

Towards a Food Secure Pacific



DRAFT Framework for Action on
Food Security in the Pacific
2011 - 2015

SCOPE

This proposed Framework for Action has been formulated 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. Countries and areas included in the scope of the document are American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, 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 and Vanuatu. 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.

DOCUMENT PREPARATION

The themes, strategies and actions within this proposed Framework for Action have been formulated through technical consultation and a series of national food summits. They will be further discussed at a Pacific Food Summit from 21 to 23 April 2010 in Port Vila, Vanuatu. 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) have coordinated the drafting of the Framework for Action.

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).

EXECUTIVE SUMMARY

This document outlines the Pacific approach to food security. Its aim is to support Pacific countries to move towards ensuring that all their 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 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 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. Along with the low consumption of fruits and vegetables, they also contribute to vitamin and mineral deficiencies. Domestic and imported foods are sometimes unsafe (old or contaminated food), leading to food-borne illnesses and, at a national and regional level, compromising the ability of Pacific food products to meet export standards.

Environmental and economic 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.

Urgent action to influence policies, environment, organizations and individuals involved in contributing to food security is needed. 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 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 six 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; and a food security information system.

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 the 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 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 all involved in improving food security paying particular attention to the needs of infants and vulnerable groups. 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 it possible to make easy, enjoyable, exciting healthy choices .

The final theme (**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. Often information is available that can be informative for improving food security, but this new knowledge is not often shared or linked with other information 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.

Food is central to Pacific life. Not all the answers to the challenges we face are apparent. 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 the Pacific Food Summit and this document stimulate discussion on food security and encourage creation of innovative solutions.

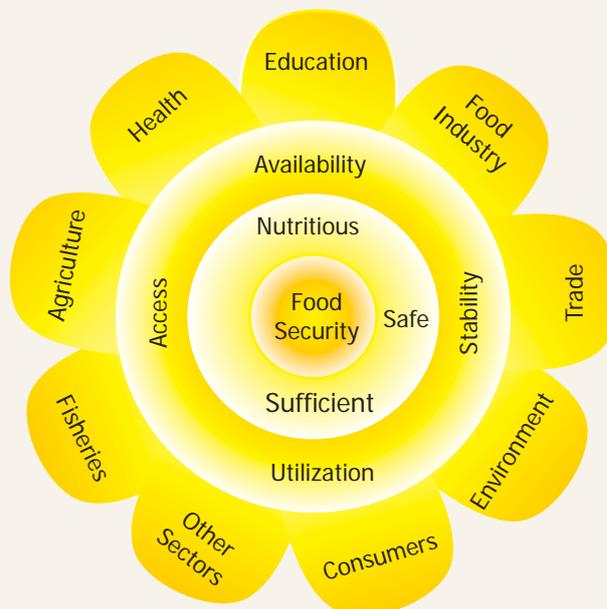
BACKGROUND

Food security is a fundamental health and development issue in the Pacific. Diverse factors operating at multiple levels challenge the Pacific countries capacity 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 agriculture, the environment, trade and health 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; the media environment influences 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 food (is there food to eat?), accessibility of food (can it be purchased or grown?), stability (are there risks of losing access to food due to economic or environmental shocks?) and the use of food (can the food be used to meet dietary (is it nutritious?), and health (is it safe?) needs 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 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.

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. The increasing reliance on imports to meet the demand for food has heightened the Pacific's susceptibility to food and fuel price levels¹. There has been a steep rise in food prices in recent years. Though prices since have declined, real food prices 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 slowdown².

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. Any rise in staple food prices is likely to impact negatively on food security. Future food and oil price hikes are expected to increase the vulnerability of the poor and low-income households. 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.

¹ *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.

² 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. 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.

The shift from traditional staples to processed foods in the Pacific has been exacerbated by mass media advertising, commercial marketing and promotional activities. These activities shape popular perceptions about the acceptability and attractiveness of imported foods, often to the detriment of traditional foods of higher nutritional value. Expert opinion predicts that these and as yet unknown external challenges that impact on the food system will further threaten food security unless effective action is taken now.

