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DEPARTMENT OF ECONOMIC  
AND SOCIAL AFFAIRS

# *Global Action Programme*

on Food Security and Nutrition  
in Small Island Developing States



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# FOREWORD

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It is my distinct honor to introduce this publication on the Global Action Programme on Food Security and Nutrition in Small Island Developing States (SIDS). Its preparation was facilitated by the Food and Agriculture Organization of the United Nations, the United Nations Department of Economic and Social Affairs and the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States.

The complex food security and nutrition concerns facing SIDS, in which persistent levels of undernutrition coexist with the rapidly increasing incidence of overweight and obesity, are in large part a consequence of the unique and particular set of vulnerabilities these nations face.

Although significant diversity exists across SIDS, they share common characteristics that make them particularly vulnerable to the effects of climatic and economic shocks but at the same time, as a consequence of their small size and remoteness, generally ill-equipped to promote the development of the more resilient and competitive economic sectors that are needed both to mitigate the effects of these shocks and to contribute to improved food security and nutrition.

The S.A.M.O.A. Pathway, the outcome of the Third International Conference on SIDS held in Apia, Samoa in 2014, provides a robust explanation of the many challenges facing SIDS and underscores the need for a more integrated approach to sustainable development, as emphasized in the 2030 Agenda.

It calls for strengthened international cooperation and partnership with adequate investment and coordinated action to address these development challenges. The Global Action Programme on Food Security and Nutrition in SIDS represents a key and tangible follow-up to one of the challenges highlighted in SAMOA pathway - the urgent need to accelerate action on food security and nutrition in SIDS.

Developed through a lengthy process at global, regional and national levels, under the leadership of the Food and Agriculture Organization of the United Nations, the United Nations Department of Economic and Social Affairs and the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, the Global Action Programme provides a framework within which SIDS and their development partners can better articulate and mobilize coordinated actions at the local, national, regional and global levels.

The design of the Global Action Programme around three mutually reinforcing objectives is a recognition of the importance of coordinated actions. Improvements to the enabling environment through actions that increase political commitment to addressing food security and nutrition, to enable government agencies to make coordinated interventions, and to update legislation, are critical in encouraging appropriate investments of involved stakeholders in the development of more resilient and sustainable food systems that contribute positively to improved food security and nutrition outcomes.

Concomitantly, action is needed to empower the people and communities that are at the same time most at risk from and in the best position to take the necessary actions to address the food security and nutrition challenges that they face.

The Global Action Programme does not provide a blueprint approach to addressing the food security and nutrition challenges of SIDS. Rather, it exemplifies a series of indicative actions that have most commonly been highlighted throughout the consultative process as having the potential to be part of the solution. The Global Action Programme provides a framework within which SIDS, both as individual nations and as a group, can ensure that priority actions are identified and implemented in a coherent and synergistic manner in the achievement of their food security and nutrition objectives.

We now have a well-crafted document which will guide our SIDS community in responding to the great challenges in food security and nutrition. Furthermore, this document will help many of our SIDS family as a guiding tool, complementing regional and national actions that are already

ongoing. We strongly encourage SIDS to incorporate the Global Action Programme as a programmatic framework for ensuring that a coordinated and coherent set of actions is brought to bear on the ongoing food security and nutrition crisis.

We call our development partners to align their support to SIDS through the Global Action Programme to ensure that the effect of their collective actions is realized on the ground through urgently needed improvements in the food security and nutrition situation in SIDS.




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**H.E. Mr. Ahmed Sareer**

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to the United Nations and Chair of the Alliance of  
Small Island States (AOSIS).*

# EXECUTIVE SUMMARY

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## *Why is a Global Action Programme needed?*

The *Global Action Programme on Food Security and Nutrition in Small Island Developing States* (GAP) aims to accelerate action on food security and nutrition to support the sustainable development of Small Island Developing States (SIDS). It is intended as a concrete, tangible contribution to the integrated implementation of the 2030 Agenda for Sustainable Development and is a direct response to the call in paragraph 61 of the *SIDS Accelerated Modalities of Action (SAMOA) Pathway* for an action programme to address the food security and nutrition challenges facing SIDS.

The *SAMOA Pathway* acknowledges the processes underway towards implementation of multilateral commitments for the sustainable development of SIDS while underscoring the need for a more integrated approach to sustainable development. It calls for strengthened international cooperation and partnerships to address the persistent development challenges of SIDS and to achieve internationally agreed goals.

Food security and nutrition are complex multifaceted challenges that cut across the 2030 Agenda, with most of the SDGs containing targets that are linked, either directly or indirectly, to food security and nutrition. Actions to end hunger, achieve food security, and improve nutrition are crucial investments in human health and wellbeing and poverty reduction, they reduce inequality and improve gender equality, foster

economic growth, yield benefits across generations, and will be central to the achievement of the 2030 Agenda as a whole.

## *What are the food security and nutrition challenges facing SIDS?*

The SAMOA Pathway reflects a number of challenges shared by Small Island Developing States that make them uniquely vulnerable to food insecurity and which magnify the importance of taking a truly cross sectoral approach to improving the food security and nutrition status of SIDS. These challenges include: limited land mass and population; fragile natural environments and lack of arable land; high vulnerability to climate change, external economic shocks, and natural disasters; high dependence on food imports; dependence on a limited number of economic sectors; and distance from global markets.

The majority of SIDS face a “triple burden” of malnutrition, in which undernutrition, micronutrient deficiencies, and overweight and obesity coexist within the same population, communities, households, and, at times, within the same individual over the life course. While undernutrition has fallen over the past three decades, progress has been slow and levels of stunting still exceed 20% in children in the poorest SIDS. At the same time, levels of obesity, particularly among women have increased sharply, with obesity in Caribbean countries averaging one third of adults, and over 40% in many of the AIMS.

In the Pacific, 75% of adult deaths are due to non-communicable diseases to which poor nutrition is a major contributor.

In addition to the direct health consequences, malnutrition imposes considerable social and economic costs on individuals, families, communities, and societies, is often linked to poverty in a vicious cycle, and can exacerbate inequities by disproportionately affecting disadvantaged groups, including women and children.

## *What is the Global Action Programme?*

The GAP recommends a series of indicative actions at local, national, regional, and global levels to achieve three interconnected and mutually-reinforcing objectives.

### *Objective 1: Enabling environments for food security and nutrition*

Building an enabling environment for food security and nutrition requires strong, sustained political commitment; effective governance and institutional arrangements including meaningful opportunities for civil society to engage and to hold governments to account; the alignment of processes, policies, legislation, systems, regulations, and investments across sectors and levels; the building and mobilisation of sufficient capacity and resources; and the generation and dissemination of reliable and timely knowledge and evidence.

Actions in support of strengthened enabling environments are proposed under three components:

- 1.1 Political commitment and governance
- 1.2 Capacity and resources
- 1.3 Knowledge and evidence generation, dissemination and use

### *Objective 2: Sustainable, resilient, and nutrition-sensitive food systems*

Despite significant improvements in the efficiency of food systems in delivering increasing quantities of food to growing populations, developments in these systems have created numerous challenges, including increased barriers to the participation of vulnerable groups, whether as producers, employees and consumers; growing malnutrition and health costs due to the emergence of and preference for more energy dense and convenient processed foods; significant levels of food loss and waste; increased incidence of food safety issues and trans boundary diseases; and environmental and natural resource degradation.

Actions in support of sustainable, resilient and nutrition-sensitive food systems will need to be addressed in a coherent and joined up fashion. The importance of moving from traditional approaches of supporting sector specific technological interventions towards a more programmatic and holistic approach to strengthening food systems will be critical in meeting this objective. For ease of articulation, the objective is structured around five components – the first three are primary sector specific, one covers

post-production value chain development and another includes actions required to ensure improved resilience of these systems:

- 2.1 Sustainable management and use of oceans and seas and their resources for food security and nutrition
- 2.2 Sustainable management and use of freshwater resources for food security and nutrition
- 2.3 Sustainable management and use of terrestrial resources for food security and nutrition
- 2.4 Inclusive and efficient nutrition-sensitive value chains
- 2.5 Climate adaptation and resilience for food security and nutrition

***Objective 3: Empowered people and communities for improved food security and nutrition***

Pro-poor policies and strategies are needed to increase the ability of vulnerable groups to take advantage of, and benefit from, the opportunities created by the GAP. These include measures that target and address key sources of vulnerability and deprivation, to strengthen adaptive capabilities, and to provide social protection. Targeted interventions and programmes are also needed to address food insecurity and malnutrition, and their determinants, in vulnerable groups, by providing specific nutrition interventions; supporting their rights and access to natural resources; by enhancing their access to land, services and markets and by supporting their participation in policy and governance processes, including social protection.

The objective comprises three components:

- 3.1 Social and economic empowerment
- 3.2 Nutrition-sensitive social protection programmes
- 3.3 Targeted community-based interventions and services to prevent and treat malnutrition

In assisting SIDS to achieve these three interrelated objectives, the GAP's structure is intended to facilitate and guide a comprehensive, multi-sectoral approach to identifying and implementing priority actions to achieve food security and improved nutrition in SIDS.

***How will the GAP be implemented?***

The GAP is a global guidance document intended to strengthen the coherence and coordination of global and regional support for food security, nutrition and sustainable development in SIDS, as well as to support SIDS governments in strengthening their national approaches and ensuring that their needs and priorities are met in relevant global and regional policy processes. Its primary audience is SIDS governments and their development partners, including international and regional organizations, donor agencies, and other actors working on food security, nutrition and sustainable development in SIDS. The active engagement of private sector actors, civil society and other non-state actors including community groups, local authorities, the scientific and academic communities will be critical for the effective implementation of the GAP.



The GAP has been developed to align with existing global, regional and national strategies aimed at improving food security, nutrition and sustainable development in SIDS. It builds on these strategies and initiatives by consolidating the multiple existing global and regional recommendations and commitments relating to food security, nutrition and sustainable development into an integrated framework that addresses the specific vulnerabilities, needs and priorities of SIDS and facilitates the translation of these strategies at the national level. At the global level, these strategies include the *Rome Declaration and Framework for Action on Nutrition* as the two main outcome documents of the *Second International Conference on Nutrition*. At the regional level, the GAP is aligned with key regional food security, nutrition, and sustainable development strategies and action plans including the *Framework for Action on Food Security in the Pacific: Towards a Food Secure Pacific*; the *WHO Action Plan to Reduce the Double Burden of Malnutrition in the Western Pacific Region*; the *CARICOM Multi-Country Sustainable Development Framework*; the *CARICOM Regional Food and Nutrition Security Action Plan (RFNSAP)*; and the *Indian Ocean Regional Programme for Food Security and Nutrition (PRESAN)*.

The development of detailed implementation roadmaps at the regional, national and agency level, based on this GAP, but taking into account regional and national priorities, needs and conditions is encouraged. It is expected that these implementation roadmaps will identify specific priorities, modalities of collaboration and partnerships, roles, accountabilities, governance, and resourcing opportunities.

### *How will the achievements of the GAP be monitored?*

As with the 2030 Agenda, the focus of reporting for the GAP will be at the national level where each country will have the primary responsibility for collecting and making data on the SDG indicators available, with support from UN agencies and other global and regional partners. Monitoring and reporting on a core set of indicators, to be reported on by all SIDS, will be important to ensure comparability and a harmonized approach. This core set of indicators will be kept to a minimum, and reflect the shared challenges and priorities of all SIDS. In addition to minimizing the monitoring and reporting burden, this approach will ensure that actions taken on the GAP fully support the efforts of SIDS to achieve internationally agreed goals and targets under the 2030 Agenda, as well as the World Health Assembly global nutrition and NCD targets. ■

# INTRODUCTION

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The *Global Action Programme on Food Security and Nutrition in Small Island Developing States* (GAP) aims to accelerate action on food security and nutrition to support the sustainable development of Small Island Developing States (SIDS).<sup>1</sup> It is intended as a concrete, tangible contribution to the integrated implementation of the 2030 Agenda for Sustainable Development.

Food security and nutrition are identified as an overall priority for the 2030 Agenda and reflected in Sustainable Development Goal 2 (SDG 2), under which UN Member States have committed to ending hunger, achieving food security, improving nutrition, and promoting sustainable agriculture by 2030. Food security and nutrition contribute to the integrated implementation of the 2030 Agenda and therefore, most of the SDGs contain targets that are linked, either directly or indirectly, to food security and nutrition.

Recognising the need to accelerate global progress towards SDG2, and the cross cutting nature of food security and nutrition for achieving the 2030 Agenda for Sustainable Development, the UN General Assembly in April 2016 committed Member States to a Decade of Action on Nutrition (2016-2025). The Decade is a global collective effort to end

malnutrition in all its forms within the framework agreed at the 2<sup>nd</sup> International Conference on Nutrition (ICN2) held in November 2014 (outlined in the Rome Declaration on Nutrition and Framework for Action)<sup>2</sup> and under the umbrella of the 2030 Agenda. It is supported by the new strategic plan of the UN Standing Committee on Nutrition (UNSCN), the dedicated platform for open, substantive and constructive dialogue on nutrition between UN agencies.

The agreed priorities of SIDS for the 2030 Agenda are outlined in the *SIDS Accelerated Modalities of Action (SAMOA) Pathway*.<sup>3</sup> The *SAMOA Pathway* acknowledges processes underway towards implementation of multilateral commitments for the sustainable development of SIDS,<sup>4</sup> while underscoring the need for a more

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<sup>2</sup> Second International Conference on Nutrition, 19-21 November 2014, Rome, Italy, jointly organized by WHO and FAO.

<sup>3</sup> Outcome document adopted at the Third International Conference on the Sustainable Development of Small Island Developing States (Apia, SAMOA, 1-4 September 2014) and endorsed by the UN General Assembly in its Resolution 69/15 of 14th November 2014.

<sup>4</sup> Including those outlined in the Rio Declaration on Environment and Development, Agenda 21, the Programme for the Further Implementation of Agenda 21, the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation), including chapter VII, on the sustainable development of small island developing States, and the Johannesburg Declaration on Sustainable Development, the Programme of Action for the Sustainable Development of Small Island Developing States (Barbados Programme of Action) and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States (Mauritius Strategy), and the outcome document of the 2012 United Nations Conference on Sustainable Development, entitled "The future we want".

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<sup>1</sup> Small Island Developing States (SIDS) are a distinct group of developing countries that share similar vulnerabilities and development challenges. The UN SIDS group is made up of 39 countries across three regions: the Caribbean region (16), Pacific region (15), and Atlantic, Indian Ocean, Mediterranean and South China Seas (AIMS) (8).

integrated approach to sustainable development as reflected in the 2030 Agenda for Sustainable Development. It calls for strengthened international cooperation and partnerships, with adequate provision and mobilization of all means of implementation, to address the persistent development challenges of SIDS and to achieve internationally agreed goals. This includes support for the efforts of SIDS to:

- End malnutrition in all its forms, including by securing year-round access to sufficient, safe, affordable, diverse, and nutritious food;
- Take urgent steps to establish, for the period from 2015 to 2025, 10-year targets and strategies to reverse the spread and severity of non-communicable diseases.
- Promote the further use of sustainable practices relating to agriculture, crops, livestock, forestry, fisheries and aquaculture to improve food and nutrition security while ensuring the sustainable management of the required water resources;
- Promote open and efficient international and domestic markets to support economic development and optimize food security and nutrition;
- Enhance international cooperation to maintain access to global food markets, particularly during periods of higher volatility in commodity markets;
- Increase rural income and jobs, with a focus on the empowerment of smallholders and small-scale food producers, especially women and youth;
- Enhance the resilience of agriculture and fisheries to the adverse impacts of climate change, ocean acidification and natural disasters; and
- Maintain natural ecological processes that support sustainable food production systems through international technical cooperation.

The *SAMOA Pathway* recognises, in paragraph 61, the call, in the outcome of the interregional preparatory meeting for the third International Conference on Small Island Developing States, adopted in Bridgetown on 28 August 2013,<sup>5</sup> for the development of an action programme to address food and nutrition challenges facing SIDS, facilitated by the Food and Agriculture Organization of the United Nations (FAO).

This GAP is the outcome of consultations conducted between June 2015 and April 2017, led by the FAO in close coordination with the United Nations Department of Economic and Social Affairs (UN-DESA) and the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States (UN-OHRLLS).<sup>6</sup>

Recognising the priorities outlined in the *SAMOA Pathway*, the GAP focuses on opportunities to strengthen cooperation and enhance integration of existing processes and strategies towards global, regional, and national commitments for food security, nutrition and sustainable development in

5 A/CONF.223/PC/2, annex.

6 Consultations were launched with a High-Level Panel on SIDS at the 39<sup>th</sup> session of the FAO Conference in Rome, Italy on 6<sup>th</sup> June, 2015. A Ministerial Meeting on Enhancing Food Security and Climate Adaptation in SIDS was held in Milan, Italy on 14-16 October, 2015, jointly organised by the FAO, the UN Department for Economic and Social Affairs (DESA), and the Government of Italy. At the close of this meeting, SIDS government participants adopted the *Milan Declaration on Enhancing Food Security and Climate Adaptation in Small Island Developing States, in the framework of the SAMOA Pathway*. Regional consultations were subsequently convened by the FAO for the SIDS of the Atlantic and Indian Ocean, Mediterranean and south China sea (AIMS) during the 29<sup>th</sup> session of the FAO Regional Conference for Africa on 4 – 8 April 2016 in Abidjan, Côte d'Ivoire; for Caribbean SIDS in the margins of the 34<sup>th</sup> session of the FAO Regional Conference for Latin America and the Caribbean in Mexico City, Mexico from 29 February to 3 March, 2016, and the Asia and Pacific SIDS, during the 33<sup>rd</sup> FAO Regional Conference for Asia and the Pacific, Putrajaya, Malaysia, 9 March 2016. A technical meeting was held in 1-3 November 2016 in Suva, Fiji.

SIDS.<sup>7</sup> These opportunities include strengthening international partnerships, enhancing mobilization of resources (human and financial); strengthening capacity and capacity development efforts; sharing of information, knowledge, experience and technologies; improving coordination and coherence of policy, project and programme delivery; and the integration of food security and nutrition objectives, actions and accountability mechanisms into all relevant policies, programmes, strategies, and plans of action.

