



FOOD AND AGRICULTURE ORGANIZATION
of the United Nations

**Implications of WTO Membership for Pacific
Island Countries on the Food, Agriculture,
Forestry and Fishery Sectors**

REPORT
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LIST OF ACRONYMS

AoA	Agreement on Agriculture
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization
HACCP	Hazard Analysis and Critical Control Point
HTFA	Heat Treatment Forced Air
IPPC	International Plant Protection Convention
IPR	Intellectual Property Rights
ISO	International Standards Organization
LDCs	Least Developed Countries
MTA	Multilateral Treaty of Fisheries with America
OIE	Office International des Epizooties
PACER	Pacific Agreement on Closer Economic Relations
PICs	Pacific Island Countries
PICTA	Pacific Island Countries Trade Agreement
PNG	Papua New Guinea
RMI	Republic of Marshall Islands
SIDS	Small Island Developing States
SPARTECA	South Pacific Regional Trade and Economic Cooperation Agreement
SOPAC	South Pacific Applied Geoscience Commission
SPC	South Pacific Community
SPREP	South Pacific Regional Environment Programme
SPS	Sanitary and Phytosanitary Standards
TBT	Technical Barriers to Trade
USP	University of the South Pacific
WHO	World Health Organization
WTO	World Trade Organization

1. EXECUTIVE SUMMARY

1.1 Overview of Pacific Island Countries (PICs)

The Pacific Islands are a diverse group of countries with a total population of 6.9 million people who share common features such as nearly all of the countries have relatively small populations and therefore limited domestic markets; most of the countries rely on their agricultural and fisheries and other natural resources for food, employment and exports; there is only limited manufacturing in most of the countries and nearly all dependent on imports for most of their production inputs and consumer products (including processed foods).

1.2 Agricultural Sector

Agricultural production remains the core activity in most of the Pacific Islands. The generally fertile soils and favorable climates have allowed most of the countries to be self-sufficient in essential food production. The bulk of agricultural activity is at a subsistence or semi-subsistence level. Pacific island governments continue to give priority in the development of the agricultural sectors particularly as an important source of food and income for a large part of local populations.

However most PICs have eliminated any direct assistance to the agricultural sector making it difficult for farmers at the grassroots level to improve production. Assistance is mainly concentrated on the provision of planting materials, extension services, research on pests and diseases and facilitating the development and marketing of agricultural products.

The share of agriculture to the Gross Domestic Product is declining due to a number of factors and the same is registered for agricultural exports.

The following issues and constraints provide justifications for this decline:

- Limited agricultural land available
- Access to finance for agricultural activities is limited
- Vulnerability to natural calamities and new diseases and pests
- Falling world prices for basic commodities such as copra and cocoa
- High domestic and international transportation costs
- Limited access of remote islands and rural areas
- Limited knowledge on market information
- Increasing barriers and standards imposed by developed markets
- Limited information and knowledge on diversification strategies

1.3 Forestry Sector

Forestry development in the Pacific islands varies between large, medium and small island countries. For large and medium island countries, forestry plays a critical role by contributing significantly to the national economy and to national development. Governments however are still continuing research and product development on highly valued tropical hardwoods and exotic species. The environmental effects of deforestation have led to Governments imposing policies and requirements for the sustainable development of forests in the Pacific.

1.4 Fishery Sector

The total revenue from fisheries has been significant for many countries accounting up to 50% of the national budget in some.

In most PICs there is a growing demand for fish in the domestic market which they find difficult to cope with by just exploiting the coastal/ near-shore fisheries alone. This is due to resource limitations and the artisanal nature of most of the fisheries.

The major strength of most of the PICs is the relatively large, potentially resource rich sea areas with exclusive economic rights, the extent of which may be as high as 3.5 million sq kilometers in some. Even in the case of Samoa, which has a relatively small Exclusive Economic Zone (EEZ), in 2001, the fisheries industry contributed 8.3% to the total GDP.

Undoubtedly access fees are a crucial component of government revenue for many PICs and could exceed the total value of all exports in some Island nations. Except for few vessels targeting live fish, most target tuna. In addition to access fee and employment, the fleets also provide income by way of government levies, transshipment fees, annual fees, import duty on bait, withholding tax, fines, local purchase of goods and services. It has been reported (ADB Pacific Study Series) that a tuna seiner spends US\$ 300-450,000 each time it calls over at a port, depending on the service and nature of facilities required. On the other hand a locally based sashimi long-liner spends US\$ 13,000 on each trip back, a relatively important source of income for PICs considering the short duration of their fishing operations.

Other issues and constraints facing the fisheries sector include:

- High transportation costs to major markets due to remoteness of PICs
- Limited downstream processing due to smallness of domestic markets
- Limited access to markets due to heavy price competition in international markets
- Threats of the long term sustainability of fishery resources
- External pressure for more sustainable fishing practices

1.5 Food Sector

The food processing and manufacturing industries within PICs, where they exist, share the following characteristics:

- Are mainly small in scale and rely on simple technological processes such as drying, cooking, canning, pasteurization and fermentation;
- Export predominantly primary products and/or food products that have undergone minimal value adding or further manufacturing;
- The level of and access to technical knowledge of food technology and quality assurance and skills within the private sector is limited;
- Government sectors lack the technical skills to advise industry on establishing modern production systems, including requirements for ensuring product quality and safety.

In general, food and public health legislation and regulations and industry standards are:

- Outdated and are mostly confined to hygiene and sanitation requirements of food businesses.
- Highly prescriptive and do not take an outcome based and risk-based approach that modern international food regulatory requirements demand.
- Not compliant with internationally agreed principles of food hygiene that require adequate quality assurance systems and including Hazard Analysis and Critical Control Point (HACCP) for processed food products, and good agricultural practice (GAP) for agricultural commodities. The general exception here is the seafood industry of many countries that has developed and implemented HACCP systems in response to export market requirements.

1.6 Trade Policies in the Pacific

The PICs studied have mostly liberalized their trade policies as part of their economic reforms and most still depend on import duties as an important source of government revenue. Some of the issues relating to trade policy development in the PICs include:

- Limited coordination amongst Government agencies in the implementation of trade policies
- Limited involvement of the private sector and civil society in trade policy development
- Governments still depend on customs tariffs as major source of revenue

The PICs studied who are currently members of the Pacific Island Countries Trade Agreement (PICTA) are Cook Islands, Samoa, Tonga, Niue and Nauru. This regional trade agreement provides opportunities for PIC exports as a stepping stone to the multilateral trading system.

Vanuatu, Tonga and Samoa are now processing their applications to become members of the World Trade Organization (WTO).

1.7 The Benefits and Challenges of WTO Membership

1.7.1 Agreement on Agriculture (AoA)

(a) Benefits;

- Access to export markets
- Special and Differential Treatment under AoA
- Access to technical assistance to update legislation and raise capacities and knowledge to implement AoA
- Special treatment in terms of food security for net food importing countries;

(b) Challenges;

- Continuous liberalization by international markets provide a huge challenge for Pacific Island exports in terms of competitiveness
- Increasing price stabilization support is needed by the agricultural producers as world prices continue to decline, this implicates the AoA provisions on domestic support. Although there are provisions under the AoA providing special and differential treatment for developing countries, this may not be the case for acceding countries. This has been the experience of Vanuatu in their accession process where they were asked to eliminate or phase out all domestic support relating to the copra industry.
- Impact on net food importing countries as subsidies in developed markets are reduced
- Limited human and financial resources to administer the Agreement

1.7.2 Agreement on Sanitary and Phyto-Sanitary Measures (SPS) and Technical Barriers to Trade (TBT)

(a) Benefits;

- The benefits of establishing Codex-based food standards within countries, allows them to apply those standards to imported foods. Such measures are justified under the SPS and TBT provisions of the WTO agreements. By enforcing food standards at the border, countries have an accepted mechanism whereby they can legitimately apply inspection strategies and analytical tests to foods, thereby preventing their entry if they are mislabeled, of poor nutritional quality and potentially unsafe. At the moment, any PIC can apply these standards on their own accord provided they have the resources and assistance to implement these. However should one apply to become a member of the WTO they would be asked to apply these standards under the SPS and TBT Agreements. In this case, the PIC could seek assistance for resources to apply such standards.
- The direct benefits to the food industry of these systems are that they will better assure the safety and quality of their products, and satisfy domestic and international food standards requirements.
- The implementation of quality management systems by food businesses, whilst needing investment of resources and technical skills, has been demonstrated to improve efficiency of operations, enhance employee training and skills and commitment to their jobs.
- The demonstration of quality and safety systems also improves consumer confidence and builds bridges to allowing trade on world markets and can help to maintain existing and develop further export markets.
- By becoming a member of the WTO, the above points could benefit PICs through the availability of technical support (from bilateral donors and regional and multilateral agencies) to assist the PICs in the implementation of these Agreements.

(b) Challenges

- The obligation to abide by the SPS and TBT Agreements under the WTO presents challenges for the planning and implementation of domestic laws and regulations within PICs.

- For food products to meet international food safety and quality standards, many developing Pacific countries need to invest substantially in both physical and institutional infrastructure
- Although the SPS agreement requires developing countries to be provided with technical assistance to do this, there is still often a gap between what is needed and what is provided.
- Many countries lack the data as well as the capacity and technical expertise to fully participate in Codex standard setting processes as well as other relevant forums on food safety and or quality issues (e.g. WHO, ISO).

1.7.3 Overall WTO Agreements

(a) Benefits

- Non-trade discrimination and improved market access
- Special consideration for net food importing countries
- Improved national legislation and standards
- Protection of Intellectual Property Rights
- Improved inflow of raw materials at reduced duties

(b) Challenges

- Increasing government costs for accession processes
- Limited capacity and trade expertise in negotiating accession processes
- Loss of Government revenue from tariff liberalization
- Elimination of subsidies and support for domestic industries
- WTO plus demands on acceding countries as experienced by Vanuatu

1.8 *The Future Outlook*

The future of the Pacific requires substantial attention particularly in the development of the agricultural sector, which is the backbone of many Pacific Island economies.

1.8.1 Trade Policies

The future of trade policies for PICs require strong partnership between the Government and the private sectors.

The PICTA provides opportunities to export smaller quantities of products to PIC markets and the latter could be an alternative source of imports.

1.8.2 Agricultural Sector

- Reduced supply capacity constraints
- Strengthen agricultural sector infrastructure
- Reduced duties on raw materials
- Government continuing domestic support to farmers
- Increased knowledge and capacity on regional and multilateral issues
- Trade Facilitation support
- Access to market information
- Participation in multilateral forums

1.8.3 Forestry Sector

Forestry resources in the Pacific are depleting and efforts to improve this sector should focus on the following policy strategies;

- Promotion of reforestation programs with emphasis on high valued timber species
- Development of sound forestry utilization practices

- Compulsory forestry policies and codes to protecting the environment
- Development of sustainable strategies to the harvesting of forests
- Ongoing research and investment on value-added wood products for export markets

1.8.4 Fisheries

- PICs have vast scope for improved, *sustainable income* from their fishery resources provided they are properly managed and not over exploited.
- Training and capacity building in fisheries sector are two areas of special significance to PICs if they were to strengthen their access to international markets
- Regional approach to address the limited airfreight capacity of the PICs for fish exports would improve access to markets.
- The PICs would benefit very much from improved access to up-to-date fish price information and market intelligence.
- Establishment of linkages with international fish trade/ marketing databases such as FAO-GLOBEFISH and INFOFISH would be relevant.
- Harmonization of legislation as applied to fisheries sector has progressed with the growing focus on sanitary and phytosanitary (SPS) principles, including HACCP application and adoption of national standards based on CODEX.
- There is definite scope for fish based convenience foods; fish burgers, cakes and snack foods, which could be marketed through existing channels

1.8.5 Food

- Modernizing food control systems to incorporate risk-based requirements and process control such as HACCP will better ensure public health and safety;
- Improve training and build capacity in modern food control systems for both government and industry and to implement HACCP and preventive food safety and quality systems across food industries;
- Industries and Government need to be proactive in developing and implementing preventive and risk-based food safety and control systems to ensure consumer safety. Such systems will also assist industry efforts to access markets.
- Inspectors need more opportunities for training, particularly in modern food safety systems such as HACCP, which will enhance their inspection and audit abilities, as well as help them educate the food industry and consumers.
- The food and health inspectorate needs to shift away from prescriptive and end product inspection to one that focuses on prevention through process control of specific hazards and auditing of food safety programs and systems.
- Ministries of Health need to engage and work more closely with the agriculture ministries and the food industry to share their collective expertise and identify training needs in preventative systems.

1.9 **Recommendations**

1.9.1 Trade Policies

1. Increased participation of the private sector, non-governmental organizations (NGOs) and civil society in trade policy development;
2. Improved access to market information both at the national and international levels;
3. Coordination amongst Government Departments
4. Regional cooperation
5. Capacity Building
6. Improve transportation links by linking with other sectors (ie: tourism)
7. Access to technical assistance
8. Trade Promotions

1.9.2 Agriculture

9. Strengthening marketing arm of agricultural departments
10. Continuation and increased access of farming systems program

11. Transparent systems of procedures for the allocation of any subsidies to the farmers
12. Organic certification

1.9.3 Forestry

13. Enhance facilitation role of forestry authorities in improving timber and other forest products processing in complying with international standards
14. Assist countries develop and adopt sound forest policies and practices
15. Value added timber products have great potential for forestry in the Pacific.

