Acknowledging the differences in priorities among stakeholders, and taking both bio-physical and socio-economic factors into account, can help develop long-term sustained change in food production and consumption patterns.

- Interconnected decision-making: Stakeholders should communicate on the interconnectivity of actions in the food systems. This can impact decision-making across production, consumption and nutrition. Stakeholders should understand causes and effects within the food systems.

- Evidence-based: Decisions should be based on evidence.

- Measuring: Discussions should be focused on specific, measurable, achievable, realistic and time-bound actions to create real change. Stakeholders stay motivated to participate in transformative processes when they see decision-making resulting in real change.
Continuous learning: Systems thinking requires the use of feedback mechanisms to improve decision-making. The complexity of food systems will mean that some actions will not result in the intended outcomes. Such cases provide valuable learning opportunities; these cases should be used to develop greater understanding of the causes of failure, to improve future decision-making.
100% INCREASE IN SMALLHOLDER PRODUCTIVITY AND INCOME

Working group composition – participating agencies
Co-Chairs: IFAD, ILO, UNDP

Participating agencies: FAO, OHRLLS, UNCTAD, World Bank

This compendium summarizes the outcome of the work done by the twenty-three High level Task Force of Global Food and Nutrition Security entities coordinated by the HLTF coordination team for the Zero Hunger Challenge from October 2014—July 2015.

This report outlines the main features of this specific Zero Hunger Challenge element, including suggested metrics to monitor progress, as a guide to all stakeholders willing to join the challenge. The report is articulated around four sections. Each section explains the approach used, bottlenecks encountered, alternatives considered and all the information necessary for the reader to understand how the group reached its conclusions.

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I. Definition

Concordance reached by the High level Task Force of Global Food and Nutrition Security entities:
For the purpose of this working group, references to smallholders or to small-scale food producers are meant to include smallholders, small-scale rural processors, agriculture and food workers, artisanal fishermen, pastoralists, rural artisans, indigenous peoples and the landless. Doubling income has been interpreted as doubling their consumption and savings opportunities in monetary terms. Doubling productivity has been interpreted as doubling the ratio of output to inputs used in the agricultural production process implemented by these groups.

As there are a number of different ways to define smallholder agriculture, the Working Group decided not to use a narrow definition for its work, but to focus on rural poverty reduction and improved welfare of smallholders through increased incomes and productivity and encouraging decent work in rural areas.

Given the heterogeneity of smallholder agriculture and rural livelihoods, the group agreed that there is no one size fits all approach toward achieving the established target of a “100 per cent increase in smallholder productivity and income.” As each country is guided in policy decision-making by its own understanding and way of categorizing small farms and small-scale farmers appropriate to its specific circumstances, the definition provided here is intended to be adapted to country-level contexts for implementation and monitoring purposes.

The agreed proxy definition has two key inter-related dimensions. The first dimension relates to outcomes which translate into: (i) increased smallholders’ productivity; (ii) increased smallholders’ incomes; (iii) diversified rural livelihoods; and (iv) increased decent work opportunities in rural areas. These outcomes will be especially important for poor rural people. The second dimension refers to the enablers which provide the means to achieving those outcomes.

II. Policy measures

Concordance reached by the High level Task Force of Global Food and Nutrition Security entities
Proposals for policies and investments to be established by governments to help achieve these outcomes are grouped around nine areas:

1. Promote adequate, secure and equal access for women and men to land, natural resources, finance, knowledge and technology, infrastructure, services and markets.

2. Foster increased and equal access for men and women, and in particular young people, to agricultural and rural advisory services, including agricultural research and extension, as well as improved seeds and good planting materials.


4. Enhance smallholder resilience, including through diversification of farm and non-farm employment, and increased investments in agricultural research.
5. Promote the application of international labour standards in the rural economy and in the agricultural sector in particular, giving priority to core labour standards.

6. Strengthen farmers’ organizations, the organizations of smallholders and waged agricultural workers, and other rural-based organizations, paying particular attention to women and youth, to increase their participation and voice in policy and decision-making processes that drive agricultural and broader rural transformation and to recognize and enhance the economic roles of these organizations.

7. Promote access to social protection systems, including nationally defined social protection floors, and risk management mechanisms for smallholders.

8. Invest in the development of statistical indicators and data on the rural economy.

9. Take into account environment and climate change-related issues when designing and implementing agricultural and rural development policies.

These policies and investments will help achieve the four outcomes outlined above. Priorities among these will vary by country.

1. Promote adequate, secure and equal access for women and men to land, natural resources, finance, knowledge and technology, infrastructure, services and markets:

- Invest in developing human capital and infrastructure to improve access to services in rural areas – health, education, security and utilities, as well as commercial and financial services, government administrative services, postal and communication services, transport and construction – as part of broader strategies to improve food and nutrition security, working and living conditions for rural workers, and the attractiveness of the rural economy. Promote investment programmes in human capital, with a particular focus on smallholders and agricultural workers, both female and male, which build their capacities and have a positive effect on yields and revenues.

- Put in place policies to ensure that women and men have equal rights and control over resources, including land and other forms of property.

- Promote public investment in infrastructure — storage facilities, irrigation, roads, harbours, etc. – contributing to increased productivity and access to markets and reduced production costs for smallholders. This will attract private investment, enhance the creation of more and better jobs, and stimulate growth. Promote local resource-based infrastructure projects which create greater quantity and quality of jobs and contribute to broader local micro, small and medium-sized enterprise development, skills development and local economic development. Engage women in planning processes to support their equal access to employment opportunities.

