

# Towards a Food Secure Pacific



Framework for Action on  
Food Security in the Pacific

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## ABOUT THIS PLAN

The themes, strategies and actions within this Framework for Action (Framework) have been formulated through technical consultation and a series of national food summits. They were further discussed and developed at the Pacific Food Summit from 21 to 23 April 2010 in Port Vila, Vanuatu. The report 'Food Security in the Pacific: A background paper for the Pacific Food Summit' provided an evidence-base for the summit. The Food Secure Pacific Working Group (FSP), comprised of the United Nations Food and Agriculture Organization (FAO), the Global Health Institute (GHI) (Sydney West Area Health Service), the Pacific Island Forum Secretariat (PIFS), the Secretariat of the Pacific Community (SPC), the United Nations Children's Fund (UNICEF) and World Health Organization (WHO) coordinated the drafting of the Framework for Action.

The Framework is intended as a regional and national policy guide, but recognises that not all strategies and actions included will be relevant to all countries. The plan guides countries in determining relevant, specific country-level activity.

This document is a living document, and will continue to be refined in the coming years as we learn more about improving food security from within and outside of the Pacific region. No set timeframe has been applied, as actions are both short and long-term. A review will be conducted in five years.

## SCOPE

This Framework for Action was prepared in response to a call for action on food security from Pacific leaders at the 39th Pacific Islands Forum, held in Niue from 19 to 20 August 2008. In November 2008, the FSP was convened to progress the food security agenda in the Pacific as an instrumental part of the Pacific Plan. This work is an instrumental part of the Pacific Plan for Strengthening Regional Cooperation and Integration (the 'Pacific Plan'). The 'Pacific Plan' is available on the Pacific Islands Forum Secretariat website at: [www.forumsec.org.fj](http://www.forumsec.org.fj). Countries and areas included in the scope of the document are American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, the Republic of the Marshall Islands, the Federated States of Micronesia, Nauru, New Caledonia, Niue, the Commonwealth of the Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu and Wallis and Futuna. It is anticipated that Australia and New Zealand, other countries and development partners will be key supporters in the further formulation and implementation of the Framework.

## Towards a Food Secure Pacific

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.

(World Food Summit, 2009)

Towards  
a Food  
Secure  
Pacific



## EXECUTIVE SUMMARY

This document outlines the Pacific approach to food security. Its aim is to provide an over-arching strategic Framework that guides Pacific countries to move towards ensuring that all our people, at all times, have physical, social and economic access to sufficient, safe and nutritious food. It brings us closer to our vision of 'Healthy Islands' and helps fulfill the 'Pacific Plan'.

Traditionally, islands achieved food security through sustainable agricultural and fishing practices and a reliance on local food staples such as roots and tubers, bananas and breadfruits. More recently, imported foods have helped contribute to food security by meeting a growing demand for more and a greater variety of foods. However, changes in both the supply and demand of food pose an increasing threat to food security, which is reflected in the health of Pacific populations.

Food security is impacted by a complex range of factors. Breast milk is the foundation of food security for infants, but breastfeeding rates are low and in some cases are dropping. While imports have contributed to food security by making more foods available, they also threaten it by exposing populations to cheaper and poor quality foods. Cheap imported foods compete with domestic foods, increasing dependence on outside providers. Foods that are of poor nutritional quality (high in calories and low in vitamins and minerals) are contributing to high rates of diabetes, heart disease, stroke and cancer. Consumption of fruits and vegetables is low and



vitamin and mineral deficiencies widespread. Domestic and imported foods are sometimes unsafe (old or contaminated), leading to food-borne illnesses and, at a national and regional level, compromising the ability of Pacific food products to meet export standards.

Environmental shocks also impact food security. With climate change, the maximum speed of tropical cyclones is expected to increase by up to 20%, rainfall variation destabilizes croplands (70% of the gross crop area is rain-fed), agricultural lands are damaged, coastal areas are inundated, fresh water is salinized, tuna stocks are shifting (away from Pacific-exclusive economic zones) and the incidence of diseases and health risks (dengue fever, ciguatera poisoning) is increasing.

Economic shocks, such as recent increases in food and fuel prices, mean that household budgets have to stretch further to buy food, particularly in growing urban areas where access to land for gardening is limited. Land tenure systems and land use policies influence the availability of land for

production. Transport costs to rural areas and outlying islands further increase the price of food and limit inter-Pacific trade in locally-grown food.

Urgent action to influence policies, environment, organizations and individuals contributing to food security is needed. Addressing land, transport, energy and information and communication technology systems that underpin action to achieve food security is crucial. A return to a subsistence way of life with the expectation of being able to feed the whole population is unrealistic. However, local production needs to remain the core of the food system and the capacity of farmers and fisherman to trade their produce locally, regionally and internationally needs to be supported and extended. Developing and investing in sustainable farming methods is necessary, as is improving the ability of farmers to withstand and adapt to environmental and economic changes. Similarly, managed, health-enhancing international trade, of both exports and imports, is important in maintaining food security. Action needs to be taken to improve the nutritional quality of imports and to upgrade the food safety system so it provides effective protection. The food industry, both internal and external to the Pacific, has the potential to play an important role in improving the nutritional quality of the food available through product diversification and reformulation (such as reducing salt and nutrient fortification).



This Framework outlines seven themes related to improving food security. Its purpose is to help guide future actions, policy directions and funding decisions on: leadership and cooperation; regulatory frameworks, enforcement and compliance and public-private sector collaboration; enhanced and sustainable production, processing and trading of safe and nutritious local food; protecting infants and vulnerable groups; consumer empowerment and mobilizing partners; a food security information system and enhancing land tenure systems and land-use policies, energy, transport, education and communication systems to underpin food security.

**Theme 1** recognizes that government working alone cannot achieve food security. Health services alone cannot improve nutrition. Led by government, all sectors and agencies play an important role in moving towards food security. Important partners include civil society, the food industry and trade, agricultural and fisheries, health and education sectors, regional agencies and aid donor partners. This theme outlines a leadership structure and ways in which sectors can cooperate to build strong national and regional partnerships to face current and future challenges to our food system. It is intended to act as the vehicle by which all partners can engage effectively to overcome the coordination, communication and resource issues we face.

**Theme 2** recognizes the importance of partnerships and collaboration between the public and private sectors for the formulation, implementation and enforcement of food legislative frameworks. Food control systems

must be developed and enhanced to assure the quality and safety of food available to consumers. Private food businesses and farmers need assistance in complying with mandatory requirements and voluntary measures.

Food security will be improved when the availability, access, stability and use of locally-produced food is increased sustainably. **Theme 3** recognizes this vital contribution.

**Theme 4** stresses the importance of paying particular attention to the needs of infants and vulnerable groups- from all involved in improving food security. All actors need to be aware of the impact of their activity on infants and vulnerable groups and take appropriate action to ensure they are protected.

**Theme 5** recognizes that all sectors and agencies have responsibility to provide consumers with information, and empower populations with skills to make informed decisions about food. The food security causality pathway needs to be well understood, healthy options need to be promoted and appropriate environmental changes need to be in place to make healthy choices easy choices.

**Theme 6** recognizes the need for robust, evidence-based information about food security. We need greater understanding of the diversity of food security issues across the Pacific. Sometimes information is available that can be informative for improving food security, but this new knowledge is not often shared or linked with other information and organizations in useful ways. This Framework proposes building a common set of food security indicators so that we can monitor and evaluate progress. It proposes a method of wide and timely collection and dissemination of effective new ideas and initiatives. All actors in the food system need timely information on what is happening within all dimensions of food security to assist them to work towards food security. It is hoped that, in future, measures of food security will feed into economic growth indicators and help connect economic growth with health and wellbeing.