1.9.4 Fisheries

16. To meet the growing domestic demand for fish, and to cut down on heavy imports of meat and meat products, it would be prudent for the PICs to focus on expanding/ upgrading the domestic fleets to be able to fish in deeper waters and also consider diverting by-catch from off-shore fleets, to the domestic market.
17. In the export sector, PICs could benefit by increasing the supply of prime quality raw material suitable for sashimi / chilled exports by encouraging good handling practices on board (with minimal deck modification) focusing more on quality of fish.
18. By-products from such processes could also serve as the backbone for a domestic food and animal/ fish feed industry, latter through integration with agricultural feed bases such as copra cake, catalysing domestic poultry/ aquaculture industries.
19. By-catch fish and waste/ off-cuts from loining could also be used in the production of convenience foods and snack foods.
20. In rural areas, especially in outer islands, training in fish drying/ smoking, coupled with micro-finance could be a useful approach to create employment and income generation.
21. In order to meet safety and quality requirements in major markets, PICs should lay emphasis on strengthening seafood quality assurance programs and application of good hygienic practices/ good manufacturing practices in tandem with HACCP.
22. The PICs would benefit from improved access to fish price information and market intelligence, useful in the assessment of fees and taxes, litigation and valuation of stocks, planning and execution of fish marketing operations and export-processing.
23. A regional approach which assures a full load-factor could be attractive to air cargo handlers.
24. Though there is considerable export trade with Japan and US, the lack of EU approved facilities in any of the PICs under study has prevented them benefiting from the growing EU market for tuna and tuna products, especially fresh and frozen tuna with an annual growth estimated at between 10-15%. It is recommended than a speedy uniform approach with technical guidance and appropriate support from EU would be urgent need to enable PICs to access to EU market.
25. In the case of PICs, importance of fisheries management to assure sustainability of resources as well as long term food security (and revenue) cannot be overemphasized. While noting the valuable contribution of FFA and SPC by way of fishing effort and related data, mechanisms for speedy dissemination of such data /information to relevant government /industrial bodies is recommended as this would help the PICs to take necessary action to minimize any adverse effects on resources as well as sustainable use to resources.
26. Diverse ecology and pristine conditions which exist in some PICs offer much scope for development of exotic aquaculture species such as giant clam, black pearl, trochus etc.

27 Intellectual Property Rights (IPR) is not an important issue in fisheries just yet. However, it may become more significant with aquaculture and aquarium fisheries if endemic species from the PICs are cultured overseas.

1.9.5 Food Sector

- 28 PICs establish and/or strengthen existing National Codex Committees and under these, establish a food standards working group to assess current legislation in relation to its ability to adopt Codex-based or regionally harmonized food standards.
- 29 Establishing a regional body to develop model food standards for the region that could be adopted as law through each country's food legislation.
- 30 Establishing, through SPC, a regional agreement to facilitate the adoption of harmonised food standards by each country.
- 31 Where not already established (as for example through the WTO accession process) PICs establish Government and industry consultation forums to discuss food safety and quality issues and needs.
- 32 Developing recommendations on capacity building and training needs for both Government and industry and feeding these into national development plans.
- 33 Ministries of Health and Agriculture within PICs jointly address the need for greater expertise in food technology and develop strategies in consultation with FAO to train and maintain skilled personnel.
- 34 That expertise of the food and public health inspection officers within Ministries and Departments of Health is significantly strengthened through training in modern outcomes and risk-based preventive food safety systems
- 35 That expertise in quality assurance and good agricultural practice programs in agricultural sectors is enhanced to underpin food safety and quality in agricultural production
- 36 That food testing and analytical capacity in PICs be strengthened.
- 37 That Government, in consultation with Chambers of commerce and food industry associations, develop further training packages for the food industry in the area of quality assurance and HACCP.

2. INTRODUCTION

The FAO had commissioned this study to analyze the implications of WTO membership for the Pacific Island Countries particularly in terms of food, agriculture, fisheries, and forestry. This study emanated from a request from the Ministers of Agriculture of the Pacific at their meeting in Port Vila in 2001. The Southwest Pacific Agriculture Ministers Meeting in Port Vila, Vanuatu in August 2001 recognized the importance of the global agricultural trade liberalization in the context of the broader economic reform process in the region. The Ministers agreed that the agricultural multilateral dimension of agriculture trade in the region is relatively new and will manifest itself more clearly in the coming years. In this regard, the Ministers requested FAO assistance to undertake a study to analyze the implications of WTO membership for agriculture, fishery, and forestry in the PIC. Such study will provide information to the PIC and enlighten the countries to make policy decisions on agricultural trade and in respect to WTO membership implications. In the above-mentioned meeting it was agreed to present the study during the next Southwest Pacific Agriculture Minister's meeting to be held in April 2003.

The objectives of the study include the following;

1. Review economic and agricultural policies relating to trade in agriculture, forestry, fisheries and the food industries;

2. Analysis of the sectors in terms of past performances, exports, constraints facing the sectors such as market access, meeting quality requirements and resources availability.
3. Comparing the current national policies and performances to the WTO Agreement on Agriculture;
4. Analysis of the continuous issues facing the Pacific Islands in terms of agriculture, fisheries, forestry and food products;
5. Summarizing the threats posed by international markets on Pacific Island agricultural produce, fisheries, forestry and food products;
6. Analysis of implications of WTO membership for the agriculture, fisheries and forestry of PICs
7. Make recommendations to assist Governments, FAO and other regional and bilateral donor agencies to develop programmes that could address issues highlighted by this study.
8. Provide individual country profiles outlining the status of development in the areas of trade, food, agriculture, fisheries and forestry and specifying the issues and recommendations pertaining to each country.

3. METHODOLOGY

3.1 *Desk Review*

The study involved desk research on the general overview of the Pacific island countries and WTO requirements. This review highlighted the implications of WTO membership for the Pacific Island Countries and reviewed the performances of the PICs in the agriculture, forestry, fishery and food sectors. A report on this review was presented to the Southwest Pacific Agriculture Ministers Meeting in Fiji in April 2003, as an information background paper on the study.

3.2 *Country Visits*

The mission team¹ visited Tonga, Vanuatu, Cook Islands, Palau, Marshall Islands, Kiribati, Niue and Samoa and made consultations with the government officials, private sector enterprises and organizations on the economic status of the countries and highlighting any issues pertaining to international trade in the areas of food, agriculture, fisheries and forestry. The team was not able to visit Nauru due to communications difficulty with the officials in Nauru, however the team was able to visit the Nauru High Commission office in Suva to brief them on the mission objectives. The country visits took six weeks and consultations with each country ranged from 1-3 days. A list of persons consulted is in Appendix 2.

3.3 *Draft Report*

The draft report was compiled by the team in ten days, which includes an overall assessment of the benefits and costs to PICs together with individual country profiles which outlines the situation of each economy in the various sectors as well as recommendations for individual countries to consider.

4. THE PACIFIC ISLAND COUNTRIES – AN OVERVIEW

The Pacific Islands are a diverse group of countries with a total population of 6.9 million people.

Geographically, these islands span most of the southwest Pacific Ocean between latitudes 23°S and 10°N and longitudes 135°E and 155°W. Spanning such a vast area and crossing the international Date Line, the islands cover five different time zones, ranging from plus GMT 9 hours to minus GMT 11 hours (for those countries to the east of the International Date Line).

¹ Ms. Margaret Malua, Team Leader, “Agricultural Trade Policy Analyst”; Mr. Scott Crerar, “SPS and TBT Food Quality and Standards Specialist”; and Mr. Subashsinghe, “Fisheries Expert”.

The Pacific Islands are not homogeneous in terms of their history, ethnic make-up and culture. With the exception of Papua New Guinea, the Pacific Island Countries (PIC) are among the world's smallest and most remote states. Each country is distinctive in terms of its land area, population, natural resources, ethnic/cultural diversity and languages.

The PICs have some common features shared across the Pacific Islands, for example:

- nearly all of the countries have relatively small populations and therefore limited domestic markets;
- most of the countries rely on their agricultural and other natural resources (marine, timber, etc.) for employment and exports;
- there is only limited manufacturing in most of the countries and nearly all are dependent on imports for most of their production inputs and consumer products (including processed foods); and
- legislation governing land tenure in each country is based on traditional land-ownership systems. In recent years, however, this has been modified in most of the Pacific Islands to attract and support long-term foreign investment in viable projects.

4.1 Agricultural Sector

4.1.1 Current Situation

Agricultural production remains the core activity in most of the Pacific Islands. The generally fertile soils and favourable climates have allowed most of the countries to be self-sufficient in essential food production. The bulk of agricultural activity is at a subsistence or semi-subsistence level although there is an increasing dependency on imported foods.

Although commercial agriculture continues to decline in terms of contribution to the Gross Domestic Product (GDP) of the island economies, the basic livelihood of most of the PICs populations depend on subsistence or semi-subsistence agriculture. This decline in GDP contribution in agriculture relates to a number of factors including:

- The increasing contribution of other sectors such as distribution, manufacturing, financial services, construction, transport and tourism activities to the GDP has lowered the relative overall contribution of the agricultural sector;
- The effect of natural calamities and falling world market prices has also contributed to the decline in the agricultural contribution;
- The decreasing size of agricultural land from human settlements

Most PICs rely on the export of agriculture-based products although the value of exports has also been declining. Commodities such as copra provide basic income for many small farmers in the islands particularly farmers living in the small atolls such as Kiribati and the Marshall Islands. This continues to be the case even though the world prices have slumped in the last three years. In response to declining world prices for copra and coconut oil, some Pacific island countries have introduced price stabilization subsidies not only to provide a stable income for the farmers but also to encourage the cutting of copra as a source of income for most rural communities.

Table 1 : Table on Percentage of Subsistence in the Pacific (2000 – 2001)

Country	Percentage of Population living in Subsistence/Semi-subsistence	Contribution of Agriculture to GDP
Cook Islands	76%	12%
Kiribati	90%	2%
Marshall Islands	80%	13.3%
Niue	90%	-
Palau	96%	4%
Samoa	70%	14%

Tonga	70%	28%
Vanuatu	80%	14%

Source: KVA Consult 2003 Data

Root crops such as taro, yams and cassava are also contributing to the export sector with taro exports from Samoa recovering from the taro leaf blight disease. Countries such as Tonga and Niue are looking at alternative value added ways such as exporting frozen taro and cassava to New Zealand to address the issues of lower prices, quality and shorter shelf lives.

Some countries have introduced new crops, which yield high value in the international markets. For instance vanilla has been successfully cultivated in Tonga and Niue with the latter concentrating on the organic certification of vanilla plantations. The improvement in the world price for vanilla has given some opportunities for the island farmers to diversify. Other new products that have entered the international markets successfully are the noni juices from Samoa, Tonga and Cook Islands with very little out of Niue. Efforts to further develop noni into by-products as well as seeking organic certification to gain more value added products have begun. Tonga continues to export squash to the Japanese market. Efforts by PICs to export fruits and vegetables using Heat Treatment Forced Air (HTFA) technology have been successful in Tonga, the Cook Islands and now Samoa.

Over the last 20 years a variety of introduced agricultural products have been developed in the Pacific Islands and most of these have thrived in the rich soils and favourable climates. These new agricultural products, mainly catering for the domestic markets, have included ginger, pumpkin, squash, limes, cucumbers, peppercorns, vanilla beans, Chinese cabbages, tomatoes, some temperate fruits and commercially acceptable varieties of pineapples and pyrethrum.

The export of kava, once a key export crop for several PICs has declined drastically due to the ban on kava from the EU markets.

Livestock production in the PICs is limited to the domestic markets except Vanuatu, which successfully exports beef to international markets. In the smaller islands, small scale poultry and pig farms are very common and are geared to producing eggs for local consumption and pork for ceremonial activities.

In terms of agriculture statistics available for national accounts purposes, Governments find it difficult to assess the real contribution of agriculture in value terms as the agricultural sector is mainly exempted from taxes and the only reliable method of measuring the sector's performance is through products exported, sale of produce at the local markets and produce sold to processors.

Table 2 : Main Agricultural Exports by Country (2000 – 2001)

Country	Main Exports	As percentage of total exports
Cook Islands	Fish, Black Pearls, Papaya, Maire, noni	93%
Kiribati	Copra, shark fins, seaweed, fish, sea cucumber, pet fish	100%
Marshall Islands	Copra cake, coconut oil, handicrafts	27%
Nauru	Fish, Phosphate	
Niue	Taro, Honey, Vanilla	100%
Palau	Fish	
Samoa	Fish, Taro, Coconut oil, Desiccated coconut, noni, coconut cream, coconuts, copra meal, bananas	74% (including 68% fish exports)
Tonga	Squash, Vanilla, Fish, Kava, Noni	86% (including 28% fish exports)
Vanuatu	Beef, Copra, Cocoa, Timber, Kava, Coconut oil	51%

Source: KVA Consult 2003 Data

Pacific island governments continue to give priority in the development of the agricultural sectors particularly as an important source of food and income for a large part of local populations. However most

PICs have eliminated any direct assistance to the agricultural sector making it difficult for farmers at the grassroots level to improve production. Assistance is mainly concentrated on the provision of planting materials, extension services, research on pests and diseases and facilitating the development and marketing of agricultural products.