The GAP is a global guidance document intended to strengthen the coherence and coordination of global and regional support for food security, nutrition and sustainable development in SIDS, as well as to support SIDS' governments in strengthening their national approaches and ensuring that their needs and priorities are met in relevant global and regional policy processes. Its primary audience is SIDS governments and their development partners, including international and regional organizations, donor agencies, and other actors working on food security, nutrition and sustainable development in SIDS. The active engagement of private sector actors, civil society and other non-state actors including community groups, local authorities, the scientific and academic communities will also be critical for the effective implementation of the recommendations made in the GAP.

<sup>7</sup> Including binding and non-binding commitments outlined in the WHO Comprehensive Implementation Plan for Maternal, Infant and Young Child Nutrition, WHO Global Action Plan on the Prevention and Control of Non-Communicable Diseases, ICN2 Rome Declaration and Framework for Action; 10-year Framework of Programmes on Sustainable Consumption and Production (10YFP), UN Framework Convention on Climate Change and its Paris Agreement, Addis Ababa Action Agenda of the Third International Conference on Financing for Development, Sendai Framework for Disaster Risk Reduction 2015-2030, the International Treaty on Plant Genetic Resources for Food and Agriculture, the Convention on Biological Diversity's (CBD's) 2011-2020 Strategic Plan and associated Aichi targets (notably 4, 6, 13, and 14), as well as the CARICOM Port of Spain Declaration on NCDs, the WHO Action Plan to Reduce the Double Burden of Malnutrition in the Western Pacific Region (2015-2020), and regional and national food and nutrition security policies and action plans (including Food Secure Pacific, the CARICOM Regional Food and Nutrition Security Action Plan (RFNSAP), and the Indian Ocean Regional Programme for Food Security and Nutrition (PRESANI)).

Given their common challenges and vulnerabilities - including small size, limited resources, geographic remoteness, and susceptibility to natural hazards, climate change, and sea level rise - a strong, collective voice for SIDS is essential to ensure that their needs are heard and prioritised internationally. At the same time, SIDS are diverse in terms of their levels of economic development, geographies, political and socio-cultural contexts.

Development of detailed implementation roadmaps at the regional, national and agency level, based on this GAP, but taking into account regional and national priorities, needs and conditions, and aligning with existing regional and national policies, plans, and targets is therefore strongly encouraged. It is expected that these implementation roadmaps will identify specific priorities, the sequencing of interventions over the short, medium and longer terms, modalities of collaboration and partnerships, roles, accountabilities, governance, and resourcing opportunities.

### *Food security, nutrition, and the SDGs*

The 2030 Agenda is an integrated system of goals and targets, where the successful implementation of any one Sustainable Development Goal (SDG) will influence progress in others. Food security and nutrition are complex, multi-faceted challenges that cut across the entire 2030 Agenda as both inputs to, and outputs of, the successful implementation of most of the 17 SDGs. The evidence is particularly robust for bidirectional links between food security and nutrition, and poverty eradication (SDG 1), hunger, sustainable food and agriculture (SDG 2 and 12), health and sanitation (SDG 3), education and learning (SDG 4), gender equality and empowerment (particularly of girls, women, and vulnerable and marginalized populations) (SDG 5), equality (SDG 10), conservation and sustainable use of natural resources on earth and below water (SDG 6, SDG 14 and 15).

Food security exists “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”.<sup>8</sup> This concept of food security encompasses four pillars: availability, access, utilization, and stability. All four pillars are intricately linked to poverty (SDG 1). Poor households spend a greater share of their income on food, are vulnerable to hunger and poor quality diets because they lack the resources to meet their basic needs, and are significantly more vulnerable to food price spikes and volatility. Food prices, and food price volatility, are influenced by the interplay of a number of factors at the global, national, and local levels, including the availability, management and use of natural resources (SDGs 2, 6, 12, 14, and 15), energy prices (SDG 7), climate change (SDG 13), and global demand factors.

Food availability, access, and stability are strongly dependent on sustainable, resilient, inclusive, and efficient systems of production and consumption, which feature prominently in more than half of the SDGs (including SDGs 2, 6, 7, 8, 9, 12, 13, 14, and 15). Temperature and sea-level rises, extreme weather events and other adverse impacts of climate change pose a growing threat to agricultural and food systems worldwide, while these same systems have a major role to play in climate change mitigation and adaptation efforts (SDG 13).

Food security is a necessary, but not sufficient condition of good nutritional status. In addition to individual access to, and intake of, adequate, safe and nutritious food, nutritional status is influenced by illnesses and physical activity at the individual level (SDG 3), household food security, maternal and child feeding and care practices, access to quality health-care services (SDG 3), access to clean water and safe sanitation (SDG 6), and underlying policies, availability and management of resources at the societal level (cutting across multiple SDGs, including 10, 14 and 16).<sup>9</sup>

<sup>8</sup> FAO, 2002. *The State of Food Insecurity in the World 2001*. FAO, Rome.

Malnutrition is linked, either directly or indirectly, to many of the major causes of death and disability worldwide, and represents the number one risk factor in the global burden of disease.<sup>10</sup> Malnutrition manifests itself in multiple ways, from low body weight, deficiency in essential vitamins and minerals, increased risk of infection, and impaired child growth and development, to excess body weight and increased risk of chronic diseases due to excess intakes of fat, salt or sugar.<sup>11</sup>

Addressing malnutrition in the first 1,000 days of life – from pregnancy to two years of age – represents the most critical “window-of-opportunity” for reducing the global burden of malnutrition, in terms of impact and returns on investment. Inadequate nutrition during this period can contribute to an intergenerational cycle of malnutrition, including elevated future risk of adult obesity and non-communicable diseases (NCDs). In a form of ‘early life programming’, low birth weight, stunting and wasting are themselves independent risk factors for overweight later in life. A child whose growth was stunted during the first 1,000 days of life is at greater risk of becoming overweight later in life, particularly when exposed to a more ‘obesity prone’ environment (with wide availability of cheap energy-dense, processed foods and low physical activity). Ensuring good nutrition during the critical first 1,000 days period builds a foundation for longer, healthier lives and has intergenerational benefits.

In addition to the direct health consequences, malnutrition imposes considerable social and economic costs on individuals, families, communities, and societies, is often linked to poverty in a vicious cycle, and exacerbates inequities by disproportionately affecting disadvantaged groups,

<sup>9</sup> UNICEF 1990. *Conceptual Framework on the Causes of Malnutrition*.

<sup>10</sup> Global Panel on Agriculture and Food Systems for Nutrition (2016). *Food Systems and Diets: Facing the challenges of the 21<sup>st</sup> Century*.

<sup>11</sup> *Global Nutrition Report 2016*.

including women and children. Undernutrition in utero and early childhood impairs physical and cognitive development, is linked to lower educational attainment, and impedes children from achieving their full social and economic potential. Obesity and diet-related NCDs reduce individual productivity and earning capacity while increasing household expenses. At the macroeconomic level, all forms of malnutrition have significant long-term impacts on labour supply (both quality and quantity), national productivity, and economic growth. Good nutrition, on the other hand, supports higher educational attainment (SDG 4), productivity and macroeconomic growth (SDGs 2 and 8).

Much of the burden of food insecurity, hunger, and malnutrition is avoidable, and tackling it is a moral imperative. Actions to end hunger, achieve food security, and improve nutrition are also crucial investments in human health and wellbeing, poverty reduction, and economic growth, yield benefits across generations, and will be central to the achievement of the 2030 Agenda as a whole.

### *Food security and nutrition situation in SIDS*

SIDS share a number of challenges that make them uniquely vulnerable to food insecurity, including: limited land mass and population; fragile natural environments and lack of arable land; high vulnerability to climate change, external economic shocks, and natural disasters; typically high dependence on food imports; dependence on a limited number of economic sectors; and distance from global markets. At the same time, there is considerable variability between SIDS in socio-economic conditions and institutional capacities, and in their food security and nutrition situations.

Food imports have become an increasingly important source of food availability in most SIDS. Caribbean SIDS, for instance, currently import in excess of USD 5 billion in food annually, an increase of more

than 50 per cent since 2000. Food imports in the region are projected to increase to USD 8-10 billion by 2020 if current consumption and production patterns remain as they are now. Almost all Caribbean SIDS import more than 60 per cent of the food they consume, with half of them importing more than 80 per cent. Only three Caribbean SIDS (Belize, Guyana, and Haiti) produce more than 50 per cent of their consumption. Processed foods, grains (wheat and corn), and livestock products (meat and dairy) are among the top five food import categories, accounting for over USD 1 billion or approximately 25 per cent of annual food imports among Caribbean SIDS.

Declining domestic food production has increased the dependence of many SIDS on imported foods, although domestic food production remains significant in some SIDS.<sup>12</sup> In the Indian Ocean region, the share of food consumed that is produced domestically ranges from less than 30 per cent in Mauritius and Seychelles (25 per cent and 28 per cent respectively) to 71 per cent in Comoros. Cereals (including rice), vegetable oils, meat and dairy products are among the main import categories, with most imports coming from countries far from the Indian Ocean region (e.g. Brazil, South-East Asia).<sup>13</sup>

Given this level of dependence on food imports, SIDS populations are particularly vulnerable to external shocks, including from food price and supply volatility, as witnessed during the 2008 global food crisis. The risks posed to global rice and wheat production by climate change, including the adverse impacts of the El Niño phenomenon, linked with increasing demand for these basic foods from an expanding world population, could lead to less secure and more costly supplies of imported staples in SIDS. The collapse of coastal fisheries resources would also increase the reliance of SIDS on imports of animal-based proteins at a time when the diets of emerging global economies are demanding more meat and dairy products. The effects of population growth on

<sup>12</sup> FAO, 2015. *State of Food Insecurity in the CARICOM Caribbean*.

global food supplies over the next two decades are expected to be just as consequential as the disasters triggered by natural hazards, eventual impacts of sea level rise and saltwater intrusion from longer-term climate change.

The nutritional quality of many imported foods is also of concern for SIDS. While trade liberalization has contributed to lower food prices for consumers and improved access to a more diverse and stable supply of foods year round, an unintended consequence of this process in SIDS has been to incentivise consumption of energy-dense foods that are high in fat, salt and sugar. Although largely an import issue, foreign investment in domestic food processing sectors in some SIDS has also contributed to the increased availability, and lower prices, of highly processed foods. The result has been a ‘dietary transition’ away from traditional, domestic staples (root crops and tubers), fruits and vegetables towards diets high in processed foods and animal source foods, sugar, fat and salt. This transition has been identified as a leading driver behind the sharp rise in rates of obesity and micronutrient deficiency in SIDS.

These dietary shifts have taken place alongside rapid social and epidemiological changes associated with rapid urban population growth in SIDS,<sup>14</sup> including a trend towards increasingly sedentary lifestyles, lower labour force participation in agriculture, increasing labour force participation by women (with less time available for household food preparation, and unmatched by an increased participation in household tasks by men), and a growing appeal and acceptability of ‘western’ foods and eating patterns.

Many SIDS have high poverty levels and high rates of unemployment, two key constraints to food access. The highest poverty rates are registered in

<sup>13</sup> Programme Régional pour la Sécurité Alimentaire et Nutritionnelle (PRESAN) de la Commission de l’Océan Indien (COI), 2016.

<sup>14</sup> The population of the Pacific SIDS is predicted to increase by 80% by 2050.

the SIDS of the Atlantic Ocean, reaching 66.2 per cent in São Tomé e Príncipe and 69.3 per cent in Guinea-Bissau.<sup>15</sup> Poverty rates exceed 30 per cent in six Caribbean SIDS, with the poverty rate in Haiti approaching 60 per cent. In the Pacific, poverty rates range from 12.7 per cent in Vanuatu to 35.2 per cent in Fiji. Youth unemployment is particularly high in most SIDS and is higher than the global average. More than half of youth in the Republic of the Marshall Islands and Kiribati are unemployed, for example,<sup>16</sup> and 25 per cent of youth are unemployed in seven of the fourteen Caribbean SIDS.

The majority of SIDS face a ‘triple burden’ of malnutrition, in which undernutrition, micronutrient deficiencies, and overnutrition coexist within the same population, communities, households, and, at times, within the same individual over the life course.

A number of SIDS have achieved reductions in undernourishment<sup>17</sup> in recent years. Samoa, Sao Tome and Principe, and four Caribbean countries (Cuba, Dominican Republic, Guyana, and St. Vincent and the Grenadines) are among the 29 countries worldwide to have met both the World Food Summit and Millennium Development Goal targets of halving the number and prevalence of undernourished people by 2015.<sup>18</sup> Two Caribbean SIDS (Barbados and Dominica), two Indian Ocean SIDS (Mauritius and Seychelles), and three Pacific SIDS (Fiji, Samoa and Kiribati) have achieved undernourishment rates of less than 5 per cent. Six Caribbean countries (Bahamas, Belize, Jamaica, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago)

<sup>15</sup> FAO, 2016. *State of Food Security and Nutrition in Small Island Developing States (SIDS)*. Rome, Italy.

<sup>16</sup> UNDP 2014. *The State of Human Development in the Pacific: A report on vulnerability and exclusion in a time of rapid change*. United Nations Development Programme, Pacific Centre, Suva, Fiji.

<sup>17</sup> Defined as inability to acquire enough food to meet the daily minimum dietary energy requirements, over a period of one year.

<sup>18</sup> FAO, IFAD and WFP, 2015, *The State of Food Insecurity In the World 2015*. Meeting of the 2015 international hunger targets: taking stock of uneven progress. FAO, Rome. Available at: <http://www.fao.org/3/a-i4646e.pdf>

have undernourishment rates between 5 and 10 per cent, and five more (Antigua and Barbuda, Grenada, Guyana, St. Kitts and Nevis, and St. Lucia) have undernourishment rates between 10 and 20 per cent. Other SIDS, such as Fiji, Kiribati, Maldives and Solomon Islands, have achieved the MDG 1 target.

However, as a whole, SIDS have advanced more slowly in reducing hunger than the global average. While the prevalence of undernourishment fell by 44% in the developing world (from 23.3% to 12.9%) between 1990-92 and 2014-16, in SIDS the reduction was only by 26%, from 24.5% to 18%.<sup>19</sup> Two SIDS have an undernourishment rate higher than 20 percent: Guinea-Bissau with 20.7% and Haiti - a unique case in the Caribbean sub-region with more than half of the population (53.4%) estimated to be undernourished.

Chronic undernutrition, resulting in stunting, wasting, low birth weight, and micronutrient deficiencies remains a serious concern in many SIDS, particularly among specific, vulnerable population groups, including women of reproductive age and children less than five years of age. Stunting rates among children under-5 are categorised as 'high prevalence' in Papua New Guinea (49.5%), Solomon Islands (32.8%), as 'medium prevalence' in Vanuatu (28.5%), Nauru (24%), Guinea-Bissau (27.6%) and Haiti (21.9%).<sup>20</sup> These national figures tend to mask wide disparities, with children living in rural areas and low-income households, and children born to mothers with low levels of education are more likely to be stunted than their counterparts. In Vanuatu, stunting prevalence in rural areas is 1.7 times higher than in urban areas.<sup>21</sup>

Most Pacific Island countries have wasting rates at or below 5%, however wasting prevalence tends to be higher in the youngest age groups (under 24 months).

<sup>19</sup> *ibid.*

<sup>20</sup> Global Nutrition Report, 2016.

<sup>21</sup> Vanuatu Demographic and Health Survey 2013.

Wasting is at 'serious' level in Papua New Guinea (14.3%) and the Maldives (10.2%).<sup>22</sup>

Prevalence of Low Birth Weight (LBW)<sup>23</sup> is reported to be 10% or above in several Pacific Island countries (Fiji 10%; Vanuatu 10%; Solomon Islands 13%; Republic of Marshall Islands 18%; Federated States of Micronesia 18% and Nauru 27%).<sup>24</sup>

Anaemia among women and children is a public health problem in most SIDS. The 2016 Global Nutrition Report reports moderate prevalence of anaemia among women of reproductive age in most Pacific Island countries (for example, Kiribati at 20.7%, Vanuatu 21.7%, Solomon Islands 25.3%, Fiji 26.8%, Papua New Guinea 29.8%) and as well as in Belize (21.7%), Jamaica (24.4%), and Suriname (24.9%) in the Caribbean.<sup>25</sup> Prevalence rates are even higher in the African SIDS (for example, 30.8% in Comoros, 42.7% in Sao Tomé e Príncipe, and 44.6% in Guinea-Bissau). Among children under-5 years, the prevalence of anaemia is generally higher in the younger age groups (6-24 months).

Optimal infant and young child feeding includes early initiation of breastfeeding within one hour of delivery, with exclusive breastfeeding until six months of age followed by continued breastfeeding until at least two years of age together with safe, healthy complementary foods. Most countries in the Pacific are above the 2025 global target for exclusive breastfeeding (at least 50%). However, exclusive breastfeeding practices are inadequate in a number of SIDS (for example, Suriname (2.8%), Belize (15%),

<sup>22</sup> Global Nutrition Report, 2016.

<sup>23</sup> Defined by the WHO as weight at birth of less than 2,500 grams (5.5 pounds). Low birth weight - due to preterm birth or restricted foetal growth - is closely associated with foetal and neonatal mortality and morbidity, inhibited growth and cognitive development, and chronic diseases later in life. Global prevalence of Low Birth Weight (LBW) is 15%, with a global target of 30% reduction to less than 10% prevalence by 2025.

<sup>24</sup> UNICEF's Approach to Nutrition Programming in East Asia and Pacific Regions, vol 2: Situation Analysis, 2015.

<sup>25</sup> Global Nutrition Report, 2016.



Jamaica (24%), Marshall Islands (31%), Tuvalu (35%) and Fiji (40%) and continued breastfeeding until two years of age is extremely low.

Prevalence rates of obesity and NCDs associated with poor quality diets are, in many SIDS, amongst the highest in the world. Chronic NCDs are now the leading cause of morbidity and mortality in most SIDS. In the Pacific, where leaders have declared an “NCD crisis”,<sup>26</sup> NCDs are now responsible for approximately 75% of deaths. The top seven most obese countries in the world are in the Pacific and of the ten countries with the highest diabetes prevalence in the world, seven are Pacific SIDS.<sup>27</sup> Eleven Caribbean SIDS have obesity rates greater than 30 per cent among adult women, and five of these countries have adult female obesity rates exceeding 50 per cent. Several SIDS are starting to experience high levels of child overweight (including Tuvalu 6.3%; Maldives 6.5%, Jamaica 7.8%; Papua New Guinea 13.8%, Tonga 17.3%;).<sup>28</sup>

The costs of managing and treating obesity and associated NCDs are a significant drain on the resources of most SIDS, and are projected to rise exponentially.<sup>29</sup> In the Pacific, public expenditure on health as a percentage of GDP is much higher than the global average for lower-middle income countries, with expenditure on treating and managing NCDs exceeding more than 50% of the health budget for many countries.<sup>30</sup> Expanding public health expenditure in the context of low rates of economic growth, limited capacity to generate tax revenue, and high vulnerability to economic shocks and natural hazards presents a significant health financing challenge for these countries.