The final theme, **theme 7**, recognizes that achieving food security is underpinned by several cross-cutting areas that must be addressed in appropriate and practical ways. These areas include access to and proper utilization of land, secure transport services and transport infrastructure, reliable and affordable energy, utilizing information and communication technologies as a means to enhance economic livelihood of farmers and rural communities, and awareness and understanding of food security developed in educational and training institutions.

Food is central to Pacific life. Not all the answers to the challenges we face are apparent yet. However, if stronger partnerships can be built and experience in improving food security can be gained, we will be better prepared to protect this precious resource now and for the future. It is hoped that this Framework stimulates discussion on food security and encourages creation of innovative solutions.

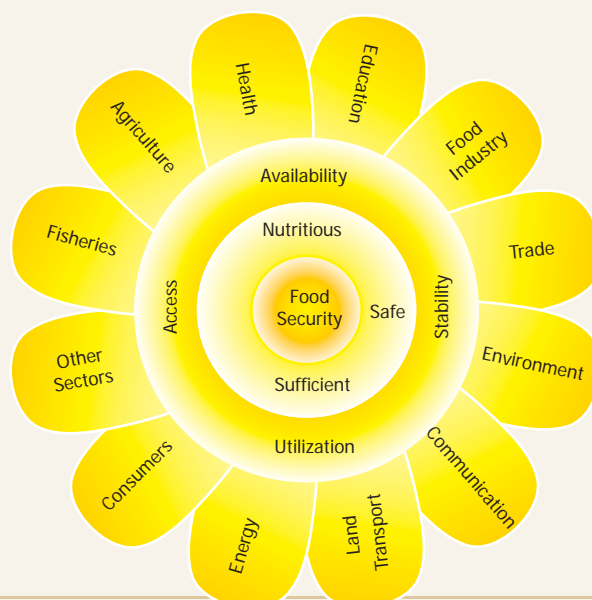
## BACKGROUND

Food security is a fundamental health and development issue in the Pacific. Food plays an important social and cultural role in all Pacific societies. Diverse factors operating at multiple levels challenge the capacity of Pacific countries to ensure food security. At the macro level, globalization, population growth, urbanization and climate change affect availability and access to sufficient, safe and nutritious food. Additionally, national and regional policies on land use, agriculture, the environment, energy, trade and health, and transport and communications systems have an impact on food prices, local food production, imported food, nutrition standards and food advertising, labeling and marketing. At the micro level, social determinants such as household income influence access to food; education and the media environment influence food awareness and the perceived acceptability and/or attractiveness of particular food choices. Together, these factors interact to determine what food is obtained and consumed, ultimately affecting health and development outcomes.

## CONCEPTUAL MODEL OF FOOD SECURITY IN THE PACIFIC

The flower below (Figure 1) provides a conceptual model of food security in the Pacific. Food security is achieved when all people at all times have sufficient, safe and nutritious food. Access to sufficient, safe and nutritious food depends on the availability of healthy food (is there healthy food to eat?), accessibility of healthy food (can it be purchased or grown?), stability (are there risks of losing access to healthy food due to economic or environmental shocks?) and the use of food (can the food be used to meet dietary requirements, i.e. is it nutritious?), and health needs (is it safe and are healthier choices preferred?). These factors are in turn influenced by the multiple sectors, groups and environments that affect food supply and demand. To ensure food security, all Pacific countries and areas, sectors and groups need to work together.

**Figure 1: Conceptual model of food security in the Pacific**





## Food Security in the Pacific is threatened

Traditionally, Islands achieved food security through sustainable agricultural and fishing practices and a reliance on local staples such as roots and tubers, bananas and breadfruits. More recently, imported foods have helped contribute to food security by meeting a growing demand for more and a greater variety of foods. However, food security in the Pacific is under threat.

Climate change, including more frequent and intense natural disasters and changes in the suitability of land and water for agriculture and fisheries, is eroding Pacific countries' and areas' capacity to sustain local food production. Land ownership and land tenure policies affect allocation of land for agricultural, forestry and aquaculture production, and therefore local food production and economic development potential.

Imports of cheap (e.g. rice, wheat), low quality (e.g. lamb flaps, turkey tails) and convenience (e.g. ready-to-eat) foods now compete with domestic foods (e.g. root crops) that often have higher production costs and are less convenient to store and prepare. Energy costs and reliability, and lack of infrastructure that would support the production and local trade of traditional food are barriers to the consumption of local foods. In the Pacific region, transport systems that are not reliable, affordable, or able to ensure safe storage of food in transit, including to rural areas and outlying islands, are barriers to the safe consumption of both Pacific and imported foods.

Real gross domestic product (GDP) growth rates are forecast to remain low or negative in most countries because of weak to moderate agricultural economy performance. The increasing reliance on food imports is of special concern in Polynesian and Micronesian countries with limited agricultural production and export earnings. The increasing reliance on imports to meet the demand for food has heightened the Pacific's susceptibility to food and fuel price levels<sup>1</sup>. There has been a steep rise in food prices in recent years. Though prices since have declined, real food prices in 2010 are typically 19% higher than they were two years ago, even after accounting for inflation. Thus, many poor people are faced with higher food prices in the midst of a global economic slowdown<sup>2</sup>. This is significant as one third of the total Pacific population lives below national poverty lines.

Urbanization and high population growth rates (in excess of 2% in Melanesian countries) accompanied by stagnant agricultural productivity is severely challenging existing farming systems to produce enough food to meet the needs of growing populations. Also, while customary land ownership structures of most countries and strong family and cultural norms of giving and sharing in the Pacific have been providing an important safety net for strengthening food security for the most vulnerable in many communities, these norms are being threatened by urbanization, the growing importance of the cash economy and the growing number of claims on land as populations grow on and off the Islands.

<sup>1</sup> *Pacific Island Food Security in the 21st Century: Situation, Challenges and Opportunities*. Paper presented at the 2008 Ministers of Agriculture and Forestry Meeting, Apia, Samoa.

<sup>2</sup> FAO ESA Working Paper No. 09-09: *How Much Did Developing Country Domestic Staple Food Prices Increase During the World Food Crisis? How Much Have They Declined?* July 2009.

Controlling the safety of imported food is also an enormous challenge for the Pacific. The lack of adequate food safety laws, regulations and standards and inadequate capacity to enforce them has resulted in the importation of low quality food (old, damaged and contaminated products and products with low vitamins and minerals and high in fat, sugar and/or salt) that pose serious health risks to consumers. Consumers are being exposed to food that is sold after its specified use-by date and/or has undergone temperature abuse before or during distribution to the Pacific. Conversely, with agricultural products and fish comprising the bulk of exports from the Pacific, the failure to meet strict food safety and quality regulatory requirements of export markets has been an impediment to fully exploiting the Pacific's potential as a food exporter.

Mass media advertising, commercial marketing and promotional activities have exacerbated the shift from traditional staples to processed foods in the Pacific. These activities shape popular perceptions about the acceptability and attractiveness of imported foods, often to the detriment of traditional foods of higher nutritional value. A lack of awareness and knowledge of the issues surrounding food security in the general public, community leaders and policy makers affects household, community and local and national decisions. The shift from traditional foods is also influenced by the costs of maintaining communications within and between countries about local markets and changes in economic and environmental conditions and by the ability to adopt new technologies. A lack of information and communication technologies available to rural areas limits the ability of producers and farmers to monitor the market and understand their consumers, and affects the economic development and food-producing potential of rural communities.

### **The health consequences are significant**

The increasing reliance on imported food, the decline in local food production, the failure to enact and enforce food safety regulations and standards and the shift in food preferences towards convenient, cheap but nutritionally inferior foods are all placing Pacific populations at greater risk of noncommunicable diseases (NCDs), vitamin and mineral deficiencies, malnutrition and food-borne diseases. Furthermore, a lack of food security impacts directly on lifestyle-related behaviours including tobacco and alcohol consumption, thus compounding the risk of NCDs, malnutrition and poor individual and community health.