Table 3 : Assistance Provided to Agricultural Sector

Country	Type of assistance to agricultural sector	Access to Finance available
Cook Islands	Facilitating role, extension services, assistance in accessing finance	Commercial banks
Kiribati	Facilitation role, research and product development, marketing and distribution	Development Bank
Marshall Islands	Government pays US\$0.08 cents per pound for copra, mobile extension services, product development, facilitating role	Commercial Banks, Micro-finance schemes
Niue	Plowing service, facilitation role in research, product development, marketing, and extension services	Development Bank
Palau	Farm tractor service, planting materials, vet services, farming systems projects	Commercial Banks, Credit Unions
Samoa	Extension services, research, marketing, product development, facilitation role, price stabilization on copra.	Development Bank, Micro-finance schemes, commercial banks
Tonga	Facilitating role, extension services, technical advise on pesticides etc.	Development Bank, Commercial banks, Cooperative Bodies
Vanuatu	Subsidy on the copra from US\$250-US\$350 per ton, research, product development, extension services, marketing	Commercial Banks, Micro-finance schemes

Source: KVA Consult 2003 Data

4.1.2 Issues and Constraints

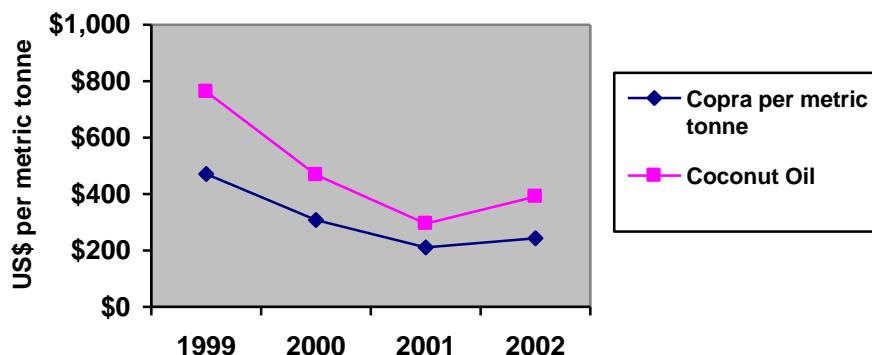
There are, however, some impediments to the expansion of the agricultural sectors in the Pacific Islands. These include:

- i) *Agricultural land available* – the average land area utilized by many farmers is 1-3 acres, which is very small for any commercial plantations. Multi-cropping of crops, vegetables and fruit trees is very common, yielding small supplies and catering mainly for the local market. This is one of the reasons for limited supply capability of exportable products. Access to agricultural land was also identified as a problem such as in Tonga, Vanuatu and the atoll PICs. In Vanuatu for instance about 14% of the population do not have access to agricultural land;
- ii) *Access to finance for agricultural purposes* - because most of the land in the islands are customary or traditionally owned by the society, using land as collateral for financing is a problem. Although there are Development Banks in the islands providing agricultural loans for the farmers, the requirements and interest rates make it difficult to access. Some countries have micro-finance schemes tailored for small farmers and some countries have cooperative societies such as the Tonga Marketing Cooperative providing some financial assistance to its members. The problems associated with access to finance have forced farmers to retain the traditional farming practices. Even the Governments do not have the resources to provide the necessary capital equipment for farming for example in Niue, the Government leases out one plow to be used by the farmers;
- iii) *Natural Calamities* – PICs are very much constrained by unpredictable natural calamities such as cyclones, drought and flood that have hampered the development of agriculture. Tonga,

Vanuatu, Niue and Samoa have had recent experiences with tropical cyclones and the Marshall Islands and Kiribati are presently going through long periods of drought;

- iv) *Diseases and Pests* – PIC's agricultural products also experience diseases and pest issues which constraint the quality and supply of products. For example, tropical fruit flies have disallowed market access for fruits and vegetables to overseas markets such as New Zealand. Diseases such as the taro leaf blight greatly affected the taro industry in Samoa from 1993. Furthermore, the capacity of the PICs to undertake extensive research and to eradicate these pests and diseases is very limited;
- v) *Falling prices on commodities* – coconuts, which are abundant in the PICs, face a continuous decline in world prices in regards to copra and coconut oil. Pacific Island countries heavily rely on copra production for exports to the international markets. The supply and demand of coconut oil in the open market is the determining factor in calculating copra prices in the world market. The decline in world prices for copra were linked to an increase in supply of coconut oil from the Philippines and Indonesia in 2000 where Philippines increased its coconut oil exports by 85% from the previous year. Due to the smallness of the islands and difficulties associated with increasing the volumes of copra, the PICs are price takers rather than price setters. Hence whatever the world price is, islands are compelled to sell at the price offered by their buyers.

Figure 1. Average International Copra Prices



Note: 2002 Prices supplied by Coconut Oil Products Samoa Limited, October 2002
Source: *Coconut Market FOCUS International Bulletin Vol. VI 2001*

- vi) *High transportation costs to international markets* – the PICs, being remotely located in the vast Pacific Ocean, continue to be constraint by the high transportation costs to and from markets. Given the perishable nature of the agricultural products exported, most exporters rely on airfreight space to ship their products overseas. This makes the products highly priced in very competitive markets.
- vii) *Internal transportation* – this is another major constraint facing farmers in the islands where countries do not have efficient internal transportation to ship products from the remote islands to the main ports. This is a particular problem in the Cook Islands where papaya cannot be transported from the outer islands to Rarotonga due to inefficient services. Marshall Islands and Kiribati face irregularity in the supply of copra from the outer islands due to inefficient internal transportation. The costs of internal transportation are also very high which make it unproductive to bring copra from the outer islands when it only obtains a very small return. Farmers in the remote islands have copra as the main income source and the inefficiency in the provision of transportation services has led to an ongoing shortage of basic food supplies;
- viii) *Market information* – access to market information in the export markets continue to constraint the development of exports from the PICs. Information on the prices, the market requirements, the distribution channels, and the level of market demand all provide pertinent information for the PICs in planning exports. Information on markets available within the Pacific region barely exists. For instance, Kiribati exports copra all the way to Bangladesh where Marshall Islands and Samoa need more copra to run their oil mills;

- ix) *Increasing barriers imposed by overseas markets* – PIC's agricultural exports continue to face stringent requirements from the overseas markets. There are also restrictions that are not justifiable especially for some value-added products. For example Australia restricts banana chips from Samoa even as personal consignments. Organically certified plantain bananas from Samoa also face new restrictions into the New Zealand market as a result of millibugs. China did not accept a shipment of copra from Marshall Islands with no apparent reasoning. The recent ban on kava due to liver related diseases in Europe has devastated kava exports from the Pacific.
- x) *Limited information and knowledge on diversification strategies* – most farmers have now shifted their emphasis on organically produced products. The main constraints faced by farmers are the high costs and processes for international organic certification. This is the case in the Cook Islands and Niue where some farmers could not afford the organic certification costs.

4.2 Forestry

4.2.1 Current Situation

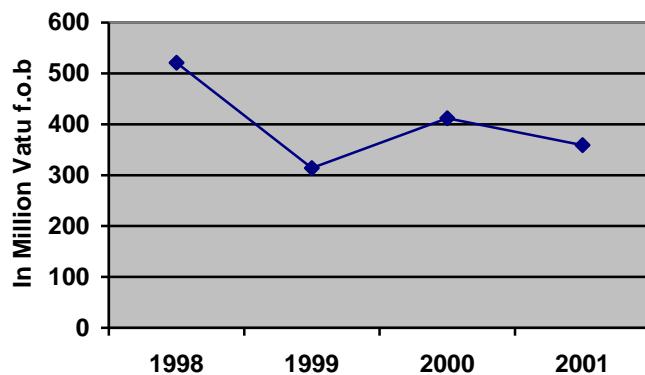
Forestry development in the Pacific islands varies between large, medium and small island countries. For large and medium island countries, forestry plays a critical role by contributing significantly to the national economy and to national development. Governments however are still continuing research and product development on highly valued tropical hardwoods and exotic species. The environmental effects of deforestation have led to Governments imposing policies and requirements for the sustainable development of forests in the Pacific.

Table 4 : Status of Forestry in the PICs

Country	Status of Forestry
Cook Islands	2000 acres Pine Trees planted and 2 acres of sandalwood
Kiribati	Coconut timber for local products
Marshall Islands	There is a high percentage of senile coconut palms with strong interest to utilize as timber.
Niue	Ongoing harvesting of natural forests. Forestry code of practice in force, promoting local value added furniture.
Palau	Existence of small forestry plantations mainly of mahogany. Some milling of old plantings going on but at very small scale.
Samoa	Harvesting natural forests on-going with timber sawmills. Planting exotic species such as mahogany, value added products such as furniture from coconut timber etc.
Tonga	Establishment of pine plantations with planned target of 2000 ha on Eua island. Catering for local market and value added wood products
Vanuatu	Timber one of Vanuatu's main exports but also declining due to high level of requirements from export markets. Impacts of land disputes greatly reduce/limit level of harvesting.

Source: KVA Consult, 2003

Figure 2. Timber exports for Vanuatu 1998 – 2001



Source: Reserve Bank of Vanuatu, *Quarterly Economic Review September 2002*

4.2.2. Issues and Constraints

- i) National codes of logging practice not fully implemented and enforced
- ii) Several countries do not have nationally approved forest policies, and those that have are yet to fully implement their policies
- iii) Limited expertise to meet international requirements – as in the case of Vanuatu where they are finding it difficult to meet the sustainable forests certification principles due to limited knowledge and expertise
- iv) Commitment of landowners to plant trees unpredictable especially those landowners being paid licensing fees by milling companies in Vanuatu
- v) Off-cuts of wood not utilized for value added products and are wasted
- vi) Environmental pressure on logging and sustainable forests – in the case of Vanuatu the Forestry Department and Environment must work together but with limited personnel this has not been fruitful
- vii) Local industries facing competition from cheap imported woods – Vanuatu facing major competition with cheap pines from Fiji

4.3 *Fisheries*

4.3.1. Current Situation

Small Pacific Island Countries are highly dependent on agriculture, fishery and forestry sectors. The total revenue from fisheries has been significant for many countries accounting up to 50% of the national budget in some. During the study, it was noted that most are now laying increased emphasis on the fisheries sector, focusing on domestication of fishing fleets, enhance income from licensing, product and market diversification, resource management, introduction of aquacultural techniques etc. Compared to the agriculture sector, fisheries sector has been somewhat shielded from problems such as global market price slumps and understandably from land-tenure issues, though the sector has its own quota of unique problems and issues, which are mostly related to sustainability and management of resources, and economics and efficiency of capture and marketing. In most PICs there is a growing demand for fish in the domestic market (Table 5), which they find difficult to cope with by just exploiting the coastal/ near-shore fisheries alone. This is due to resource limitations and the artisanal nature of most of the fisheries.

Table 5 : Per Capita Fish Consumption (1990s), Present Population (2003) and the Total Fish Requirement at the Consumption Level in the 1990s

Country	per/capita intake* (1990s)	Population (2003)	Fish requirement** (Mt)
Cook Islands	68	18,400	1,250
Kiribati	182	90,000	16,380
Marshall Islands	61	63,000	3,843

Nauru	50	11,200	560
Niue	62	2,500	155
Palau	108	18,500	1,998
Tonga	35	100,000	3,500
Vanuatu	27	170,000	4590
Samoa	32	170,000	5,440

Source: ADB Pacific Studies Series, TUNA (2001)

** Total fish requirement based on the level of per capita consumption in the 90s.

For example, in 2001 the recorded domestic production of fish in Palau, Tonga and Marshall Islands was 270mt, 521mt and 1758mt respectively, which falls far below the estimated requirement of nearly 2000mt, 3500mt and 3840mt respectively. The demand has made fresh fish relatively costly in many PICs, compared to imported animal products such as poultry. In Palau, for example, imported chicken is marketed around US\$ 0.70/lb upward, whereas most varieties of fresh fish cost US\$ 1.50-2.50/lb. Another substitute for fresh fish is canned fish, which is very popular in almost all PICs as a convenience food. In the face of the falling commodity prices and increasing import bills, it is advisable for the PICs to look at ways of using their fishery resources to bridge the growing domestic demand for animal protein, and to cut down on heavy imports of meat and meat products, the high consumption of which, many believe is unhealthy.

Due to limited coastal resource base and operational limitations, it would be difficult for the artisanal fisheries in the PICs to cope with the growing demand for fish. As a result, many PICs have focused on expanding/ upgrading the fleets to be able to fish in deeper waters or diverting by-catch from locally registered long-line vessels, to the domestic market. In Tonga, such vessels released nearly 520mt of tuna and snapper valued at T \$ 1.5 million to the domestic market in 2001. In Kiribati, the government subsidiary company CPP has planned to sell such by-catch through its own channel of outlets in Betio and Tarawa.