<sup>26</sup> 42<sup>nd</sup> Pacific Islands Forum, 2011.

<sup>27</sup> Pacific Possible: Health and Non-Communicable Diseases. Background Paper. The World Bank, 2016.

<sup>28</sup> Global Nutrition Report, 2016.

<sup>29</sup> World Bank, 2012, The Economic Costs on Non-communicable Diseases in the Pacific Islands, Final report.

<sup>30</sup> World Bank, 2016. Pacific Possible: Health and non-communicable diseases.

The economic burden (costs as a percentage of GDP) of NCDs in Pacific SIDS is much greater than the global average, and is projected to escalate further in the coming decades.<sup>31</sup> The biggest driver of lost output is the potential loss of labour due to early death. Cardiovascular disease accounts for the greatest mortality-related economic burden in the Pacific Islands, although diabetes plays a far greater role in the Pacific countries compared to the global average. By 2040, it is estimated that mortalities due to these two NCDs alone will have reduced the labour force of Pacific SIDS by between 6-20%.<sup>32</sup>

### *Alignment with existing food security and nutrition strategies*

The GAP has been developed to align with existing global, regional and national strategies aimed at improving food security, nutrition and sustainable development in SIDS. At the global level these strategies include the *Rome Declaration and Framework for Action on Nutrition* as the two main outcome documents of the Second International Conference on Nutrition. In endorsing the Rome Declaration, SIDS and other participating governments committed to a set of national policies aimed at eradicating malnutrition and transforming food systems to make nutritious diets available to all. The Framework for Action provides a guide to implementing the Rome Declaration and includes a series of recommendations.<sup>33</sup> Other key

<sup>31</sup> *ibid.*

<sup>32</sup> *ibid.*

<sup>33</sup> These recommendations include creating enabling environments for effective action and for strengthening sustainable food systems (including through investments in pro-poor agriculture and smallholder agriculture to enhance the nutrition- sensitivity and resilience of agricultural systems); recommendations relating to international trade and investment, nutrition education and skill building; health systems; use of cash and food transfer, including school feeding programmes and other forms of social protection, to improve diets in vulnerable populations; strategies to promote, protect and support breastfeeding; specific strategies to address child stunting, wasting, and overweight; school food and nutrition policies and programmes; policies to ensure universal access to safe water and adequate sanitation, and to promote safe hygiene practices; strategies to strengthen food safety legislation and regulations; and accountability.

global strategies include, by no means exclusively, the *WHO Comprehensive Implementation Plan for Maternal, Infant and Young Child Nutrition*; the *Global Action Plan on the Prevention and Control of Non-Communicable Diseases*; the *10-year Framework of Programmes on Sustainable Consumption and Production (10YFP)*; the *UN Framework Convention on Climate Change and its Paris Agreement*; the *Addis Ababa Action Agenda*; the *Sendai Framework for Disaster Risk Reduction*; the *International Treaty on Plant Genetic Resources for Food and Agriculture* and the *Convention on Biological Diversity's Strategic Plan* and associated Aichi targets (notably 4, 6, 13, and 14).

Key regional food security, nutrition, and sustainable development strategies and action plans, include: the *Framework for Action on Food Security in the Pacific: Towards a Food Secure Pacific*; the *WHO Action Plan to Reduce the Double Burden of Malnutrition in the Western Pacific Region*; the *CARICOM Multi-County Sustainable Development framework*; the *CARICOM Regional Food and Nutrition Security Action Plan (RFNSAP)*; and the *Indian Ocean Regional Programme for Food Security and Nutrition (PRESAN)*.

The GAP builds on the above strategies and initiatives by consolidating the multiple global and regional recommendations and commitments relating to food security, nutrition and sustainable development into an integrated framework that addresses the specific vulnerabilities, needs and priorities of SIDS and facilitates the translation of these strategies at the national level.

Given their common challenges and vulnerabilities, a strong, collective voice for SIDS is imperative to ensure that their needs are heard and prioritised in global and regional policy processes. Key to the success of the GAP will be the fostering of enhanced partnerships and collaboration between SIDS, in order to support this collective voice and rebalance the existing emphasis on individual country action. It is anticipated that the GAP will serve as a framework for strengthening interaction between national and regional bodies, and for fostering collaborative intra- and inter-regional efforts. Working through regional economic communities, notably the Caribbean Community (CARICOM), Pacific Islands Forum Secretariat (PIFS), the Indian Ocean Commission (IOC), and the Economic Community of West African States (ECOWAS), will be particularly important. ■



**GRENADA**

A vendor selling fish at a local fish market.

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# ACTION PROGRAMME

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## *Goal and vision*

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The GAP aims to accelerate action on food security and nutrition in SIDS to support their efforts towards achieving the 2030 Agenda for Sustainable Development. It is intended to support and strengthen the implementation and alignment of existing global, regional, and national strategies and plans, within the framework of the SDGs.

The overarching vision of the GAP is the achievement of the right of everyone to access safe, sufficient and nutritious foods, the end of hunger and malnutrition in all its forms, and the sustainable management and utilization of natural resources in Small Island Developing States (SIDS) for the benefit of present and future generations.

The GAP recommends actions at local, national, regional, and global levels to achieve three interconnected and mutually-reinforcing objectives: 1) Enabling environments for food security and nutrition; 2) Sustainable, resilient, and nutrition-sensitive food systems; and 3) Empowered people and communities for improved food security and nutrition.

The GAP is intended to facilitate and guide a comprehensive, multi-sectoral approach by identifying recommendations that address the multiple causes of food insecurity and malnutrition at the immediate (individual), underlying (household/ community) and basic (societal) level. It aligns global recommendations to scale up a set of proven, high-

impact nutrition-specific interventions that address the immediate causes of malnutrition with strategies to integrate food security and nutrition objectives into a wide range of sectors, including agriculture, fisheries, environment, education, social welfare, water supply and sanitation, and trade.

The GAP has been developed as a global guidance document. The framework and recommendations provided should be reviewed and adapted according to regional, national and local priorities, needs and conditions. However, the GAP strongly advocates for comprehensive, multi-sectoral and multi-stakeholder approaches regardless of each country's individual situation, as global evidence indicates that this is the most effective approach to tackling food insecurity and reduce malnutrition.

The GAP is intended to be useful to, and used by, a wide range of stakeholders. Many of the recommendations are particularly relevant to governments, who have primary responsibility for protecting their citizens' right to safe, sufficient and nutritious food, as well as their development partners, including donor agencies, and international and regional organizations. However, achieving the goal and vision of the GAP will also require active commitment from, and involvement of the diverse range of private actors involved in food systems (from small-scale producers/ fishers and micro-enterprises, to cooperatives and multinational corporations), civil society and other non-state actors, local authorities, the scientific and academic communities. ■

## *Objectives and recommended actions*

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The GAP's structure and three objectives are based on a theory of change developed to guide implementation of the GAP, as well as monitoring and evaluation (See Figure 1). According to this theory of change, successful implementation of many of the recommended actions will be reinforced by, and in some cases depend on, progress in other areas of the GAP. Actions to strengthen enabling political, institutional, and socio-cultural environments for food security and nutrition (Objective 1) will be necessary to support and enable actions to improve the sustainability, resilience, and nutrition-sensitivity of food systems (Objective 2). Actions taken under these two

objectives will reinforce, and be reinforced by, actions aimed at social and economic empowerment, and at building on the strengths of people and communities to enhance access to, and utilisation of, nutrition-specific and nutrition-sensitive programmes and services (Objective 3).

Recommended actions are further organised into several components within each of the three objectives, and are distinguished by level (local, national, regional, and global). Given the interconnected nature of the GAP and its three objectives, many of the recommended actions are themselves linked, and in many cases mutually-reinforcing. Where implementation of a recommended action is particularly critical to the successful implementation of another, this is identified. ■

Figure 1: Theory of Change



sustainable management and utilization of natural resources in SIDS for the benefit of present and future generations.

### SUSTAINABLE, RESILIENT, NUTRITION-SENSITIVE FOOD SYSTEMS

Sustainable management and use of natural resources:

- Sustainable, resilient, climate-smart production systems.
- Improved conservation and use of biodiversity.

Inclusive and efficient nutrition-sensitive value chains:

- Increased access to and participation of smallholders and small-scale enterprises in nutrition-sensitive value chains.
- Increased productivity and efficiency of inclusive, nutrition-sensitive value chains.

Climate adaptation and resilience:

- Increased resilience of food systems and communities to climate change, disasters and shocks.

### EMPOWERED PEOPLE AND COMMUNITIES

Social and economic empowerment:

- Improved access of rural and urban poor to knowledge, resources, services, and decent employment and work opportunities, particularly among youth and women.

Nutrition-sensitive social protection programmes:

- Improved access to, and effectiveness of, nutrition-sensitive social protection programmes.

Nutrition-specific interventions and programmes:

- Improved access to, demand for, and utilization of, services for the prevention and timely treatment of malnutrition in all its forms.

### SUSTAINABLE, RESILIENT, AND NUTRITION-SENSITIVE FOOD SYSTEMS

- Improved capacities and practices for sustainably managing and using oceans and seas and their resources, freshwater resources, and terrestrial resources for improved food security and nutrition, including climate-smart agriculture, conservation and use of biodiversity.
- Improved smallholder access to credit and insurance, and options for smallholders, including crop and livelihood diversification.
- Increased investment in, and support for, inclusive, nutrition-sensitive value chains, including market and infrastructural development.
- Improved technical and managerial capacities to support and promote nutrition-sensitive value chains, and to increase productivities and efficiencies.

### EMPOWERED PEOPLE AND COMMUNITIES

- Smallholder and other local organisations strengthened and empowered.
- Increased capacities to develop and deliver nutrition-specific and nutrition-sensitive programmes and services.
- Improved design, coverage, delivery, and coordination of programmes and services to promote social and economic security, and to address food insecurity and malnutrition, that build on the strengths of communities.
- Community/traditional leaders engaged.

• At national level:

Resource allocation, human and institutional capacity development; knowledge generation and dissemination; surveillance, M&E; public information campaigns; collaboration, exchange, training.

• At local level:

Mobilisation; collective action; advocacy, dialogue, engagement, exchange.

## Objective 1. Enabling environments for food security and nutrition

An enabling social, economic, and political environment is key to achieving and sustaining progress in food security and nutrition. Building an enabling environment for food security and nutrition requires strong, sustained political commitment; effective governance and institutional arrangements including meaningful opportunities for civil society to engage and to hold governments to account; the alignment of processes, policies, legislation, systems, regulations, and investments across sectors and levels; the building and mobilisation of sufficient capacity and resources; and the generation and dissemination of reliable and timely knowledge and evidence.

Efforts to build and sustain enabling environments for nutrition have gained momentum globally in recent years, spearheaded in large part by the Scaling Up Nutrition (SUN) Movement. The SUN Movement is aimed at catalyzing and supporting collective action, increased investment, and aligned implementation to advance progress towards global nutrition targets. The SUN Movement promotes a country-led approach whereby governments convene multi-sectoral and multi-stakeholder platforms supported by organized networks of partners – civil society, business, UN agencies, and donors. These multi-stakeholder platforms coordinate efforts across sectors to support a dual approach to nutrition, coupling the scaling up of a set of evidence-based, cost-effective nutrition-specific interventions with strategies to enhance the nutrition outcomes of effective, large-scale nutrition-sensitive interventions. Of the 57 countries that have signed up to the SUN Movement and its system of support networks, only Haiti is a SIDS. ■

### Component 1.1. Political commitment and governance

The concept of governance encompasses the institutions, rules, and norms (formal and informal) through which a society is organised, the processes and outcomes of decision-making and implementation, and the distribution and exercise of power within that society.

While the concept of governance is contextual – enabled or constrained by the specific socio-economic, socio-political and socio-cultural conditions in each country - there is general consensus on what effective governance for healthy diets and nutrition looks like. This consensus is reflected in the commitments and recommendations of the ICN2 Rome Declaration on Nutrition and Framework for Action, which themselves build on existing commitments, goals and targets for nutrition, including those outlined in the WHO *Global Action Plan on the Prevention and Control of NCDs 2013–2020* and WHO *Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition*. These global commitments and goals are reinforced in the findings and recommendations of recent expert evidence reviews, including those of the WHO Commission on Ending Childhood Obesity,<sup>34</sup> and the Global Panel on Agriculture and Food Systems for Nutrition's (GLOPAN's) Foresight Report *Food Systems and Diets: Facing the Challenges of the 21st Century*.<sup>35</sup>

Key global recommendations for strengthening nutrition governance broadly include:

- Raising the profile of nutrition within relevant national strategies, policies, actions plans and programmes, and aligning national resources accordingly;
- Establishing formal, sustainable multi-sectoral and multi-stakeholder coordination mechanisms (both vertical and horizontal) to drive effective and coherent approaches and joint action across relevant sectors and levels of government;

<sup>34</sup> WHO 2016.

<sup>35</sup> GLOPAN 2016.



- Designing and implementing regulatory and voluntary instruments, based on scientific evidence and international guidelines, to improve the nutritional quality and safety of the food supply; limit the marketing, availability and consumption of unhealthy foods and beverages; and lower the relative price of healthy foods and raise the relative price of unhealthy foods;
- Implementing policies on foods and beverages sold, marketed and provided in and around schools;
- Exploring the use of non trade-distorting policy measures to improve the supply and competitiveness of local, nutritious foods and to make fruits, vegetables, pulses, nuts and seeds much more available, more affordable and safe for all consumers, including the poorest, including greater investment in the infrastructure required to produce, store and transport these foods, investment in agricultural research on these foods; and incentives for production and sale of healthy foods including where the poorest live;
- Ensuring that food-based dietary guidelines (FBDGs) guide policy decisions affecting food systems and nutrition across all relevant sectors, in addition to forming the basis for nutrition education;
- Raising awareness and promoting healthy eating habits through the provision of nutrition education and information, using multiple channels (ranging from mass media to the delivery of nutrition education in community settings), with the disclaimer that such efforts need to be accompanied by strategies to improve food environments (including acting on the legislative and policy recommendations outlined above), in order to incentivise and support healthy dietary behaviours;
- Implementing policies and actions across all relevant sectors to address the broad determinants of food security and nutrition, particularly for poor, vulnerable and marginalized population groups, including agriculture, health, education,

economic development, social protection, social welfare, infrastructure, planning and urban design, water and sanitation, trade, industry, investment, and environment sectors.

Effective governance is needed across the full range of sectors, actors, institutions, and activities involved in food systems, including those governing the management of natural resources (oceans and seas, fresh water, and land, including plant genetic resources and forestry), as well as infrastructure, trade, marketing, and food safety and quality.

The Committee on World Food Security (CFS) is the foremost independent, intergovernmental platform for advancing food security and nutrition governance at the global level, and is supporting country-led implementation of the 2030 Agenda and SDGs as they relate to food security, nutrition and sustainable agriculture. One of the core functions of the CFS is to provide independent, evidence-based guidance on food system governance. Key CFS guidance documents include the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests*<sup>36</sup> and *Principles for Responsible Investment in Agriculture*.<sup>37</sup>

Effective food security and nutrition governance requires integration and coordination across all levels - from global to local. Governments have a primary responsibility for interpreting recommendations and taking action at country level, in coordination with other stakeholders and in relation to national needs and conditions. Above all, strong political will and commitment, beginning at the highest level of government, is essential to achieve sustained improvements in food security and nutrition.

Many SIDS governments demonstrated strong, early leadership in recognizing the urgency of the inter-related food security, climate change, nutrition and NCD-related challenges facing their populations. CARICOM

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36 VGGT 2012.

37 FAO 2014.

Heads of State, for example, convened the world's first high-level summit on NCDs in 2007. This summit and its outcome document, the *Declaration of Port of Spain: Uniting to stop the epidemic of chronic non-communicable diseases*, essentially paved the way for the 2011 UN High Level Meeting on the Prevention and Control of NCDs. Converting commitment into action has proven challenging, however. Evaluation of progress in implementing the commitments made in the Port-of-Spain declaration show progress has been uneven, with progress in implementing the diet-related commitments being particularly limited.<sup>38</sup>

Translating global commitments and recommendations relating to food security, nutrition and NCDs into action at the national and sub-national levels, and ensuring truly multisectoral approaches, are common challenges globally, and this is a key area in which SIDS have identified a need for enhanced international support and assistance. It is anticipated that a key function of the GAP will be to serve as a tool to advocate for increased commitment and buy-in to these platforms. International examples of good practice in implementing multisectoral approaches nutrition can be drawn from the experiences of countries involved in the Scaling Up Nutrition Movement.<sup>39</sup> The expansion of the SUN movement has demonstrated that multi-sectoral and multi-stakeholder coordination platforms are highly effective mechanisms for convening key stakeholders, creating ownership across sectors, ensuring joint development of objectives, and for providing monitoring and oversight to maintain coherence and quality across multisectoral programs. There are also examples of good practice from other areas of sustainable development, including One Health and the translation of the global action plan on Anti-Microbial Resistance to the national level.

Although SIDS are at varying stages of developing and implementing multi-sectoral approaches to food security and nutrition, and have significantly different

institutional structures for coordinating action, sharing of experiences, both within and between SIDS regions is strongly recommended. Experiences of a number of SIDS in establishing multisectoral NCD platforms have demonstrated the critical importance of: (i) Ensuring effective participation and input from all relevant ministries and stakeholders, including meaningful engagement of civil society; (ii) Ensuring that these platforms are appropriately positioned (within the office of the Head of State appears to be more effective than within a single line ministry), and have appropriate mandates and high level support to be able to lead, and (iii) Strong leadership, transparency, and accountability, including setting of clear targets and indicators, and monitoring and reporting of progress.

When establishing multi-stakeholder platforms for food security and nutrition, it is essential that governments develop clear and transparent guidelines and strategies for appropriate engagement with, and regulation of, the private sector, in order to enable and incentivize positive contributions as well as to ensure robust safeguards against negative roles, abuse and conflicts of interest.