Unhealthy foods and eating patterns are a major factor contributing to food-related chronic disease and death (mortality) in the Pacific. Consumption of high-fat, energy-dense food contributes to obesity. The people living in the Pacific have some of the highest prevalence rates of obesity in the world, with rates of 40% and higher in many countries. Levels of hypertension are also high throughout the Pacific and obesity and hypertension are major risk factors for diabetes, heart disease, stroke and cancer<sup>3</sup>.

<sup>3</sup> STEPS Reports of Fiji, Nauru, American Samoa, Tokelau, the Marshall Islands, Federated States of Micronesia (Pohnpei) and Kiribati (2005-2010)

Less noticeable, but equally of concern, are vitamin and mineral deficiencies arising from heavy consumption of poor quality food and very low consumption of fruits and vegetables. Iron-deficiency anaemia is reported to be 20% or greater in children and pregnant women in 15 of 16 Pacific island countries surveyed<sup>4</sup>. For infants up to 6 months old, food and nutrition security is about breastfeeding, and surveys suggest that many infants are not exclusively breastfed up to 6 months old<sup>5</sup>. Also, for infants 6 months old to 9 months old, an average of only 71% received complementary foods in a timely manner. Iodine and vitamin A deficiency remain serious public health challenges in the Pacific<sup>6</sup>.

Finally, infectious diarrhoeal and parasitic diseases, many of which can be attributed to the consumption of contaminated food and water, remain a major cause of illness (morbidity) in many countries of the Pacific.



<sup>4</sup> WHO Global Database on anaemia. WHO, Geneva. Available at <http://www.who.int/anaemia/en>

<sup>5</sup> From national and UNICEF surveys in Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Nauru, Palau, Papua New Guinea, the Marshall Islands, Solomon Islands, Tonga, Vanuatu (during the period 1995–2007)

<sup>6</sup> WHO Western Pacific Regional Office. FAO/SPC/UNICEF/WHO/PIFS concept paper: A Pacific Food Summit 2010: Facilitating action for a food secure Pacific. WHO, Manila, May 2009.

## The economic implications are severe

The Pacific cannot afford the health consequences of a lack of food security<sup>7</sup>. Acute care for NCDs is very expensive and the economic impact of early death and disability, before age 65, is staggering. Also, by compromising the health and nutritional status of Pacific people, a lack of food security reduces productivity and drains government resources. Ultimately, the lack of food security contributes to the Pacific's burden of poverty and retards national development.

### THE RISK TO FOOD SECURITY IN THE PACIFIC HAS BEEN RECOGNIZED AT THE HIGHEST POLITICAL LEVEL.

*At the 39th Pacific Islands Forum, held in Niue from 19 to 20 August 2008, Forum Leaders:*

*“Acknowledged the high importance of food security as an emerging issue which poses challenges for the future well-being of people across the region” and “called on all countries to maintain open markets and, where possible, to increase the production and supply of healthy food”.*

*Leaders “committed their governments to immediate action to address food security issues nationally and, where possible, regionally through a range of measures across key sectors such as agriculture, fisheries, trade and transport”.*

## Land, transport, energy and communication is crucial

Access to, management of, and proper utilization of land underpins food security. Land ownership and land tenure systems will need to be assisted to ensure security of land ownership while at the same time unlocking the economic development potential of land for food security and other commercial exploitation. Transport security is essential for food security. The Pacific is a maritime region: 98% ocean. Without reliable and affordable transport systems food security will not be achieved. Energy security is crucial for food security. Without reliable and affordable energy, large parts of food production systems and the total storage and transportation of food will not occur, thereby undermining food security. Information and communication technologies have started playing huge roles in various parts of the food commodity pathway, from farmers to markets to consumers. Embracing the power of Information and Communication Technologies (ICTs) will empower producers, link farmers to markets and consumers and vice-versa and help unlock the development potential of rural communities and enhance food security and sustainable economic livelihoods.

<sup>7</sup> Khaleghian P. Noncommunicable Diseases in Pacific Island Countries: *Disease burden, economic cost and policy options*. A report prepared by the Secretariat for the Pacific Community and the World Bank. 2003.

## Multi-sectoral call for action

Food security underlies the vision of 'Healthy Islands' articulated in the Yanuca Island Declaration of 1995 by the Pacific Ministers for Health. The Yanuca Island Declaration states that healthy islands should be places where children are nurtured in body and mind; environments invite learning and leisure; people work and age with dignity; and ecological balance is a source of pride<sup>8</sup>. It commits to place the health and well-being of Pacific islanders at the centre of national development plans. This holistic perspective links economic development, environmental protection and health promotion and protection, and recognises the values that make up the unique Pacific way of life. Since then, and against a regional and global backdrop of a strengthening call for action, the Pacific Island Leaders and Ministers and FAO, SPC, UNICEF, WHO and other agencies have independently and jointly sought to address the numerous factors that influence food security.

In 2007, the meeting of Pacific Health Ministers called for urgent action on the burden of NCDs. This led to the establishment of the Pacific Framework for the Prevention and Control of Non-Communicable Diseases (2007) and contributed to the subsequent Western Pacific Regional Plan of Action for Non-communicable Diseases (2008). Health Ministers also identified the need for a regional approach to food fortification and called for a regional Food Summit with representatives from health, agriculture, trade and finance. As an initial response, a meeting on Food Standards to Promote Health and Fair Trade in the Pacific was held (Manila 2007). It was proposed that food standards and trade agreements (including Pacific Island Countries Trade Agreement (PICTA), Pacific Agreement on Closer Economic Relations (PACER) and World Trade Organization (WTO) pacts in the Pacific should take account of the urgent need to reduce the NCD burden.

The following year, and in the face of rising food and fuel prices across the Pacific, Pacific Islands Forum Leaders acknowledged the vital importance of food security at the 39th Pacific Islands Forum. This stimulated several technical meetings that identified how to adopt Codex standards in the Pacific, established a mechanism for sharing information and expertise among Pacific countries on the formulation and harmonization of food standards and identified ways of improving the food supply to reduce NCD risk factors in the Pacific. In September 2008, the Second Regional Conference of Ministers of Agriculture and Forestry Services was held in Samoa on the theme of food security, nutritional balance and sustainable management of natural resources. Ministers welcomed the decision of the Forum Leaders to prioritize action on food security in the Pacific Plan and reaffirmed they would continue to provide leadership in working with their communities and development partners to address food security.

<sup>8</sup> Yanuca Island Declaration. World Health Organization. Regional Office for the Western Pacific. WHO/HRH/95.4. Manila, 1995.

To open communication channels with the food industry, a meeting between the food industry and health sector on imported and processed food was organized by Sydney West Area Health Service (SWAHS) in partnership with FAO, SPC, UNICEF and WHO. (Sydney, 2008). A meeting looking specifically at opportunities for rice fortification to address vitamin and mineral deficiency followed (Sydney, 2009).

In May 2009, FAO convened the Eighth Meeting of Southwest Pacific Ministers of Agriculture in Alofi, Niue, with food security as an agenda item. This was followed by the Forum Trade Ministers Meeting in June 2009 and the Eighth Pacific Ministers of Health Meeting in July 2009. The participants at all three meetings acknowledged food security as an issue of national and regional significance and endorsed the convening of a multi-sectoral Pacific Food Summit in 2010 to be supported by food summits at a national level. The summits would finalize a practical and achievable Framework for Action (this document) to be considered for endorsement by Heads of government at the 2010 Pacific Island Forum Leaders' meeting in Vanuatu.

The call for action from a range of sectors is clear. Responding to this call, this Framework for Action has been prepared to lay out the vision for improved food security in the Pacific and to guide meaningful future action.

## A FRAMEWORK FOR ACTION ON FOOD SECURITY IN THE PACIFIC

### VISION

All people in the Pacific 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.

