

**SECRETARIAT OF THE PACIFIC COMMUNITY**  
**THIRTY-EIGHTH MEETING OF THE**  
**COMMITTEE OF REPRESENTATIVES OF GOVERNMENTS AND ADMINISTRATIONS**  
(Noumea, New Caledonia, 13–16 October 2008)

*REGIONAL POLICY AGENDA - INCREASED FOCUS ON FOCUS MEMBER PRIORITIES*

**AGENDA ITEM 3.1 – FOOD SECURITY IN THE PACIFIC**

(Paper presented by the Secretariat)

**EXECUTIVE SUMMARY**

1. Food security means that all people at all times have physical, social and economic access to sufficient safe and nutritious food to meet their needs for an active and healthy life. Food security is central to human development and to many of the major human rights treaties.
2. Several Pacific Island countries and territories (PICTs) are now net importers of food. Agricultural productivity and coastal fisheries production have stagnated and are not keeping pace with population growth. At the national level, Pacific Islanders are generally more than able to meet their minimum calorie requirements. But the effects of rapid population growth, rising global food and fuel prices, climate change, increasing rural–urban migration, loss of traditional knowledge, and high consumption of low-quality imported food have combined to create an unprecedented threat to food and nutritional security in the Pacific.
3. Diets that include a high proportion of imported food with little nutritive value are causing or contributing to escalating rates of non-communicable diseases (NCDs), malnutrition and micro-nutrient deficiencies. This imposes significant direct health costs and indirect costs, through lost working days, on PICT economies.
4. Forum Leaders have recognised the threat that food insecurity poses to the future well-being of people across the region and have prioritised action on food security under the Pacific Plan. In particular, the Niue Communiqué: (i) recognised that high food prices provide a strong incentive to increase Pacific food production, and called on all countries to give priority to increasing this production; (ii) 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; (iii) called on regional technical agencies to assist in supplementing national capacity in these areas by assisting in research and the development of more robust national policies and practical responses; and (iv) called on the Forum Secretariat and SPC to explore avenues for intra-country trade in locally grown food commodities.

5. Addressing the threats to food security in the region requires a multi-sectoral approach that involves the ‘whole of society’ and ‘whole of government’. Priority actions for government institutions (the agriculture, fisheries, environment, customs, finance, community affairs, culture, women, youth, education and health sectors), the private sector and civil society include boosting local production of crops and fish; strengthening infrastructure for food distribution; reducing the burden of higher food prices; providing incentives for economic growth; diversifying production systems to adapt to climate change; developing urban agriculture; and raising awareness of the benefits of a nutritious diet and consumption of local produce.
6. Failure to immediately implement long-term strategies to address the threats to food security will result in worsening health outcomes, loss of productivity and rising import bills.

## **RECOMMENDATIONS**

7. CRGA is requested to:
    - i. support the priority given to addressing food security by the Forum Leaders in their Niue Communiqué;
    - ii. recognise the importance of a multi-sectoral approach and encourage a ‘whole of society’ and ‘whole of government’ approach to providing food security;
    - iii. support the work SPC is leading to assist members to address the food security challenges they face across a range of sectors; and
    - iv. encourage development partners to provide additional support to strengthen the capacity of SPC programmes to assist members to achieve food security by adopting the strategies outlined in this paper.
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## FOOD SECURITY IN THE PACIFIC

### Purpose

1. The purpose of this paper is to highlight emerging threats to food security in the Pacific, the strategies that countries and territories can implement to improve food security, and the implications of failing to take immediate action.