- Improve access to financial services for both men and women to a range of productive (asset accumulation, working capital) and protective (mitigating risk exposure, including health issues) purposes. This should help smallholders and rural populations in general purchase stock, equipment, and agricultural inputs; maintain infrastructure; contract labour for planting and harvesting; transport goods to markets; make and receive payments; manage peak season incomes to cover expenses in the low season; invest in education, shelter and health; and, deal with emergencies. Insurance can help protect smallholders’ asset base and increase their productivity.
• Promote cooperative and farmers’ organizations which can facilitate equal access for women and men to knowledge, credit/finance and technology, services and markets, and help rural workers improve their productivity and incomes.

2. **Foster increased and equal access for men and women, and in particular young people, to agricultural and rural advisory services, including agricultural research and extension, as well as improved seeds and good planting materials:**

• Strengthen smallholder access to markets and agricultural services, paying special attention to gender equality which is essential for increasing smallholder productivity and incomes and achieving sustainable economic development. Despite their multiple roles, women have significantly less access than men to land and other assets, services, processing and marketing opportunities that would enable them to enhance their productivity and improve their livelihoods and incomes. They also have limited access to credit, information and technologies, and often face difficulties in terms of mobility and political participation. Gender equality and women’s empowerment are crucial to achieving food and nutrition security, and enabling poor rural people to overcome poverty. Evidence demonstrates that when women are empowered, there are significant benefits for agricultural production, rural business development, as well as nutritional and educational outcomes of children. Priority should be given to investments in programmes and policies that address gender inequalities, particularly those relating to access to education, health care and services, infrastructure, and productive resources and assets.

• Invest in increasing access to and scaling-up innovations and interventions which promote sustainable and productive food and agriculture systems.

3. **Promote investments in sustainable agriculture, in accordance with the “Principles for responsible investments in agriculture and food systems” of the Committee on World Food Security (2014) and the “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security”:**

• Develop and implement mechanisms that promote the level and quality of investments in the agro-food sector, in accordance with the CFS “Principles for responsible investments in agriculture and food systems”, which address all types of investment – public, private, large, small – and can be used by all stakeholders when developing individual agreements and contracts. Responsible investments in agriculture and food systems are essential for enhancing food and nutrition security; increasing productivity, incomes and decent employment opportunities; and eradicating poverty and ensuring sustainable development. Responsible investments in agro-food value chains – from production to consumption – create quality jobs, stimulate demand through increased economic activity, and assist small-scale enterprises, including small-scale family farmers, to access national, regional, and global supply chains, thereby improving their incomes and the availability of diverse, healthy and nutritious food. For measures to address nutrition, please refer to Reports of Working Group 1 and Working Group 2.

• Establish measures to improve governance of tenure of land, fisheries and forests, in line with the CFS “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security” (2012), with the overarching goal of achieving food and nutrition security for all and to support countries in their efforts towards the progressive realization of the right to adequate food in the context of national food security.

• Implement relevant recommendations of the mid-term review of the Istanbul Programme of Action due in 2016, particularly regarding boosting structural transformation, agricultural
productivity and productive capacity-building in agriculture in the least developed countries (LDCs).

4. Enhance smallholder resilience, including through diversification of farm and non-farm employment, and increased investments in agricultural research:

- Improve the productivity of smallholders, paying particular attention to rural women and young people. Promote on and off-farm economic and employment opportunities through technical advice, increased market access, more inclusive financial services (including risk management), provision of infrastructure that links rural and urban regions, and human resource development. Such improvements, along with coherent employment policies, can facilitate the transition from the informal economy to the formal economy, particularly for women farmers, and allow workers in food production systems to access services and earn a decent income.

- Provide entrepreneurship and skills training for smallholders, waged agricultural workers and rural workers in general, paying special attention to women and youth, to acquire the skills necessary to improve productivity, start their own businesses and take up employment opportunities in other sectors of the economy.

- Promote enterprise development and employability among women by providing financial assistance to small businesses. Improve skills and literacy, paying particular attention to such factors as local customs and culture and promoting measures such as equal pay, child care, flexible working hours and options for part-time work, which tend to enhance women’s participation. Improve women farmers’ access to productive resources to sustainably increase yields and raise total agricultural output.

- Support financial inclusion of smallholders and rural people through increased and sustainable access to a variety of financial services – savings, credit, remittances and insurance, etc. – to enable them to invest in productive activities, both agricultural and non-agricultural, and protect themselves against risk.

- Invest in agricultural research systems to support development of improved crop varieties and livestock breeds that are more resilient to climate shocks, and to the projected increase in global temperatures. Climate change is projected to reduce agricultural productivity, particularly in the poorest regions. More investment in improved seeds and livestock can help offset these negative impacts on productivity growth.

5. Promote the application of international labour standards in the rural economy and in the agricultural sector in particular, giving priority to core labour standards:

- Support countries in their efforts to ratify and effectively implement relevant international labour standards, thereby promoting an enabling environment for improved productivity and performance. Give particular attention to standards applicable to the agro-food sector and to labour in rural areas. These standards may include, inter alia, the Right of Association (Agriculture) Convention, 1921 (No. 11), Minimum Wage Fixing Machinery (Agriculture) Convention, 1951 (No. 99), Rural Workers’ Organizations Convention, 1975 (No. 141), Plantations Convention, 1958 (No. 119).

- Given the prevalence of child labour in agricultural and rural areas, place particular attention to promoting implementation of international labour standards on child labour. These may include the Minimum Age Convention, 1973 (No. 138) and the Worst Forms of Child Labour Convention, 1999 (No. 182).

- Create an enabling environment for effective and inclusive social dialogue, which brings together public, private and civil society stakeholders, on employment practices and working
conditions and encourage the development of labour market institutions in rural areas, with a view to helping states implement international labour standards.

- Support governments in their efforts to establish a legally defined minimum wage corresponding to a living wage, ensure labour inspections in agriculture, secure social security for smallholders and waged agricultural workers’, and establish compulsory registries of agricultural workers and the compulsory licensing of labour contractors.