### GOALS

To strengthen and improve:

1. **Availability of food.** Is there sufficient healthy food to eat?
2. **Access to food.** Can healthy food be purchased or grown?
3. **Stability of food systems.** Are there risks of economic (price surges) and environmental (climate variability) shocks that jeopardize healthy food availability and access all the time?
4. **Food utilization.** Can the food be used to meet dietary (is it nutritious?) and health (is it safe?) needs and are healthier choices preferred?

### GUIDING PRINCIPLES

#### 1. Committing to a coordinated multi-sectoral approach

Ensuring food security within the Pacific is a complex and multi-faceted challenge. Within countries, it requires a coordinated multi-sectoral response engaging not only government sectors such as land, agriculture, fisheries, trade, environment, health, education and rural development, transport, energy and ICTs, but also industry stakeholders from primary producers to processors, importers and exporters and consumers and householders with the capacity to grow and harvest food.

Multi-sectoral action is also needed to achieve consistency among sectoral policies that impact on the diverse elements that constitute food security. Holistic policy formulation requires understanding the multiple roles of agriculture, forestry and fisheries, land, transport, energy, ICTs in national development, and health, employment, education, trade balance and the environment. Between countries, regional cooperation is essential to ensure a harmonized approach to establishing food standards and regional food security policies and to facilitating food trade. Pacific countries' and areas' food security can be enhanced through partnerships among the Island nations. Efficiency and competitiveness require regulatory frameworks that become cost-effective at a regional level. Regional cooperation can address challenges such as food security policies, trade and investment promotion, research and development, capacity building and adaptation strategies for climate change.

## **2. Recognition of food security as a human right**

Access to sufficient, safe and nutritious food at all times has been recognized as a right for all people by the Pacific Health Ministers in endorsing the vision of 'Healthy Islands' as an overarching framework for health protection and promotion in the Pacific. Thus, ensuring food security must be accorded priority to improve the living conditions and protect the life and health of Pacific populations. Equally, ensuring food security is a responsibility for all people. This supports World Food Summit declarations in 1996, 2002 and 2009 and links to efforts to achieve the realization of the right to adequate food in the context of national food security (FAO 2005).

## **3. Recognition of food security as a critical development issue**

Workforce productivity and economic development are intricately linked with food security. Hence, food security must be integrated into the development agenda. Economic growth in the Pacific must ensure that all sectors of society, especially vulnerable groups, enjoy food security. Social determinants of health, such as education, nutrition, clean water, sanitation, housing, gender, race and environment, can influence differential health outcomes from a lack of food security. Interventions must address the need to reduce inequities across and within countries by considering the role of economic development in shaping the social determinants of health to enable access to sufficient, safe and nutritious food at all times by all people.

## **4. The adoption of sustainable solutions that build self-reliance and empowerment**

Long-term food security requires establishing food supply systems that can mitigate risk and cope with stress. Food supply systems traverse many sectors including land tenure and land use systems; transportation systems; energy technology systems to support food production, storage and transportation; and information and communication systems that link food to markets and consumers. There is a need to create more resilient food systems capable of adapting to shifts at both the macro and local levels and absorb disturbances resulting from the volatility of the global economic market and environmental changes. To enhance food security in Pacific countries, food systems must be strategically repositioned to rest on the pillars of vibrant subsistence systems, globally competitive agricultural and fisheries' products and demand driven-importation. Activities will build on existing country and regional infrastructure and align with existing objectives and plans to ensure the benefits last and meet the needs of future generations. Local capacity must be strengthened to monitor and maintain food security in the long-term.



## 5. Respecting and valuing indigenous systems and culture

Policies, programmes and services must respect and take into consideration the specific cultures and the diversity of populations within Pacific countries and areas. Whenever feasible, traditional mechanisms and practices that enhance food security, such as indigenous risk-coping food production systems, customary management of fisheries' resources and traditional preservation techniques, will be promoted and preserved.

### THEMES

The strategies and actions are structured under seven themes:

#### Themes:

1. Leadership and cooperation
2. Regulatory frameworks, enforcement and compliance and public-private sector collaboration
3. Enhanced and sustainable production, processing, marketing, trading and use of safe and nutritious local food
4. Protect infants and vulnerable groups
5. Consumer empowerment and mobilizing partners
6. Food security information system
7. Enhanced land tenure systems and land-use policies, energy, transport, education and communication systems to underpin food security



## Theme 1: Leadership and cooperation

Expected outcome: Strong leadership and effective multi-sectoral coordination for food security regionally and nationally

### Strategies

1. Seek integration of food security into national and regional political agendas.
2. Formulate regional and national mechanisms for effective cross-sector communication, coordination, collaboration and implementation of food security solutions.
3. Seek engagement of all stakeholders from public, private and civil sectors.
4. Secure adequate funding and resources nationally and regionally to effectively implement required food security actions.

### Rationale

The extremely broad range of influences affecting food security means the issue cuts across multiple sectors such as health, agriculture, trade and education and involves multiple industry, consumer and civil society groups. However, current efforts being implemented nationally and regionally to improve food security are often limited by a lack of structures and resources to assist coordination, communication and allow informed decision-making. A lack of resources and capacity also limit the effectiveness of stakeholders to respond to the scale and multi-sectoral nature of the issue.

To address the many issues involved, engagement is needed among a wide range of national and regional stakeholders, with effective mechanisms established to ensure governments, producers and consumers all have a say in the different measures required to improve food security.

The implementation efforts of all parties can be improved by establishing effective partnership structures nationally and regionally. These partnerships will use existing structures and initiatives where possible.

In order to secure and apply the resources required to implement effective solutions, commitment and leadership from the highest political level is required nationally and regionally. Endorsement of this Framework by national governments and regional leaders is the first step in this process.

## Potential Actions

Strategy 1: Seek integration of food security into national and regional political agendas.

1. Identify a Minister to advocate for and champion food security.
2. Report annually on food security to the Pacific Island Forum leaders.
3. Seek endorsement of the Framework for Action by leaders.
4. Seek country specific timelines and integration of the Framework into the Pacific Plan regional policy structure.
5. Maintain the regional Pacific ownership of the Framework while linking it with global agendas.

Strategy 2: Formulate regional and national mechanisms for effective cross-sector communication, coordination, collaboration and implementation of food security solutions.

1. Strengthen existing or establish a new multi-sectoral food committee nationally, that includes representatives from the private sector and consumers to strengthen food regulations, encourage local production and protect vulnerable populations.
2. Identify action areas of synergy and conflict and formulate national plans to address them.
3. Establish and implement an effective regional partnership initiative to carry out the Framework, including a dedicated facilitator role within a Council of Regional Organizations in the Pacific (CROP) Agency and a high level multi-sectoral coordinating committee.
4. Establish clear regional communication and reporting mechanisms on food security.
5. Strengthen the Pacific Food Safety Quality and Legislation Expert Group and other technical advisory groups that can assist in decision-making by the regional partnership initiative.

Strategy 3: Seek engagement of all stakeholders from public, private and civil sectors.

1. Establish informal food industry, private sector advisory groups to facilitate discussions among governments, agencies, the private sector and consumers.

Strategy 4: Secure adequate funding and resources regionally and nationally to effectively implement required food security actions.

1. Ensure prioritisation of food security resources nationally.
2. Seek financial assistance from aid and development partners for establishment and maintenance of a regional partnership initiative.
3. Seek international recognition for the Framework and regional partnership initiative.
4. Seek financial assistance from aid and development partners for implementation of the Framework.
5. Ensure food security is a priority consideration within Free Trade Agreements such as PICTA/PACER, and that resources promoting free trade agreements support progress towards a food secure Pacific.