Coherent policies and actions are needed across all sectors that influence food security and nutrition, either directly or indirectly. Worldwide, food security and nutrition have been predominantly addressed through health and social sectors. However, policies implemented through these sectors could be made more sustainable and have a much stronger impact if they were better co-ordinated and integrated with other policies, including growth and development policies.<sup>40</sup> In some SIDS, this may require updating legislation to enable implementation of recommended policies and strategies.

Use of fiscal measures to improve food environments and diets, as appropriate within the national context, is a key global recommendation and has been the subject of considerable attention. Overall, available evidence

<sup>38</sup> PAHO/WHO and CARICOM. Evaluation of the 2007 CARICOM Heads of Government Port of Spain NCD Summit Declaration. 2016.

<sup>39</sup> [scalingupnutrition.org](http://scalingupnutrition.org).

<sup>40</sup> OECD 2016.

indicates that well-designed taxation measures can effectively encourage and support healthier food and beverage purchasing behaviours, with the strongest evidence for taxes on sugar-sweetened beverages (one of the key recommendations of the Commission on Ending Childhood Obesity). A number of SIDS have begun to explore the use of excise and other 'health taxes' to disincentivise consumption of foods and beverages identified as contributing to unhealthy diets. While Samoa's experience with its import ban on turkey tails highlights the importance of ensuring coherence between trade and nutrition policy measures,<sup>41</sup> there are a range of evidence-based measures to promote healthy food environments and diets that do not conflict with multilateral trade rules. In the Pacific, excise taxes on sugar sweetened beverages and other food and beverage products with low nutritional value are being explored by a number of SIDS in response to the Pacific NCD pathways document endorsed by Ministers of Health and Ministers of Finance at the Forum Economic Ministers Meeting in Honiara, Solomon Islands in July 2014.

The *SAMOA Pathway* identified enhanced cooperation to maintain access to global food markets as a key priority for SIDS. Strengthening intra-regional markets and trade represents another critically important opportunity for improving food security in SIDS, both through reduced vulnerability to supply and price volatility, as well as expanded market opportunities for nutritious foods. This calls for greater regional cooperation, not only in the area of trade (and ideally through a comprehensive regional food security and nutrition action plan); strengthened cooperation (including in the area of technical standards), technical assistance, and capacity-building support in a range of sectors from development partners; and enhanced planning and investment in infrastructure and in improving production capacity in agricultural sectors where SIDS have geophysical and other advantages to supply their regional neighbours. For some SIDS

(including Kiribati and the Maldives), this may also mean exploring the potential to increase food production in outer 'garden islands' and facilitate internal trade between these and the main islands (including addressing storage and transportation challenges), providing the dual benefit of increasing the availability and access of fresh, nutritious foods to urban communities in the main islands, and providing a source of income to outer island residents.

Efforts to promote trade and improve trade efficiency need to take into account the vulnerability and resilience of SIDS, and may need to be accompanied by non trade- distorting measures that improve the supply and competitiveness of local, nutritious foods. Given their limited and often fragile natural resource bases, a strategy of food self- sufficiency is unrealistic in most SIDS. However, a strategy of managed trade, with some rebalancing of the ratio of imports to domestic production of traditional products, could help to improve the supply and competitiveness of local, nutritious foods, improve diet quality, reduce health care costs, narrow rising trade deficits. Revising agricultural and related policies to comply with the national food security and nutrition plan, as well as international trade rules and commitments, can help to promote the greater use of biological diversity, to prioritise investment in local fruit, vegetable and animal and fish products identified as efficient sources of micro- and macronutrients, and to improve the availability of, and access to, these foods.

At the same time, the multilateral trading system must play a role in promoting food security and nutrition in a meaningful way. The successful and timely conclusion of the issues remaining from the Doha Round of trade negotiations of the World Trade Organisation, including in the areas of agriculture, fisheries and trade and environment, should make a contribution in this regard. The Nairobi Package arising from the Tenth WTO Ministerial Conference included the commitment to eliminate agricultural export subsidies, which is relevant to SIDS.<sup>42</sup> ■

<sup>41</sup> Samoa was required to lift the ban when it acceded to the WTO in 2012.

<sup>42</sup> Tenth WTO Ministerial Conference, Nairobi 2015.

## Indicative actions: Political commitment and governance

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p><b>1.1.1.</b> Enhanced political commitment to eradicate hunger, food insecurity, and malnutrition.</p>	<p><b>1.1.1.1.</b> Strengthen advocacy and collective action to hold national governments to account in implementation of food security and nutrition commitments.</p>	<p><b>1.1.1.2.</b> Set specific, measurable, achievable, relevant and time-bound (SMART) commitments for food security and nutrition.</p>	
<p><b>1.1.2.</b> Inclusive governance, coordination, and accountability mechanisms for food security and nutrition in place at all levels.</p>	<p><b>1.1.2.1.</b> Facilitate and support meaningful engagement of communities, particularly marginalized and at-risk groups, in multi-stakeholder coordination and decision-making platforms for food security and nutrition at all levels.</p> <p><b>1.1.2.2.</b> Integrate food security and nutrition priorities into community development plans and link to district and national cross-sectoral processes drawing on experiences and lessons learnt in other SIDS (e.g. Tonga experience).</p>	<p><b>1.1.2.3.</b> Establish/strengthen multi-sectoral, multi-stakeholder, and multi-level governance and coordination platforms for developing and overseeing an integrated national approach to improving food security and nutrition, and strengthening horizontal and vertical coordination. Ensuring appropriate positioning of these platforms (ideally with direct line from the office of the Head of State, rather than within the and strategies, Ministry of Health or other line ministry), building capacities and ensuring adequate resourcing are essential to ensure that these platforms can function effectively.</p> <p><b>1.1.2.4.</b> Develop comprehensive, multi-stakeholder national food security and nutrition plan, and incorporate this into the national development strategy.<sup>43</sup></p> <p><b>1.1.2.5.</b> Allocate budget lines for nutrition strategies and plans.</p>	
<p><b>1.1.3.</b> Legislative and institutional frameworks are strengthened and harmonized to improve food security and nutrition.</p>	<p><b>1.1.3.1.</b> Strengthen local institutions, systems and mechanisms for addressing food security and nutrition challenges, and link to advocacy and awareness-raising strategies.</p>	<p><b>1.1.3.2.</b> Harmonize and strengthen legislative and institutional frameworks across the food system to improve food security and nutrition, including those relating to food safety and quality; biosecurity, conservation and use of land, forest, marine, and freshwater biodiversity and resources; gender equality and women's empowerment.</p>	

<sup>43</sup> Drawing on international guidelines where available e.g. FAO/Commission on Genetic Resources for Food and Agriculture (CGRFA) voluntary guidelines for Mainstreaming Biodiversity into Policies, Programmes, and National and Regional Plans of Action on Nutrition.

INDICATIVE ACTIONS		
	Regional level	Global level
	<p><b>1.1.1.3.</b> Explore use of scorecard or other approach to track progress and hold governments to account in implementation of food security and nutrition commitments. Examples include NCD scorecards developed to benchmark and monitor progress in implementing policy commitments in the Caribbean (Port of Spain NCD evaluation) and Pacific (MANA framework).</p>	<p><b>1.1.1.4.</b> Ensure strengthened and coherent engagement in global governance processes.</p>
	<p><b>1.1.2.6.</b> Support translation of global guidance on food security and nutrition governance to the national level, including through providing platforms for intra- and inter-regional dialogue and exchange among SIDS.</p>	<p><b>1.1.2.7.</b> Provide coordinated support to strengthen capacities for collaborative multi-sectoral and multi-stakeholder food security and nutrition governance at national and sub-national levels.</p>
	<p><b>1.1.3.3.</b> Harmonize and strengthen regional institutional frameworks, standards, guidelines, and processes to improve food security and nutrition.</p>	<p><b>1.1.3.4.</b> Provide coordinated capacity-development support to strengthen, modernize, and harmonize, legal and institutional frameworks, including through support for South-South cooperation and Parliamentary alliances.</p>

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p>1.1.4. Effective and coherent policies are in place to promote food security and nutrition.</p>	<p>1.1.4.1. Facilitate and support meaningful engagement of communities, particularly marginalized and at-risk groups, in political and policy-making processes affecting food security and nutrition.</p>	<p>1.1.4.2. Prioritise, and set time-bound targets for, implementation of global best-practice policy recommendations for promoting food security, healthy diets and nutrition, including evidence-based regulatory and policy measures to improve the nutritional quality of the food supply and limit the marketing, availability and consumption of unhealthy foods and beverages; and non trade-distorting measures to improve the supply and competitiveness of local, nutritious foods.</p> <p>1.1.4.3. Establish and/or update national food-based dietary guidelines that include locally produced food and incorporating sustainability principles to guide all national nutrition education programmes, as well as to create a link between food demand and supply by guiding policies and actions in all relevant sectors, including agriculture, health, social protection, and education (including food standards for schools as well as other public institutions).</p>	
<p>1.1.5. Policies and strategies across sectors are aligned to maximise benefits for food security and nutrition.</p>	<p>1.1.5.1. Facilitate and support meaningful engagement of communities, particularly marginalized and at-risk groups, in political and policy-making processes affecting food security and nutrition.</p> <p>1.1.5.2. Integrate food security and nutrition priorities into local planning, development processes, and poverty reduction strategies.</p>	<p>1.1.5.3. Review existing policies across all relevant sectors (including agriculture, health, economic development, social protection, education, trade, environment, water and sanitation, infrastructure, and industry) for their impacts on food security and nutrition, and integrate food security and nutrition objectives, actions and accountability frameworks into all relevant policies and programmes, based on scientific evidence and international guidelines.</p> <p>1.1.5.4. Strengthen/reform policies to promote social and economic security and empowerment, including rural infrastructure and services; urban planning, housing, land use, and development; water and sanitation; social, health, education, and employment policies.</p>	

INDICATIVE ACTIONS

Regional level	Global level
<p>1.1.4.4. Explore opportunities to integrate food security and nutrition objectives into regional policies (including those relating to trade, investment, food safety and quality).</p>	<p>1.1.4.5. Provide coordinated support for capacity-development to design and implement effective and coherent public policies for improving food security and nutrition, including through support for South-South cooperation and Parliamentary alliances.</p>
<p>1.1.5.5. Establish inter-regional trade policies and platforms and integrate food security and nutrition objectives, actions and accountability mechanisms.</p>	<p>1.1.5.6. Provide coordinated support to build capacities of government and other stakeholders for policy development and reform.</p>

## Component 1.2. Capacity and resources

Sufficient resources and human and financial capacity are fundamental components of enabling environments. The *SAMOA Pathway* notes that lack of resources and capacity has constrained the abilities of SIDS to create enabling environments for sustainable development and to fully implement international commitments, including the *Barbados Programme of Action* and *Mauritius Strategy*.

Human and institutional capacity-building is needed in all sectors and at all levels to improve food security and nutrition in SIDS. This includes strengthening the capacity of governments to establish and lead sustainable and accountable multistakeholder platforms, to assess and align policies and processes across sectors, and to formulate and implement sound policies for improved food security and nutrition. It also includes simultaneously strengthening the capacity of local government authorities and civil society, community based and youth organizations to perform their functions; the capacity of research organizations to conduct high quality, timely, interdisciplinary and policy- and industry-relevant research; the capacity of frontline staff to deliver services; and citizen's capacity to advocate for their needs and hold governments to account. All of this will require significantly greater investment from domestic and international sources, as well as better quality, and better targeting of, investment.<sup>44</sup>

Commitments to strengthen domestic financing for sustainable development outlined in the *Addis Ababa Action Agenda* include: strengthening the mobilization and more effective use of domestic resources; increasing public investment in tackling efforts to end food insecurity, hunger and malnutrition in all its forms, as well as in sustainable and resilient infrastructure; delivering social protection and essential public services for all; and setting nationally appropriate spending targets for quality investments in essential public services, including health, education, energy, water and sanitation.<sup>45</sup> In the *Addis Ababa Action Agenda*, the international community further committed to strengthening international cooperation in capacity-building and resource mobilization to support the sustainable development efforts of SIDS.

The *SAMOA Pathway* calls for specific support to help SIDS to “effectively participate in the multilateral trading system, including with respect to explaining trade rules and disciplines, negotiating and implementing trade agreements and administering coherent trade policies”, as well as to support SIDS efforts to “assess the implications and mitigate the impact of non-tariff barriers to their market access opportunities through, *inter alia*, appropriate technical assistance and the implementation of the Trade Facilitation Agreement of the World Trade Organization.”<sup>46</sup> ■

<sup>44</sup> Guidelines for responsible investment in agriculture and food systems are outlined in the Committee on World Food Security's Principles for Responsible Investment in Agriculture and Food Systems (CFS 2014).

<sup>45</sup> Addis Ababa Action Agenda of the Third International Conference on Financing for Development endorsed by the UN General Assembly in its resolution 69/313 of 27 July 2015.

<sup>46</sup> Resolution 69/15, paragraph 107.





**COOK ISLANDS**

Teina Tuatai and Tuaine Turua test water samples for contamination at the Ministry for Marine Resources (MMR). The MMR is keen to ensure all fishing and fisheries-related areas comply with Codex standards in terms of contaminants in water and fish.

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## Indicative actions: Capacity and resources

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p><b>1.2.1.</b> Increased investment in promoting food security and nutrition across agricultural and food systems.</p>	<p><b>1.2.1.1.</b> Identify opportunities to increase resources available to local institutions and organizations.</p>	<p><b>1.2.1.2.</b> Attract and scale-up public and private investment in agricultural research and development for improved food security and nutrition, including the creation, adoption and incubation of innovative technologies and practices developed for, and in, islands and atolls, based on CFS guidelines for responsible investment in agriculture.</p> <p><b>1.2.1.3.</b> Increase investment in infrastructure, services, and markets for local, inclusive, and nutrition-sensitive value chains, including improved transport, storage and processing capacities.</p>	
<p><b>1.2.2.</b> Human and institutional capacities for addressing food security and nutrition challenges enhanced in all relevant sectors.</p>	<p><b>1.2.2.1.</b> Strengthen capacities of local government and community-based organizations for addressing food security and nutrition challenges, including for community-based surveillance, program/service delivery (including training of community nutrition/behaviour change promoters), and monitoring; natural resource management; as well as capacity development of individuals to access and manage finances, and to generate income.</p>	<p><b>1.2.2.2.</b> Strengthen organizational capacities for ecosystem stewardship, livelihoods, food security and nutrition at all levels, with a focus on governance, social inclusion and community empowerment.</p> <p><b>1.2.2.3.</b> Strengthen research capacities for addressing food security and nutrition challenges, including capacity for inter-sectoral coordination between research organizations.</p> <p><b>1.2.2.4.</b> Provide training and capacity-building to social workers, agricultural extension personnel, teachers, health professionals, and other front-line personnel in the delivery of programs and services to promote food security, nutrition, and social and economic security (link to 3.3.1).</p> <p><b>1.2.2.5.</b> Strengthen capacity to conduct <i>ex ante</i> impact assessments of all proposed free trade agreements for food security and nutrition considerations, including potential impacts on local production, and import volumes of different food categories, and for nutrition/health representatives to participate in trade negotiations.</p> <p><b>1.2.2.6.</b> Strengthen public sector capacities to monitor and enforce compliance to regulatory frameworks in the areas of fisheries, agriculture, forestry, conservation and use of marine and terrestrial biodiversity, food safety and quality.</p> <p><b>1.2.2.7.</b> Identify and build the capacity of potential advocates, champions, role models, and drivers of change for improving the food system, food security and nutrition (including politicians, celebrities, sportspersons, civil society representatives, and local leaders).</p>	

INDICATIVE ACTIONS		
	Regional level	Global level
	<p><b>1.2.1.4.</b> Explore novel opportunities to harmonize and pool resources for improved food security and nutrition (e.g. regional approach to address inter-island transportation challenges).</p>	<p><b>1.2.1.5.</b> Mobilize and increase resources available to support efforts to improve food security and nutrition in SIDS.</p>
	<p><b>1.2.2.8.</b> Strengthen capacities of regional organizations working in all relevant sectors to address food security and nutrition challenges, including capacity for coordination and improved coherence (e.g. CARICOM, IOC, SPC).</p> <p><b>1.2.2.9.</b> Strengthen and build research capacities for addressing food security and nutrition challenges, including capacity for inter-sectoral coordination between research organizations.</p>	<p><b>1.2.2.10.</b> Provide coordinated support to build institutional and human capacities in all relevant sectors (including agriculture, forestry, fisheries, and health) and at all levels (regional, national and municipal/local) for addressing food security and nutrition challenges, including capacities for the development and adoption of low-cost surveillance, monitoring and assessment capabilities, program delivery, inter-sectoral coordination between organizations and ministries, and nutrition advocacy (including identifying and building the capacities of potential “nutrition champions” at local and national levels).</p> <p><b>1.2.2.11.</b> Provide coordinated support to strengthen legal, institutional, and human capacities for effective regulation and governance of food systems for improved food security and nutrition, including legislative assistance, and support for monitoring and enforcement in the areas of fisheries, agriculture, forestry, conservation and use of marine and terrestrial biodiversity, food safety and quality.</p> <p><b>1.2.2.12.</b> Enhance support for collaborative research, technology transfer initiatives, and exchanges (including south-south and north-south) in the fields of agriculture, forestry and other land-use, and fisheries that contribute to better food security and nutrition outcomes, including exchanges on innovative approaches to linking local agricultural development and public procurement (such as home-grown school feeding programs).<sup>47</sup></p> <p><b>1.2.2.13.</b> Enhance financial and technical support for the development of sustainable, accessible and resilient quality infrastructure, including transport, energy, water and sanitation.</p> <p><b>1.2.2.14.</b> Provide coordinated support to strengthen the nutrition-sensitivity of disaster preparedness, risk reduction, and relief, and resilience- building programmes and initiatives.</p> <p><b>1.2.2.15.</b> Provide trade-related capacity-building and technical assistance to support participation of SIDS in the multilateral trading system while protecting and promoting food security and nutrition.</p>

<sup>47</sup> e.g. WFP’s Centre of Excellence on school feeding in Brazil.