- Promote occupational safety and health in agriculture, which is among the most dangerous sectors due to exposure to hazardous chemicals and machinery, and long working hours. At least 170,000 agricultural workers are killed each year due to accidents in the workplace.

6. **Strengthen farmers’ organizations, the organizations of smallholders and waged agricultural workers, and other rural-based organizations, paying particular attention to women and youth, to increase their participation and voice in policy and decision-making processes that drive agricultural and broader rural transformation and to recognize and enhance the economic roles of these organizations:**

- Promote social dialogue and organization in rural areas, including among smallholders and waged agricultural workers, in order to increase their bargaining power with respect to other market actors of the economy, as they often lack the leverage and organization needed to engage their partners in collective bargaining or social dialogue.

- Promote the design of integrated national policies that support the establishment, growth and functioning of rural workers’ organizations. Support the development of strong, independent and effective smallholder and farmers’ organizations to ensure that their collective voice contributes to the elaboration and implementation of economic and social development.

- Support and strengthen smallholders’ organizations, which protect and advocate for markets and policies that favour smallholders, particularly rural women and youth. Effective smallholder and farmers’ organizations also enable smallholders to achieve economies of scale, reduce costs and risks, improve productivity, generate higher incomes and enhance food security.

- Improve the economic roles and performance of smallholder and farmers’ organizations. This should include training to upgrade smallholder capacities and know-how in business and financial management, marketing, legal aspects and advocacy. Build capacity of waged agricultural worker organizations and harness spill-overs to better enable smallholder participation and contribute to constructive dialogue among stakeholders.

- Promote the application in law and practice of freedom of association for all agriculture and rural workers and employers, which requires addressing a range of challenges related to the nature of the rural economy such as geographical isolation, limited access to technology and means of communication, lack of capacity in the labour inspectorate, low levels of skills and education, and the high incidence of child labour, forced labour, and discrimination.

- Improve policy frameworks (including those related to the rural business and investment climates) that help enhance the sustainability and productive capacity of smallholders and profitably link them into remunerative and sustainable value chains. Strengthen smallholders’ roles and participation in agro-food value chains – from production to marketing and processing.
7. **Promote access to social protection systems, including nationally defined social protection floors, and risk management mechanisms for smallholders:**

- Extend social protection systems to rural areas, making them more accessible and better targeted to smallholders and agricultural workers, especially women, youth and disadvantaged groups. Establish social protection floors, as recommended by the Social Protection Floors Recommendation No. 202, to increase the productive capacity of smallholder and worker households, for example by helping them improve nutrition, invest in education, retain productive assets and mitigate risk. Support governments in their efforts to address gaps in access to social protection services for informal rural workers through appropriate and integrated policies.

- Implement social protection policies and programmes that promote human capital investment, and improved and resilient livelihoods and productive capacity of the rural poor to safeguard food and nutrition security for all.

- Establish risk management mechanisms and measures to limit the adverse impacts of natural disasters and excessive price volatility.

8. **Invest in the development of statistical indicators and data on the rural economy:**

- Strengthen the knowledge base through research and development of statistical indicators and data for different sectors of the rural economy, thereby improving the design, implementation, monitoring and assessment of rural development programmes as an integral part of national development plans.

9. **Take into account environment and climate change-related issues when designing and implementing agricultural and rural development policies:**

- Address concerns over the environmental sustainability of agricultural growth and facilitate a shift to a Green Economy through the promotion of climate-smart agricultural practices which address the interlinked challenges of food security and climate change adaptation as well as mitigation;

- Pay specific attention to addressing the needs of, and constraints faced by, indigenous peoples. More than 370 million self-identified indigenous peoples in the world are among the most marginalized and vulnerable groups; and the value of their unique knowledge and systems are often under-appreciated. Understanding and supporting the ways in which indigenous peoples have been able to use their traditional knowledge and social systems to make agricultural and the environment work together in harmony is of particular interest given the challenges that the world is facing with regard to food security and the management of natural resources in a context of climate change. Indigenous systems and foods protect biodiversity and are rich in nutritional value. Working in partnership with indigenous peoples and ensuring that their rights are respected, in particular in relation to their ancestral lands and dietary practices, should be a key element of sustainable food production in a post-2015 world.
**III. Metrics**

**Concordance reached by the High level Task Force of Global Food and Nutrition Security entities**

Three core indicators are proposed to track progress in the productivity and incomes of rural people across all country contexts (Group A) and four indicators that may be applicable only in certain country contexts (Group B):

GROUP A: Indicators applicable to all country contexts:
- Value of total agricultural production per labour unit
- Value of agricultural production per hectare
- Incidence of the rural working poor (proportion of rural workers living in households below the nationally defined rural poverty threshold).

GROUP B: Indicators that may not be applicable to all country contexts:
- Agriculture-orientation index of government expenditures
- Share of women (and share of men) landowners out of total agricultural landowners
- Proportion of agricultural land under irrigation
- Incidence of the rural working poor (internationally-defined poverty threshold).

**GROUP A: Indicators applicable to all country contexts**

**Indicator A1: Value of total agricultural production per labour unit (agricultural-wide, constant US dollars)**

The indicator is directly linked to the target, particularly the labour dimension of agricultural productivity. In line with the lead indicator proposed for the target in the SDG process, agriculture-wide implies a sectorial coverage that includes a full set of agricultural activities, forestry, fisheries, livestock, and hunting/gathering.

The indicator measures agricultural labour productivity, expressed in constant United States dollars per labour unit measured during a given reference period (typically: year corresponding to one full agricultural season). The quantity of labour input should cover all forms of work used in the agricultural production process, including persons in employment and persons involved in the production of own-use goods. The labour unit (denominator) may be measured by the total number of persons engaged in forms of work that contribute to agricultural production.

As an alternative measure, labour productivity could be measured as agricultural value added per labour unit (or per worker). This information is available in national accounts data and labour statistics. This would take the indicator closer to the target of doubling incomes by subtracting input costs from the production value.