## Theme 2: Regulatory frameworks, enforcement and compliance and public-private sector collaboration

Expected outcome: Strengthened food regulatory frameworks, enforcement and compliance capacities and public-private sector collaboration

### Strategies

1. Strengthen relevant legislative frameworks and harmonize standards, based on internationally-recognized standards in accordance with national needs and international trade agreements.
2. Strengthen capacity of the public sector to develop, effectively monitor and enforce the implementation of food legislative frameworks.
3. Effectively involve all stakeholders in the formulation of legislative frameworks and strengthen private sector compliance capacity.
4. Strengthen collaboration between the public and private sectors in implementation of voluntary standards and food quality and safety assurance systems.

### Rationale

Currently, a growing dependence on imported foods, a paucity of food regulations and volatility in global food and transportation costs are compounding food-related problems in the Pacific by threatening access to sufficient safe and nutritious food. Food control systems in the Pacific need to be strengthened in order to facilitate trade and protect consumers from poor quality and unsafe food contributing to NCDs, vitamin and mineral deficiencies and food-borne diseases.

Collaboration between the public and private sectors is important for the formulation and implementation of food regulatory frameworks and for improving the quality and safety of food being marketed to consumers in the Pacific. Public capacity to enforce food legislation is limited and the technical skills among small-scale farmers and food businesses to comply with mandatory requirements for food quality and safety and to implement voluntary standards and assurance systems are weak.

### Potential Actions

Strategy 1: Strengthen relevant legislative frameworks and harmonize standards, based on internationally-recognized standards in accordance with national needs and international trade agreements

Nationally:

1. Conduct a needs assessment and gap analysis to identify what policy, legislative and enforcement developments are required to enhance food security, to better protect consumers and facilitate trade.

2. Review existing policies relevant to food security, food safety and nutrition and identify how best to ensure such policies are well integrated.
3. Review and modernize food laws, where necessary, to ensure food control management takes a production-to-consumption approach, identifies roles and responsibilities of all relevant organizations, and avoids gaps and unnecessary duplication.
4. Establish food standards based on internationally-recognized standards, in accordance with national needs and international trade agreements.
5. Strengthen participation in relevant international standards-setting processes related to food processing and primary production.
6. Support micronutrient fortification of specific foods such as wheat flour, rice, salt and complementary foods, as appropriate.
7. Regulate the fat, sugar and/or salt content of food, as appropriate.

Across the Pacific:

1. Harmonize food regulations and standards in line with Codex guidance, where possible, to ensure that they are risk-based and that they facilitate trade in safe and healthy food, including fortified food.
2. Support the work of the Pacific Food Safety and Quality Legislation Expert Group in sharing information and providing expert advice relevant to food laws, regulations and standards, and expand its membership to facilitate a more multi-sectoral approach to food legislation development in the Pacific.
3. Develop regional guidance and draft standards to better address food-related issues of relevance to the Pacific such as unsafe or expired food, vitamin and mineral deficiencies, and NCDs, through mechanisms such as the Pacific Food Safety and Quality Legislation Expert Group and the Pacific Fortification Partners Group, together with international organizations, and regional organizations. To ensure they are evidence-based, collect and provide supportive evidence for such standards that countries can use in developing relevant national standards. A mechanism needs to be in place to facilitate broader agreement and uptake of these standards of Pacific relevance by countries and areas.
4. Contribute to the formulation and application of the Strategic Plan of the FAO/WHO Coordinating Committee for North America and the South-West Pacific.

Strategy 2: Strengthen the capacity of the public sector to develop, effectively monitor and enforce the implementation of food legislative frameworks.

Nationally:

1. Strengthen the capacity of food safety authorities to act as independent and trusted public health bodies by providing adequate financial, technical and human resources and appropriate and ongoing training opportunities in priority areas.
2. More efficiently focus food safety authorities' resources and actions by introducing risk-based food inspection systems, including import and export inspection and certification systems, and through the sharing of relevant information among competent authorities.
3. Upgrade food analysis capacity in the region, including facilities, equipment and technical, financial and human resources, as required to monitor local and imported food.

Across the Pacific:

1. Through country-based agreements pursue wider application of the principle of recognition of equivalence of food control systems to facilitate trade.
2. Establish a database on food analysis capacity that enables authorities to identify and more readily access food analysis capacity in a timely manner, internally and externally, where it is not available within a given country (linked to theme 6 strategy 1).
3. Share information through a strengthened International Food Safety Authorities Network and enhance food emergency response capacity.

Strategy 3: Effectively involve all stakeholders in the formulation of legislative frameworks and strengthen private sector compliance capacity.

Nationally:

1. Establish operational mechanisms to provide adequate opportunities for consumers, the private sector and trading partners to be fully engaged in the formulation of food legislation (laws, regulations and standards).
2. Establish guidance and provide adequate resources to improve the process of consultation among government, industry and consumers.
3. Involve all relevant industries in the formulation of legislative frameworks, especially when considering standards related to the products that they produce.

4. Develop effective business-to-business partnerships to assist smaller and less developed businesses in the ongoing improvement of food safety.
5. Provide support, technical or financial, to industries to help them meet regulatory requirements and buyer demands.
6. Enhance the commitment of food safety authorities in collaboration with the private sector to increase private sector capacity to comply with good agricultural practices (GAP), good manufacturing processes (GMP), good hygienic practices (GHP) and hazard analysis and critical control point (HACCP) requirements.

Across the Pacific:

1. Enhance the use of web-based information technology to better inform and engage private stakeholders from across the Pacific in food legislative developments.

Strategy 4: Strengthen collaboration between public and private sectors in implementation of voluntary standards and food quality and safety assurance systems.

Across the Pacific:

1. Strengthen the capacity of farmers and food businesses to improve food quality (including organic agriculture) and safety through incentives and training partnerships involving government, industry, academia and international and regional organizations.
2. Build agreements between public and private sectors to enhance industry awareness of voluntary standards and certification programmes, to increase their capacity to participate in the formulation of voluntary standards and comply with certifying bodies and buyers demands.
3. Build agreements between public and private sectors to achieve a gradual population-wide reduction in dietary salt, fat and sugar consumption in the Pacific.



### Theme 3: Enhanced and sustainable production, processing, marketing, trading and use of safe and nutritious local food

Expected outcome: Improved production, processing, marketing, trading and use of safe and nutritious local food

#### Strategies

1. Develop and strengthen policy, legal and regulatory frameworks for sustainable production and trade of agriculture, aquaculture, forestry and fisheries' products.
2. Increase the production, productivity and resilience of agriculture and fisheries' systems.
3. Increase the contribution of oceanic fisheries' resources to domestic food supplies and employment.
4. Enhance food processing capacity and value-adding of agriculture and fisheries' products.
5. Increase competitiveness and trade of agriculture and fisheries' products in domestic and international markets.
6. Promote sustainable management of land, freshwater, agrobiodiversity and marine resources.

#### Rationale

Historically, agriculture and fisheries systems have ensured food security in Pacific countries and areas. Local systems, based on subsistence, have developed within a local environmental and cultural context and have therefore been traditionally resilient. However, changing circumstances (including population growth, urbanization, increased farm commercialization, income and export orientation, globalization and climate change) are threatening the capacity of these systems to produce a sustainable supply of nutritious food for local populations. Increased reliance on low quality food imports has resulted in nutritionally deteriorating diets contributing to the alarming increase in NCDs.

Currently, insufficient investment in agriculture, the lack of relevant policy, weak data and market information systems and infrastructure, the high cost and low status of local compared with imported food, limited interest of youth in agriculture, biosecurity issues and climate change are undermining food security in Pacific countries. Secure access to land for food production and comparatively low productivity also have become significant food security issues in many Pacific countries and areas as a result of population growth pressures on traditional community farming systems, commercialization of land usage for

increased agricultural production for cash crops or single-crop exports, expanding peri-urban communities and increasing commercialization of land for other economic activities such as tourism, mining and logging.