### Background

2. Food security means that all people at all times have physical, social and economic access to sufficient safe and nutritious food to meet their needs for an active and healthy life. Food security is central to human development and to many of the major human rights treaties.<sup>1</sup>
3. Food security can be met through local subsistence and market production of nutritious staples. It can also be achieved through imports of suitable food by PICTs that are able to generate enough income to pay for the food needed. A country can be a significant importer of food, but provided it has a stable source of revenue to finance these imports (e.g. export earnings), it can enjoy a high degree of food security. However, global monopolies tend to control most aspects of the agri-business supply chain, from agricultural inputs to supermarket outlets. This favours the production of cheap, low-quality products, so imported food tends to have less nutritional value than locally produced food.
4. PICTs have generally managed to achieve food availability except at times of major natural disasters. But this situation is changing – several PICTs are now net importers of food, in part due to the stagnation of agricultural productivity and coastal fisheries production as a result of declining investment in these sectors.<sup>2</sup> In addition, the effects of rapid population growth, rising global food and fuel prices, climate change, increasing rural-urban migration, loss of traditional knowledge and increasing consumption of low-quality imported food have combined to create an unprecedented threat to food security in the Pacific. Where food insecurity exists, allocation of food within the household can leave particular individuals, such as women and children, vulnerable. When households face food shortages, women are usually the last to eat and are prone to nutrient deficiencies as a result.
5. Households in urban areas are particularly vulnerable to the effects of rising food and fuel prices. An estimated 1.3 million people (mid-2008) in PNG living in urban centres or in non-village rural locations do not have good access to land or coastal waters to produce food. A further one million rural people in PNG live outside the cash economy and are particularly disadvantaged and poor. Many people living on the Guadalcanal Weather Coast in Solomon Islands or in parts of Tanna in Vanuatu are in a similar situation.

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<sup>1</sup> Including the Universal Declaration of Human Rights, International Covenant on Economic, Social and Cultural Rights, and Convention on the Rights of the Child.

<sup>2</sup> Based on partner data from UN COMTRADE Statistics, in: World Bank, 'Who are the net importing countries?'. Policy research working paper 4457.

6. The large majority of Fiji's population are also worse off as a result of the global food crisis. This includes urban and peri-urban dwellers who represent almost 90,000 households and 50% of the population, and sugar-cane farmers and labourers, representing around 22,000 households and a further 11% of the population, who face declining incomes and grow little of their own food.
7. The populations of Polynesia have no significant export earnings from which to finance imports and are heavily reliant on remittances from overseas. Atoll small island states are at greatest risk of food insecurity caused by rising prices. These PICTs are particularly adversely affected due to their lack of land and water, poor soils and high population density. They depend heavily on imported food but have negligible export earnings to cover the cost.
8. Diets that include an increasingly higher proportion of imported food with little nutritive value are causing or contributing to escalating rates of non-communicable diseases (NCDs), malnutrition and micro-nutrient deficiencies. NCDs include cardiovascular diseases (heart disease, stroke), cancer, diabetes, hypertension and respiratory diseases. The total disease burden estimated for low to middle income countries in the western Pacific region (including PICTs), measured as lost disability-adjusted life years (DALYS), was dominated (37.3%) by cardiovascular diseases and cancer. The consequences of malnutrition and micronutrient deficiencies (especially iron deficiency anaemia and Vitamin A and iodine deficiency) are poor growth, loss of intellectual capacity, and infant and maternal morbidity and mortality. Iron deficiency anaemia is also associated with reduced productivity and is linked to childhood mortality and morbidity.

#### **FOOD SECURITY RECOGNISED AS A REGIONAL PRIORITY**

9. In the Niue Communiqué, Forum Leaders recognised the threat that food insecurity poses to the future well-being of people across the region and prioritised action on food security under the Pacific Plan. In particular, the Communiqué:
  - i. recognised the opportunities that high food prices offer to increase Pacific food production, and called on all countries to give priority to increasing this production;
  - ii. 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;
  - iii. called on regional technical agencies to assist in supplementing national capacity in these areas by assisting in research and the development of more robust national policies and practical responses;
  - iv. called on the Forum Secretariat and SPC to explore avenues for intra-country trade in locally grown food commodities.

10. Pacific Ministers of Agriculture and Forestry at their recent meeting in September 2008 welcomed the decision of the Forum Leaders and recognised the differences within the region in terms of vulnerability to food insecurity. SPC and other agencies were urged to reflect these differences in their support with a wide range of responses from targeted investment to strengthened public-private sector partnerships. The importance of agro-biodiversity, traditional crops and production systems and customary food security mechanisms were also emphasised.