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 placing Pacific populations at greater risk of noncommunicable diseases (NCDs), vitamin and mineral deficiencies, malnutrition and food-borne diseases.

Unhealthy foods and eating patterns are a major factor contributing to food-related chronic disease and mortality in the Pacific. Consumption of high-fat, energy-dense food contributes to obesity. With rates of 40% and higher in many countries, the people living in the Pacific have some of the highest prevalence rates of obesity in the world³. Levels of hypertension are also high throughout the Pacific and obesity and hypertension are major risk factors for diabetes, heart disease, stroke and cancer.

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 surveyed³. 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 old⁴. 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 Pacific⁵.

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 morbidity in many countries of the Pacific.



3 STEPS Reports of Fiji, Nauru, American Samoa, Tokelau, Marshall Islands, Federated States of Micronesia (Pohnpei) and Kiribati. (2005-2010)

4 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)

5 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 food insecurity⁶. 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, food insecurity 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 recent 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”.

Multisectoral call for action

Food security underlies the vision of “Healthy Islands” articulated in the Yanuca Island Declaration of 1995. 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. This requires multi-party and multisectoral action.

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 Noncommunicable 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

6 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.

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 (see box). 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 that they will continue to provide leadership in working with their communities and development partners to address food security.

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). This was followed by a meeting that looked specifically at opportunities for rice fortification to address vitamin and mineral deficiency (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 multisectoral 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 that will 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 proposed Framework for Action has been prepared to lay out the vision for improved food security in the Pacific and to guide future action.

A PROPOSED 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 food to eat?
2. Access to food. Can food be purchased or grown?
3. Stability of food systems. Are there risks of economic (price surges) and environmental (climate variability) shocks that jeopardize 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. The adoption of a coordinated multisectoral approach

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

Multisectoral 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 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 the declaration of the World Food Summits of 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 gender and race, can influence differential health outcomes from food insecurity. 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. 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 systems 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 six themes:

Themes:

1. Leadership and cooperation
2. Regulatory frameworks, enforcement and compliance and public-private sector collaboration
3. Enhanced and sustainable production, processing and trading of safe and nutritious local food
4. Protect infants and vulnerable groups
5. Consumer empowerment and mobilizing partners
6. Food security information system

Theme 1: Leadership and cooperation

Expected outcome: Strong leadership and effective multisectoral 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 on food security.
3. Seek engagement of all stakeholders from public, private and civil sectors.
4. Secure adequate funding and resources regionally and nationally 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 multisectoral 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. Agreeing to this Framework is the first step in that process.

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. Seeking 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 food security (champion).
2. Report annually on food security to the Pacific Island Forum leaders.
3. Seek endorsement of the Framework for Action by leaders.
4. Seek integration of the Framework into the Pacific Plan regional policy structure.

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

1. Strengthen or establish a multisectoral food committee 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 for Action, including a dedicated facilitator role with a Council of Regional Organizations in the Pacific agency and a high level multisectoral 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 coordinating committee.

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. Seek financial assistance from aid and development partners for establishment and maintenance of a regional partnership initiative.
2. Seek international recognition for the Framework and regional partnership initiative.
3. Seek financial assistance from aid and development partners for implementation of the Framework for Action.

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 and harmonize legislative frameworks in order to protect consumers (from vitamin and mineral deficiencies, NCD risks, food-borne diseases) and facilitate trade based on internationally recognized standards and trade agreements.
2. Strengthen capacity of the public sector to effectively monitor and enforce the implementation of food safety and quality legislative frameworks.
3. Effectively involve the private sector in formulation of legislative frameworks and strengthen their 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 and harmonize legislative frameworks based on internationally-recognized standards and trade agreements in order to both protect consumers and facilitate trade.