In some countries and areas, tourism or other forms of non-agricultural business activity are important drivers of rural economic growth and improved food security. Thus, integration of agricultural, food-processing, value addition and non-agricultural business activities is likely to enhance food security and contribute to improving the nutritional quality of diets.

Fishery resources are traditional pillars of food security and have remained fundamentally important for nutrition, welfare and employment. However, in many countries of the Pacific, the inshore resource has been subjected to environmental degradation and overfishing. Conservation of stocks and sustainable management are priority issues.

Population growth of above 2% in some Pacific countries and areas puts pressure on agricultural land. Increasing demands on limited water resources from urban sectors, intensified cropping, land degradation and overfishing make the sustainable management of the natural resource base critical to food security and agricultural productivity. Environmental issues are becoming more important, placing new pressures on policy formation. Action is also required to enhance biosecurity. Biosecurity is a strategic and integrated approach that encompasses policy and regulatory frameworks based on internationally-recognized standards and guidance to analyse and manage risks in animal and plant life and health, food safety and biosafety.

### **Potential Actions**

Strategy 1: Develop and strengthen policy, legal and regulatory frameworks for sustainable production and trade of agriculture, aquaculture, forestry and fisheries' products.

1. Strengthen participatory, practice and evidence-based policy formation processes that build resilience, sustainability, diversity and food security concerns and consider health impact assessments into agriculture/fisheries' policies and strategies, and improve integration with other sectoral policies, in particular health, land, trade, environment, energy and education.
2. Increase opportunities to market and promote local foods and varieties and encourage a 'Go local' approach by increased supply of local food products for consumption by residents and tourists.

3. Strengthen capacity in data collection, analysis and dissemination of agricultural production and trade findings as well as develop more robust trade policy formulation and negotiation.
4. Formulate, or revise as necessary, legislation and regulatory frameworks to facilitate and sustain private investment in agriculture, health and nutrition, food security and rural development.
5. Strengthen collaboration between Departments of Agriculture, Fisheries and Trade.

Strategy 2: Increase the production, productivity and resilience of agriculture and fisheries' systems.

1. Strengthen biosecurity and quarantine systems to curb the import of invasive species, pests and diseases and to respond as necessary at national and regional levels.
2. Secure access to land and water for subsistence food and cash crop production.
3. Identify priority infrastructure needs to better link agricultural producers to domestic and international markets and target national and development partner resources, including public-private partnerships, to upgrade key infrastructure while also providing for maintenance costs.
4. Increase investment in agricultural research and extension systems, including through private sector partnerships.
5. Improve access to rural finance (credit and savings).
6. Provide information and support for urban and peri-urban food production systems (including school gardens).
7. Promote commercial aquaculture to supply farmed fish to urban markets; continue to support inland aquaculture where appropriate.
8. Support the conservation and development of farming systems, particularly traditional food crops and systems and use of agricultural biodiversity.
9. Build capacity of smallholder farmers and others to identify, analyse and implement cost-effective mitigation and adaptation responses to climate change and other related natural disasters.
10. Build on the knowledge base around diversity of traditional farming systems.

Strategy 3: Increase the contribution of oceanic fisheries' resources to domestic food supplies and employment.

1. Increase catches of offshore tuna and related species by commercial coastal fishermen to substitute for reef fish and other inshore catches.
2. Assist the development of business skills of small-scale commercial fisherman.
3. Promote, where appropriate, increased landing of tuna for processing to create employment.
4. Increase availability of tuna and related species from industrial fisheries on the local market without unduly impacting on the livelihoods of small-scale fishers.
5. Monitor mercury levels in populations with high consumption of pelagic fish.

Strategy 4: Enhance food processing capacity and value-adding of agriculture and fisheries' products.

1. Research what foods are most appropriate for food processing, and consider seasonal fluctuations in supply.
2. Improve capacity for value chain analysis, upgrading and promotion of income-generating opportunities for innovative value-added local products that are safe, meet quality standards and are healthy/nutritious.
3. Facilitate investment into appropriate technology for processing opportunities and adapt existing processing facilities to changing requirements (e.g. tuna canneries and climate change).

Strategy 5: Increase competitiveness and trade of agriculture and fisheries' products in domestic and international markets.

1. Strengthen market intelligence gathering, market information systems and product promotion.
2. Support increased efficiency in domestic agrofood supply chains and promote well-functioning markets and competition (including reduced postharvest losses and improved quality).
3. Strengthen the capacity of farmers' organizations and small farmers to help address economies of scale in purchase of inputs and consistency (quantity and quality) in supply of products.
4. Support WTO-consistent, non-trade distorting special measures aimed at creating incentives for smallholder farmers, enabling them to compete on a more equal footing in world markets.

5. Share innovation, opportunities and best practice of actions that increase island-to-island trade of domestic foods.

Strategy 6: Promote sustainable management of land, freshwater, agrobiodiversity and marine resources.

1. Implement an appropriate mix of community-based and national management measures to conserve coastal fisheries' resources and monitor their effectiveness, such as zoning.
2. Establish community-managed protected areas to conserve biodiversity and promote ecosystem services.
3. Strengthen capacity for sustainable forest management and forest resource monitoring.
4. Support organic agriculture development and promote agroforestry growth.
5. Foster national capacity in land use planning and management, monitoring, climate change and disaster risk management.
6. Formulate integrated water resource management plans that incorporate needs for agricultural irrigation.

## Theme 4: Protect infants and vulnerable groups

Expected outcomes: Increased well-being, reduced illnesses, disabilities and premature deaths associated with a lack food security

### Strategies:

Governments, civil society, the private sector, all agencies and other key players are to:

1. Identify all populations vulnerable to a lack of food security and ensure that all interventions reach these groups.
2. Promote exclusive breastfeeding and the appropriate introduction of nutrient-rich complementary foods to all infants.
3. Promote lifestyles and good nutrition that lead to reduction of overweight and obesity and better management of NCDs.
4. Establish social protection mechanisms for the poor.
5. Meet food and nutrition needs of pregnant women, children, lactating mothers, the elderly and those with disabilities.
6. Promote and strengthen inter-sectoral collaboration and link community resilience and coping mechanisms to protect against adverse effects of climate change and natural disasters.
7. Promote and implement comprehensive strategies to address rapid population growth.

### Rationale

Effective policies and strategies to enhance food security must take into account the needs of those who already lack food security and those vulnerable to a lack of food security. Because of physiological needs, pregnant women, infants, children and adolescent girls are particularly vulnerable. Because of limited access to secure food, the urban poor, rural landless and people affected by disasters and susceptible to NCDs are also vulnerable. Traditional cultural practices may impact on food security of vulnerable groups, especially women and children.

Preventing malnutrition during pregnancy and the first two years of life is when most gains are to be made in reducing morbidity and mortality and preventing the onset of NCDs later in life. For infants, food security is primarily about exclusive breastfeeding for the first six months of life and the introduction of nutritious complementary foods after this. Micronutrient supplementation (i.e. iron and folic acid) of pregnant women, children and adolescent girls is important when there are low levels of food fortification and consumption of nutrient-rich food. Note that in some individuals, micronutrient deficiency and obesity may co-exist.

Two of the most significant factors affecting food security, but external to the food system in the Pacific, are rapid population growth and frequent natural disasters. The impact is most severe for the poorest members of the community, particularly those in urban areas without access to subsistence agriculture or fisheries, or solely relying on subsistence agriculture.

### **Potential Actions**

Strategy 1: Identify all populations vulnerable to a lack of food security and ensure that all interventions reach these groups.

1. Provide technical support to identify, profile and map vulnerable population groups.
2. Advocate for all appropriate targeted interventions to reach all identified vulnerable groups.
3. Monitor and evaluate the interventions for effectiveness.
4. Consider mandatory fortification that supports the nutritional needs of vulnerable groups.