### *Component 1.3. Knowledge and evidence generation, dissemination and use*

There is an urgent need to strengthen the knowledge and evidence base on food security and nutrition in SIDS, and to enhance inter-sectoral as well as intra- and inter-regional knowledge sharing. Enhancing the generation, disseminate and use of knowledge is a key priority that cuts across all areas of the GAP. Accurate and timely data on key food security and nutrition risks and outcomes, for example, are needed to enable effective policy and programme development, while implementation of all interventions recommended in the GAP should be regularly monitored and evaluated for their impacts, including any differential impacts. Other key knowledge and evidence priorities in SIDS include enhancing investment in, and strengthening capacities, for: agricultural research and development targeted at improving the nutritional quality and resilience, and conserving and using the biodiversity of, food systems.

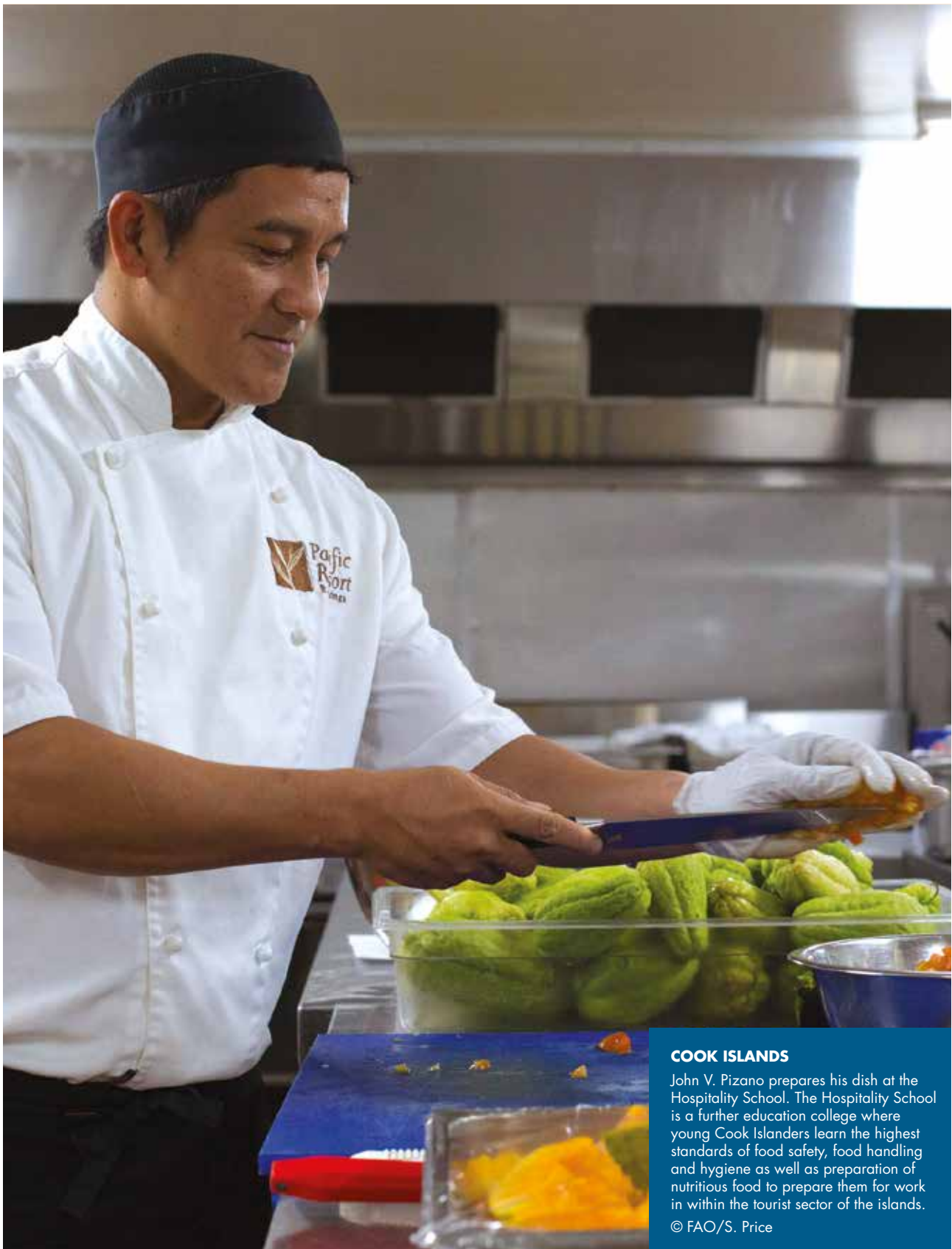
Evidence-based communication strategies are needed to disseminate/reinforce key food security and nutrition messages. Public awareness campaigns can be effective, provided they are focused, sustained, delivered through multiple

communication channels, and targeted to specific population groups. Possible themes for public awareness campaigns in SIDS include climate change risks and the importance of human and environmental resilience to the longer-term impacts of climate change; the benefits of a sustainable approach to land-use practices and the importance of biological diversity conservation and use; the importance of protecting freshwater resources; and on how individual dietary and lifestyle choices affect individual health and the environment (based on national food- based dietary guidelines and tailored to specific population groups).

SIDS possess a wealth of cultural heritage, which is a driver and enabler for sustainable development. Harnessing this traditional knowledge will be pivotal to achieving the 2030 Agenda in SIDS. Indigenous bio-cultural heritage recognizes the deep connections among people, culture, knowledge and the natural environment, and can meaningfully advance social development. There are also significant opportunities to better promote and support SIDS' culture and traditional knowledge relating to local food and cuisine. The Pacific Regional Cultural Strategy 'Investing in Pacific cultures 2010-2020' is an example of a regional strategy to integrate culture into sustainable development strategies that should be supported at all levels.<sup>48</sup> ■

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<sup>48</sup> Investing in Pacific Cultures (2010-2020).



#### COOK ISLANDS

John V. Pizano prepares his dish at the Hospitality School. The Hospitality School is a further education college where young Cook Islanders learn the highest standards of food safety, food handling and hygiene as well as preparation of nutritious food to prepare them for work in within the tourist sector of the islands.

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## Indicative actions: Knowledge and evidence generation, dissemination and use

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p><b>1.3.1.</b> Collection, generation, dissemination and use of reliable, timely, locally-relevant data and knowledge, including surveillance, monitoring and evaluation.</p>	<p><b>1.3.1.1.</b> Collect and document traditional knowledge and practices relating to natural resource management and the production and preparation of traditional foods, and support sharing of knowledge between communities (link to 3.3.1.1).</p> <p><b>1.3.1.2.</b> Support local research on the identification, utilisation, and market development of diverse, locally produced, nutrient-rich foods.</p> <p><b>1.3.1.3.</b> Support community-led campaigns to raise awareness about the importance of efforts to improve food security and nutrition, nutrition education programmes to build knowledge and skills needed for healthier and more sustainable dietary habits, as well as safe hygiene and childcare practices (link to 2.5.1.2 and 3.1.1.5).</p>	<p><b>1.3.1.4.</b> Monitor the implementation of policies and strategies outlined in the national food security and nutrition plan, and evaluate impacts across social groups.</p> <p><b>1.3.1.5.</b> Conduct regular surveillance and monitoring of the food security and nutrition situation in different population groups, including women, children, and other vulnerable population groups, and disaggregated by socioeconomic group, with timely response to emerging needs and challenges.</p> <p><b>1.3.1.6.</b> Support agricultural research and development of a diverse range of foods including local staples and other crops, including underutilized traditional crops, a diverse range of fruits and vegetables best adapted to the effects of climate change, and appropriate production of animal-source products, applying sustainable food production and natural resource management practices (link to 2.3.1.2).</p> <p><b>1.3.1.7.</b> Support research relating to climate-smart, nutrition-sensitive food systems, including use of renewable sources of energy which are abundant (such as wind, water and solar power) and related technologies.</p> <p><b>1.3.1.8.</b> Support policy-oriented research to develop clear, usable analytic tools for assessing coherence between policies and programmes across all sectors (in particular, agriculture and trade), and food security and nutrition objectives; for monitoring the impacts of policy measures on food supply, food consumption and nutrition indicators; and for identifying opportunities to enhance positive/mitigate adverse impacts.</p> <p><b>1.3.1.9.</b> Integrate a limited but key set of food security and nutrition indicators into existing relevant surveillance, monitoring and evaluation mechanisms where appropriate, based on scientific evidence and international guidelines.</p> <p><b>1.3.1.10.</b> Promote research, investment in, and the adoption of, ICT technologies to advance information-sharing between urban and rural areas, and to ensure access to markets, data, and knowledge, particularly for small-scale farmers/fishers.</p> <p><b>1.3.1.11.</b> Support research to better understand knowledge, attitudes, practices and norms related to food and nutrition, including motivators, sources of influence and the communication channels most likely to impact shifts in practices.</p>	

## INDICATIVE ACTIONS

Regional level	Global level
<p><b>1.3.1.12.</b> Support maintenance and utilization of regional plant genetic resource facilities, including support for use of climate-resilient traditional crop varieties by farmers.</p> <p><b>1.3.1.13.</b> Establish regional and inter-regional knowledge exchange platforms to facilitate sharing of knowledge, information and experience, document key lessons on what works and share.</p> <p><b>1.3.1.14.</b> Develop regional research, technology transfer, and other initiatives.</p> <p><b>1.3.1.15.</b> Integrate culture into regional development plans and strategies.</p>	<p><b>1.3.1.16.</b> Support inter-country collaboration, such as North-South, South-South and triangular cooperation, and information exchange on agriculture, nutrition, food, technology, research, good governance, policies and programmes.</p> <p><b>1.3.1.17.</b> Provide support to strengthen national and regional research capacities on climate resilience, and facilitate research that takes into account the rich local, traditional and indigenous knowledge of SIDS as well as SIDS-based innovation and technologies.</p> <p><b>1.3.1.18.</b> Support efforts to assess the effectiveness of ‘health excises’ and other fiscal measures in changing food consumption patterns, as well as their impacts on finance, in order to progress evidence-based policy approaches to incentivize healthier eating patterns.</p> <p><b>1.3.1.19.</b> Provide support to monitor and track progress towards relevant global commitments and goals including exploring opportunities for a scorecard approach that builds on existing data collection processes to track progress in implementation of ICN2 and SDG (especially SDG 2) commitments.</p>

## *Objective 2. Sustainable, resilient, and nutrition-sensitive food systems*

The political, social, and economic environment creates the conditions in which food systems operate. Food systems comprise the production, aggregation, processing, distribution, consumption and disposal of goods that originate from agriculture, forestry, aquaculture and fisheries. They include the individuals, organizations and enterprises that produce, transform and deliver product to market.

Numerous political and institutional processes, and policy-level actions influence how food systems operate and the foods they deliver. Food systems, in turn, determine the range of foods that are available, affordable, convenient and desirable to people; that is, the food environment. Food environments are the interface between food systems and diets. In combination with individual factors such as income, knowledge, time and preferences, they shape dietary consumption, which, in turn, affects nutritional status.

Despite significant improvements in the efficiency of food systems in delivering increasing quantities of food to growing populations, developments in these systems have created numerous challenges, including increased barriers to the participation of vulnerable groups, whether as producers, employees and consumers; growing malnutrition and health costs due to the emergence of and preference for more energy dense and convenient processed foods; significant levels of food loss and waste; increased incidence of food safety issues and trans boundary diseases; and environmental and natural resource degradation.

Globally, food systems need to be fundamentally reshaped to support local family-based production systems, high quality and sustainable diets, and better nutritional outcomes, in addition to supplying

sufficient quantities of food.<sup>49</sup> This will require coherent and coordinated action by a wide range of stakeholders – including family-farmers and fishers, producer organizations, consumer associations, industry associations and private sectors – and the mainstreaming of principles and recommendations for nutrition-sensitive approaches into strategies and actions across all components of food systems. These food system level actions will need to be supported by enabling political and institutional environments, including high-level and sustained political commitment and the alignment of national resources accordingly, and coherent public policies across the range of government ministries influencing food systems from production to consumption as articulated under Objective 1.

In most SIDS, women play a central role in food systems. In the Pacific, women are 52 percent of the agricultural work force. But across the SIDS (as in many other countries) women lag behind men in terms of access to productive resources (including land and equipment), credit and other financial services, technology, and other resources. Achieving gender equality and the empowerment of women, particularly in the primary production sector, is critical. While efforts should be made to increase women's access to and control of resources, including income, such activities need to be complemented with a women's time use analysis to determine labour and time requirements for women, the introduction of time saving technologies for tasks performed by women, and strategies to ensure equitable intra-household access to resources.

Production and post-production activities are inextricably linked. The development of value chains that link producers with consumers is critically important in ensuring that markets for increased agricultural production are attractive to producers, particularly for products produced in a more sustainable and inclusive way. These markets provide incentives for producers to invest in

<sup>49</sup> Global Panel 2016 Foresight Report on Food Systems and Diets.



improved technologies and to adopt new practices. Without viable markets, incentives for investment in increased production won't be sustained. At the same time, without a consistent marketable supply of product, the required investments in value chain and market development won't be made by private sector enterprises. Organized networks of small-scale producer/fishers associations (e.g. cooperatives) can play an important role in supporting consistent supply of products to markets. Locally focused quality assurance systems such as the organic Participatory Guarantee Systems<sup>50</sup> can assist by certifying producers based on active participation of stakeholders on the basis of trust, social networks and knowledge exchange.

Actions are required to support coordinated investments by producers and other value chain actors in reshaping food systems. These actions are needed at the international level to create the environment for the emergence of robust global markets that deliver safe, healthy food with reliability and at a reasonable cost to consumers, at regional level to promote intra-regional trade and at national level to promote healthy, productive and resilient fisheries, oceans and seas; sustainable land management, the protection of soil and terrestrial ecosystems, and responsible patterns of consumption; all critical for food security and nutrition in SIDS.

Building food systems that are resilient, especially to environmental degradation, climate change, natural hazards, and economic volatility, is an urgent priority in SIDS. Sea-level rise and other adverse impacts of climate change represent the gravest of threats to the survival and viability of many islands and atolls,<sup>51</sup> including, for some, through the loss of territory. The adverse impacts of climate change compound existing challenges in SIDS, including biodiversity loss and food insecurity, and have placed additional burdens on their national budgets and their efforts to achieve sustainable development goals.

Although actions in support of sustainable, resilient and nutrition-sensitive food systems will need to be addressed in a coherent and joined up fashion, for ease of articulation, this objective is structured around five components – the first three are primary sector specific, one covers post-production value chain development and one includes actions required to ensure resilience of these systems. The importance of moving from traditional approaches of supporting sector specific technological interventions to a more programmatic and holistic approach to strengthening food systems will be critical in meeting this objective. ■

<sup>50</sup> <http://www.ifoam.bio/en/organic-policy-guarantee/participatory-guarantee-systems-pgs>

<sup>51</sup> Atolls have particular circumstances and are some of the most vulnerable environments in the Pacific. There are about 210,000 people living on atolls in the Pacific (across Kiribati, Marshall Islands, Tuvalu, Federated States of Micronesia, Palau, Papua New Guinea and Solomon Islands). Three of the countries consist of only atolls. The population of atolls is expected to increase to about 350,000 by 2050. This population dynamic linked to the sea-level rise and lack of land and water resources for agriculture will push these people into poverty.

### *Component 2.1. Sustainable management and use of oceans and seas and their resources for food security and nutrition*

Healthy, productive and resilient fisheries, oceans and seas are the cornerstone of food security, sustainable livelihoods, economic development and essential ecosystem services in SIDS. In many Pacific SIDS, per capita fish consumption is more than 3–4 times the global average, with fish providing 50–90% of animal protein in the diet of coastal communities.<sup>52</sup> However, climate change, pollution, ocean acidification, habitat loss, and other stressors, as well as overexploitation and other unsustainable practices linked to population growth and growing demand for fish, are putting aquatic resources under considerable pressure and challenging the health, productivity and resilience of marine ecosystems.<sup>53, 54</sup>

Much of the fish used for food in SIDS come from subsistence fishing in coastal waters. However, the marine environment also offers a largely untapped opportunity for aquaculture and fisheries development in SIDS, most of which have limited resources for freshwater aquaculture. Already high demand for seafood products in SIDS is expected to increase with future population growth and changing demographic pressures. Imports are already partially meeting this demand in a number of SIDS. However, the sustainable development of marine aquaculture has significant potential to contribute to food security, while providing

income and employment opportunities, and reducing reliance on imported foods.

SIDS have been at the forefront of advocacy for the ‘Blue Economy’ approach to harnessing the potential of healthy oceans, seas and coasts for sustainable development. Most have committed to international agreements and frameworks for sustainable fisheries and coastal management,<sup>55</sup> as well as national and regional fisheries management policies. The challenge is adequate financial and non-financial resourcing and institutional and human capacities for adapting and implementing these, particularly at national level.

The *SAMOA Pathway* identifies a range of priorities for the conservation, management and sustainable use of oceans and seas and their resources in SIDS, including strengthened legal, institutional and human capacities for: the sustainable management of coastal zones and fisheries; the protection of coral reefs and other vulnerable marine ecosystems from ocean acidification and other hazards; and, the monitoring, control, and surveillance of illegal, unreported, and unregulated fishing. It also calls for the cooperation of the international community in implementing shared responsibilities, including under regional fisheries management organizations and arrangements; in addressing the use of subsidies in the fisheries sector that contribute to over-capacity and overfishing; and in ensuring that the burden of conservation and management of ocean resources does not disproportionately fall on SIDS. ■

<sup>52</sup> SPC 2011. Vulnerability of Tropical Pacific Fisheries and Aquaculture to Climate Change.

<sup>53</sup> HLPE 2014. Sustainable fisheries and aquaculture for food security and nutrition. A report by the High-Level Panel of Experts on Food Security and Nutrition. Rome, Italy, June 2014.

<sup>54</sup> The Role of Seafood in Global Food Security. Document A/69/71.

<sup>55</sup> Including the Port State Measures Agreement to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing (PSMA), and the Convention on Biological Diversity’s (CBD’s) 2011-2020 Strategic Plan and relevant Aichi Biodiversity Targets (notably 6).