**Critical food security challenges facing the region:**

11. **Rapid population growth:** Populations are projected to grow at an annual rate of 2% in Melanesia, 1.84% across Micronesia, and 0.7% in Polynesia over the next few years. This translates into around 180,000 more people in the region each year between now and 2011, equivalent to the combined populations of Kiribati, Marshall Islands, Palau and Nauru. If growth continues at this rate, the region's population is expected to double in 36 years.
12. Urban populations in many PICTs are growing at an even faster rate – they are expected to double in 25 years throughout Melanesia. This will lead to overcrowding in many Pacific towns, and in some cases, to the type of population densities usually associated with urban poverty.
13. The effects of population growth on food security in the Pacific are clearly evident in the fisheries sector, where fish provides 50–90% of dietary animal protein in rural areas and 40–80% in many urban centres.<sup>3</sup> To supply the recommended amount of fish needed for good nutrition, or to maintain traditional patterns of fish consumption, access to another 115,000 tonnes of fish must be provided across the Pacific by 2030.<sup>4</sup> The problem is that coastal fisheries, which are currently used to provide most of the fish for food, do not have the capacity to sustain the catches required to deliver this quantity of fish.
14. In Papua New Guinea, where sweet potato is the major staple for rural households, production will have to increase by around 2 million tonnes by 2030 to feed the larger population projected.
15. **Rising global food and fuel prices:** Over the past few years, the prices of imported foods such as grains, meat, dairy products and vegetable oil have risen sharply worldwide. The Pacific has been particularly hard hit. For example, in Kiribati, the price of a bag of rice is up 30% since the beginning of the year and the price of imported food in Solomon Islands went up by 26% between January and July. In Samoa, the value of wheat imports increased by 45% between 2005 and 2007. Speculators looking for better returns than they could get from stocks or real estate have bet on higher food prices, contributing to price rises. The diversion of grain into biofuels production in response to subsidies, particularly in the United States, has also been a significant contributing factor.

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<sup>3</sup> SPC Policy Brief 1/2008, 'Fish and Food Security'.

<sup>4</sup> Bell et al. 2008. Planning the use of fish for food security in the Pacific. Marine Policy (in press).

16. The rising price of food has been compounded by rising fuel and freight costs. Freight costs make up a significant proportion of imported food prices. For example, a packet of Maggi noodles that retails for AUD 0.37 in Fiji sells for AUD 0.70 in Nauru due to high freight costs. Higher fuel prices will widen these differences.
17. Rising prices are eroding real wages and living standards. Lower-income households in particular are facing difficult decisions in balancing food costs with expenditure on other household goods and services, including schooling and health care, which also have long-term impacts on wellbeing.
18. It needs to be acknowledged, however, that the current trends are part of a wider commodities boom that is benefiting many households in western Melanesia. Large numbers of rural households in Papua New Guinea have enjoyed significant increases in farm gate prices, ranging from 39% for cocoa to 231% for copra. A similar situation is occurring in Solomon Islands and Vanuatu. This illustrates the crucial contribution of agricultural exports in contributing to food security, although agricultural commodity prices can be very volatile and commodity booms can be short-lived.
19. **Climate change:** The strength of traditional production systems will be tested by changes in climate, which are expected to have significant impacts on food production in the region (see CRGA 38 Paper 3.2). In the agricultural sector, the combined effects of projected changes in rainfall patterns and sea level rise are expected to reduce yields through stress to crops and loss of productive land. Climate change is also likely to affect the types of crops that can be grown and increase the risk of pests and diseases. Atolls are particularly at risk from increased saltwater intrusion, which will make it even harder to grow food in these harsh environments.
20. Regional and national plans to optimise the contribution of fisheries to food security<sup>4</sup> could be derailed by climate change. Possible specific threats to fisheries include changes to the distribution and abundance of tuna; degradation of coral reefs, leading to a decline in coastal stocks; damage to essential infrastructure for fleets and aquaculture; increased costs to provide better safety for fishing at sea; and difficulties in developing freshwater aquaculture.
21. **Rural–urban migration and loss of traditional knowledge:** Customary land-ownership and coastal fishing rights, and strong cultural norms of sharing and giving, have been important in protecting the most vulnerable in society from food insecurity. Smallholder farming systems have generally proven to be adaptable and resilient in the face of change. These traditional safety nets are lost or greatly reduced when people migrate to urban areas. They are also under threat in some rural areas from the growing importance of the cash economy.
22. In addition, loss of traditional knowledge and skills in harvesting, preparation and preservation of traditional crops has also contributed to poor nutritional outcomes. The Island Food Community of Pohnpei is promoting the consumption of local foods with a *Go Local* campaign and is very active in raising awareness of the nutritional value of local food, including a karat banana variety that is rich in provitamin A carotenoids, which are precursors to vitamin A. Vitamin A helps boost immune systems, protects against infections and is required for good eye health. Despite its ready availability in local crops such as bananas, pandanus and breadfruit, Vitamin A deficiency is a public health issue in Pohnpei and other PICTs.