Nationally:

1. Review and modernize food laws, where necessary, to ensure legislation takes a production-to-consumption approach and is risk-based.
2. Strengthen participation in international food standards by enhancing the availability of national food safety data, building regulatory and food science expertise within countries and actively participating in Codex committees.
3. Require the fortification of wheat flour, noodles, rice, salt and cooking oil, as appropriate, to better address micronutrient deficiencies.

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 regional groups, including the Pacific Food Safety and Quality Legislation Expert Group and the Pacific Fortification Partners Group, in sharing information and providing expert advice relevant to food legislation and fortification.
3. 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 capacity of the public sector to 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 training.
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.
3. Upgrade food analysis capacity, including facilities, equipment and technical, financial and human resources, as required.

Across the Pacific:

1. 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.
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. 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 public-private partnerships to achieve a gradual population-wide reduction in dietary salt consumption in the Pacific.

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

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

Strategies

1. 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 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 periurban 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 the 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: Strengthen policy, information, legal and regulatory frameworks for sustainable production and trade of products of agriculture, aquaculture, forestry and fisheries.

1. Strengthen participatory, evidence-based policy formation processes that build resilience, sustainability, diversity and food security concerns into agriculture/fisheries' policies and strategies and Improve integration with other sectoral policies, in particular health, trade, environment, energy and education
2. Increase opportunities to market and promote local foods ("Go local" – 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 as well as 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, nutrition, food security and rural development.
5. Encourage involvement of youth in agriculture and agriculture-related activities.

Strategy 2: Increased 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 periurban 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 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.

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

1. Increase catches of offshore tuna and related species by coastal fishermen to substitute for reef fish and other inshore catches.
2. Increase availability of tuna and related species from industrial fisheries on the local market without unduly impacting on the livelihoods of small-scale fishers.

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

1. 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.
2. 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 of agriculture and fisheries products on 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 (includes reduced postharvest losses and improved quality).
3. Strengthen the capacity of farmers' organizations 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.

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

1. Implement an appropriate mix of community-based and national management measures to conserve coastal fisheries resources and monitor their effectiveness.
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, monitoring and disaster risk management.
6. Formulate integrated water resource management plans which 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 food insecurity

Strategies:

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

1. Identify all populations vulnerable to food insecurity and ensure that all interventions reach/include these groups.
2. Promote initiation and exclusive breastfeeding and 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 the disabled during and post emergencies.
6. Establish community resilience and coping mechanisms to protect against adverse effects of climate change and natural disasters.
7. Promote and implement comprehensive strategies to limit population growth.

Rationale

Effective policies and strategies to enhance food security must take into account the needs of those who are already food insecure and those vulnerable to food insecurity. Because of physiological needs, pregnant women, infants, children and adolescent girls are vulnerable to food insecurity. Because of limited access to secure food, the urban poor, rural landless and people affected by disasters and susceptible to NCDs are also vulnerable.

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.

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.

Potential Actions

Strategy 1: Identify all populations vulnerable to food insecurity and ensure that all interventions reach these groups.

1. Provide technical support to identify and profiling vulnerable population groups.
2. Advocate for all appropriate interventions to reach all identified vulnerable groups.

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

1. Make all hospitals mother-and-baby friendly to support infant and young child feeding.
2. Adopt and 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 a national plan for the Code's implementation.
4. Establish a regional pool of external assessors for mother-and-baby friendly hospital initiatives.

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 are conducive to exclusive breastfeeding and promote healthy lifestyles and better management of NCDs.
3. Support and incentivise the private sector to undertake food fortification and marketing and ensure that foods are distributed with clear and adequate nutrition labelling.

Strategy 4: Establish social protection mechanisms for the poor.

1. Advocate and provide technical support for country-driven social protection mechanisms.

Strategy 5: Meet food and nutrition needs of pregnant women, children, lactating mothers, the elderly and the disabled during and post emergencies.

2. Undertake micronutrient supplementation and deworming of pregnant women and children, where necessary.
3. Establish safety nets for identified vulnerable groups, including during and after emergencies.

Strategy 6: Establish 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 as well as adaptation.