## Indicative actions: Sustainable management and use of oceans and seas and their resources for food security and nutrition

OUTCOMES	INDICATIVE ACTIONS			
	Local level	National level	Regional level	Global level
<p><b>2.1.1.</b> Oceans and seas and their resources are sustainably managed and used for food security and nutrition.</p>	<p><b>2.1.1.1.</b> Empower all communities to manage their resources and work with government collaboratively for coastal fisheries management (link to 1.2.1.1 and 1.2.2.1).</p> <p><b>2.1.1.2.</b> Evaluate social, economic and environmental viability of community based farming of sea cucumbers and seaweeds for sale as a cash crop, as well as the processing of seaweed and fishery by-products into high-value products (e.g. fish oil, chitin, collagen, carrageenan, alginate).</p> <p><b>2.1.1.3.</b> Build capacity at the local level to ensure fish produced meets minimum food safety standards (link to 1.2.2.5).</p> <p><b>2.1.1.4.</b> Promote the consumption of fish and the utilization of fish byproducts for direct consumption rather than discarding.</p>	<p><b>2.1.1.5.</b> Strengthen implementation of community-based ecosystem approaches to coastal fisheries management to achieve national coverage.</p> <p><b>2.1.1.6.</b> Formulate and enact a national plan of action for implementing the Port State Measures Agreement.</p> <p><b>2.1.1.7.</b> Ensure fish consumption is part of national food security and nutrition plan (link to 1.1.2.4).</p>	<p><b>2.1.1.8.</b> Provide support to achieve implementation of community-based ecosystem approach to coastal fisheries management that reaches all coastal communities.</p> <p><b>2.1.1.9.</b> Evaluate the potential for development of more efficient and equitable domestic and export value chains for farmed aquatic products (such as sea cucumbers, seaweed, marine macroalgae, and shellfish, and pearl oysters).</p> <p><b>2.1.1.10.</b> Ensure regional standards for food safety and quality include fisheries products (link to 1.1.3.3).</p>	<p><b>2.1.1.11.</b> Provide coordinated support to build capacities for sustainable management and use of oceans and seas and their resources.</p> <p><b>2.1.1.12.</b> Provide support to the implementation of the Port State Measures Agreement, including supporting the development of national implementation plans based on national capacities, priorities, needs, and conditions.</p> <p><b>2.1.1.13.</b> Provide support to the implementation of the Guidelines for Small-Scale Fisheries, including supporting the development of national implementation plans based on national capacities, priorities, needs, and conditions.</p>

## *Component 2.2. Sustainable management and use of freshwater resources for food security and nutrition*

SIDS also face numerous challenges with respect to freshwater resources, including pollution, the overexploitation of surface, ground and coastal waters, saline intrusion, drought and water scarcity, soil erosion, water and wastewater treatment and the lack of access to sanitation and hygiene. Furthermore, changes in rainfall patterns related to climate change have regionally varying and potentially significant impacts on water supply.

Lack of access to safe, clean water for drinking and food preparation is a major cause of water-borne illnesses, including diarrhoeal diseases, in some SIDS. Diarrhoeal diseases caused by unclean water, poor hygiene and sanitation have a major impact on nutritional status and can lead to death, particularly among young children and other vulnerable population groups.

Equally, water is an important resource in many productive sectors such as crops and livestock and

drainage is needed to prevent flooding. Interventions to improve irrigation and drainage for example, need to be included as components of water planning and management at the community and national level.

Priorities identified in the *SAMOA Pathway* include: the development of institutional and human capacities for the effective, inclusive and sustainable implementation of the integrated management of water resources and related ecosystems; the provision of appropriate facilities and infrastructure for safe drinking water, sanitation, hygiene and waste management systems need support; expansion of wastewater treatment, recycling and reuse in the context of the sustainable and efficient use of water resources; and improvement of water-use efficiency (including, for example, the development of aquaponics) and the elimination of over-extraction, especially of groundwater, which in turn is affected by farming practices.

There may be some potential for inland fisheries and freshwater aquaculture to contribute to improved food security in a small minority of SIDS, particularly those with large interiors (e.g. freshwater aquaculture of tilapia in Papua New Guinea and the Solomon Islands). ■



**JAMAICA**

Sorting tilapia fingerlings at a fish farmer's brood pond.

© FAO

## Indicative actions: Sustainable management and use of freshwater resources for food security and nutrition

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p><b>2.2.1.</b> Freshwater resources are sustainably managed and used for food security and nutrition.</p>	<p><b>2.2.1.1.</b> Support communities to take ownership of water planning and management at relevant levels, including participatory mechanisms for the sustainable management of ecosystems and landscapes that are key to ensure the availability, quality and stability of water for food security and nutrition, including the need for water for crops and livestock and the need for drainage to prevent flooding (with strong governance and accountability frameworks and mechanisms, possibly through the establishment of water users association) (link to 1.2.2.1).</p> <p><b>2.2.1.2.</b> Strengthen the capacity of households and local organizations to adopt water-saving practices and technologies for innovative water storage and distribution, efficiency in multiple water uses and disposal of wastewater that is appropriate for the environmental, social and cultural contexts (link to 1.2.2.1).</p> <p><b>2.2.1.3.</b> Pilot and assess school feeding programmes built around pond aquaculture (link to 1.2.2.3).</p>	<p><b>2.2.1.4.</b> Improve access to environmentally sound and energy efficient technologies and strengthen management strategies for the catchment, production, conservation, delivery, and use of freshwater, including rainwater catchment, irrigation and drainage systems, water treatment systems and desalination, the trialling and development of aquaponics (link to 1.2.2.3).</p> <p><b>2.2.1.5.</b> Investigate the viability of integrating aquaculture into agricultural landscapes, such as fish into rice field systems, or the development of multi-purpose farm ponds (link to 1.2.2.3).</p> <p><b>2.2.1.6.</b> Explore feasibility and effectiveness of targeted incentives and disincentives to ensure quality of freshwater resources is preserved, particularly for drinking water (link to 1.2.2.3).</p> <p><b>2.2.1.7.</b> Develop integrated national water resource management strategy, and incorporate food security and nutrition concerns (link to 1.1.5.3).</p> <p><b>2.2.1.8.</b> Review national policies related to trade, rural development, and industrialization to ensure that they promote water for food security and nutrition and eliminate practices that disadvantage the vulnerable and marginalized (link to 1.1.5.3).</p> <p><b>2.2.1.9.</b> Design and implement agricultural practices (agronomic practices, agro-ecological innovations, seeds, livestock breeds, diversification) and landscape management which increase resilience of agricultural systems to water stress.</p>	

## INDICATIVE ACTIONS

Regional level	Global level
<p><b>2.2.1.10.</b> Strengthen regional cooperation to build capacities for management of freshwater resources.</p> <p><b>2.2.1.11.</b> Strengthen regional research and knowledge exchange relating to water for food security and nutrition.</p> <p><b>2.2.1.12.</b> Assess viability of enterprise oriented aquaculture and the results to secure inward business investment.</p>	<p><b>2.2.1.13.</b> Strengthen international cooperation to build capacities and mobilize resources for water and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.</p> <p><b>2.2.1.14.</b> Strengthen international research and development cooperation to investigate issues relating to water for food security and nutrition in SIDS.</p>

### *Component 2.3. Sustainable management and use of terrestrial resources for food security and nutrition*

Developing production infrastructures and enhancing the nutrition-sensitivity of agricultural systems using sustainable food production and natural resource management techniques based on agro-ecological principles is a key priority for promoting food security and income generation in SIDS.

Relevant multilateral commitments and targets include the UN Framework Convention on Climate Change, as well as the Convention on Biological Diversity's (CBD's) 2011-2020 Strategic Plan and associated Aichi Biodiversity Targets (notably 4, 13, and 14), and Programme of Work on Island Biodiversity and Biodiversity for Food and Nutrition, and the Non-Legally Binding Instrument on All Types of Forests.

Traditional staple crops such as coconut, breadfruit, and bananas have been critical to the nutritional adequacy of diets in SIDS for generations. Coconut and other staple crops have also traditionally provided a disaster-resilient food and income source, as well as timber, fuel, hydration and medicine. There is an urgent need to strengthen plant genetic resource conservation in SIDS in order to secure traditional staple crops against the threat of disease and ensure their availability for future generations.

Enhanced cooperation and investment is needed to support an agro-ecological approach to increasing production of nutritious traditional and non-traditional crops (fruits and vegetables, nuts, seeds and legumes), as well as for the appropriate production of animal-source products in SIDS. Most SIDS can grow a wide variety of fruits and vegetables, some of which have been found to have superior nutrient

content when compared to mainstreamed cultivars.<sup>56</sup> These nutrition-sensitive agricultural interventions need to be linked to strategies to ensure access to and affordability of these more nutritious foods on domestic markets through adoption of nutrition-sensitive value chains approach for prioritizing interventions (linked to Component 2.4 – Inclusive and efficient nutrition sensitive value chains).

Organic agriculture has the potential to deliver a wide range of benefits for food security, nutrition and sustainable development in SIDS, including by protecting and supporting traditional farming knowledge and practices; soil fertility, and biodiversity; promoting diversified, productive, sustainable, and resilient farming systems; providing niche domestic and export market opportunities; and reducing pesticide residue levels in the food supply and in the environment more broadly.

Islands forests provide significant livelihood opportunities for people in rural areas. As these resources are mostly concentrated on land with limited suitability for agriculture, agroforestry and forest-based income is often the only income for persons living in or close to the forest. In Papua New Guinea, for example, the majority of the population lives in traditional societies that are heavily dependent on forests resources for nutrition, livelihoods, building materials, medicinal plants, and a wealth of other resources. However, these forests are increasingly under threat from deforestation, conversion, and degradation. Action is needed to ensure that the most efficient and effective management practices are identified and disseminated in order to slow, halt, and reverse deforestation and forest degradation, including by promoting trade in legally and sustainably harvested

<sup>56</sup> Banana cultivars traditionally grown and eaten in the Federated States of Micronesia, for example (including *Karat* and *Uht en Yap*) contain significantly higher levels of provitamin A carotenoids than *Cavendish* bananas (275 times higher in the case of *Uht en Yap*). *Cavendish* is by far the most commonly grown and traded banana cultivar globally, accounting for 41% of global production, and is a poor source of provitamin A carotenoids.



forest products; and to achieve appropriate and effective reforestation, restoration and afforestation.

Coastal forests, including mangroves, fulfill important functions in terms of providing wood and non-wood forest products, coastal protection, mitigation of pollution, conservation of biological diversity and provision of habitat, spawning grounds and nutrients for a variety of fish and shellfish. In addition, communities depend upon mangroves for their existence through hunting, fishing, craft, tour guiding and other nature-based activities. In the coastal zones, various non-wood forest products (NWFPs) are used for subsistence purposes and some are also sold commercially. More effective conservation and management of these resources is urgently needed.

Agroforestry systems, which include both traditional and modern land-use systems where trees are managed together with crops and/or animal production systems in agricultural settings can provide dynamic, ecologically based, natural resource management systems that diversify and sustain

production, in turn increasing the social, economic and environmental benefits for land users at all scales.

In Pacific SIDS and in Indian Ocean Islands, the introduction of new land and marine tenure systems' development policies, laws, and regulation – mainly to facilitate economic activities - can reduce access to land for farming and access to traditional fishing grounds. More often than not, food security implications of these are not high in the issues considered."<sup>57</sup> At the same time, the need for land for agriculture, food and water security and economic and social development must be balanced with the need for ecosystem conservation and biodiversity preservation. SIDS are renowned for their species diversity and endemism. However, the biological diversity in SIDS is among the most threatened in the world. In light of their capacity constraints, and the unique and fragile biological diversity (both terrestrial and marine) of SIDS, greater international cooperation and support is needed for biodiversity conservation. Smaller SIDS in particular face disproportionate responsibility for conserving these biological resources. ■

<sup>57</sup> FAO, 2008. *Climate Change and Food Security in Pacific Island Countries*.

## Indicative actions: Sustainable management and use of terrestrial resources for food security and nutrition

OUTCOMES	INDICATIVE ACTIONS			
	Local level	National level	Regional level	Global level
<p><b>2.3.1.</b> Terrestrial resources are sustainably managed and used for food security and nutrition.</p>	<p><b>2.3.1.1.</b> Foster role of local organizations in improving food security and nutrition through sustainable resource management approaches that value local culture, knowledge and practices (link to 1.2.2.1 and 3.1.1.2).</p> <p><b>2.3.1.2.</b> Support community-level action to test, promote, and incentivise use of traditional crop varieties to improve the supply of locally-appropriate and nutritious foods.</p> <p><b>2.3.1.3.</b> Support community-based approaches to the governance and sustainable management of natural resources, including community-based forest management (CBFM) approaches.</p>	<p><b>2.3.1.4.</b> Promote the diversification of crops, including underutilized traditional crops, more production of fruits and vegetables, nuts and seeds and legumes, and appropriate production of animal-source products, applying sustainable food production and natural resource management practices. Link these to strategies to ensure access to and affordability of these more nutritious foods on domestic markets (link to 1.3.1.5).</p> <p><b>2.3.1.5.</b> Explore opportunities for cooperation and shared agendas between health and agricultural sectors for production of crops that are 'high value' from both a nutritional and economic perspective (e.g. fruits, vegetables, organic traditional crops).</p>	<p><b>2.3.1.6.</b> Support integrated approaches to the conservation (and multiplication) of traditional crop varieties, including in situ (e.g. on-farm and home-garden) and ex situ (e.g. in plant genetic resource facilities), as well as their utilization (including for research and development of indigenous nutrient-dense varieties incorporating local farming practices)</p> <p><b>2.3.1.7.</b> Support the development and dissemination of technologies to support organic and agro-ecological farming and forestry approaches, including biological disinfestation techniques.</p>	<p><b>2.3.1.8.</b> Facilitate knowledge generation, dissemination, and sharing and provide technical assistance on integrated approaches to promoting food security and nutrition, and sustainable land management, including forest and tree-based systems (link to 1.3.1.20).</p> <p><b>2.3.1.9.</b> Provide support for the development of domestic and export organic value chains, including capacity-building, technology transfer, supporting market access, and providing platforms and opportunities for knowledge-sharing and technical exchanges between SIDS.</p>



**HAITI**

A farmer inspecting a maize crop.

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### *Component 2.4. Inclusive and efficient nutrition-sensitive value chains*

Value chains include all actors and activities from food production to consumption—“from farm to fork”. While value chain interventions have historically focused on increasing income for small-scale producers/fishers and other stakeholders along the chain, value chains can also play an important role in determining the availability, affordability, safety, quality, and acceptability of nutritious foods. Nutrition-sensitive interventions in value chains can range from improving inputs for nutritious foods and supporting the use of improved processing and storage practices in order to enhance the competitiveness of target value chains, to promoting and supporting market access, and encouraging consumption of safe and nutritious foods, as well as various measures along the value chain aimed at discouraging the wide availability and consumption of unhealthy foods and beverages.

Infrastructural development (including roads, port and storage facilities, and telecommunications), as well as innovative strategies to address transport barriers and strengthen routes to markets (both domestic and international) are key priorities for SIDS, which face market access and trade challenges due to their geographical remoteness as well as small economies, populations and area. Inadequate port and storage facilities, lack of capacity in meeting various international standards, and other non-tariff barriers also undermine the competitiveness of SIDS in global markets. Even within SIDS, transporting fish and other foods to urban centres can be prohibitively expensive. There is therefore an urgent need to explore low cost and sustainable transport options, particularly maritime transport, as well as inter-island domestic transport services. In addition to the benefits for food security and nutrition, better planning for, and investment in, infrastructural development will have wide-ranging benefits for SIDS economies.

The *SAMOA Pathway* recognized the importance of the efficient movement of people and goods in fostering full engagement in local, regional and

global markets and the potential for sustainable transportation to improve social equity, health, the resilience of cities, urban-rural linkages and the productivity of rural areas of SIDS.

Developing domestic markets (including tourism markets) for nutritious, locally produced crops such as breadfruit can deliver wide-ranging benefits for food security and nutrition, rural development, and economic growth in SIDS. Intra-regional markets also present opportunities, as do domestic tourism and export value chains for high-value products (e.g. value-added products and by-products from seaweed farming and fisheries).

Strengthening links between agriculture and tourism presents a further opportunity for agricultural development in SIDS. Agri-tourism strategies, which are already being explored in some SIDS, offer multiple benefits, including increasing rural income and employment opportunities (including for youth), enhancing rural livelihoods, and reducing rural-urban migration; maximising the local benefits of tourism and promoting inclusive economic growth; stimulating production of, and strengthening demand for, traditional local foods and food preparation techniques, and incentivising investment in local value chains; increasing food system resilience; reducing reliance on imported foods and trade deficits; and providing a point of difference in tourism policy and marketing. A whole-of- government approach is essential to successful and sustainable agri-tourism development – with coordination between the agriculture, tourism, health and environment sectors of paramount importance - as is coordination and collaboration between the public and private sectors.

Efficient markets and value chains will also reduce food wastage and post-harvest losses. Reducing food loss/wastage (FLW) along supply chains by improving harvesting, storage, processing and distribution practices across all producers, as well as through consumer education across all segments of the population, represents a major opportunity to improve food security and livelihoods. Food losses impact food security and

nutrition by reducing the amount of food available, raising food prices, and negatively impacting on food access for those who face FLW-related economic and income losses. They also have a longer-term effect on food security through the unsustainable use of natural resources on which the future production of food depends. Identifying the causes of food losses along food chains and taking effective steps to address them can make a significant contribution to food security and nutrition. Reducing such losses, could increase food supplies, reduce food prices and reduce pressure on land and other scarce resources. In SIDS, food losses, and food quality losses, along local food supply chains (from sea/farm to market and to fork) are the primary concern (as opposed to wastage at the consumption level).

Food safety and biosecurity are inextricably linked to nutrition, particularly in places where food supplies are insecure. Strong biosecurity frameworks are essential to protect against threats and mitigate the risks posed by invasive species to agricultural production systems, human, plant and animal health, and economies. Given the unique characteristics of SIDS, there is an even greater need for regionally-coordinated approaches to biosecurity and invasive pest management, including in the areas of research, knowledge translation, and information exchange; upgrading and harmonizing legislative and regulatory frameworks; surveillance, capacity-strengthening for monitoring, inspection, enforcement, and quarantine; and emergency preparedness.

Food contamination with chemical, microbiological, zoonotic or other hazards can occur at any stage of the food supply chain, from on-farm to household preparation. In SIDS, key food safety concerns include consumption of contaminated seafood/shellfish (e.g. Hepatitis A virus, foodborne parasites, fish and shellfish toxins) and grains (aflatoxin), as well as gastrointestinal illnesses associated with drinking contaminated water and poor sanitation. In the Western Pacific Region, aflatoxin (a toxin produced

by mould that grows on grain that has been stored inappropriately), rather than diarrhoeal diseases, is estimated to be the leading cause of foodborne disease deaths.<sup>58</sup> Aflatoxin is linked to liver cancer, one of the most deadly forms of cancer. Strategies to educate and raise awareness among the different actors along value chains about the importance of food safety (including safe storage and handling techniques) are essential.