The indicator can be generated for all agricultural producers and workers and for smallholder producers and women-headed household producers, separately in two sub-indicators (see A.1a and A.1b below).

**Sub-indicator A.1a: Value of total agricultural production per labour unit (for smallholder producers; agriculture wide, constant US dollars)**
To estimate this indicator for smallholders specifically, a more operational definition needs to be adopted. In the context of the preliminary SDG indicators, it is proposed to break it by farm size. The specific cut-off farm area size for smallholders still needs to be determined.

While defined as a sub-indicator, this (along with indicator A.2a) will be one of the two indicators closest to the overall target for this ZHC element.

**Sub-indicator A.1b:** Value of total agricultural production per labour unit (agriculture-wide; for female-headed farm household; constant US dollars)

See justification of indicator A.1. In many developing countries, women make up an important share of the agricultural labour force, also managing the family farm unit. Women often have a lack of access to and control over land (see indicator B.2). They may also have a lack of access to finance, inputs, and other resources (more so than their male counterparts) while also carrying out most unpaid care and work burdens in the household. The indicator should be reflective of such differences in access to resources and, hence, productive potential. Interventions to reduce such gender gaps should lead to a smaller differential in productivity between female producers and the average.

**Indicator A2: Value of agricultural production per hectare (agriculture-wide; constant US dollars / hectare)**

This indicator provides another proxy of increased supply of food and income earning capacity of smallholders. As a land productivity indicator, the value of production used in the numerator and the land area used in the denominator only refer to crop production and crop area planted. Along with indicator A.1, this indicator will provide the basis for monitoring progress towards the target of doubling productivity. It will support monitoring of that target for smallholders, both generally and by sex.

Increased land productivity (crop yield) does not necessarily correspond to increased income. (e.g., if productivity improvements imply increased input costs or if increased supply leads to reduced unit prices). Hence, some caution will be needed in interpreting this indicator to measure progress toward the target of doubling rural or smallholder incomes. Given the different agro-climatic conditions and potential yields across countries, the aggregate indicator should be interpreted with care. It may not be appropriate to have a uniform target for the value of (smallholder) crop production per hectare. Ideally, targets should be set to reflect progress towards closing the yield gap (defined as the gap between the yields achieved in a country and technical potential yields). Closing this gap reflects progress towards productivity growth, new technology, infrastructure improvements and market integration.

**Sub-indicator A.2a:** Value of total agricultural production per hectare (for smallholder producers; agriculture wide; constant US dollars / hectares of arable land)

For justification of the disaggregation by farm size, see indicator A.1a. For interpretation, see indicator A.2.

**Sub-indicator A.2b:** Value of total agricultural production per hectare (for female-headed farm households; agriculture-wide; constant US dollars / hectares of arable land)

See justification of indicator A.2. For the disaggregation for female headed farm households, see A.1b.

**Indicator A.3: Incidence of the rural working poor (proportion of rural workers living in households below the nationally defined rural poverty threshold).**

The indicator is defined as the number of people whose main form of work is in employment and persons whose main form of work is in own-use production of goods. These people live in households whose incomes (often derived by consumption expenditure per capita, using the LSMS methodology) are below the nationally-defined poverty line. This is applicable to all countries since the poverty
threshold is based on nationally-defined rural poverty thresholds rather than on an international threshold.

Data may be disaggregated by economic activity (including agriculture and non-agriculture) in employment or own-use production of goods, as well as by age group (total, youth and adult) and/or sex. It is typically based on the measurement of real household expenditure (as a proxy for disposable income) and refers to a nationally-defined absolute poverty line for rural areas. The indicator is directly linked with the target of “100 per cent increase in smallholder income”, and shows the links between rural poverty and employment. Because nationally defined poverty lines are used, different welfare standards may apply across countries. Hence, this indicator cannot be used for international comparisons.

**Sub-indicator A.3a: Incidence of rural poverty (proportion of the rural population below the national poverty line for rural areas)**

This is a context indicator: it provides information about well-being in terms of the income of all people living in rural areas.

All technical considerations regarding poverty line indicated above apply for this indicator as well.

**Sub-indicator A.3b: Rural poverty gap index (depth of poverty among rural households measured as the mean income/expenditure shortfall from the national poverty line in rural areas as a proportion of that line)**

The indicator is applicable to all countries since the poverty threshold is based on a nationally-defined rural poverty threshold rather than an international poverty line which would be suitable to lower-income countries. This indicator measures average income shortfalls of the rural poor and is indicative of additional efforts needed to lift them out of poverty. Higher values indicate higher shortfalls, with the non-poor having zero shortfalls.

The indicator is generated using the same data and poverty line(s) as for the poverty incidence, indicator A.3a.

**GROUP B: Indicators that may not be applicable to all country contexts**

**Indicator B.1: Agriculture-orientation index of government expenditures (ratio of the share of government expenditures on agricultural development in total government expenditure relative to the share of agricultural GDP in total GDP)**

The indicator relates to SDG target 2.a.1, which states: "Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productivity capacity in developing countries, in particular in least developed countries." The proposed indicator measures country commitments to agriculture relative to other sectors and shows the relative importance of the agricultural sector for the economy at large. The relevance of this indicator is based on the assumption that the removal of key bottlenecks to smallholder farmers would require additional efforts from governments through rural infrastructure, targeted subsidies and other productive support measures.

This indicator is included in the proposed list of preliminary indicators for SDG monitoring, as an indicator linked to a means of implementation.