Table 6 : Direct Employment in Tuna Fishing and Processing in PICs (2000)

Country	Total jobs
Cook Islands	77
Kiribati	1,193
Marshall Islands	519
Nauru	21
Niue	47
Palau	36
Tonga	403
Vanuatu	130
Samoa	4,070

Source: ADB Pacific Studies Series, TUNA (2001)

The fisheries sector also has potential for providing considerable direct and indirect employment opportunities in the PICs. Table 6 shows direct employment in the tuna sector alone in 2000.

Tuna is the primary fishery of the PICs. Dependence of many developing countries in the region on tuna resources has led to the UN Conference on Straddling Fish Stocks and Highly Migratory Species to adopt in August 1995 an agreement which binds developed nations to provide management assistance to developing countries, especially Small Island Developing States (SIDS) that depend on the exploitation of living marine resources. Under the provisions of the agreement those SIDS which depend on tuna would qualify for assistance (financial and technical, transfer of technology and consultative) in developing tuna conservation mechanisms and participating in tuna fisheries.

The major strength of most of the PICs is the relatively large, potentially resource rich sea areas with exclusive economic rights, the extent of which may be as high as 3.5 million sq kilometers in some. Even in the case of Samoa, which has a relatively small EEZ, in 2001, the fisheries industry contributed 8.3% to the total GDP.

The resource is mainly constituted of relatively high value migratory stocks of tuna, targeted by purse-seiner and long-liner fleets operating in western and central Pacific waters. Purse-seiner landings has hovered around 900,000mt over the last few years while long-liner fishery, which targets mostly yellow fin and big eye, has stood around 190,000mt.

PICs also enjoy a very distinct coastal reef area, which sustains both reef and deep water species with a relatively high market value. The reef and adjacent deep water areas are mainly fished by domestic or land-based vessels and provides fish for the population and a livelihood for some.

Undoubtedly access fees are a crucial component of government revenue for many PICs and could exceed the total value of all exports in some Island nations. Except for few vessels targeting live fish, most target tuna. In addition to access fee and employment, the fleets also provide income by way of government levies, transshipment fees, annual fees, import duty on bait, withholding tax, fines, local purchase of goods and services. It has been reported (ADB Pacific Study Series, 2001) that a tuna seiner spends US\$ 300-450,000 each time it calls over at a port, depending on the service and nature of facilities required. On the other hand a locally based sashimi long-liner spends US\$ 13,000 on each trip back, a relatively important source of income for PICs considering the short duration of their fishing operations.

However, their growing concern and focus is on sustainability of resources in both offshore and near-shore/reef fisheries, increased recruitment of distant water fishing fleets to the area and the reported continued poor catches and size reduction of some species. There is growing concern in some circles on the recent introduction of super-seiners of 3000-4000 ton capacity to the region, a concern which is understandable as a purse-seine vessel in a single haul can capture enough tuna to match the value of one years exports from some PICs.

4.3.3. Issues and Constraints

- i) *High transportation costs to major markets* due to their distance is a key constraint to product and market diversification. Due to high transportation cost, air shipments have been limited to certain high value products such as sashimi tuna, fresh tuna, tuna loins and high priced reef fish species etc. Airfreight charges from PICs vary from US\$ 1.70/kg to locations such as Honolulu or Guam, which serve as access to US mainland to around US\$ 4-6 to Japanese/EU markets, depending on the route. This has limited the options for the landings to less attractive frozen market or to canneries.
- ii) *Limited airfreight capacity* – The limited number of airlines servicing the Pacific islands also contribute to the limited airfreight capacity for fish exports. In Samoa for instance, this issue has been raised continuously by the fish exporters.
- iii) *Limited domestic involvement* in fishing due to poor fishing capacity and skill levels, compounded by limited access to finance, has prevented PICs from receiving maximum benefit from their fishery resources. The subsistence nature of the traditional fishery and poor access to marketing has acted as a disincentive for such engagement. Hence the focus has been on licensing of foreign vessels to exploit migratory tuna stocks, which has become a very useful income source for the PICs.
- iv) The domestic fleets have mainly focused on near-shore and reef resources. Even though there is considerable effort towards domestication of the deep water fleet, such action has so far had limited success due to *poor access to capital and lack of skilled personnel* even though significant progress has been made in this direction in Samoa and Cook Islands.
- v) *The small size of the domestic market* has also been a disincentive for downstream processing, compounded further by relatively *high production cost*. Relatively *high fuel and labor costs* were noted in many islands. As a result PICs continue to depend on food imports, including fish imports, mainly canned fish. There is much to be desired in the nutritional and product quality of many imports. Even though fresh fish is very popular, accessibility to fresh fish is limited due to *lack of infrastructure* for storage and marketing. The limited range of fishery products perhaps may have contributed to some extent on the over dependence on imported, nutritionally inferior, fatty meats. Life style diseases such as diabetes are a growing problem among some communities where around 15-18% of the population is affected.

- vi) *Limited access to finance* is often cited as a factor, which impedes expansion of the domestic sector. Due to widening income deficits as a result of falling exports and increasing imports, many PICs have become increasingly dependant on revenue from vessel license fees to narrow the gap, rendering the availability of funds for development of the fisheries sector to be limited.
- vii) *Market accessibility* for fisheries products from PICs has become difficult due to heavy price competition in regional markets and traditional markets as well as specific *technical/ quality requirements* imposed by some target markets. Dearth of *trained manpower* and *institutional capacity* has hampered PICs ability to address some of these requirements, especially quality requirements which involves specific tests and detailed records. The EU requirement of a designated *competent authority* is not available, for products to have access to EU market.
- viii) The biggest challenge faced by the PICs is the long term sustainability of their resources. In spite of the rapid expansion of fleets operating in the region, landings have remained somewhat relatively static. Faced with depleting yellow fin and big eye resources, some fisheries have targeted albacore lining at lower depths. Recruitment of super-purse seiners to the region has raised concern among some. Uncontrolled recruitment of vessels to the region could thus affect the long term viability of fisheries in the region with serious effects to PICs.
- ix) There is concern among environmental and other lobby groups on sustainability and status of Pacific tuna fisheries and fishing practices, and the overall benefit to the PICs and their populations at large. It is also believed that the increase in population in many PICs, estimated at 2.2% per annum, would put pressure on coastal and reef resources. To satisfy the growing demand for fish the countries have to either increase imports or focus more on increasing the local fishing effort, the latter being the more plausible approach for the PICs. Opening up of traditional markets such as New Zealand and Australia under WTO would undoubtedly further marginalize the trade of PICs with these countries.
- x) There is also concern on the declaration of waters adjacent to PICs as a whale sanctuary. Losses to fisheries landings/income as a result of the sanctuary to toothed whales/ pilot whales have been variously estimated at Tala \$ 5 million(US\$1.7 million/ annum in Samoa, F\$ 20 million in Fiji and 40% of the catch in PNG. There is growing concern whether such cohabitation could lead to environmental groups sensitizing consumers to avoid tuna from such waters, even though fisheries activities have had no negative impact whatsoever on the whale populations. Intellectual Property Rights (IPR) is not an important issue in fisheries just yet. It may become more significant with aquaculture, and in aquarium fisheries if PICs endemic species are commercialized and cultured overseas.

4.4 Food Sector

4.4.1. Current Situation

The food processing and manufacturing industries within PICs, where they exist, share the following characteristics:

- Are mainly small in scale and rely on simple technological processes such as drying, cooking, canning, pasteurization and fermentation;
- Export predominantly primary products and/or food products that have undergone minimal value adding or further manufacturing;
- The level of and access to technical knowledge of food technology and quality assurance and skills within the private sector is limited;
- Government sectors lack the technical skills to advise industry on establishing modern production systems, including requirements for ensuring product quality and safety.

4.4.1.1 *Food safety infrastructure – legislation and standards*

PICs are mostly aware of the need to implement comprehensive food safety and quality legislation, regulations and standards, so that they may better assure the safety of the domestic food supply, together with gaining greater access to international food markets. Some countries have started to improve infrastructure in the food safety and quality area through revising food legislation and building infrastructure.

In general, food and public health legislation and regulations and industry standards are:

- Outdated and are mostly confined to hygiene and sanitation requirements of food businesses.
- Highly prescriptive and do not take an outcome based and risk-based approach that modern international food regulatory requirements demand.
- Consistent with internationally agreed food safety requirements, such as quality and safety assurance systems that comply with Codex General Principles of food hygiene. The general exception here is the seafood industry of many countries that has developed and implemented HACCP systems in response to export market requirements.

4.4.1.2 *CODEX Application*

A number of the PIC countries including Tonga, Vanuatu, the Cook Islands and Samoa have established National Codex Committees (NCC) to coordinate and advise their governments on food safety and quality, policy and standards (see Box 1). This is a positive step. However, the Committees, regardless of where the National Codex Contact Point (CCP) or Chair is based, have been relatively inactive and the work of the Committees has not been given sufficient priority. In this sense, in developing food safety and quality standards and policies, there is a need to:

- Work more cohesively, rather than in isolation, giving the work of Codex Committees high priority amongst Ministries and clearly agreeing on respective roles and responsibilities. As an example, Tonga has recently made a decision to give priority to food safety by integrating many of the food-related functions, including the Codex Committee, within the Ministry of Agriculture. This action will have benefits in bringing more expertise under one agency and in improving coordination of food-related policies and strategies.
- Increase consultation and better working relationships amongst Government Ministries, the food industry and its associations.
- Better harness the collective knowledge and skills of all sectors and clearly identify their respective needs.
- Maintain public health outcomes as a central objective in developing food standards. In this respect, Ministries of Health need to play a strong role in the work of the NCC.

Box 1. Current Pacific Island Member Governments of Codex

Eleven Pacific Island countries (including Australia and New Zealand) are members of the Codex Alimentarius Commission:

- Australia
- Cook Islands: NCC est. 1999, no action since then; CCP within agriculture.
- Federated States of Micronesia
- Fiji: NCC est. 1999, last meeting 2000, CCP within agriculture
- Kiribati
- New Zealand
- Papua New Guinea: NCC est. 2001, relatively inactive, CCP within agriculture;
- Samoa: NCC est. 2000, relatively inactive; CCP within health
- Solomon Islands
- Tonga: NCC est. 1999, Cabinet endorsed, little activity, CCP within agriculture
- Vanuatu: NCC est. 2000, regularly active, CCP within agriculture

Source: FAO Sub-Regional Office Apia

4.4.1.3 Examples within PICs of food products meeting technical requirements

There have been notable examples of where countries have established internationally accepted standards in food production:

- Vanuatu has a world-class beef industry with established export markets. This has been facilitated through its compliance with international requirements for disease control, animal slaughter and process control and inspection procedures.
- Samoa leads the region with respect to the development of modern risk-based and preventative legislation and standards for the production and export of seafood products. The system takes a “gate-to-plate” approach to the management of hazards and assurance of quality and presents a model to other sectors and countries (see Figure 10).
- The Cook Islands, Kiribati and Palau have or are actively developing HACCP systems for the export of seafood to satisfy market demands and facilitate the growth of the fisheries industry.
- The Marshall Islands has developed a world-class tuna loining factory, operating under HACCP a requirement that supplies tuna to American Samoa for canning.
- The noni juice industry within the Cook Islands has implemented quality assurance through ISO 9002 accreditation and demonstrates how small niche industries can export competitively by producing quality value-added food products.
- Tonga has developed quality systems for the production of pumpkin squash and vanilla and the vanilla industry here and in other countries (Vanuatu and Niue) is developing certification systems for organic production.

Other food sectors within PICs have been able to comply with importing country's demands for quality and safety requirements through bilateral arrangements. For a number of PIC countries including Tonga, the Cook Islands and Samoa, fresh fruits and vegetables have played a strong role in establishing and sustaining export markets. Export prospects have increased for these commodities through the establishment of high temperature forced air (HTFA) treatment facilities, so that the quarantine requirements of importing countries are satisfied.

Box 2: Model Standards Setting System – Samoa’s Seafood Export Industry

In the 1990s Samoa’s seafood industry suffered high rejection rates in its tuna exports to American Samoa. In addition to this, reports from New Zealand during the same period linked two episodes of histamine poisoning to fish exported from Samoa. The industry recognized that it had to be proactive and develop quality and safety systems for the industry to safeguard its viability and reputation on export markets. The Samoan Seafood Standards Council was developed to guide the establishment of seafood standards and regulations and advise government on their implementation and enforcement. Importantly, the Council was established as a collaborative Government and Industry body that had strong consultative mechanisms with its stakeholders. As a result of this work, new fish processing and export regulations were enacted in Samoa in early 2003 under an amendment to the Fisheries Act (1988). They provide a system for the regulation of processing and trade of exported fish and fish products.

The regulations take a “gate-to-plate” approach to the management of food safety hazards and assurance of quality and present a model to other sectors and countries on how an internationally compliant food safety and quality system can be successfully developed. Trained officers within the Fisheries Department undertake certification of export products and the auditing of export facilities and the Fisheries Department is the established Competent Export Authority.