23. An associated problem is loss of the genetic diversity of crops in the region, which may mean that plant varieties with important nutritional characteristics are no longer available.
24. **Increased consumption of low quality imports:** Even when countries can finance food imports, the poor nutritional quality of many imported food products has contributed to higher rates of NCDs. The high cost of imported foods is exacerbating these problems by forcing low income households habituated to imported foods to switch to cheaper products of even lower nutritional quality.

#### **National and regional priorities for action**

25. **Boosting local production of crops and fish:** Governments should promote local food production systems through educational campaigns and advocacy. Increased primary production and economic growth are urgently needed to provide food security for the region's rapidly growing rural and urban populations. To increase the availability of locally produced fruit and vegetable crops, land use policies must be developed to improve land administration and make more land available for agriculture and stimulate investment.
26. To plan for the additional 115,000 tonnes of fish needed for food security in 2030, PICTs need to (i) improve the management of coastal fisheries to reduce the gap between the fish needed for food security and the fish available, and (ii) then fill the gap by installing low-cost, inshore fish aggregation devices (FADs) to enable subsistence fishers to catch more tuna; by developing small-pond aquaculture; and by implementing regulations that require tuna vessels to land 'discards' and 'bycatch' to provide a low-cost source of fish for urban centres.
27. Declining investment in research for agriculture, fisheries and aquaculture, and extension must be reversed. PICTs must make the most of the genetic diversity present both in and outside the region to improve the nutritional quality of the food produced and strengthen the capacity to produce food despite the challenges of climate change. They must also strengthen biosecurity services to facilitate access to genetic material from overseas. SPC's Biosecurity and Trade team run training on market access requirements and import risk analysis for quarantine officers from across the region. The team is also supporting harmonisation of biosecurity laws to facilitate global and intra-regional trade.
28. **Making agriculture attractive to youth:** The benefits of participating in agricultural and fishing enterprises must be demonstrated to young people to encourage them to take advantage of economic opportunities in these sectors. Schools and other educational institutions need to include relevant information in their curriculums and make the link between local food production and healthy lifestyles. Appropriate training and technical assistance need to be made available to young people regardless of their level of education. Young people can be important agents for change when given education and opportunities. It is important to support and harness youth initiatives to raise awareness of the environmental, social, cultural and health aspects of food security.

29. **Strengthening infrastructure for food distribution:** In many PICTs, unreliable transport and shipping services, and poor marketing infrastructure, constrain the ability of producers in rural areas to supply urban centres. Transport and storage infrastructure needs to be improved to ensure local food crops can reach urban markets. This is true of the highlands in Papua New Guinea and outer islands in general. Suitable storage facilities also need to be constructed in ports where industrial fleets land or trans-ship tuna so that fish unsuitable for canning and export can be sold cheaply to rapidly growing urban populations.
30. **Reducing the burden of higher prices:** Given the small size of their economies, PICTs are forced to accept international prices for many of the commodities they import. In the short term, the options for responding to the current food and fuel price hikes include reducing duty on basic food items and providing immediate relief for those most at risk, e.g. through targeted cash transfers. However, careful analysis and strategies are needed because price controls can undermine domestic production by blocking transmission of higher prices to domestically grown food, which dampens the production response to higher prices.
31. **Providing incentives for economic growth:** The private sector plays a crucial role in stimulating domestic and export trade and providing the employment needed to underpin food security. Governments must ensure that the commercial environment is conducive to private sector growth by reducing the costs of doing business and ensuring that government investment supports private sector development rather than crowding it out. Governments should limit their activities to the provision of infrastructure, research and development, education, extension services and biosecurity services. Given the importance of export earnings in maintaining food security, governments need to identify and prioritise promising domestic and export commodities, and negotiate market access. Organic and fair-trade certification systems provide an opportunity to develop higher value products and can help support export trade at a time when many developed countries are also promoting local production.
32. **Diversifying production systems to adapt to climate change:** Building resilience at a country and community level by creating more options to produce food and livelihoods, including through new forms of agriculture, fishing and aquaculture, will be a key step in managing the risks to food security posed by climate change. Diversifying production systems will help rural communities adapt to climate change because they can switch from systems affected adversely by different environmental conditions to those favoured by the new conditions.
33. The Centre for Pacific Crops and Trees (CePaCT) is establishing a ‘climate change ready’ collection of crop plants, including varieties from within and outside the region that are saline and drought tolerant (See CRGA paper 3.1). Traditional knowledge and practices also have crucial roles to play in assisting rural communities to adapt. These practices can help maintain the diversity of customary food production systems and the use of food preservation techniques.