Strategy 2: Promote exclusive breastfeeding and the appropriate introduction of nutrient-rich complementary foods to all infants.

1. Make all hospitals mother-and-baby friendly, and support early initiation of breastfeeding.
2. Legislate the Code on Marketing of Breast-milk Substitutes.
3. Advocate for revision of each Pacific Island's Code on Marketing of Breast-milk Substitutes and guide countries and areas in the formulation of national plans for the Code's implementation.
4. Establish a regional pool of external assessors for mother-and-baby friendly hospital initiatives.
5. Create employment legislation and workplace policies that are conducive to exclusive breastfeeding, including breastfeeding breaks and maternity leave.
6. Promote and support the appropriate introduction of local complementary foods, alongside continued breastfeeding for up to around two years of age.
7. Develop and implement policies or guidelines for breastfeeding mothers with HIV and AIDs.

Strategy 3: Promote lifestyles and good nutrition that lead to reduction of overweight and obesity and better management of NCDs.

1. Encourage the private sector to produce and market products that promote healthy lifestyles and good nutrition.
2. Create workplace policies that promote healthy lifestyles and better management of NCDs.
3. Support and incentivise the private sector to ensure foods are distributed with clear and adequate nutrition labelling.
4. Adopt codes of marketing of unhealthy foods to children and other vulnerable groups.
5. Identify champions and role models for promoting healthy lifestyles among youth.

Strategy 4: Establish social protection mechanisms for the poor.

1. Advocate and provide technical support for country-driven social protection mechanisms.
2. Address food security needs of outer island populations with special attention to transportation costs.
3. Support economic activities and income-generating opportunities for vulnerable groups.
4. Recognise the vulnerability of women street sellers and take steps to protect them.
5. Establish safety nets for identified vulnerable groups, including during and after emergencies.

Strategy 5: Meet food and nutrition needs of pregnant women, children, lactating mothers, the elderly and those with disabilities.

1. Undertake micronutrient supplementation of pregnant women and children, where necessary.
2. Undertake de-worming of pregnant women and children, where necessary.
3. Continue to promote, protect and support breastfeeding during and after emergencies, including discouraging donations of infant formula after emergencies.
4. Strengthen gender policies to reduce women's vulnerability to a lack of food security.



Strategy 6: Promote and strengthen inter-sectoral collaboration and link community resilience and coping mechanisms to protect against adverse effects of climate change and natural disasters.

1. Provide technical and financial support for climate change and disaster preparedness and response.
2. Adapt and strengthen resilience and coping mechanisms to existing systems, where possible, through inter-sectoral collaboration.

Strategy 7: Promote and implement comprehensive strategies to address rapid population growth.

1. Strengthen linkages to existing country population policies and sexual health strategies.

## Theme 5: Consumer empowerment and mobilizing partners

Expected outcome: Individuals, communities, producers and governments empowered with information about food security and the skills to make informed decisions and healthy choices

### Strategies

1. Focused and sustained education to raise awareness and knowledge about food security and the links between food and health and social and economic outcomes.
2. Targeted, evidence-based advocacy to promote food security in the Pacific.
3. Regular and sustained communication campaigns that promote healthy choices and strengthen supportive environments.
4. Formulation and use of appropriate, harmonized food security-related guidelines and tools for education and promotion.

### Rationale

Food choices and preferences are an important part of food security. In an environment in which advertising, marketing and promotions regularly seek to influence food choices, there is a need to empower individuals, to foster community participation and to encourage civil society, industries and governments to make choices that lead to better health all along the food chain, from 'farm to fork'. To create 'Healthy Islands', healthy choices need to be easy choices.

While there is some awareness of some components of food security, the wide range of interlinked influences is not well understood. Education is required so that people are aware of the determinants of food security and the health, social and economic outcomes that result when food security is threatened. Moreover, because knowledge does not always translate into action, communication campaigns and efforts to create supportive environments are needed to make healthy choices easy. Healthy foods not only need to be available and accessible, they need to be preferred. Lifestyle interventions should seek to build on activities already being carried out by countries.

### Potential Actions

Strategy 1: Focused and sustained education to raise awareness and knowledge about food security and the links between food and health and social and economic outcomes.

1. Train health staff (with a particular focus on all staff who work in delivery rooms, maternal and child health care centres and paediatric clinics) on breastfeeding with updated WHO material.

2. Carry out assessment of education efforts with regard to food security at a national level and make recommendations for improvement.
3. Improve the quality of food available at schools and support schools to implement a nutrition policy.
4. Provide information on the nutrient content of local food products.
5. Facilitate and conduct integrated (agriculture, health, trade, education, producer) food security training across sectors at regional and subregional levels.
6. Strengthen awareness of food security and its importance with and through the partners and stakeholders.
7. Conduct consumer forums to engage them in the food security debate.

Strategy 2: Targeted, evidence-based advocacy on food security in the Pacific.

1. Establish a regional advocacy function within the regional partnership initiative (theme 1) to coordinate and implement sustained advocacy on food security and incorporate food security advocacy within and through existing education and health services and agencies.
2. Focus advocacy on women's and youth groups to mobilize support and increase the uptake of exclusive breastfeeding.
3. Establish and implement a regional food security advocacy campaign.
4. Advocate for improved nutrition, particularly among the most vulnerable populations.
5. Strengthen consumer groups to give consumers a stronger voice on food security policy and decision-making.

Strategy 3: Regular and sustained communication campaigns that promote healthy choices and strengthen supportive environments.

1. Design and implementation of multi-year national or local healthy lifestyle programmes on healthy eating (including breastfeeding) and physical activity using proven approaches (e.g. strategic health communication and mobilisation programmes) to influence choices and impact behaviour.
2. Integration of new programmes with existing campaigns and programmes across all sectors and groups.
3. Enhance the knowledge and understanding of food security issues amongst the media.

Strategy 4: Formulation and use of appropriate, harmonized food security-related guidelines and tools for education and promotion.

1. Create, support and strengthen school food policies and programmes.
2. Development and dissemination of a regional guide and resources on food security in the Pacific.

## Theme 6: Food security information system

Expected outcome: A comprehensive food security intelligence capacity established to document progress, identify vulnerabilities, spread innovation and provide evidence for appropriate implementation of programmes

### Strategies

1. Building on existing information and monitoring systems to provide a timely, comprehensive and multi-sectoral view of food security in the Pacific.
2. Assessment of economic, social (including health) and environmental impacts through modeling and other tools, to inform government policy-makers about the value and costs of investments (and lack of) in food security interventions.
3. Build the human and technical capacity in countries and the region to collect appropriate data, conduct analysis, interpret and communicate it to decision-makers and use this information in a timely and cost-effective manner to guide policy and programme development and implementation.

### Rationale

To improve food security, information from numerous sources is needed so a more complete understanding of the current situation, and where additional efforts are required, is obtained. Donor and other organizations that provide resources to address food security also require monitoring and evaluation information on the effectiveness of their investments. The food security information system will build on current surveys and monitoring so that better evidence is available to inform policy decisions and to provide information for all actors involved in food security to understand the impact their actions have. Risk factors to food security in the Pacific are common among many countries. Food security monitoring, sharing of information and knowledge transfer among countries and areas is therefore crucial for addressing food security issues in the region.

Priority attention must be given to developing information capacity and resources that are appropriate for country and regional needs and assist countries to improving the targeting and implementation of programmes to improve food security and vulnerability.

## Potential Actions

Strategy 1: Building on existing information and monitoring systems to provide a timely and multi-sectoral/ comprehensive view of food security in the Pacific<sup>1</sup>.