Gastro-intestinal illnesses arising from consumption of unsafe food or water can negatively impact on nutritional status by reducing nutrient absorption and exacerbating nutrient deficiencies. Morbidity associated with foodborne illness can affect school attendance, educational attainment, and ability to participate in income-earning activities. Food contamination also imposes significant social and economic costs through its effects on access to markets and tourism earnings.

Vulnerable population groups from a nutrition perspective - infants, young children, pregnant and lactating women, older adults, and people with compromised immune systems – are particularly susceptible to foodborne illness. Foodborne infection in these population groups is also more likely to lead to serious illness and death. These population groups are also particularly susceptible to gastro-intestinal illnesses associated with contaminated water and poor sanitation, which is a major public health challenge in some SIDS (and linked to Component 2.2 – Sustainable Management and Use of Freshwater Resources).

Adoption and compliance with sanitary and phytosanitary measures, including best practices in the prevention and management of pest and diseases and the exclusion of invasive species, is essential for SIDS and contributes to strengthened linkages and the creation of synergies between tourism and agriculture. In turn, this ensures that tourism growth is sustainable and that the benefits of tourism are shared with rural communities and contributes to increased economic and social development. ■

58 WHO Estimates of the Global Burden of Foodborne Diseases (2015).

## Indicative actions: Inclusive and efficient nutrition-sensitive value chains

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p><b>2.4.1.</b> Increased access to and participation of smallholders and small-scale enterprises in nutrition-sensitive value chains.</p>	<p><b>2.4.1.1.</b> Facilitate and support engagement of smallholder farmers, particularly women, in nutrition-sensitive value chains, including through financial literacy education, technical advice, value chain education, access to finance mechanisms; and childcare facilities. Combine with a women's time use analysis to determine labour and time requirements for women, the introduction of time saving technologies for tasks performed by women, and strategies to ensure equitable intra-household access to resources (link to 3.1.1.3).</p> <p><b>2.4.1.2.</b> Empower smallholder organizations to facilitate market linkages, including mechanisms for the collection/aggregation of locally produced product for sale to processors, and ensure quality and consistency of supply (link to 3.1.1.2).</p> <p><b>2.4.1.3.</b> Increase access of farmers/fishers and enterprises to agricultural and climate financing (including risk sharing and insurance services, and low-interest loans) and improved technologies (including seeds), particularly smallholder women (link to 3.1.1.4).</p> <p><b>2.4.1.4.</b> Support use of traditional food preservation techniques in rural areas, and value-adding for local products via agri-processing.</p>	<p><b>2.4.1.5.</b> Direct public investments towards, and enhance institutional support and other incentives for, value chains that increase availability of nutritious, locally-produced foods, including staple crops, fruits, vegetables, animal and fish products and seafood, while enhancing returns for producers, particularly smallholders, and that are job-intensive and environmentally sustainable.</p> <p><b>2.4.1.6.</b> Explore innovative approaches to integrate smallholder farmers into nutrition-sensitive value chains, including commercially-oriented cooperative business models (as has been successfully done in the Caribbean).</p> <p><b>2.4.1.7.</b> Encourage creative business models, to enable low interest financing and risk sharing.</p> <p><b>2.4.1.8.</b> Identify and enhance opportunities for nutrition-sensitive institutional food procurement, including school feeding programs, to provide reliable markets for small-scale producers.</p> <p><b>2.4.1.9.</b> Promote stronger linkages between small-scale producers and the tourism, hospitality, and culinary sectors and stimulate demand for local products, utilizing emerging regional and international alliances and platforms in this area (e.g. Chefs for Development).<sup>59</sup></p> <p><b>2.4.1.10.</b> Evaluate selected agriculture value chains and map opportunities for additional marketing and distribution of current and new food products.</p>	
<p><b>2.4.2.</b> Increased productivity and efficiency of inclusive, nutrition-sensitive value chains.</p>		<p><b>2.4.2.1.</b> Provide training and capacity-building to improve production and post-harvest management, address inefficiencies, and improve competitiveness in value chains for nutritious, locally-produced foods, including staple crops, fruits, vegetables, animal and fish products and seafood, particularly those involving smallholders.</p> <p><b>2.4.2.2.</b> Promote use of new, energy-efficient technologies in post-harvest processes.</p> <p><b>2.4.2.3.</b> Facilitate adoption of scale-appropriate food processing technologies.</p> <p><b>2.4.2.4.</b> Explore innovative financing mechanisms to improve storage, preservation, transport and distribution technologies and infrastructure to reduce food and nutrient losses and waste.</p> <p><b>2.4.2.5.</b> Explore low cost and sustainable transport options for food security and domestic economies, as well as access to export markets.</p>	

<sup>59</sup> <http://chefs4dev.org>

## INDICATIVE ACTIONS

Regional level	Global level
<p>2.4.1.11. Establish regional market facilities and regional market information systems.</p> <p>2.4.1.12. Promote regional cooperation and trade in agricultural products, between the islands and with neighbouring continental states.</p> <p>2.4.1.13. Promote and strengthen regional approaches to biosecurity and food safety.</p> <p>2.4.1.14. Support efforts to promote stronger linkages between small-scale producers and the tourism, hospitality, and culinary sectors and stimulate demand for local products, utilizing emerging regional and international alliances and platforms in this area (e.g. Chefs for Development).<sup>60</sup></p>	<p>2.4.1.15. Enhance cooperation between national and regional bodies, and international development partners, in harmonizing standards, and designing and enforcing effective quarantine systems.</p> <p>2.4.1.16. Investigate the potential to scale up school feeding initiatives as a means to promote and ensure a sustainable market for locally-produced fresh foods and to promote healthy eating habits among children.</p>

<sup>60</sup> <http://chefs4dev.org>

### *Component 2.5. Climate adaptation and resilience for food security and nutrition*

Disasters and food insecurity are directly interconnected. Floods, droughts, hurricanes, tsunamis and other hazards destroy agricultural, livestock and fishing infrastructure, assets, inputs and production capacity. They interrupt market access, trade and food supply, reduce income, deplete savings and erode livelihoods. SIDS are particularly challenged by disaster risks due to their size, location and characteristics of their economies. Many Pacific SIDS have been affected by El-Nino conditions since 2015, with Papua New Guinea - the largest and most populated country in the region - most severely affected. El-Nino driven drought and frosts have severely disrupted the country's largely subsistence-based agricultural sector and exacerbated the already high prevalence of food insecurity, hunger and malnutrition. In some SIDS, average annual disaster-related losses are equivalent to over 100 per cent of the amount that those countries are able or willing to spend on education, health, and social protection.<sup>61</sup> Fiji's agricultural sector alone incurred an estimated \$542 million in damages and losses as a result of tropical cyclone Winston in February 2016.<sup>62</sup>

Since most SIDS are net food importers, SIDS are also particularly vulnerable to higher international food prices and excessive price and supply volatility. Given their reliance on remittances, they are also particularly vulnerable to global economic crises.

Signatories to the *Paris Climate Agreement* committed to strengthening the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by "Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions

development, in a manner that does not threaten food production".<sup>63</sup> The Paris Agreement Article 11 articulates the need to enhance the capacity and ability of developing country parties, in particular countries that are particularly vulnerable to the adverse effects of climate change, such as SIDS to take effective climate action. The actions should facilitate technology development, dissemination, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information.

The *Sendai Framework for Disaster Risk Reduction 2015-2030* reaffirms that it is critical to build resilience in the area of disaster risk reduction in SIDS and provide particular support through the implementation of the *SAMOA Pathway*. Achieving the *Sendai Framework* global targets in SIDS, including substantially reducing the number of affected people, reducing direct disaster economic loss, substantially reducing damage to critical infrastructure, and substantially increasing multi-hazard early warning systems, can contribute significantly to safeguarding food security and protecting agricultural investments from natural hazards and climate change. The *Sendai Framework* further highlights the need to integrate within disaster risk management considerations within sectorial plans, programmes and policies of all development sectors.

Achieving *Sendai Framework* global target (d) to substantially reduce disaster damage to critical infrastructure is vital to protect infrastructure that can provide uninterrupted access to domestic, regional and international markets, including building back better following a disaster and building better from the start to withstand natural hazards through proper design and construction.

Given the level of overlap between the two areas and the potential to maximise efficient use of resources,

<sup>61</sup> Global Assessment Report on Disaster Risk Reduction 2015.

<sup>62</sup> Fiji Post-Disaster Needs Assessment – May 2016, Government of Fiji.

<sup>63</sup> FCCC/CP/2015/L.9/Rev.1, Article 2.1(b).



integrating approaches to disaster risk management and adaptation to climate change are recommended wherever possible. The new Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management (FRDP) (2017-2030), endorsed by Leaders during the 47th Pacific Island Forum meeting in the Federated States of Micronesia, is the world's first integrated regional framework to build resilience to climate change and disasters.<sup>64</sup>

A twin-track approach combining short- and long-term risk management in the broad context of sustainable development is essential in SIDS. The future will be different and mechanisms are needed to take account of this in long-term planning for food security, nutrition, and development in SIDS. Climate change is not only going to impact on food security and nutrition in so many ways, but it is going to impact the capacities of communities (largely the marginalised and vulnerable) to respond to climate change. Better planning increases the resilience of food systems, livelihoods, and communities to climate change, disasters and shocks. It can also have positive externalities for the economy more broadly, for example through enhanced infrastructure maintenance and development.

The resilience of many staple crops in SIDS to natural disaster (principally cyclones and drought) provides added impetus for investing in domestic food supply capacity in order to reduce vulnerability to climate change. The overall impact of climate

change on Pacific staple food crop production is expected to be generally low over the next few decades and far less than the impact of global warming on supply of imported grain crops from other regions.<sup>65</sup> There is a critical need to identify and disseminate those varieties of local staples best adapted to the effects of climate change; but more generally to facilitate improved efficiency of production and marketing of local staples in order to reduce reliance on imported cereals. Enhancing conservation and use of agro-biodiversity will also be an important means of improving resilience to climate change in SIDS.

Availability of reliable data is crucial to better plan and implement climate change and disaster risk reduction strategies. Climate data, vulnerability assessment, exposure data, projections and probabilistic models, monitoring and early warning systems based on a multi-hazard approach, and accurate and up-to-date information on disaster impacts, including damage and losses to the agricultural sector and critical infrastructure, can all facilitate risk-informed planning, decision making, and investment in agricultural and food system development and help to avoid the accumulation of new risks.

The likelihood of both sudden and slow-onset disasters dictates that approaches to natural resource management continue to evolve as natural and management sciences improve understating of the complex systems that farmers, fishers and communities are called on to manage in SIDS. ■

<sup>64</sup> <http://www.forumsec.org/resources/uploads/embeds/file/Annex%20-%20Framework%20for%20Resilient%20Development%20in%20the%20Pacific.pdf>

<sup>65</sup> Bell J and Taylor M. 2015. *Building climate-resilient food systems for Pacific Islands*. Penang, Malaysia: WorldFish. Program Report: 2015-15.

## Indicative actions: Climate adaptation and resilience for food security and nutrition

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p><b>2.5.1.</b> Increased resilience of food systems and communities to climate change, disasters and shocks.</p>	<p><b>2.5.1.1.</b> Develop, support, and strengthen community-based mechanisms for climate change adaptation and disaster risk management, including community-based surveillance systems, and support mainstreaming of food security and nutrition considerations into these mechanisms.</p> <p><b>2.5.1.2.</b> Support community-led campaigns to raise awareness about how individual dietary and lifestyle choices affect the environment and climate (link to 1.3.1.4 and 3.1.1.5).</p>	<p><b>2.5.1.3.</b> Include explicit food security and nutrition objectives in national disaster preparedness and management plans, including contingency and emergency response plans, and in national adaptation and resilience-building programmes of action, taking into account specific national and regional vulnerabilities and economic, environmental and social situations.</p> <p><b>2.5.1.4.</b> Develop strategies to restore affected and vulnerable communities that depend on farming, livestock, fisheries and forestry for their livelihoods in event of disasters.</p> <p><b>2.5.1.5.</b> Develop affordable climate and disaster insurance, in particular for climate risk management and develop tools to access climate insurance by farmers.</p> <p><b>2.5.1.6.</b> Strengthen emergency response systems for food borne disease outbreaks, livestock disease and plant disease threats.</p> <p><b>2.5.1.7.</b> Improve generation of climate and disaster exposure information and databases to include agricultural production areas.</p> <p><b>2.5.1.8.</b> Support improved baseline monitoring of island systems and the downscaling of climate model projections to enable better projections of the future impacts on small islands.</p> <p><b>2.5.1.9.</b> Develop/improve national environment and resource databases, and the dissemination of information to relevant groups - especially rural communities, youth and women - as the basis for all aspects of land-use planning and management, along with appropriate decision-making tools such as land/geographic information systems, that contribute to better food security and nutritional outcomes.</p>	

## INDICATIVE ACTIONS

Regional level	Global level
<p><b>2.5.1.10.</b> Include explicit food security and nutrition objectives in regional mechanisms for the management of food crises and disasters caused by natural hazards.</p>	<p><b>2.5.1.11.</b> Support integrated approaches to improving food security and nutrition, conservation and use of biodiversity, and climate change adaptation and resilience.</p> <p><b>2.5.1.12.</b> Provide coordinated capacity- building support for the integration of critical adaptation needs, including food security, nutrition water, sanitation, coastal protection, and protection of critical coastal infrastructures, into national development agendas.</p> <p><b>2.5.1.13.</b> Support development of climate and disaster data and information systems, including modeling of climate change impacts.</p>

### *Objective 3. Empowered people and communities for food security and nutrition*

Food insecurity, hunger, and malnutrition are inextricably linked to poverty and inequality in a vicious cycle. Poverty is the most important root cause of malnutrition. Without income or adequate resources, people are less likely to be able to access adequate food. Malnutrition, in turn, affects the ability of individuals and households to escape poverty by impairing child growth and development; reducing individual's capacity to work, earn income, and produce food, and contributing to social and economic inequality and instability. Poverty, lack of access to adequate diets, and inadequate nutrition in utero and the early years of life, are also linked to overweight and obesity. Getting out of extreme poverty enables people to eat a more varied diet. However, improved access to food does not guarantee access to and consumption of good quality foods. For poor urban households in particular, energy-dense foods of low nutritional quality are often the most affordable and easily accessible. In many lower-income countries worldwide, prevalence of overweight and obesity is rising fastest in the lowest socioeconomic groups.<sup>66</sup> A challenge for poverty reduction programmes is the need to address food insecurity and hunger without adding to the burden of overweight and obesity.

Economic growth is vital to create the opportunities for people in poverty to get out of it. However, pro-poor growth and development policies and

strategies are needed to increase the ability of poor people to take advantage of, and benefit from, these opportunities. This includes measures that target and address key sources of vulnerability and deprivation, and strengthen adaptive capabilities, in the areas of education, health, training, employment, and social protection. Targeted interventions and programmes are also needed to address food insecurity and malnutrition, and their determinants, in vulnerable groups, particularly women, adolescent girls, infants and young children, including by providing specific nutrition interventions; supporting their rights and access to natural resources; by enhancing their access to land, a range of services, innovative technologies and markets; by increasing their options for decent employment and income generation; and by supporting their participation in policy and governance processes, including social protection.

It is essential that interventions, programmes, and services aimed at social and economic empowerment of communities, and at addressing food insecurity and malnutrition in target groups, are underpinned by enabling political, institutional and social environments, as outlined in Objective 1. This includes the formulation and implementation of pro-poor and inclusive policies, and the mainstreaming of poverty reduction strategies into all national policies and planning processes, as well as regulatory measures (including those to promote gender equality, breastfeeding, such as maternity leave, and facilities and time for breastfeeding in workplaces) and social marketing strategies to promote and support healthy diets and nutrition throughout the life course. ■

<sup>66</sup> Jones-Smith et al (2012). Is the burden of overweight shifting to the poor across the globe? Time trends among women in 39 low- and middle-income countries (1991–2008). *International Journal of Obesity* 36(8):1114-1120.

### *Component 3.1. Social and economic empowerment*

Historically, SIDS communities have been rooted in subsistence family farms and small-scale fisheries. Small-scale producers (encompassing agriculture, fish farming, and capture fisheries) are still the most common agricultural enterprise in SIDS. In the *SAMOA Pathway*, the international community pledged to support SIDS efforts to increase rural income and jobs, with a focus on the empowerment of small-scale producers. This calls for an inter-sectoral, pro-poor rural development approach to replace the classical paradigm of “business-as-usual” to agriculture development,<sup>67</sup> involving enhanced investment in the most vulnerable sectors as well as the empowerment of producer organizations to ensure that they have the tools they need not only to overcome hunger and malnutrition, but to enhance their resources and capabilities. Small-scale producers themselves are the major source of investment in agriculture, but policies and programmes, including access to market, credit and insurance, often discriminate against them.

Achieving sustainable and inclusive development will depend on the empowerment of communities to self-organize, and to engage in local governance and collective action, with community-based organizations providing key entry points for action, including through technological innovation, market access, and greater bargaining power. Farmers/fishers’ organizations and cooperatives, for example, can play a critical role in ensuring quality and consistency of supply from groups of small holders and facilitating market linkages. Enhanced cooperation and support is needed to strengthen human and institutional capacities in these and other local organizations. Specific strategies to empower and build capacities of SIDS youth (by supporting youth-led organizations,

enabling social innovation, formalizing social movements, and providing inclusive platforms for youth to engage in policy and decision-making processes, for example) should also be prioritised.

Empowerment is also about options. Providing options for primary producers, for example, can be a powerful way of improving livelihoods and food security. This can range from greater access to a variety of seeds and various credit schemes to improving opportunities for livelihood diversification into off-farm and non-agricultural activities. Growth of non-farm activities is often driven by agricultural growth and can stimulate local employment creation.