4.4.1.4 Food safety, enforcement and laboratory capacity

- Overall, health and food inspectors within PICs show good proficiency in knowledge and inspection of general food safety principles such as hygiene and sanitation.
- Industries and Government need to be proactive in developing and implementing preventive and risk-based food safety and control systems to ensure consumer safety. Such systems will also assist industry efforts to access markets.
- Inspectors need more opportunities for training, particularly in modern food safety systems such as HACCP, which will enhance their inspection and audit abilities, as well as help them educate the food industry and consumers.
- The food and health inspectorate needs to shift away from prescriptive and end product inspection to one that focuses on prevention through process control of specific hazards and auditing of food safety programs and systems.
- Ministries of Health need to engage and work more closely with the agriculture ministries and the food industry to share their collective expertise and identify training needs in preventative systems.

4.4.2 Issues and Constraints

For many of the PICs there is still an adversarial situation rather than a collaborative one between government and the industry together with the ongoing internal misunderstandings between key government ministries. Samoa, Tonga and Vanuatu have improved in this area as a result of their WTO accession activities, but in general the following issues need to be given attention in PICs:

- i) Modern food safety and quality systems require co-regulatory partnerships. Standards development needs to be achieved in consultation with industry and other stakeholders, including consumers and strong consultative mechanisms are essential. Government must be able to establish standards, but these need to be feasible and industry needs to be responsible for developing the preventive systems to ensure food safety and quality.
- ii) National Chambers of Commerce and food industry associations need to be more active in voicing their views and their needs to Government and in driving the need for food safety reform.
- iii) The food industry and businesses should be made more aware that it is their responsibility to establish food safety and quality systems and this should be supported in government policies and assistance.
- iv) Where they do not already exist, the governments of PICs need to establish formal mechanisms of consultation for industry and consumers on food safety and quality issues. Collectively, deficiencies in knowledge, resources and technology can be identified and strategies developed to address the gaps.
- v) The integrated control of pests and hazards in agriculture remains a problem in some PICs. This is seen as a particular issue in those countries that cannot afford costly HTFA treatment facilities and have encountered barriers to trade as a result of not being able to demonstrate freedom from pests through establishing monitoring programs. An inability to monitor and

- therefore ensure freedom from pests such as fruit fly has resulted in trade barriers for exports (e.g. taro exports from Kiribati and Niue and limes from Niue).
- vi) The control of pesticide residues is also an area where PICs are potentially vulnerable on world markets. The presence of residues in foods is perceived as a food safety risk and is a common barrier to trade.
- vii) The production of sufficient high quality produce is a major barrier to establishing and sustaining further export markets for PICs. This is particularly the case for Tonga, the Cook Islands and Samoa whose fruit and vegetable resources are considerable but under-utilized.
- viii) Food analytical capacity in most PICs is scant or non-existent. This means that microbiological and compositional assays required to underpin the enforcement of food standards are not performed. Where laboratories exist, they are usually associated with the central hospital and food testing is rarely undertaken due to insufficient resources and a low priority given to food samples. It is unfeasible and too costly to establish new laboratories in most PICs and attempts should be made to enhance existing services where they exist through hospital or water testing laboratories. In doing so, the emphasis should be on establishing basic food microbiological and compositional test capabilities and having appropriately trained laboratory technicians in these areas. In this respect, it is recognized that the capacity building project TCP/RAS/2801 aims to provide training in various aspects of food analysis such as food composition, food pesticides and heavy metals and on the preparation of a database on food composition. This training will develop and enhance the skills of the laboratory technicians in the region in food analytical work and could be a solid basis for the building of further laboratory capacity.
- ix) In most countries, there is little onus on the food business operator to have skills or experience outside that of satisfying general hygiene requirements.

5. TRADE POLICIES IN THE PACIFIC

5.1 Current Situation

The PICs studied have mostly liberalized their trade policies as part of their economic reforms and most still depend on import duties as an important source of government revenue.

Table 7 : Tariffs and implications

Country	Import Duty Rates (average range for food products)	Other taxes	WTO implications
Cook Islands	0-10%	VAT – 12.5%	
Kiribati	0 – 40%		
Marshall Islands	5% – 8%	Gross Revenue Tax – 3% including exports + 4% Local Government tax	
Niue	10% - 60%	Port fees Airfreight - NZ\$20/tonne Seafreight – NZ\$50/tonne	
Palau	0 – 3%	Gross Revenue Tax – 4%	
Samoa	0-20%	Excise on softdrinks, alcohol VAGST – 12.5%	
Tonga	0-25%	Ports& Services Tax – 20% Wharfage – 5% Sales tax on imports only – 5%	5% sales tax on imported goods inconsistent with National Treatment principle Ports & Services tax regarded as normal duty taking duties to more than 40%
Vanuatu	5-50%	VAGST – 12.5%	Most tariffs and export taxes were eliminated during

			Vanuatu's reforms and accession to the WTO
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Source: KVA Consult 2003 (compiled from data collected from PICs)

From the above tariffs, most PICs have liberalized tariff regimes and are already opening up to international trading. Tonga would soon be undertaking a tariff reform liberalization program, which would be more liberal than the current arrangement.

5.2 Issues and Constraints

Some of the issues facing PICs in their trade policies include:

- i) *Limited coordination amongst Government agencies in the implementation of trade policies* – this is a problem in PICs where everything on WTO or trade rests with the trade or commerce ministries. Customs, revenue, planning, and agriculture are not fully consulted on their roles in the development of trade policies;
- ii) *Limited involvement of the private sector and civil society in trade policy development* – some countries do not involve the private sector in the development of trade policies hence when the private sector is consulted on their views on trade, they are usually against the government policies. Furthermore, awareness of the private sector on international trade policies is very limited especially in identifying opportunities arising out of these policies;
- iii) *Governments still depend on customs tariffs as major source of revenue* – the main source of revenue for some countries is from customs tariffs and charges. A reduction in tariff revenues would mean a loss of government revenue for government spending

6. THE WORLD TRADE ORGANIZATION (WTO)

6.1 Basic Principles

The World Trade Organization provides a legal framework of rules to govern international trade particularly to allow the free flow of trade between markets where such rules for international trade are agreed between nations. Basic principles of the WTO include:

- Trade without discrimination, which includes the Most Favoured Nation Clause – member countries should not give more favourable treatment to any member(s) and the National Treatment (members must not treat members differently from domestic producers)
- Market Access – members must reduce tariffs and barriers to allow for the free flow of trade
- Transparency
- Predictable and growing access to markets
- Trade in services

Source: http://wto.org/english/the_wto_e/whatis_e/eol/wto01_14.htm

6.2 Status of PICs in the WTO

There are currently three Pacific Island countries that are members of the WTO which are Fiji, Papua New Guinea and Solomon Islands. Three PICs are currently negotiating their accession process to become members of the WTO, which are Vanuatu, Tonga and Samoa. The following figure presents the status of accession of these countries.

Table 8: Status of Accession of PICs

Vanuatu	Accession completed however Vanuatu Government withdrew their accession from the WTO in 2001 so that the Government could review and assess their commitments according to their status of development.
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Tonga	Tonga applied for WTO membership in 1995 and the first working party meeting was held in April 2001. A WTO Working Committee has been setup in Tonga to oversee Tonga's accession process. Tonga is now processing the bilateral consultations and negotiations with WTO members.
Samoa	Samoa applied for WTO membership in 1998 and the first working party meeting was held in March 2002, together with the first bilateral meetings with WTO members. Samoa is now undergoing bilateral negotiations under the guidance of a National WTO Working Committee.

6.3 The Agreement on Agriculture (AoA) – Provisions and how it relates to PICs

The objective of the Agriculture Agreement is to establish a fair and market oriented agricultural trade system.² This would improve predictability and security for importing and exporting countries alike. The new rules and commitments under the Agreement apply to:

- Market access – various trade restrictions confronting imports
- Domestic Support – subsidies and other programmes, including those that raise or guarantee farm gate prices and farmers' incomes
- Export subsidies and other methods used to make exports artificially competitive.

The agreement does allow governments to support their rural economies, but preferably through policies that cause less distortion to trade. It also allows some flexibility in the way commitments are implemented. Developing countries do not have to cut their subsidies or lower tariffs as much as developed countries, and they are given extra time to complete their obligations. Special provisions deal with the interests of countries that rely on imports of their food supplies and the least developed countries.

6.3.1. The status of PICs in terms of the AoA

The main concessions provided by some PICs is the price stabilization subsidy on copra due to falling world prices. The majority of small farmers in the smaller islands rely on copra as a source of income and the lower world prices for copra has forced governments to assist in the price of copra. With a view to meeting the plunge in the world prices for copra from 1999-2000, the Samoan Government reintroduced a price stabilization for copra in 2001 to encourage farmers to produce copra. An amount of ST\$ 1.5 million tala (approximately US\$ 450,000) was allocated by Government to stabilize the local price of copra. Government has set a minimum producer price and should the price offered be less than this minimum price, Government would top it up. For instance the current price for a metric tonne of copra is ST\$600 in which 10% of this price is the stabilizer.

Market access in terms of exports to the developed markets such as US, New Zealand and Australia are duty free for PICs under the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA) Agreement and the United States Compact Agreement with the Micronesian states of Palau and Marshall Islands. Market access to Pacific islands markets at lower or reduced duty rates is covered under the Pacific Island Countries Trade Agreement (PICTA)³. In terms of imports most PICs have lower tariffs than some WTO members on agricultural products.

The total value of domestic support provided by PIC governments to agricultural producers is insignificant (less than 10% of total production) and most islands rely on technical assistance from donor countries and agencies to support this sector. The support given to the agricultural sector is geared towards addressing food security issues and also providing diversification for income generating activities for farmers. For example FAO is supporting farmers in the remote islands of Vanuatu in growing basic food for subsistence living as well as assisting Niue and other island countries in research and product development of agricultural products suitable for farmers under the Telefood program.

6.3.2. Challenges of the AoA

Pacific Island exports would continue to face many challenges as multilateral liberalization takes place. The main challenges include the following;

² Source: http://www.wto.org/english/docs_e/legal_e/14-ag_01_e.htm

³ As at May 2003, PICTA applies only to Cook Islands, Samoa, Fiji, Tonga, Niue and Nauru.

- i) The islands are already price takers in nearly all commodities sold in the world market given the supply side constraints. Continuous liberalization by international markets provide a huge challenge for Pacific Island exports in terms of competitiveness and Governments are obliged to provide support to the agricultural producers as most Pacific Island countries still rely on agriculture as the backbone for economic development.
- ii) The Pacific islands mainly consisting of small developing and least developed states certainly require special and differential treatment in light of the commitments under the WTO Agreements. Least Developed Countries (LDCs) are currently exempted from all reduction commitments; however this does not apply to acceding LDCs. Acceding LDCs who had been requested to make reduction commitments would be further disadvantaged as the small agricultural industries would have to struggle on their own to develop their produce. The increasing poverty being discussed at any international fora such as the recent World Summit on Sustainable Development reinforces the needs of the LDCs for development assistance from their respective Governments and international donors.
- iii) All PICs studied are net food importing countries relying heavily on imported foods as alternative sources of food. In the past, most Pacific island people relied on agriculture as the main source of food, however with the increasing constraints faced by the agricultural sector, people have shifted their emphasis on imported foodstuffs. Rice has become a stable food in most islands and farmers are even selling produce in the market to get money to buy rice. Other imported foodstuffs that have been adopted as basic foods include tinned fish, flour, chicken, sugar and milk. Should there be a reduction in subsidies in the developed countries, the prices of basic foods would increase. This would greatly impact the PICs particularly in the smaller islands such as Cook Islands, Marshall Islands, Palau, Nauru and Kiribati.
- iv) The Agreement on Agriculture and the requirements for member countries to improve their legislative frameworks as well as WTO administrative requirements⁴ have yet to be fully absorbed by the Pacific Islands as most lack the awareness and human resource capacity to develop their own systems.

6.4 The SPS and TBT Agreements

Protecting human health and ensuring quality in today's global food market is an important challenge, and one that must be addressed through internationally recognized health and food safety systems. Such systems must ensure that consumers are supplied with food that is of high quality and safe to eat, and that their own country's food resources are protected from diseases.

6.4.1. The SPS Agreement

The WTO Agreement on the Application of Sanitary and Phytosanitary (SPS) Measures establishes the basic rules for food safety, and animal and plant health standards⁵. It builds on previous GATT rules to restrict the use of unjustified sanitary and phytosanitary measures for the purpose of trade protection. The basic aim of the SPS Agreement is to maintain the sovereign right of any government to provide the level of health protection it deems appropriate, but to ensure that these sovereign rights are not misused for protectionist purposes and do not result in unnecessary barriers to international trade.

6.4.2. Food Standards, Codex and SPS

The SPS Agreement allows countries to set their own standards, but also states that regulations must be based on science, and that they should be applied only to the extent necessary to protect human, animal or plant life or health. Member countries are encouraged to use international standards, guidelines and

⁴ WTO Administrative Requirements include the submission of Agriculture Schedules outlining the value of all agriculture support measures, setting up and the running of the AoA enquiry points as well as making notifications on any new policies/changes to the WTO Secretariat.