34. **Developing urban agriculture:** Pacific Islanders living in urban areas are especially vulnerable to food insecurity. Backyard gardening needs to be encouraged to make use of the limited land available to urban households. Even small vegetable plots can help reduce the burden of higher prices on household incomes and improve nutritional outcomes. The Fiji Ministry of Primary Industries has launched a 'Plant 5 a day' campaign to encourage more backyard gardening.
35. **Raising awareness of the nutritional value of local foods:** Many local food crops are highly nutritious. In addition, some are also valued for their medicinal properties. Promoting the nutritional value of these traditional foods is one way of reducing the growing burden of nutrition related diseases. The 'Pacific Healthy Eating Guidelines' for adults promote the consumption of a variety of local foods each day as central to good nutrition. Taro, which is more nutritious than white rice, is a prime example. Taro is an excellent source of energy (for growth and work), fibre (to keep the digestive system healthy), essential minerals such as calcium (for strong bones) and iron (to keep the blood healthy). Swamp taro varieties are also rich sources of zinc, which is an essential mineral for protecting against infections.
36. Although promoting increased production and consumption of locally produced foods is central to addressing nutritional deficiencies, other measures are also needed, such as campaigns to promote breastfeeding, and micronutrient supplementation where there is chronic malnutrition due to lack of sufficient land to produce food. Awareness campaigns are vital in encouraging behavioural change.

#### **Implications of inaction**

37. Failure to immediately implement long-term strategies to address the threats to food security posed by rapid population growth, rising food and fuel prices, climate change, urbanisation, loss of traditional knowledge and the prevalence of low-quality imported food will result in worsening health outcomes, loss of economic productivity and rising import bills. Analysis for nine countries<sup>5</sup> shows that if the value of food imports grows in line with expected population growth, these countries will collectively be spending an additional US \$120 million on food imports by 2030. Financing such expenditure will, for example, require a 79% increase in agriculture, forestry and fisheries export earnings in Vanuatu, and a 10% increase in remittances in Samoa.
38. Without food security, the burden of NCDs will continue to grow. The cost of NCDs in the region is already substantial. For example, 27% of Samoa's total health budget is spent on treating NCDs, 18% in Tonga and 11% in Fiji. Limited access to nutritious food, and poor eating habits, will mean that a large and increasing proportion of the population will develop NCDs leading to an expectation that clinical services will also be scaled-up to meet demand. The distribution of health spending in PICTs is heavily biased towards hospital-based (curative) services and there is a lack of investment in preventative activities. This imbalance between funds spent on curative and preventative medicine often does not make long-term economic sense, although it reflects the immediate wishes of a caring society.

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<sup>5</sup> Cook Islands, Fiji, FSM, Kiribati, Palau, Samoa, Tonga, Tuvalu and Vanuatu.

## **Conclusion**

39. Addressing the threats to food security in the region requires a multi-sectoral approach that involves the 'whole of society' and 'whole of government'. Priority actions for government institutions (the agriculture, fisheries, environment, customs, finance, community affairs, culture, women, youth, education and health sectors), the private sector and civil society include boosting local production of crops and fish; strengthening the infrastructure for food distribution; limiting price rises; providing incentives for economic growth; diversifying production systems to enable adaptation to climate change; developing urban agriculture; and raising awareness of the benefits of a nutritious diet and consumption of local produce.

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17 September 2008