Gender equality, women’s empowerment, and the full realization of human rights for women and girls have a transformative and multiplier effect on sustainable development and are a driver of economic growth in SIDS. Gender equality in the agricultural sector is imperative. At a minimum, agricultural policies, services and programmes should “do no harm” to women or gender dynamics, including by ensuring men and women equal access to extension and rural advisory loans and other financial services, education, relevant knowledge, and pro-poor policies and strategies. Advocacy for the protection of breastfeeding, adequate rest for pregnant and lactating women, and perinatal care is also vital. Encouraging cooperative membership is another strategy to enhance women’s decision-making power and management of household resources. The gender implications of all agricultural programmes and recommended (agricultural) activities, including impacts on mother’s/caregiver’s time allocation and energy expenditure, should be considered.

Efforts to empower and engage youth in SIDS, including improving employment and livelihood opportunities, as well as targeted strategies to raise awareness and incentivise behaviour change are also vital. ■

<sup>67</sup> FAO, IFAD, WFP. 2015. *Achieving Zero Hunger: the critical role of investments in social protection and agriculture*. Rome.

## Indicative actions: Social and economic empowerment

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p><b>3.1.1.</b> Improved access of rural and urban poor to knowledge, resources, services, markets, and decent employment and income opportunities, particularly among youth and women.</p>	<p><b>3.1.1.1.</b> Provide and promote diverse income and livelihood opportunities for rural communities.</p> <p><b>3.1.1.2.</b> Enhance support for farmer/fisher organizations and other local organizations (link to 2.4.1.2).</p> <p><b>3.1.1.3.</b> Promote energy- saving and less labour- intensive tools to enable small-scale farmers/fishers to conserve time and energy to focus on their own and their families’ optimal health and care practices.</p> <p><b>3.1.1.4.</b> Address asset and organizational deficiencies to ensure smallholder farmers/fishers have a greater chance to access resources, and support improved livelihoods, resource sharing, access to water and fisheries, land tenure, indigenous people’s rights, and capital development (link to 2.4.1.3).</p> <p><b>3.1.1.5.</b> Build capacities for community-led nutrition action, including awareness-raising and nutrition education activities for behavioral and social change (link to 1.3.1.4 and 2.5.1.2).</p> <p><b>3.1.1.6.</b> Build capacity and support role of community/traditional leaders and other actors as agents of social and behavioral change, including demand generation for services; raising awareness about and modeling healthy diets and lifestyles; promotion of shared responsibilities between men and women in the household; and strengthening community accountability for maternal and child malnutrition.</p>	<p><b>3.1.1.7.</b> Enhance coverage and delivery of pro-poor rural development and poverty reduction strategies.</p> <p><b>3.1.1.8.</b> Increase public and private investment in building and maintaining appropriate infrastructure, including ports, roads, transportation, electricity and power generation and information and communications technology infrastructure, for nutrition-sensitive value chains (link to 2.4.1).</p> <p><b>3.1.1.9.</b> Provide support for infrastructure development that maximizes pro-poor development and access to services and markets for nutrition-sensitive smallholder value chains.</p>	

## INDICATIVE ACTIONS

Regional level	Global level
<p><b>3.1.1.10.</b> Strengthen regional networks of small-scale farmer/fisher organisations for agricultural research, outreach and development.</p> <p><b>3.1.1.11.</b> Support the development of regional/sub-regional evidence bases for maximizing social and economic empowerment, and food security and nutrition in SIDS.</p>	<p><b>3.1.1.12.</b> Conduct collaborative, cross-sectoral research on the pathways between food security and nutrition, and social and economic empowerment, and document and share experience and best practices.</p>

### *Component 3.2. Nutrition-sensitive social protection programmes*

Social protection and nutrition are intrinsically linked. In countries whose economies are dominated by small-scale producers, there is a large overlap between people who depend on agriculture for their livelihoods, those most at risk of food-insecurity and malnutrition, and beneficiaries of social protection programmes.<sup>68</sup> Social protection is recognized as an effective measure to reduce poverty and food insecurity, and to foster inclusive rural development. The expansion of social protection systems to all, particularly the poorest and most vulnerable, is one of the proposed targets of the SDGs. However, the positive effects of pro-poor rural agriculture development and social protection policies on nutrition are not automatic and, in general, the potential for social protection programmes to help reduce malnutrition is as yet under-exploited. To maximise their effectiveness, social protection programmes need to be designed and implemented in a nutrition-sensitive manner.

Effective nutrition-sensitive social protection programmes target nutritionally vulnerable population groups (particularly the critical ‘first 1,000 days’ window of opportunity), incorporate explicit nutrition objectives and indicators, improve income, foster linkages between essential services, include education strategies to raise awareness and influence behaviours, include strategies to reduce vulnerability to external shocks, and improve diets through better access to food which conforms with the beliefs, culture, traditions, dietary habits and preferences of individuals, and which is consistent with recommendations for healthy diets outlined

in regional/national food-based dietary guidelines. Effective governance of all social protection programmes, including transparency, accountability, and well-designed monitoring and evaluation components, is essential.

School food and nutrition programmes – encompassing the procurement and provision of more nutritious and locally grown foods through school feeding programmes, as well as education and skill-building programmes - are well-recognised social protection programmes and serve as an excellent example of how public policy outcomes can be amplified through a more inclusive approach to governance and can serve as a national development strategy. Schools provide excellent entry points for reaching children as well as their families and communities, and are a setting in which multiple sectors can join forces in improving nutrition.

There is a growing evidence base demonstrating that linking school feeding to agricultural development works.<sup>69</sup> These approaches are also potentially effective ways of diversifying school meals and nutrition-sensitive public food procurement, with significant potential to be extended beyond schools to other institutional procurement programmes (including hospitals and prisons). They require considerable political will and leadership and commitment to the development of better social and pro-poor policies.

With their vulnerability to climate change, natural hazards and shocks, a twin-track approach to social protection is critical in SIDS, with essential assistance provided in times of crisis/shocks through social protection transfers, combined with long-term support for livelihoods through targeted pro-poor investments in productive activities. ■

68 FAO 2015.

69 For example, World Food Programme’s (WFP’s) Home Grown School Feeding and P4P programmes, and Brazil’s national school feeding programme.





**MAURITIUS**

School children are provided a free meal at school every day.

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## Indicative actions: Nutrition-sensitive social protection programmes

OUTCOMES	INDICATIVE ACTIONS		
	Local level	National level	
<p><b>3.2.1.</b> Improved access to, and effectiveness of, nutrition-sensitive social protection programmes.</p>	<p><b>3.2.1.1.</b> Foster and support community-led initiatives to enhance food security and nutrition, including backyard gardening and school feeding programmes.</p>	<p><b>3.2.1.2.</b> Integrate food security and nutrition objectives and actions into the design of social protection programmes, and use food security and nutrition indicators to monitor and assess effectiveness.</p> <p><b>3.2.1.3.</b> Strengthen the design of social protection systems and interventions to make them more flexible and responsive to shocks caused by natural hazards, price shocks, and other key stresses in SIDS, in a way that governments can anticipate, prevent, and plan for crises through adaptation of the eligibility requirements, transfer size and delivery mechanisms of programmes, as well as through establishment of contingent financing structures.</p> <p><b>3.2.1.4.</b> Increase investment in, and support for, school food and nutrition programmes, and other public procurement programmes that are linked to local smallholder producers (link to 2.4.1.8).</p> <p><b>3.2.1.5.</b> Organize south-south visits to facilitate sharing of knowledge, lessons and best practices relating to nutrition-sensitive public procurement programmes.<sup>70</sup></p>	

<sup>70</sup> e.g. the Purchase from Africans, for Africa (PAA Africa) project jointly undertaken by FAO, WFP, and the governments of Brazil, UK, Ethiopia, Malawi, Mozambique, Niger, and Senegal to link school feeding programs to smallholder farmers and agricultural development.

INDICATIVE ACTIONS

Regional level	Global level
<p><b>3.2.1.6.</b> Document and share experience and best practices relating to the design, implementation, monitoring and evaluation of nutrition- sensitive social protection programmes, including school food and nutrition programmes.</p>	<p><b>3.2.1.7.</b> Enhance and better coordinate support for the design, delivery, expansion, and monitoring and evaluation of nutrition- sensitive social protection programmes, including school food and nutrition programs linked to smallholders and pro-poor agricultural development.</p>

### *Component 3.3. Targeted community-based interventions and services to prevent and treat malnutrition in all its forms*

Member States of the WHO have committed to implementing a range of cost-effective, evidence-based, community-level interventions for preventing and treating malnutrition through the WHO/UNICEF Global Strategy for Infant and Young Child Feeding, WHO Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition, WHO Global Action Plan for the Prevention and Control of NCDs, WHO International Code of Marketing of Breastmilk Substitutes and subsequent relevant WHA Resolutions, and WHO Set of Recommendations on the Marketing of Food and Non-Alcoholic Beverages to Children; the Report of the Commission on Ending Childhood Obesity, and regional commitments such as the WPRO Action Plan to Reduce the Double Burden of Malnutrition.

This includes strategies to protect, promote and support optimal breastfeeding and complementary feeding practices; to strengthen and enforce legal

frameworks on marketing of foods and beverages to children, as well as standards for foods and drinks provided and sold in schools; and to strengthen the delivery of nutrition and health services in multiple settings.

Social and behaviour change is critical for improving the nutrition status of key groups. The aim is to enhance coverage of service delivery through multiple platforms to promote optimal nutrition practices among individuals, families and communities and to create demand for and utilization of services for the prevention and timely treatment of malnutrition in all its forms. Understanding drivers and motivators of social change is also essential to facilitate a shift in social norms, including in relation to infant feeding and maternal nutrition, healthy diets, and perceptions of healthy weight.

A key dimension of community-based nutrition action is enabling households to maximise food security and nutrition with existing household resources, while also striving to increase such resources. Women's empowerment and nutrition education of men and women are essential to enhance the capacities of families and communities to better feed themselves. ■



**COOK ISLANDS**

Two young boys enjoy a bottle of fizzy drink. Fizzy drinks are now the subject of a tax: the higher the sugar content, the higher the tax. It is hoped that people will at least be persuaded to buy the diet versions of fizzy drinks to start to combat the high incidence of NCDs in the Cook Islands.

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## Indicative actions: Targeted community-based interventions and services to prevent and treat all forms of malnutrition

OUTCOMES	INDICATIVE ACTIONS	
	Local level	National level
<p><b>3.3.1.</b> Improved access to, demand for, and utilization of, targeted interventions and services to prevent and treat malnutrition in all its forms, particularly among children and women of reproductive age, adolescents, and youth.</p>	<p><b>3.3.1.1.</b> Support community-led education, skill-building, and behavior change initiatives to promote healthy eating and other behaviors, including safe hygiene and child-care practices, improved home food processing, storage and preservation techniques to retain nutritional value and food safety, and reduce seasonal food insecurity and post-harvest losses, breastfeeding and optimal complementary feeding, and the importance of diverse, balanced diets and physical activity (link to 1.3.1.1).</p> <p><b>3.3.1.2.</b> Integrate gender considerations in community-based food security and nutrition programmes and activities, including attention to impacts on mother's/caregiver's time allocation and energy expenditure, and promote shared responsibilities between men and women in the household.</p>	<p><b>3.3.1.3.</b> Prioritise investment in evidence-based, cost-effective nutrition-specific interventions for promoting maternal nutrition, breastfeeding, complementary feeding, and optimal infant and young child feeding and care practices outlined in the Global Strategy for Infant and Young Child Feeding and WHO Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition.</p> <p><b>3.3.1.4.</b> Implement evidence-based, cost-effective community-level interventions for the promotion of a healthy diet outlined in global guidance documents.<sup>71</sup></p> <p><b>3.3.1.5.</b> Dedicate adequate resources for monitoring and evaluation of intervention effectiveness, including distributional effects.</p> <p><b>3.3.1.6.</b> Include specific agriculture-nutrition targeting criteria to ensure that families with infants and young children, in particular women farmers, benefit from both agriculture and nutrition education programmes.<sup>72</sup></p>

<sup>71</sup> Including the ICN2 Framework for Action, WHO Global Action Plan for the Prevention and Control of NCDs, and WHO Set of Recommendations on the Marketing of Food and Non-Alcoholic Beverages to Children.

<sup>72</sup> [http://www.fao.org/fileadmin/user\\_upload/nutrition/docs/education/infant\\_feeding/Programme\\_Lessons.pdf](http://www.fao.org/fileadmin/user_upload/nutrition/docs/education/infant_feeding/Programme_Lessons.pdf)

## INDICATIVE ACTIONS

Regional level	Global level
<p><b>3.3.1.7.</b> Share experience and best practices relating to implementation of community-based food security and nutrition programmes and services</p> <p><b>3.3.1.8.</b> Monitor implementation of the Baby Friendly Hospital Initiative.</p> <p><b>3.3.1.9.</b> Monitor diet quality shifts (link to 1.3.1.16).</p>	<p><b>3.3.1.10.</b> Provide coordinated support for implementation, monitoring, and evaluation of proven interventions to prevent and treat malnutrition in target population groups, particularly children and women of reproductive age, adolescents and youth.</p> <p><b>3.3.1.11.</b> Support efforts to improve the evidence base on food-based approaches, including biofortification, to improving diet diversity and addressing micronutrient and protein deficiencies in SIDS.</p>

# MONITORING AND EVALUATION

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A multi-level approach to monitoring and reporting will be used to track progress in the implementation of the GAP. As with the 2030 Agenda, the focus of reporting for the GAP will be at the national level where each country will have primary responsibility for collecting and making data available on the SDG indicators, with support from UN agencies and other global and regional partners. The mechanism, and the timeline for reporting, will be developed in alignment with the SDG monitoring.

Monitoring and reporting on a core set of indicators, to be reported on by all SIDS, will be important to ensure comparability and a harmonized approach. This core set of indicators will be kept to a minimum,<sup>73</sup> and reflect the shared challenges and priorities of all SIDS to the greatest extent possible. It will draw on relevant established or proposed global indicators from the SDG monitoring framework and on other relevant established global indicators where appropriate. In relation to nutrition, for example, these would include the Global Monitoring Framework on Maternal, Infant and Young Child Nutrition,<sup>74</sup> Global Strategy for Women's, Children's and Adolescent's Health,<sup>75</sup> and NCD Global Monitoring Framework.<sup>76</sup> The indicators would also be closely linked to the

recommendations in the ICN2 Framework for Action. In addition to minimizing the monitoring and reporting burden, this approach will ensure that actions taken on the GAP fully support the efforts of SIDS to achieve internationally agreed goals and targets under the 2030 Agenda, as well as the World Health Assembly global nutrition and NCD targets to be met by 2025.

It is expected that monitoring and evaluation plans will be developed as part of more detailed national and regional implementation plans. National implementation plans will be based on the GAP framework, but adapted and refined at the activity level according to national contexts, needs, and priorities. Data collection methods, timing, and levels of disaggregation, will also be defined according to national context and priorities. Countries are encouraged to foster broad, multi-stakeholder participation in local and national surveillance, monitoring and reporting, and to draw on existing mechanisms and processes where possible.

Monitoring at the regional and global levels will also be important to track progress in implementation of the global and regional-level indicative actions outlined in the GAP, as well as to promote coherence and shared accountability; to facilitate knowledge exchange and sharing of best practices; and to indicate countries or components of the GAP that may be in need of enhanced support. Regional monitoring will also serve to provide an important link between the global and national levels. Where possible, regional monitoring, reporting, dialogue and exchange will build on existing regional mechanisms and platforms.

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<sup>73</sup> An indicative list of anticipated outcomes and their associated SDG targets and indicators has been prepared to accompany this GAP.

<sup>74</sup> [http://www.who.int/nutrition/topics/proposed\\_indicators\\_framework/en/](http://www.who.int/nutrition/topics/proposed_indicators_framework/en/)

<sup>75</sup> <https://www.everywomaneverychild.org/wp-content/uploads/2016/11/gsi-indicator-and-monitoring-framework.pdf>

<sup>76</sup> [http://www.who.int/nmh/global\\_monitoring\\_framework/en/](http://www.who.int/nmh/global_monitoring_framework/en/)



At the regional, national, and sub-national levels, additional complementary indicators may be used to prioritize actions and track progress according to country and region-specific challenges and priorities. Some SIDS, for example, may identify priority actions and goals that are seen as necessary preconditions for the indicative actions outlined in the GAP, and for which tracking of progress would be beneficial. While the core set of global indicators will be largely outcome-focused, these extended sets of indicators at the regional, national and sub-national levels may include process, intermediary, and outcome-based indicators.

A dedicated mechanism to report back on progress in implementation of the GAP at the global level

will be developed by the FAO, in collaboration with UN-DESA and UN-OHRLS, and in alignment with the SDG monitoring framework. It is envisaged that the FAO and UN-DESA will provide the necessary information to allow the Secretary-General to report to the General Assembly and to the Economic and Social Council on the progress achieved in the implementation of this Global Action Programme.

Implementation of the GAP will be aligned with the timeline of the 2030 Agenda (2017- 2030), strengthening linkages with the 2030 Agenda follow up and review process. Detailed progress reviews will be conducted every 5 years at which time priorities and recommended actions may be revised, depending on evolving needs. ■



## **MALDIVES**

FAO and Ministry of Fisheries, Agriculture and Marine Resources of the Maldives employees transporting by dinghy a delivery of manure, seed, guava seedlings and tools for distribution to the local inhabitants. FAO, in collaboration with the Government of the Maldives, is working to restore livelihoods to tsunami-affected farmers with agricultural inputs.

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# Global Action Programme on Food Security and Nutrition in Small Island Developing States

Although significant diversity exists across Small Island Developing States (SIDS), they share common characteristics that make them uniquely vulnerable to food insecurity, and have contributed to the majority of SIDS facing a “triple burden” of malnutrition in which persistent levels of undernutrition and micronutrient deficiencies, coexist with an increasing incidence of overweight and obesity.

Responding to the *SIDS Accelerated Modalities of Action (SAMOA) Pathway*'s call to address these challenges, this **Global Action Programme on Food Security and Nutrition in Small Island Developing States (GAP)** aims to accelerate action on food security and nutrition to support the sustainable development of SIDS. Developed under the leadership of the Food and Agriculture Organization of the United Nations, the United Nations Department of Economic and Social Affairs and the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, the GAP is intended as a tangible contribution to the 2030 Agenda for Sustainable Development.

Aligned with existing strategies, the GAP provides a framework for SIDS - both as individual nations and as a group - to identify and implement priority actions at global, regional, national and community levels in a coherent, coordinated and collaborative way to achieve their food security and nutrition objectives. Through the GAP, these actions have the potential to significantly improve nutrition and well-being, reduce poverty and inequalities, and foster economic growth in SIDS for present and future generations.