**Indicator B.2: Share of women (and share of men) landowners out of total agricultural landowners**
This indicator measures the percentage of women and the percentage of men with legally recognized and documented rights to land. Legal land tenure for women is widely recognized as important for poverty reduction, food and nutrition security and women's empowerment, all of which contribute to raising smallholder productivity and income. The landowner is the legal owner of the land. However, definitions of ownership may vary across countries and surveys. For instance, documented ownership means that ownership is verified through title or deed, while reported ownership relies on individuals’ own judgment. Additionally, in some countries, it is more appropriate to investigate land ownership using proxies able to capture a bundle of rights. Therefore, the indicator will need to be complemented with metadata that specifies what definition(s) of ownership is employed.

This indicator could be complemented by a similar indicator measuring the proportion of adult women and men agricultural holders, out of total agricultural holders. The motivation for this indicator would be the same. It could overcome problems in measuring ownership consistently across countries and would also include those smallholders who have access to land by lease or arrangements other than formal ownership. The limitation here is that the indicator may not adequately or consistently distinguish between secure and non-secure access to and control of land.

**Indicator B.3: Proportion of agricultural land under irrigation (per cent of total agricultural land)**

This is a key indicator, as access to irrigation water is considered essential to smallholder farmers’ ability to increase agricultural productivity, in weather dependent environments.

**Indicator B.4: Incidence of the rural working poor (internationally-defined poverty threshold; proportion of rural workers living in households below the poverty lines of USD 1.90 per capita per day in PPP terms).**

See indicator A.3 for definition and interpretation. However, because it is determined through the international poverty line, this measure allows for comparison across countries.

**Sub-indicator B.4a: Incidence of rural poverty (proportion of rural population below poverty lines of USD 1.90 per capita per day in PPP terms)**

See indicator A.3a for the definition and interpretation of this indicator. Since this measure is determined through the international poverty line, it allows for comparison across countries. The indicator would directly serve to measure progress towards SDG1 (to end poverty by 2030) as applicable to the rural population.

**Sub-indicator B.4b: Rural poverty gap index (depth of poverty among rural households measured as the mean income/expenditure shortfall from poverty lines of USD 1.25 per capita per day, and USD 2.00 per capita per day as a proportion of that line)**

See indicator A.3b for the definition and interpretation. However, because this measure is determined through the international poverty line, it allows for a comparison across countries.
IV. Messaging

| Concordance reached by the High level Task Force of Global Food and Nutrition Security entities |
| Messages to the private sector should focus on the importance of responsible investments in the agro-food sector — and the production of healthy foods — in accordance with CFS’ guidance and with the need to address decent work challenges. |
| Messages to civil society and farmers’ organizations should promote inclusive and sustainable transformation of smallholder agriculture. |

Advice and messages to the private sector and civil society:

**Private sector**

- Invest responsibly in the agro-food sector, in accordance with the Principles for responsible investments in agriculture and food systems and the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security of the Committee of World Food Security, thereby enhancing food and nutrition security, creating decent employment opportunities, eradicating poverty, fostering social and gender equality, and ensuring sustainable development;

- Address decent work challenges and ensure that workers receive decent wages that are at least adequate to provide for them and their family's basic needs, including access to adequate and nutritious food, bearing in mind the negative impact that malnutrition has on human capital, productivity and growth;

- Improve employment opportunities for women, taking into account local customs and culture and providing measures such as equal pay, child care, and options for part-time work, which tend to enhance women’s participation and can positively impact productivity, incomes and household food security;

- Improve employment opportunities for young people by establishing apprenticeship schemes and skills and entrepreneurship development programmes, and offering employment services with job orientation, job matching and placement;

- Establish mechanisms for regular consultations with workers and their representatives on issues of mutual concern, and engage in collective bargaining processes to secure trust and commitment in employment relations and improve worker productivity.

- Invest in education, entrepreneurship and skills training to improve rural productivity and incomes, with a particular focus on women and youth.

**Civil society and farmers’ organizations**

- Advocate and defend smallholder interests to promote the inclusive transformation of smallholder agriculture and the scaling up of their economic activities to increase productivity, incomes, and working and living conditions.

- Include smallholders and their representatives in civil society organization structures at national and international levels and empower them to participate in decision-making processes on policies and programmes that address ways to increase smallholder productivity and incomes and promote rural development at large;

- Use and strengthen existing mechanisms, such as the Civil Society Mechanism at the Committee on World Food Security, to represent the interests of smallholders and agricultural workers and to advocate for policies that aim at increasing their productivity, incomes, working and living conditions.
V. Conclusion

The Zero Hunger Challenge Working Group 4 focused on reducing rural poverty reduction and improving the welfare of smallholders by raising incomes and productivity and creating decent work in rural areas. The content of this document reflects the collaboration among technical and policy experts across key UN agencies working on issues related to agricultural productivity and incomes and rural development at large. It combines analytical, programme, policy and investment perspectives, which take into account broader goals of sustainable development.

Given the heterogeneity of smallholder agriculture and rural livelihoods, this document acknowledges that there is “no one size fits all” approach toward achieving the established target of doubling smallholder productivity and income. Each country will thus have to adapt the definition and proposed policy measures for implementation and monitoring purposes.

The proposals in this document are intended to help inform approaches to monitoring and implementing SDGs that pertain to agriculture, and hunger and poverty reduction at national, regional and global levels, while SDG indicators, the development of which is currently under way, will be taken in to account to improve approaches to monitoring progress towards the objective of this specific element of the Zero Hunger Challenge. The indicators provide a tool for United Nations agencies and member States to monitor the status of smallholder productivity and incomes and the implementation of policy measures required to increase these significantly and to promote thriving rural economies.
COMПENDIUM — FINAL REPORT
ZERO HUNGER CHALLENGE WORKING GROUPS

THE SECRETARY-GENERAL’S HIGH-LEVEL TASK FORCE ON
GLOBAL FOOD AND NUTRITION SECURITY

ZERO LOSS OR WASTE OF FOOD

Working group composition – participating agencies
Co-Chairs: FAO, UNEP, UNIDO
Other Participants: IFAD, ILO, World Bank, WFP, WTO

This compendium summarizes the outcome of the work done by the twenty-three High level Task Force of Global Food and Nutrition Security entities coordinated by the HLTF coordination team from October 2014 to October 2015.