⁵ Sanitary and Phytosanitary measures are measures taken to protect against risks arising from the entry, establishment or spread of pests or diseases, or against foodborne risks (from additives, contaminants, toxins or disease-causing organisms in foods).

recommendations where they exist⁶, and this process is referred to as harmonization. With respect to food, the SPS Agreement formally recognizes the food safety standards, guidelines and recommendations established by the FAO/WHO Codex Alimentarius Commission (Codex). The recognition of Codex standards eliminates the need for each country individually to do its own risk assessment for any given hazard for which a standard exists. If countries adopt national food safety standards that are not more stringent than the Codex standards, and have mechanisms for monitoring compliance among food producers and exporters with these standards, then their food safety measures are presumed to be consistent with SPS provisions.

Box 3 : Codex, SPS and HACCP

Codex now recommends using a risk-based preventive approach to achieving food safety, and promotes the use of formalized risk analysis. An example of an approach is the implementation of the Hazard Analysis and Critical Control Point (HACCP) system. HACCP encourages the food industry and governments to target limited resources to the most critical steps in food production and distribution, rather than having to comply with a long list of product and procedure specifications as has been prescribed traditionally. HACCP often requires reorientation of food safety authorities towards audit and training functions, rather than on physical inspection and laboratory analysis. Although HACCP does not completely eliminate the necessity for final product inspection, the concept of process control is central to national food safety programs.

Most of the WTO member governments participate in the development of Codex standards through the Codex standard setting process. Countries may use measures that result in higher standards if there is scientific justification. The requirement for scientific justification is met by basing a measure on a proper scientific risk assessment or by conforming to a relevant international standard, guideline or recommendation.

The SPS agreement increases the transparency of sanitary and phytosanitary measures. Countries must establish SPS measures on the basis of an appropriate assessment of the actual risks involved, and if requested, make known those factors they took into consideration, the assessment procedures and the level of risk they determined to be acceptable. The SPS Agreement encourages the wider use of risk assessment for the management of food safety and animal and plant health among WTO member governments and for all relevant products. Governments are required to notify other countries of any new or changed sanitary and phytosanitary requirements that affect trade, and to set up offices called "Enquiry Points" to respond to requests for more information on new or existing measures. The systematic communication of information and exchange of information and experiences among the WTO's member governments provides a better basis for national standards.

Countries can become more aware of the technical issues being raised as potential barriers for agriculture and food exports through the SPS and TBT Committees. In this respect:

- Few countries have established SPS contact points.
- The SPS Committee is a forum where trade issues relating to food safety, animal and plant health are raised and discussed.
- By not being actively involved in SPS matters, countries are less aware of emerging issues and more at risk of failing to comply with new requirements.
- PICs should be encouraged to establish SPS contact points and be involved with the goings on of the SPS Committee.

6.4.3. The TBT Agreement

The Technical Barriers to Trade (TBT) Agreement was established at the same time as the WTO in 1995. The TBT Agreement applies to a wide range of technical regulations and product requirements. A technical regulation is defined as a document that lays down product characteristics, or their related processes and production methods, and for which compliance is mandatory. The TBT Agreement also covers voluntary regulations such as industry standards and codes of practice.

⁶ For SPS measures the WTO uses the following international standards for reference: Codex Alimentarius for food safety; Office International des Epizooties (OIE) for animal health; and the International Plant Protection Convention (IPPC) for plant health.

Under the TBT Agreement, member countries have the right to restrict trade for legitimate objectives including human health, the protection of the environment and the prevention of deceptive practices. Technical regulations cannot be more trade restrictive than necessary to fulfill a legitimate objective. The TBT Agreement expressly excludes from its application measures that fall within the scope of the SPS Agreement. Accordingly, a health and safety measure which does not relate to food-borne risks, or risks arising from pests or diseases, will fall within the scope of the TBT Agreement where it meets the definition of a technical regulation. For example, warning statements, nutrient claims, and nutrition information panels on food products are technical regulations that fall under the TBT Agreement.

6.4.4. Challenges in complying with the SPS and TBT Agreements

The obligation to abide by the SPS and TBT Agreements under the WTO presents challenges for the planning and implementation of domestic laws and regulations within PICs. Currently, most nations of the Pacific are not members of the WTO⁷ and hence, in the absence of other trade agreements, are not bound by the rules and provisions in its agreements. In the absence of such international obligations, non-members retain greater flexibility in exercising sovereignty in the passing of domestic laws that affect trade. However, trade restrictive behaviors may expose nations to retaliatory measures by other nations with whom they trade. It should also be remembered that those who do not abide by the rules and provisions of its agreements might influence detrimentally their prospects of future WTO membership.

For food products to meet international food safety and quality standards, many developing Pacific countries need to invest substantially in both physical and institutional infrastructure. While some countries have established policies and strategies for food safety and nutrition, the standards and legislation to implement and enforce the strategies have not been sufficiently developed and/or are lagging behind. Assistance and aid are often needed to bring these up to date with modern food safety and quality requirements.

Although the SPS agreement requires developing countries to be provided with technical assistance to do this, there is still often a gap between what is needed and what is provided. Additionally, many countries lack the data as well as the capacity and technical expertise to fully participate in Codex standard setting processes as well as other relevant forums on food safety and or quality issues (e.g. WHO, ISO).

6.4.5. Benefits of complying with the SPS and TBT Agreements

The benefits of establishing Codex-based food standards within countries, particularly those that rely heavily on the importation of foods can be considerable. The presence of internationally harmonized food standards within countries allows them to apply those standards to imported foods. Such measures are justified under the SPS and TBT provisions of the WTO agreements. By enforcing food standards at the border, countries have an accepted mechanism whereby they can legitimately apply inspection strategies and analytical tests to foods, thereby preventing their entry if they are mislabeled, of poor nutritional quality and potentially unsafe. This can result in greater consumer protection and enhanced public health outcomes, and improve confidence in the food supply.

The development of preventive risk-based food safety and quality systems needs to be driven by a desire of the food industry to ensure food safety and quality. The direct benefits to the food industry of these systems are that they will better assure the safety and quality of their products, and satisfy domestic and international food standards requirements. The implementation of such systems can also have indirect benefits to food businesses and industries. The implementation of quality management systems by food businesses, whilst needing investment of resources and technical skills, has been demonstrated to improve efficiency of operations, enhance employee training and skills and commitment to their jobs. The demonstration of quality and safety systems also improves consumer confidence and builds bridges to allowing trade on world markets and can help to maintain existing and develop further export markets.

6.4.6 Fisheries in the WTO

It is interesting to note that the Agreement on Agriculture does not apply to Fish and Fishery products. Under present agreements, both fisheries and forestry products are categorized under industrial products. Trade in fish and fishery products is covered by the General Agreement on Tariffs and Trade (GATT). Likewise in

⁷ The PICs that are currently WTO members are Papua New Guinea, the Solomon Islands and Fiji.

the current WTO negotiations, fish is part of the negotiations on market access for non-agricultural products.

6.5 Overall Benefits of WTO membership

- i) **Non-trade discrimination** – this important principle of WTO would benefit the PICs where other Pacific members of the WTO treat other countries more favourably than the PICs. For instance Fiji (a WTO member) stands to benefit in any trading arrangement and especially now that most PICs have lower tariffs opening access for Fijian products to enter the PIC markets. Should Fiji decide to restrict products such as copra from Samoa or Kiribati, but at the same time allow copra from Tonga, being a member of the WTO allows Samoa or Kiribati to take this up as it is inconsistent with WTO principles. This could also be a case for another WTO member to impose treat other countries more favourably than others.
- ii) **Improved market access** – PICs currently face trade restrictions from developed markets on certain products without justifiable reasons. For instance banana chips from Samoa are banned in Australia and Marshall Island copra has previously been rejected from China. Being a member of WTO allows the governments to raise such cases with the WTO Dispute Settlement Body. Although the export value derived from such exports would be far less than the costs to Government, the most important aspect is being able to access the market through transparent procedures as well as making a case with the WTO. The benefits to the farmers would also be accrued if access for such products were allowed.
- iii) **As Net Food Importing Countries** – Developed markets are required to acquire special provisions for subsidized products exported to the net food importing countries. Whether or not a small island country becomes a member of the WTO, they would still be affected by the increasing prices due to reduction of subsidies. It is therefore important for a country to be a member of the WTO where such impact could be facilitated under the Agreement on Agriculture especially in the case where food security is concerned. Food security is very important to most PICs given the fact that most rely on imported food items as in the case the smaller island states
- iv) **Improved Legislation and Standards** – it was evident from the study that most PICs do not have updated or no legislations pertaining to trade and especially legislation on food standards, which is mostly required as PICs are net food importing countries. So many products have entered the market due to lower tariffs, some food products have labels in different languages (such as Chinese) which the consumers cannot understand. Being a member of WTO, a country is required to have legislation updated and basic standards imposed on all products. This would also allow local processors to improve the standards of locally produced goods, which could be exported to overseas markets. Having updated legislation that are in line with the WTO Agreements would also allow governments to be transparent in terms of procedures and implementation of such policies. Although each country is free to harmonize their food standards even if they are not WTO members, there is no real pressure on them to do so nor do they have the resources to undertake such changes.
- v) **Protections of Intellectual Property Rights** – The TRIPS (Trade Related Intellectual Property Rights) provided protection for new processes and ideas. PICs would gain such protection especially in the areas on new agricultural products being developed such as noni products, new varieties of taro etc.
- vi) **Improved inflow of raw materials** – the private sector would stand to benefit particularly in the importation of raw materials and capital equipments for manufacturing. Also farmers would have reduced prices for the importation of farm chemicals and equipment by a reduction of duties in these areas. Reduced tariffs would also allow foreign investors to set up in the islands due to favourable access conditions.
- vii) **Access to Technical Assistance and Training** – one of the main benefits of becoming a member of the WTO and as a small island developing state or a least developed country opens the door to new areas of technical assistance available. These are mainly in the areas of capacity building for both government and private sector officials, improved access to international trade information and assistance in updating legislation and policies.

6.6 Challenges of WTO membership

- i) **Increasing government costs** – when a country accedes to become a member of the WTO, the costs associated with the process are very high especially the Pacific islands remotely located away from Geneva where all the negotiations take place. On top of the administrative costs, the costs of being an observer member may be a burden for some governments to pay on an annual basis.
- ii) **Limited capacity** – the smallness of the PICs studied make it impossible for these countries to become members especially countries with very little domestic industries. Countries such as Niue, Marshall Islands, Kiribati, Palau and the Cook Islands have only a few people working in the customs; agriculture and trade departments and adding the workload required by the WTO onto the existing work programmes require additional resources.
- iii) **Loss of Government Revenue** – Customs tariffs contribute so much to the PICs government revenue especially for Vanuatu being a tax haven. The loss of revenue to countries like Vanuatu and Tonga would affect the Government budget if no alternative revenue sources were developed.
- iv) **Elimination of subsidies or direct assistance** – The experience from the accession of Vanuatu shows that the provisions for least developed countries and developing countries under the Agreement on Agriculture do not apply to countries in accession. This meant that Vanuatu was asked by WTO members in the negotiations to eliminate the subsidies given to the farmers even though the total aggregate support was less than total production. By eliminating the meager subsidies received by farmers coupled by falling world prices on products such as copra, farmers would be greatly affected leading to increased poverty in the islands. This is a concern especially if the PICs seeking membership to the WTO are required to eliminate any subsidies or direct payments made to the agricultural sector.
- v) **WTO plus Demands** – The experience of Vanuatu saw WTO members (mainly United States) demanding more than what was covered under the existing agreements of the WTO. This is a potential cost for PICs in accession and the negotiators would have to be careful of such demands especially in making full analysis of the benefits and costs to the country and to society.

6.7 Food Security

The Ministerial Decision on measures concerning the possible negative effects of the reform programme on least developed and net food importing countries was adopted as part of the outcome of the Uruguay Round negotiations. The Decision recognizes that while the progressive implementation of the results of the UR as a whole will generate increasing opportunities for trade expansion and economic growth to the benefit of all members, during the reform programme least developed and net food importing countries may experience negative effects in terms of the availability of adequate supplies of basic foodstuffs from external sources on reasonable terms and conditions, including short-term difficulties in financing normal levels of commercial imports of basic foodstuffs.

Ministers agreed to a number of mechanisms to ensure that the implementation of the results of the Uruguay Round does not adversely affect the availability of food aid at a level sufficient to continue to provide assistance in meeting food needs of developing countries. These mechanisms include:

- a review of the level of food aid established periodically by the Committee on Food Aid under the Food Aid Convention and the initiation of negotiations to establish a level of food aid commitments sufficient to meet the legitimate needs of developing countries during the reform programme;
- the adoption of guidelines to ensure that an increasing proportion of basic foodstuffs is provided in fully grant form;
- and agreement by the developed country members to give full consideration in the context of their aid programmes to requests for the provision of technical and financial assistance to least developed and net-food importing developing countries to improve their agricultural productivity and infrastructure.

For Pacific island countries, only those countries that are least Developed Countries (Kiribati, Samoa, Tonga, Tuvalu and Vanuatu) could benefit from this Decision. No other Pacific island country is included under the WTO list of Net-Food Importing developing country members.