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

1. Identify specific and appropriate health and population policies and actions to address population growth.

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 strengthened 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, enjoyable exciting and everywhere. 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 and make recommendations for improvement.
3. Improve nutrition education and quality of food available at schools. Support schools to implement a nutrition policy and to include or strengthen nutrition, health and agriculture in the curriculum.
4. 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.

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

1. Establish a regional advocacy function within the regional partnership arrangements to coordinate and implement sustained advocacy on food security and incorporate food security advocacy within and through existing 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.

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. This builds on current work in countries and includes government sectors, civil societies, corporate organizations and churches.
3. Integration of new programmes with existing campaigns and programmes.

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

1. Strengthen school feeding programmes.
2. Development of 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 and comprehensive view of food security in the Pacific, encompassing health and nutrition status, food prices, transport costs, land use, demographic trends, socioeconomic indicators, food production, food trading and food consumption information.
2. Modelling of economic, social and environmental impacts to inform government policy-makers about the value of investing in food security interventions.
3. Build the human and technical capacity in countries and in the Region to collect appropriate data, conduct analysis and use this information in a timely and cost-effective manner to guide policy and programmes.

Rationale

To improve food security, we need information from numerous sources so we have a more complete understanding of the current situation and where additional efforts are required. 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 survey and monitoring so that we have better evidence to inform policy decisions and to provide information for all actors involved in food security to understand the impact their actions are having. Risk factors to food insecurity 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 insecurity issues in the Region.

Priority attention must be given to developing learning resources which are appropriate for country and regional needs and assist countries to improving the targeting and implementation of programmes to reduce food insecurity and vulnerability.

Potential Actions

Strategy 1: Building on existing information and monitoring systems to provide a timely and comprehensive view of food security in the Pacific, encompassing health and nutrition status, food prices, transport costs, land use, demographic trends, socioeconomic indicators, food production, food trading and food consumption information.

1. Establish food security indicators and a mechanism for monitoring food insecurity and vulnerability risk factors at the national level, including a medium-term warning system on climate change impact on agriculture and fishery productivity.
2. Share information about food security and vulnerability with other countries and areas in the Pacific.
3. Build on or create tools to assess the availability and affordability of food and agricultural products at the household level (e.g. household income and expenditure surveys).
4. Integrate nutrition and food security indicators into existing population-based surveys (undertake data collection based on international standards and appropriate sampling strategies, support population-based surveys with rapid surveys and ensure sampling of vulnerable populations).
5. Through intersectoral cooperation, keep the food security situation at a country or territorial level under continuous review for early and effective action-oriented interventions.
6. Create and use tools for targeting and implementing programmes to reduce food insecurity and vulnerability.

Strategy 2: Modelling of economic, social and environmental impacts to inform government policy-makers about the value of investments in food security interventions.

1. Build economic models that use country data to estimate the cost-benefit in investing in food interventions to protect the health of populations and engage countries to use these for evidence-based decision-making.
2. Communicate food security and nutrition information to all concerned stakeholders, including policy-makers, planners and the private sector.
3. Create and implement tools that are useful for evaluating programmes to reduce food insecurity and vulnerability.
4. Review and assess the effectiveness and impact of past interventions to improve food security and use best practises in the design of future interventions.

Strategy 3: Build the human and technical capacity in countries and in the Region to collect appropriate data, conduct analysis and use this information in a timely and cost-effective manner to guide programmes.

1. Identify universities and experts regionally and internationally to provide advice about food security improvements.
2. Provide technical assistance to the review and assessment of existing national food security-related databases and the establishment of mechanisms to monitor food insecurity and vulnerability risk factors.
3. Support the sharing of food security, nutrition and vulnerability information among countries and areas in the Pacific.
4. Support the creation of learning resources to assist countries and areas in targeting and implementing food security programmes and strategies.
5. Support updates of the OCEANIA Food Composition Tables.

ACKNOWLEDGEMENTS

Cover picture courtesy of Secretariat of the Pacific Community. The inputs of a wide range of people for the drafting of this framework are acknowledged.