This report outlines the main features of this specific Zero Hunger Challenge element, including suggested metrics to monitor progress, as a guide to all stakeholders willing to join the challenge.

The report is articulated around four sections. Each section explains the approach used, bottlenecks encountered, alternatives considered and all the information necessary for the reader to understand how the group reached its conclusions.

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I. Definition

Concordance reached by the HLTF entities:

Food is any substance, whether processed, semi-processed or raw, which is intended for human consumption.

Food loss is the decrease in quantity or quality of food.

Food waste is an important part of food loss and refers to the removal from the food supply chain of food which is fit for consumption, or which has spoiled or expired, mainly caused by economic behaviour, poor stock management or neglect.

(The above definitions were validated by the United Nations Secretary-General Ban Ki-moon at the 11 March 2015 HLTF Principals Meeting).

Explanations

Explanatory terms and concepts that underpin the definitions can be found in the definitional framework available at the following links:

- http://www.fao.org/3/a-at144e.pdf

The definitional framework was developed through a multi-stakeholder process within the Save Food Initiative and further refined within the context of the working group.

Here are some explanatory terms in the definitional framework:

- Quantitative food loss refers to the decrease in food mass.
- Qualitative food loss refers to the decrease of food quality attributes such as appearance, taste, texture and nutritional value.
- Food loss in the production and distribution segments of the food supply chain is mainly caused by the food production and supply system or its institutional and legal framework.
- Although not sharply defined, food waste is still recognized as a distinct part of food loss, because the underlying reasons, economic framework and motivation of the food supply chain actors for wasting food are different from unintended food loss. Subsequently, the strategies on how to reduce food waste are conceived in a different, targeted manner.
- The food supply chain starts from the moment that:
  - Crops are harvest-mature or suitable.
  - Animals are ready for slaughter.
  - Milk has been drawn from an udder.
  - Eggs are laid by a bird.
  - Aquaculture fish are mature in the pond.
  - Wild fish have been caught by fishing gear.
- The end point of the food supply chain is when food is consumed or removed from the food supply chain.

The term "post-harvest loss" is used to represent food loss in the production and distribution segments of the food supply chain.
II. Policy measures

Concordance reached by the HLTF entities:

A ‘hierarchy approach’ should be taken in which emphasis is placed on prevention (source reduction) as the priority option for reducing food loss and waste.

Where prevention fails or is impossible, the order of priority is: recovery and redistribution of food to feed humans; recovery to feed animals; recycling for industrial purposes such as for bioenergy; and composting. Incinerating and disposing wasted food in landfills are the worst options.

The approach to reducing Food Loss and Waste (FLW) should be embedded within a broader framework for promoting sustainable food systems. Policy measures directed at reducing FLW should promote resource efficiency, environmental sustainability and climate resilience. These policy measures can contribute to food and nutrition security goals. They should also consider relevant gender dimensions.

Policies and strategies aimed to reduce FLW should be an integral part of the wider frameworks established to promote food and nutrition security and social and economic development. These frameworks should be assessed to identify and address gaps which might contribute to FLW.

National efforts to address FLW should be coordinated to avoid duplication.

The private sector is a crucial partner in efforts to address FLW. Coherent polices and government regulations are needed to create an enabling environment that is conducive for the private sector to help reduce FLW.

The group members also agreed on the following:

FLW will likely be reduced if the public sector also involves civil society and local and regional authorities, to help identify strategies for action.

Functioning markets and prices are incentives for private sector investment. Actions for fostering market development include:

- Develop producer organizations which use market opportunities by chain actors
- Support inclusive value chains to promote partnerships among chain actors
- Develop grades and standards, while considering aesthetic standards on produce which provoke food waste.
- Promote business development services which support enterprises involved in the value chain.
- Support market institutions such as warehouse receipt systems with their associated quality control, secure storage facilities and credit functions.
- Provide market information.
- Improve market efficiency by reducing trade transaction costs.

The state of infrastructure, especially in rural areas, significantly influences the level of FLW. Infrastructure investments are a crucial part of the enabling environment for private sector activities. They include ICT, energy, roads, market facilities (assembly, whole sale and retail markets), abattoirs, fish landing sites, warehouses and cold storage. Infrastructure facilitates market access. There is generally more FLW in places with poor infrastructure.

The costs and benefits of reducing FLW need to be understood by private actors. Benefits should be improved and costs reduced.
Policies should support financial products for households, producer-groups and the private-sector. The products should also be useful for finance institutions, investment funds, and risk mitigation tools such as matching grants and loan guarantees.

Research is an important element in addressing FLW, therefore policy measures should be directed at creating a suitable environment for it. Research questions that need answering include: What is the magnitude and causes of FLW? What solutions can address this? Solutions that need to be identified through research could include improving products and processes, as well as identifying opportunities to add value to products and to use sub-quality products and by-products. Policies should support strengthening research capacity and foster public-private collaboration and partnership in research.

Policy and investments should support training and capacity-building to reduce FLW at all stages of the food supply chain. For example, to reduce FLW for food supply chains which are market-oriented and also those for food not intended for the market. Many training programmes in developing countries focus on primary crop and livestock production. As a result there is more capacity and skills in production-related issues than in the post-production components of the chain. Training is also needed for the post-production phase, to complement the support provided to increase productivity in primary production.

Where the public sector is involved in direct food procurement and distribution, policies should ensure that the practices applied are appropriate and do not lead to FLW in the value chains concerned.