The case of small island states is very important, as this study has shown that most of the islands depend on imported foods. This is especially important for islands such as the Marshall Islands, Niue, Palau and the Cook Islands where these islands would really need special assistance as stipulated by the Ministerial Decision. Whether these countries become members of the WTO or not, they would be much affected by any reforms arising out of the obligations under the AoA.

6.8 Technical Assistance on WTO Negotiations

There has been some assistance provided by FAO and other agencies as well as bilateral donors to assist PICs in building their knowledge and capacity on WTO Agreements. The following table presents a summary of the types of assistance that were made available to the PICs;

Table 9: Technical Assistance provided on WTO for PICs

	Program	Countries Covered
FAO	FAO Roundtable Meetings on the Results of the Uruguay Round Agreement on Agriculture	FAO Pacific Island Countries
	Pacific Regional Workshop on Uruguay Round Follow-up and Multilateral Trade Negotiations on Agriculture, Tonga 2001	FAO Pacific island countries
	Pacific Islands Regional Programme on Food Security" (RPFS)	All FAO members in the pacific (including Kiribati, Nauru, Niue, Marshall Islands, Palau, Papua New Guinea, Tonga, Vanuatu) are participating in the RPFS.
	The pilot phase of an SPFS project has been ongoing in the Markham valley (Morobe Province) in Papua New Guinea (PNG) since 1996 Encouraging results were obtained in the PNG project with improved technologies for rice, peanut, vegetables and yams and the introduction of small animals and fruit trees for added food and income.	PNG
	Development of National Agricultural Development and Food Security strategies and policies (NSAFS) documents	Tonga, Papua New Guinea, Vanuatu, Niue and Palau. The NSAFS documents for Marshall Islands and Kiribati
	FAO launched an initiative aimed at co-operating with countries to review and update national strategies for agricultural development and food security. This process is to be implemented in a manner fully consistent with other ongoing country strategy processes (UNDAF, PRSP etc) and is to be adapted to specific circumstances in the various countries.	
Pacific Island Forum Secretariat	Regional WTO Trade Policy Courses (jointly with the WTO Secretariat)	All Pacific Forum Island Countries
	Technical advisory services for acceding countries to the WTO	Samoa, Tonga and Vanuatu
	WTO Working Group meetings	All PICs
WTO Secretariat	Trade Policy Courses for Least Developed Countries (3 weeks)	Samoa, Vanuatu, Kiribati and Tuvalu (Pacific LDCs)

	Three months Trade Policy Course	Mainly benefited Fiji, Samoa, PNG, Tonga and Vanuatu trade officials
Agency for International Trade and Information Cooperation (AITIC)	Regional workshop on trade capacity negotiations, May 2003	Fiji, PNG, Solomon Islands, Samoa, Tonga and Vanuatu officials

Source: FAO SAPA and KVA Consult Database 2003

7. THE FUTURE OUTLOOK FOR PICS

The results of this study have shown that the future of the Pacific requires substantial particularly in trade and development policies through the food, agriculture, fisheries and forestry sectors. These sectors provide the backbone of the Pacific island economies since the majority of the populations still rely on them for basic living. The implications of the multilateral trading system on the PICs economies are far reaching and the PIC governments, donor countries and agencies must develop policies to take advantage of any benefits and opportunities that may be forthcoming to assist in these developments of the key economic sectors.

7.1 *Trade Policies*

The future of trade policies for PICs requires a strong partnership between Governments and the private sectors. This partnership could be strengthened through the following strategies:

- Consultations on issues facing the government and how the private sector could assist and address such issues
- Raising the awareness of the private sector on trade related issues at the national and international levels
- Involving the private sector in policy developments as well as members of the public

The PICTA provides opportunities for PICs where smaller PIC markets become stepping-stones for exports and experience in meeting the standards imposed by these markets (which may not be as stringent as the developed markets). The PICTA also allows PICs to address supply capability issues as required by developed markets. The Pacific Agreement on Closer Economic Relations (PACER) also provides trade facilitation assistance which is channeled through the Pacific Island Forum Secretariat.

The European Union is currently negotiating economic partnership arrangements with the African Caribbean and Pacific (ACP) group, which provides more regional opportunities for Pacific islands as well as technical assistance on trade facilitation matters that could be provided under the Cotonou Agreement.

The WTO provides legal protection for international trade. PICs with substantial level of international trading would benefit from WTO membership especially those relying on exports as major source of foreign exchange earnings and those with developed domestic industries such as the case of Samoa, Tonga and Vanuatu.

7.2 *Agriculture*

In addressing some of the issues facing agricultural development in the islands, the following options could assist PICs:

- (i) Enhancing supply capacity constraints such as improving access to land and finance to improve productive systems. Access to free or subsidized planting materials is much needed particularly in the remote islands. Access to finance through micro-credit schemes is successfully implemented in Samoa and Vanuatu, and Tonga is also planning on introducing such a scheme. Access to agricultural land could be improved through cooperative arrangements where many small farmers work together as a team;
- (ii) Strengthening the agricultural sector infrastructure where Government support is needed in the areas of research, marketing information, ongoing advisory services on opportunities available as well as the infrastructure to test the quality of the produce (such as Heat Treatment and Abattoir services).

Governments still require the assistance of multilateral and regional agencies such as FAO and SPC as well as bilateral donors in the development of infrastructure to facilitate agricultural development;

- (iii) The narrow resource base of the island economies means that most raw materials, pesticides, fertilizers are imported as well as packaging materials. Reduction of duties on these materials would provide a competitive price for agricultural products;
- (iv) Flexibility should be made for small vulnerable economies in providing domestic support to specific sectors affected. Governments at this stage of the negotiations cannot foresee any future effects or catastrophes that may not be covered by any committed safeguard measures under the Agreement;
- (v) Most officials do not have a clear idea of their role and responsibilities under the WTO Agreement of Agriculture as well as the requirements for SPS and TBT under the WTO. Improved knowledge on the WTO frameworks and how these officials could link it to national policies and strategies is of great priority;
- (vi) There is a need for small island economies to have the facilities to facilitate the agricultural exports in meeting the requirements of the international markets and the resources to set up such facility is also needed;
- (vii) Improving access to information on markets, prices and market requirements would assist in the preparation of products for exports;
- (viii) Increasing participation in the multilateral negotiations where the Pacific Island economies do not have any knowledge on the current negotiations on the Agreement nor do they have the resources and capacity to attend these negotiations. However a mechanism that would help them to participate is needed just to get their comments or ideas on the negotiations;
- (ix) Market access through regional free trade arrangements such as the PICTA would provide opportunities for the smaller export quantities to enter the smaller markets;
- (x) Most island economies have yet to fully analyze their non-trade concerns and building such awareness would assist the Governments in developing the right policies, which would not have any implications on non-trade concerns.

7.3 Forestry

Forestry resources in the Pacific are depleting and efforts to improve this sector should focus on the following policy strategies;

- Promotion of reforestation programs with emphasis on high valued timber species
- Increase access to markets
- Complementing forestry policies and codes to protecting the environment
- Development of sustainable strategies to the harvesting of forests
- Ongoing research and investment on value-added wood products for export markets

7.4 Fisheries

PICs have vast scope for a improved, *sustainable income* from their fishery resources provided they are properly managed and not over exploited. However, this needs special commitment, understanding and a collective effort, especially in the case of migratory tuna resources. Most of the world's fishery resources are fully tapped and have limited room for further expansion. In this scenario, PICs have good potential to expand and have definite advantage.

PICs also have the advantage of a wide spectrum of resources, which includes high value reef fish species as well as deep water species, ornamental fish species, bech-de-mer, seaweed, giant clam, pearl oyster etc. which offer considerable opportunities for income generation and employment. Pristine, isolated aquatic environment could be a selling point for PICs products including the service sector through eco-tourism and aquatic sports.

In spite of the relatively high transport cost, their easy access to resources offers PICs an opportunity for *product/ market diversification*. Increased landings from domestic-based vessels or domestic fleet would offer them an opportunity for value addition to their products. PICs have already benefited from the by-catch from tuna vessels. Some PICs have channeled this fish to the domestic market.

Training and capacity building in fisheries sector are two areas of special significance to PICs if they were to strengthen their access to international markets. In this respect, strengthening of national capabilities in addressing basic principles involved in food safety regulations including updating of relevant legislation, establishment of certification procedures, HACCP programs and their verification, laboratory quality assurance, and where applicable risk analysis, would be of importance. In the absence of national support institutions capable of handling training (GMP/HACCP), PICs are dependent on regional programs for staff training. In this respect, regional HACCP programs undertaken by FAO are of special significance. PICs could learn from the Asian experience by working closely with the industry, using industry facilities and support services for such training programs.

It is also worthwhile to explore networking with established laboratories in the region (Fiji, New Zealand, Australia) in order to facilitate smooth, speedy, reliable analytical procedures. Identifying several accredited laboratories through a regional programme, and linkage of national facilities with such laboratories (including staff training) could improve the buyer confidence on exports. From a fish marketing logistics angle, regional cooperation would be most welcome in training and capacity building in fish quality assurance, laboratory analysis and net- working with accredited laboratories and air-cargo logistics.

Regional approach to address the limited airfreight capacity of the PICs for fish exports would improve access to markets.

The PICs would benefit very much from improved access to up-to-date fish price information and market intelligence. Assessment of fees and taxes are often computed on the value of fish transshipped or exported. Price information would also be useful in litigation and valuation of stocks. On the other hand market intelligence would be useful in planning and execution of fish marketing operations and export-processing.

In spite of rapid development of electronic information exchange, access of most PICs for such information is inadequate. Relatively high costs of communication, poor net connectivity. In this context establishment of linkages with international fish trade/ marketing databases such as FAO-GLOBEFISH and INFOFISH would be relevant.

Harmonization of legislation as applied to fisheries sector has progressed with the growing focus on sanitary and phytosanitary (SPS) principles, including HACCP application and adoption of national standards based on CODEX. Though most PICs have National CODEX Committees, they have achieved little by way of establishing national food standards. This is due to institutional/ legal impediments and lack of consensus based decision making. CODEX is recognized under SPS as an international benchmark to base national standards. Such a process would help the PICs to integrate and address requirements of the international markets.

Costs of harmonization/ compliance can be very high, in terms of drafting legislation, preparing notification, institutional building and developing skilled manpower, access to information etc, some of which could be addressed under WTO provisions for technical assistance for LDCs.

There is definite scope for fish based convenience foods; fish burgers, cakes and snack foods, which could be marketed through existing channels. In this respect, it is important to impart necessary skills and develop entrepreneurship and provide possible support for such ventures at the initial stages. In rural areas, especially in outer islands, training in fish drying/ smoking, coupled with micro-finance could be a useful approach to create employment and income generation. Several PICs have seaweed resources which are presently exported in the dried form. There could also be a potential for development of domestic consumption of seaweed, including production of simple jelly snacks. Cottage scale fish/ poultry meal production is another option open for the artisanal sector.

With the planned expansion of domestic fleets, there is room for further growth in exports of fresh/ frozen tuna. In spite of the relatively high cost of air freight to most foreign destinations and extra packaging cost, the premium price paid for exports of fresh/ frozen tuna, which is almost 3 - 4 times that you get from canneries, will make it a fairly profitable option for domestic fleets. Supply of prime quality raw material suitable for sashimi/ chilled exports could be improved by encouraging good handling practices on board (with minimal deck modification) and focussing more on quality of fish.

Export of fresh/ frozen tuna loins is another attractive option which involves relatively low capital investment. Marshall Islands have pioneered the contract production of cooked skipjack loins for cannery in American Samoa. Similar arrangements could hold scope for some other PICs as well. Such an industry would have spin off effects, opening up possibilities for by-products/ waste utilization (fish meal, tuna concentrates, tuna oil etc) as is the norm in many Asian countries. By-products from such a process could also serve as the backbone of a domestic animal/ fish feed industry, through integration with agricultural feed bases such as copra cake, catalysing domestic poultry/ aquaculture industries. Another possible option for value addition of tuna is the production of the snack food tuna jerky, a relatively simple operation which involves relatively low capital. In fact Palau is planning to tap the tourist market for kamaboko products and tuna jerky.

Diverse ecology and pristine conditions which exists in some PICs offer much scope for development of exotic aquaculture species such as giant clam, black pearl, trochus etc. PICs such as Tonga, Kiribati, Marshall Islands, Cook Islands, Palau are actively pursuing these options. Training in shell-craft, access to market information and active marketing support programs are considered important for further growth of the industry. The isolated, pristine environment also offers much potential for organic production of aquaculture species.

7.5 Food Sector

Legislation and standards need to be updated to incorporate risk-based requirements and process control, so that preventive and risk-based food safety systems such as HACCP are encouraged. All sectors within the food supply chain need to be aware of their responsibilities with respect to ensuring food safety and quality.