1. In consultation with data users, establish a list of key food security indicators<sup>2</sup> at national level.
2. Identify data sources and compile indicators ensuring quality control measures.
3. Store information and effectively disseminate to users for timely and evidence-based decisions and action.
4. Identify gaps in existing data sources and consider possible solutions to address gaps (e.g. integrate nutrition and food security into existing population-based surveys).
5. Regional institutions and agencies to support updates of the OCEANIA Food Composition Tables to help plan micronutrient fortification and NCD prevention programmes.
6. At SPC's Pacific Regional Meeting of Heads of National Statistics Offices, discuss the establishment and review of key food security indicators, and the inclusion of these within existing or new surveys within the region).

Strategy 2: Assessment of economic, social (including health) and environmental impacts through modeling and other tools, to inform government policy-makers about the value and costs of investments (and lack of) in food security interventions.

1. Identify data needs (to support assessments) and gaps locally.
2. Develop models (test sensitivity and evaluate accuracy of these models) that use country data to estimate the cost-benefit of food interventions.
3. Review and assess the effectiveness, efficiency, sustainability and impact of past relevant interventions to improve food security.
4. Develop tools to assess social and environmental impacts of food policy interventions consistent with improving food security.
5. Work with all stakeholders to undertake assessments and inputs.
6. Communicate and disseminate food security and nutrition information to all concerned stakeholders, including policy-makers, planners, media and the private sector.

<sup>1</sup> These should, as feasible, reflect the four dimensions of food security, namely food availability, access, stability and utilization.

<sup>2</sup> Recommended indicators encompass monitoring of food supply (production & trade) through Food Balance Sheets, food prices, food composition, health & nutrition status, demographic trends, transport costs, land use.

7. Advocate for a local observatory/mechanism to produce evidence-based information on food security for planners and policy makers, and to monitor food security and vulnerability risk.
8. Create and implement tools that are useful for evaluating programmes that target improving food security.
9. Keep the food security situation at a country or territorial level under continuous review for early and effective, action-oriented interventions.

Strategy 3: Build the human and technical capacity in countries and in the region to collect appropriate data, conduct analysis, interpret and communicate it to decision makers, and use this information in a timely and cost-effective manner to guide programme development and implementation.

1. Improve capacity for collection and availability of information about food security, including surveys.
2. Identify universities and experts nationally, regionally and internationally to provide advice about food security improvements.
3. Support the sharing of food security, nutrition and vulnerability information between sectors within countries and areas in the Pacific.

## Theme 7: Enhanced land tenure systems and land-use policies, energy, transport, education and communication systems to underpin food security

Expected outcome: Effective land-use, energy, transport, communication and education support to food security

### Strategies:

1. Where appropriate, enhance land tenure systems and land-use policies for increased availability of land for agricultural production.
2. Strengthen transport systems and infrastructure in the region and within countries.
3. Increased access to energy and energy security for food production, storage and transportation.
4. Improve transport infrastructure including roads, ports' facilities including wharves and food storage facilities to both enhance and safeguard food security.
5. Expand ICT coverage to rural and remote areas to support information flow on food pricing and markets and enhance education and health service provision through distance support.
6. Incorporate food security and nutrition elements into school curricula and other appropriate training fora to enhance knowledge and understanding of the importance of food security from an early age.

### Rationale

Access to, management of, and proper utilization of land underpins food security. In some Pacific island countries and areas, existing land ownership and land tenure systems will need to be addressed to enable increased allocation of land for increased agricultural production. In others, the issue of balancing the need by land owners to secure their land and the unlocking of economic development potential of land will need to be addressed. Either way, land issues in the Pacific are very sensitive and initiatives involving land for agricultural, forestry or aquaculture production will need to be led by land owners and national authorities, and assisted where appropriate through focused regional initiatives.

Transport security is essential for food security. The Pacific is predominantly a maritime region, 98% of which is covered by ocean. Practically all food imports come by sea or air. Without reliable and affordable shipping services or air services to and from or between Pacific Island countries and areas, food security will not be achieved. Associated infrastructure such as ports and storage facilities are also crucial to enhance food security. Wharves and ports storage facilities in many countries and areas are under pressure and need improvement as a matter of urgency.



Energy security is crucial for food security. Without reliable and affordable energy, large parts of food production systems and the total storage and transportation of food will not occur, thereby undermining food security.

Information and communication technologies (ICTs) have started playing huge roles in various parts of the food commodity pathway, from farmers to markets to consumers. Embracing the power of ICTs will empower producers, link farmers to markets and consumers and vice-versa and help unlock the development potential of rural communities and enhance food security and sustainable economic livelihood.

Underpinning all the above cross-cutting areas as well as the other six themes is the appropriate level of knowledge and awareness about the importance of food and nutritional security. Practical steps need to be taken to incorporate food and nutritional security content into school curricula at all levels and in all forms of educational and training institutions ranging from primary to tertiary and formal to informal including technical and vocational training institutions.

Attention must be given to developing appropriate responses and practical approaches to each of these cross-cutting sub-themes that underpin food security, because if any one of these areas is not addressed effectively the environment to support changes in other areas in food security will be undermined.

### **Potential Actions**

Strategy 1: Where appropriate, enhance land tenure systems and land-use policies for increased availability of land for agricultural production.

1. Where appropriate, support country-led initiatives that enhance land tenure systems and land use policies that will increase the land area dedicated to sustainable production of agricultural produce for food security, sustainable livelihoods and export.

Strategy 2: Strengthen transport systems and infrastructure in the region and within countries.

Nationally:

1. Improve domestic shipping infrastructure including ports, routes, and rates.
2. Improve national road networks to rural and remote areas, in particular to areas of large agricultural potential or centres for economic activities.
3. Improve air-services within countries, in particular to remote areas.
4. Strengthen policy, legal and legislative frameworks to enhance improved and safe transportation.

Across the Pacific:

1. Work with private sector shipping companies to establish other sub-regional/regional shipping services that link island countries to promote trading of food products and other goods.
2. Promote sustainability of and create demand for feeder shipping services through analysis and mapping of food and other commodities that are available for trade between islands.
3. Explore ways to reduce or subsidize freight costs in 'non-profit' routes.
4. Improve air-service links between countries using appropriate aircraft types.

Strategy 3: Increase access to energy and energy security for food production, storage and transportation.

1. Explore ways to reduce the cost of energy to countries for production, processing, storage and transportation of food products through bulk procurement or subsidized schemes.
2. Increase access to energy of rural and remote communities to assist in food production, storage, preservation and transportation.

Strategy 4: Improve transport infrastructure including roads, ports' facilities including wharves and food storage facilities to both enhance and safeguard food security.

1. Improve port facilities including wharves at both international as well as domestic seaports.
2. Improve food storage facilities within the secured ports' areas in international ports.
3. Provide cool storage facilities in major domestic ports to preserve food products for local sales or in transit for transport to urban markets.

Strategy 5: Expand ICT coverage to rural and remote areas to support information flow on food pricing and markets and enhance education and health service provision through distance support.

1. Work with telecommunication providers to expand internet coverage and mobile telephony services to rural and remote areas under affordable commercial arrangements.
2. Where telecoms cannot or do not wish to provide the service, promote implementation of Pacific Rural Internet Connectivity System (PacRICS).
3. Provide appropriate low-cost computer technology for rural and remote students of remote schools for education purposes to enhance knowledge on food security.

Strategy 6: Incorporate food security and nutrition elements into school curricula and other appropriate training fora to enhance knowledge and understanding of the importance of food security from an early age

1. Work with national and regional education authorities and explore ways to include food security and nutritional content into primary and secondary school curricula to enhance knowledge and understanding of the importance of food security from an early age.
2. Work with informal/non-formal and technical and vocational training institutions to incorporate food security and nutritional elements into their training programmes.
3. Encourage tertiary training institutions to incorporate food security-related units in the training courses they offer for teachers to ensure graduates are well prepared to teach related subjects in secondary schools and technical and vocational training colleges in the region.

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