The regulatory framework is also important in reducing FLW. For example, compulsory reporting of waste data by businesses; landfill levies or even bans; and direct or variable charging schemes ("pay-as-you-throw" or PAYT) for waste collection. A key example is the landfill escalator tax, making landfill more expensive over time, and thus enabling the private sector to make long-term investments in landfill alternatives. Regulation is also important in reducing fish discards at sea. Misunderstood legislation could pose a barrier to reducing food waste. For example, in food recovery and redistribution through food banks, legislative uncertainty around donations can stifle food donation. To avoid this, it is crucial to improve public understanding of existing legislation.

Date marking can impact food waste. Countries should identify problems of current date marking and then address them. Policies need to support simplification and clarification of food date labelling.

**Explanations**

The above guidance was agreed through tele-conference discussions, consultations, and e-mail exchanges among the working group agencies under the coordination of the co-chair agencies.

The working group used information by the agencies and from the Save Food Initiative, the Committee on World Food Security (CFS), and the Think.Eat.Save campaign.

III. Metrics

Concordance reached by the HLTF entities:

There are two metrics being proposed to monitor progress on FLW:

- Global Food Loss Index
- Food Loss and Waste Protocol

The targets corresponding to these metrics are the same of those for SDG 12.3. They are respectively:

- By 2030 reduce food losses along production and supply chains, including post-harvest losses;
- By 2030, halve per capita global food waste at the retail and consumer levels.

Explanations

Global Food Loss Index

The Global Food Loss Index (GFLI) has been proposed as an indicator for SDG target 12.3: "by 2030 halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains including post-harvest losses.”

The model for GFLI is being refined. Working group members are assessing food losses through case-studies of the causes of losses in specific value chains. This information will improve the primary database and refine the model parameters.

GFLI aims to model country and regional food loss on factors such as weather and infrastructure (such as storage facilities and roads).

The GFLI is as a result of data aggregation on food losses, broken down by primary agricultural products. This data will be collected from representative surveys (primary data) or, in cases of data gaps, estimated by applying econometric techniques. A single number, the food loss index, can be calculated for each country to indicate the severity of food loss. It is calculated on a quantity basis and subsequently transformed to dietary energy supplies (in kilo calories) per capita for consistent aggregation and then indexing.

GFLI covers losses on farm, during transport, in storage, and during processing; losses in retail and households are not covered.

The GFLI supports dynamic predictions —estimates can be continuously updated.
Food Loss and Waste Protocol

The Food Loss and Waste Protocol is a global standard for the measurement of food loss and waste. It was proposed as an indicator for the SDG target 12.3, regarding processing, retail, consumers. It can be used by both countries and companies to measure FLW within their borders and supply chains.

The FLW protocol provides a consistent and transparent basis for entities to quantify and report FLW. It includes requirements and provides guidance on implementing them, including why quantification is useful, what to quantify (in terms of timeframe, material type, destination and boundaries) and how to quantify (which quantification methods to use, how to sample, scale, and estimate uncertainty).

A consensus-based multi-stakeholder process was followed to develop the standard. Government agencies, intergovernmental organizations, non-governmental organizations, businesses, and academic institutions from around the world participated. To assist users in preparing a FLW inventory, guidance is available for free on the FLW protocol website (www.wri.org/food/protocol).

This quantification approach has been refined from a basis in module 1 of the "think eat save guidance," which provides advice on comprehensive approach for developing food waste prevention programmes (www.thinkeatsave.org/index.php/take-action/think-eat-save-guidance-document). This approach and is currently being piloted in South Africa.
IV. Messaging

Private sector

Concordance reached by the HLTF entities:

The basic principle in the role of the private sector is that it is primarily the people and companies acting in the food supply chain (farmers, traders, processors, retailers and consumers) that can reduce FLW at a significant scale. The public sector is indispensable in reducing FLW but its primary role is in facilitating action from these actors. The private sector should support stakeholders in identifying needs for government investments and incentives. The private sector should communicate these needs to governments and development agencies and lobby for appropriate and immediate public action.

The private sector should take a hierarchy approach, with prevention as the first option for reducing FLW. Where prevention is not possible, the order of priority is: recovery and redistribution to feed humans; recovery to feed animals; recycling for industrial purposes; and composting. Incineration and disposal of waste in landfills are the last options.

When there is lack of data to guide FLW reduction, the private sector can support assessments to generate the needed data, which may help their own businesses. The private could improve the transparency and sharing of FLW data across the food supply chain.

The private sector should help prevent and reduce FLW through direct private investment in improved technologies and infrastructure needed along the food supply chain. The private sector could also conduct research to support innovations. In addition it should invest in improving supply chain management, contractual arrangements with chain partners, production planning, providing credit and technical assistance, and partnerships with the public sector. The changed practices to promote reducing FLW in the food supply chain should be integrated into business practices and corporate responsibility policies.

The group members also agreed on the following:

The approach taken by the private sector to reduce FLW should promote the sustainability of the food systems concerned. The implemented measures should ensure resource efficiency, environmental sustainability, climate resilience, and contribute to food and nutrition security goals.

Food waste reduction possibilities by the retail sector include:

- Develop and improving practices and industry standards related to product sourcing, in particular standards used to accept or reject food produce. This can be done by introducing differentiated pricing and by relaxing aesthetics standards which can cause farmers to discard good quality produce for superficial reasons, such as shape or colour.
- Better anticipate changes in consumer demand and improve contractual terms for suppliers to reduce the freedoms to cancel or modify orders in timeframes that leave suppliers with unmanageable surplus.
- Create secondary markets for lower grade foods and facilitating the use of surplus foods through food recovery and redistribution — such as food banks — and donations.
• Improve products so that they are less susceptible to FLW, modifying packaging, food labelling, storage and portion guidance. The retail sector could also raise consumers’ awareness through product-specific prevention messages, for example, through shelf-talkers.

The food service sector can reduce food waste. They can: inform consumers, restaurants, and institutions to adapt portion sizes to needs and eliminate quantity discounts; optimise demand forecasting by requesting reservations for breakfast in hotels or for lunches in cafeterias; have just in time food preparation, display smaller volumes of food at buffets and replenish buffets only as needed; raise awareness of customers about not taking more food than they can eat; offer greater variety in portion sizes; and make provisions for handling leftovers, such as “doggie-bags.”

Civil Society

Concordance reached by the HLTF entities:

Consumers’ food waste occurs as a result of sub-optimal food planning, buying, storage, preparation and use.

Messages to civil society may take two complementary forms. The first is awareness-raising to encourage behavioural change. Awareness-raising programs can show how reducing food waste not only helps to save money but also helps foster a sustainable future.

Awareness-raising should be complemented with messages to foster skills and manage food efficiently. Useful skills include household management skills, stock organization, and how to prepare nutritious and healthy meals. Cascade training, through which influential community members undergo training and then share this with their neighbours, can be particularly effective.

The group members also agreed on the following:

Regarding food waste, messages target consumers and non-governmental organizations active in the field of raising consumers’ awareness. The Think.Eat.Save campaign provides materials that can be downloaded from its website.

Awareness-raising to incite behavioural change can be done through providing evidence on: the scale of problem in terms of the percentage of the food produced for human consumption which is not eaten; the economic value of wasted food; the social, food security and nutritional impact; and the environmental impact in terms of greenhouse gas emissions and impact on natural resources. Public awareness campaigns work well both at national and at local level. To maximize efficiency, a national campaign can be started —providing core messages and campaign materials — and the actions can be implemented locally.

Some simple actions by consumers can dramatically cut the amount of food waste. The Think.Eat.Save campaign has identified ten major messages to consumers about actions they can take. These include: planning meals and shopping smartly; buying “funny” fruits and vegetables which are safe to eat but are not of optimal quality with regards to aesthetic attributes such as size, shape, or colour; understanding expiration dates to know which ones provide guidance on when
food can still be safely consumed; managing food in the refrigerator; using freezers where available; correctly selecting portion sizes at restaurants; composting food scraps; using FIFO (First in First Out) as a kitchen rule; using leftovers effectively; and donating to local food banks, soup kitchens, pantries and shelters.

Schools offer a unique opportunity to foster food waste prevention behaviours. Children can then share these behaviours with their families. Food waste prevention should be set in a context of sustainable food education, where children reconnect with the origins of food, by growing their own vegetables in school gardens or by visiting local farmers.

Civil society organizations are integral to global efforts to reduce food waste. They serve three main functions: awareness-raising; redistribution of surplus food; and research and development of new knowledge that can inform policy and business practices.

Civil society organizations also supported successful social innovations which help food waste prevention in recent years. Social innovation involves participatory, grassroots activities which respond to a social need that is not fulfilled by public services. They often have multiple benefits which may include the reduction of waste techniques, for example cooking skills classes which provide food waste prevention techniques while also addressing social isolation.
V. Conclusion

Existing knowledge gaps and additional work

Global Food Loss Index (GFLI):

The GFLI will be calculated on the basis of a standard definition. However, the accuracy of the estimates will vary across countries as a result of differences in the availability and quality of the source data.

The accuracy of the GFLI has been improved by increasing the availability and quality of primary data. Moreover, the estimation model was changed to make its parameters more responsive to those factors which influence food losses in a particular commodity per country. These factors include inadequate storage facilities, road quality, climate zone, rainfall at harvest, and presence of pests.

The working group agencies generate information which builds the database and refines model parameters for the GFLI. These activities include the case studies and surveys being carried out across all developing regions to assess the causes and extent of food losses in the food supply chains for the major food crops. These crops include grains, roots and tubers, fruits and vegetables, fish, meat, and milk.

Other international initiatives such as the Food Loss and Waste Protocol will be compared with the measurement concepts for the GFLI.

A number of working group agencies have set up a platform for sharing experiences about reducing FLW. This initiative was started by the G20.

Quantification method for food waste:

The Food Loss and Waste Protocol is a global accounting and reporting standard for quantifying food loss and waste. It will enable countries, companies and other organizations to account for and report how much food loss and waste occurs. It will also show how food waste occurs, thus enabling targeted efforts to reduce it. It is publicly available in draft form and is undergoing pilot testing by countries and companies. It will be officially published in January 2016. One of the most significant knowledge gaps is food waste data in developing and emerging economies. The current estimates for these regions at consumer level are entirely based on assumptions; data collection is needed to inform policy, private sector and civil society-led behaviour change activities.

A knowledge gap exists for downstream food waste prevention within sustainable food systems, demonstrating how food waste prevention and healthy diets contribute to sustainable food consumption, informing coordinated messaging to consumers.
Links with the global agenda on sustainable development

Future activities of the Working Group will strive to align to and contribute to SDG goal 12.3, "Ensure sustainable consumption and production patterns’ and its targets by 2030, halving per capita global food waste at the retail and consumer level, and reducing food losses along production and supply chains, including post-harvest losses."

The working groups will support initiatives by all stakeholders – governments, inter-governmental organizations, business and civil society – to achieve the SDG 12.3 target. The working group will try to mobilize these stakeholders and get their leaders' commitments to redouble efforts to reduce food loss and waste.

The working group supports considering FLW prevention to be high on the agenda of the United Nations Climate Change Conference (COP21). The working group will support awareness-raising for food waste in climate change mitigation leading up to COP21, using the SAVE FOOD and Think.Eat.Save communication channels. COP21 provides an opportunity to share the food waste messages with policymakers, the private sector and civil society.

Links with the other elements of the Zero Hunger Challenge

Work on FLW is relevant to issues addressed by the other four elements of the Zero Hunger Challenge. The working group will therefore ensure that its contribution to initiatives and processes, such as the SDGs and the Second International Conference on Nutrition (ICN2) Framework for Action, will be coordinated with the other four elements.