In order to meet the SPS and TBT measures in the WTO Agreements, PICs will need significant policy and legislative development, implementation of infrastructure and enhanced technical capacity. Some countries including Tonga, Samoa and Vanuatu are better placed to progress in these areas due to a higher level of existing infrastructure and technical programs. Regardless of the country's state of development, reform must be approached in an incremental way. The priority areas are as follows:

- Update and harmonize food legislation and standards – modernizing food control systems to incorporate risk-based requirements and process control such as HACCP will better ensure public health and safety. Domestic food safety standards will also assist countries to prevent the import of low quality food products, including those that are inappropriately labeled and out-of-date, and improve market access opportunities for domestic food industries. Countries will need assistance from trading partners, together with FAO and WHO to develop infrastructure, knowledge and technical capacity. Fiji has just drafted a new food safety bill which could serve as an example for other PICs.
- Improve training and build capacity in modern food control systems – both government and industry will need training and assistance to understand the requirements of and to implement HACCP and preventive food safety and quality systems across food industries. The agricultural sector within PICs needs to develop integrated management programs based on good agricultural practice that strategically target pest and disease control in key commodities, and mitigate the risk of specific hazards such as pesticides from occurring. FAO and WHO will need to tailor their food safety and quality training and capacity building programs strategically so that PICs are in a better position to implement and enforce the regulatory requirements of modern risk-based food safety and quality systems.
- Industries and Government need to be proactive in developing and implementing preventive and risk-based food safety and control systems to ensure consumer safety. Such systems will also assist industry efforts to access markets.
- Inspectors need more opportunities for training, particularly in modern food safety systems such as HACCP, which will enhance their inspection and audit abilities, as well as help them educate the food industry and consumers.
- The food and health inspectorate needs to shift away from prescriptive and end product inspection to one that focuses on prevention through process control of specific hazards and auditing of food safety programs and systems.
- Ministries of Health need to engage and work more closely with the agriculture ministries and the food industry to share their collective expertise and identify training needs in preventative systems.

8. RECOMMENDATIONS

8.1 Trade Policies

1. *Increased participation of the private sector, non-governmental organizations (NGOs) and civil society in trade policy development* – from the consultations, some PICs do not involve the private sector in any of the trade policy reforms. In this regard, it is recommended that governments consider involving the private sector in awareness raising, input into policy developments and allowing the private sector to participate in the policy development mechanism. This could be done through involving representatives from the Chamber of Commerce, Food Processors, Farmers Association, Women's Groups, Fisheries Association etc. in Government committees on trade and economic policies;
2. *Improved access to market information both at the national and international levels* – this could be strengthened through increased liaisons and information exchange between the government and the private sector, through the NGOs and civil society. This exchange could be done through emails, workshops and utilizing the role of extension officers
3. *Coordination amongst Government Departments* – the workload on trade and economic policies could be shared amongst the Departments such as Customs involving in the tariff and customs facilitation, the Attorney Generals responsible for legislation and regulation drafting, the agriculture in liaising with the farmers and many more. Coordination could be through the setting up of Inter-Departmental Committee.
4. *Regional cooperation* – due to resource constraints, coordination at the regional level is very important especially in the sharing of costs and information. Coordination between FAO, Pacific Islands Forum Secretariat (PIFS), South Pacific Community (SPC), South Pacific Applied Geoscience Commission (SOPAC), South Pacific Regional Environment Programme (SPREP) and the University of the South Pacific (USP) must be strengthened so that the programs compliment each other rather than duplications.
5. *Capacity Building* – increased workshops and awareness raising for all parties affected by the country's trade regime is vital for trade to occur successfully. Governments would easily identify areas of further assistance through improved knowledge of the private sector and civil society.
6. *Improve transportation links by linking with other sectors (ie: tourism)* – a coordinated approach would facilitate the need to address infrastructure support needs by linking all sectors. For instance the high costs of transportation could be reduced by increasing airline schedules and routes catering for the tourism sectors.
7. *Access to technical assistance* - The PICs should actively explore opportunities for technical assistance through WTO and other fora to strengthen the capacity of PICs to effectively take part in trade negotiation, improve information and management of resources, develop quality standards and certification procedures etc.
8. *Trade Promotions* - Considering the large number of PICs population living abroad, PICs should explore niche markets/ ethnic markets abroad. Participation in trade fairs to promote products from the PICs is also recommended.

8.2 Agriculture

9. *Strengthening marketing arm of agricultural departments* – it is important to strengthen the marketing divisions of the Agriculture Departments in each country through further training support. Improving the knowledge of extension officers on marketing information would enhance the knowledge of farmers on what is going on in the international markets. Furthermore, support to strengthen market information and market oriented production, information on domestic prices (at domestic/farmer markets, buyers or export produce, etc) for agriculture and trade officials as well as the agriculture organizations and exporters. For a country aiming at sustainable exports it is important to first establish a sustainable production and supply of export quality produce in required quantities and qualities at the required times. Improving the market research capabilities of agricultural and trade ministries prior to production must also be strengthened.

10. *Improvement of agriculture infrastructure* – improvement of market infrastructure would stimulate private sector investment and the flow of produce from production areas to either consumption areas or points of exports. For instance improving transportation access from outer islands to main market.
11. *Continuation and increased access of farming systems program* – reduced costs or free costs of planting materials must be continued on staple foods to address the issue of food security. The increasing incidence of lifestyle related diseases requires coordinated efforts by the government to promote staple crops and domestic farming.
12. *Transparent systems of procedures for the allocation of any subsidies to the farmers* – developing a transparent system of paying subsidies to farmers would assist governments in negotiations for WTO membership as well as opening avenues for further technical assistance from donors.
13. *Organic certification* – it is recommended that Governments fully assist the farmers in organic certification processes as well establishing a local certifying committee. This will provide lower costs for farmers to certify their farms and processes.

8.3 Forestry

14. Enhance facilitation role in forestry authorities in improving timber and other forest product processing in complying with international standards. This could be through membership in International Forestry Bodies and distributing information to the milling companies on new products, market opportunities and new standards.
15. Value added timber products have great potential for forestry in the Pacific. However, this requires foreign investment as the locally available resources and expertise is fairly limited. It is recommended that PICs with sufficient forestry resources promote foreign direct investment in the production of value added wooden products for export markets.

8.4 Fisheries

16. To meet the growing domestic demand for fish, and to cut down on heavy imports of meat and meat products, it would be prudent for the PICs to focus on expanding/ upgrading the domestic fleets to be able to fish in deeper waters and also consider diverting by-catch from off-shore fleets, to the domestic market.
17. In the export sector, PICs could benefit by increasing the supply of prime quality raw material suitable for sashimi / chilled exports by encouraging good handling practices on board (with minimal deck modification) focusing more on quality of fish. Export of fresh/ frozen tuna loins is another attractive option, which involves relatively low capital investment.
18. Production of fresh/ cooked tuna loins could hold scope for some PICs with spin-off effects, opening up possibilities for by-products/ waste utilization (fish meal, tuna concentrates, tuna oil etc) as is the norm in many Asian countries. By-products from such processes could also serve as the backbone for a domestic food and animal/ fish feed industry, latter through integration with agricultural feed bases such as copra cake, catalysing domestic poultry/ aquaculture industries.
19. By-catch fish and waste/ off-cuts from loining could also be used in the production of convenience foods and snack foods. Another possible option for value addition of tuna is the production of the snack food tuna jerky, a relatively simple operation which involves relatively low capital. In fact Palau is planning to tap the tourist market for kamaboko products and tuna jerky.
20. In rural areas, especially in outer islands, training in fish drying/ smoking, coupled with micro-finance could be a useful approach to create employment and income generation. Domestic consumption of seaweed (presently exported), including production of simple jelly snacks should be explored. Cottage scale fish/ poultry meal production is another option open for the artisanal sector.
21. Populations in PICs are familiar with and are used to convenience food as a result of heavy imports of meat/ poultry based canned/ processed products. Thus there is definite scope for fish based convenience foods, which could be marketed through existing channels. Such production should be pursued.

22. In order to meet safety and quality requirements in major markets, PICs should lay emphasis on strengthening seafood quality assurance programs and application of good hygienic practices/ good manufacturing practices in tandem with HACCP. There could also be regional cooperation in training activities as well, through the aegis of FAO/ SPC-UPS/ NZ-Australia programs, so as to facilitate optimum utilization of manpower and resources. On the other hand it is very unlikely that the PICs, already faced with shortage of trained manpower and logistical support, could satisfy the EU requirements in the short-term. In this respect an EU supported regional effort should be explored.
23. Though there is considerable export trade with Japan and US, the lack of EU approved facilities in any of the PICs under study has prevented them benefiting from the growing EU market for tuna and tuna products, especially fresh and frozen tuna with an annual growth estimated at between 10-15%. It is recommended than a speedy uniform approach with technical guidance and appropriate support from EU would be urgent need to enable PICs to access to EU market.
24. In the case of PICs, importance of fisheries management to assure sustainability of resources as well as long term food security (and revenue) cannot be overemphasized. While noting the valuable contribution of FFA and SPC by way of fishing effort and related data, mechanisms for speedy dissemination of such data /information to relevant government /industrial bodies is recommended as this would help the PICs to take necessary action to minimize any adverse effects on resources as well as sustainable use to resources.
25. The PICs would benefit from improved access to fish price information and market intelligence, useful in the assessment of fees and taxes, litigation and valuation of stocks, planning and execution of fish marketing operations and export-processing. In spite of the rapid development of electronic information exchange, such electronic access to most PICs for information is inadequate due to relatively high costs of communication and poor internet connectivity. In this context establishment of linkages with international fish trade/ marketing databases such as FAO-GLOBEFISH and INFOFISH would be relevant.
26. A regional approach which assures a full load-factor could be attractive to air cargo handlers.
27. Diverse ecology and pristine conditions which exist in some PICs offer much scope for development of exotic aquaculture species such as giant clam, black pearl, trochus etc. Training in shell-craft, access to market information and active marketing support programs are also considered important for further growth of the industry. Pristine, isolated aquatic environment could also be a selling point for PICs products including the promotion of the service sector through eco-tourism and aquatic sports.
28. Intellectual Property Rights (IPR) is not an important issue in fisheries just yet. However, it may become more significant with aquaculture and aquarium fisheries if endemic species from the PICs are cultured overseas.

8.4 Food Sector

29. PICs establish and/or strengthen existing National Codex Committees and under these, establish a food standards working group to assess current legislation in relation to its ability to adopt Codex-based or regionally harmonized food standards. This activity could be facilitated by FAO and/or WHO providing technical assistance to examine in detail current legislation and its capacity to adopt model food standards.
30. Establishing a regional body to develop model food standards for the region that could be adopted as law through each country's food legislation. The focus for standards should initially be on microbiological and labeling (composition, nutrition, use by date) requirements as these areas presents the highest risk to public health.
31. Establishing, through SPC with technical assistance from FAO and WHO, a regional agreement to facilitate the adoption of harmonized food standards by each country.
32. Where not already established (as for example through the WTO accession process) PICs establish Government and industry consultation forums to discuss food safety and quality issues and needs. This should be facilitated by Chambers of Commerce and food industry associations taking a more proactive role in driving the food safety and standards reform agenda using the example of other countries who have been successful in this respect (e.g. Samoa, Vanuatu);

33. Developing recommendations on capacity building and training needs for both Government and industry and feeding these into national food safety for national development plans.
34. Ministries of Health, Agriculture and Fisheries within PICs jointly address the need for greater expertise in food technology and develop strategies in consultation with FAO to train and maintain skilled personnel.
35. That expertise of the food and public health inspection officers within Ministries and Departments of Health is significantly strengthened through training in modern outcomes and risk-based preventive food safety systems. This could be facilitated through FAO and/or WHO coordinating regional training in HACCP and risk-based food safety systems and their inspection, auditing and enforcement and Ministries of Health personnel working to develop close partnerships with the food industry to jointly identify needs and assist in implementing food safety training programs.
36. That expertise in quality assurance and good agricultural practice programs in Agricultural sectors is enhanced to underpin food safety and quality in agricultural production. In particular, and in view of the potential impact upon trade, emphasis should be placed on programs to control diseases, pests and use of agricultural chemicals in key agricultural commodities. These activities could be facilitated through existing and new FAO technical cooperation programs.
37. That by taking into consideration and building upon the progress and outcomes of the capacity building project TCP/RAS/2801, food testing and analytical capacity in PICs be further strengthened as required through:
 - Developing programs to upgrade and provide additional resources (including trained technicians) to existing hospital or public health laboratories so that they can routinely analyze food samples for microbiological and compositional requirements.
 - Establishing a regional food analysts network for the pacific to share expertise and advice governments on laboratory issues for food testing.
 - Enhancing the capacity of USP in Fiji to serve the needs of PICs with respect to more complex chemical analyses of foods on a commercial basis.
 - Examining the feasibility of establishing a regional program for the ongoing monitoring of chemical residues in animal and agricultural commodities. Laboratory and survey expertise at USP should be utilized in this area.
38. That Government, in consultation with Chambers of commerce and food industry associations, develop further training packages for the food industry in the area of quality assurance and HACCP. This should be facilitated by:
 - FAO and WHO developing training modules in these areas and building this into their technical assistance programs.
 - Recommending that training institutions and colleges develop and/or strengthen existing training modules on quality assurance and HACCP for the food industry.
 - Chambers of Commerce and Government jointly establishing food industry exchange programs for industry personnel to visit key overseas industries (e.g. in Asia) to acquire knowledge and skills in quality assurance and HACCP.
 - Industry associations work with Government to develop model food safety and quality control programs for specific food sectors that could be adopted and implemented within those sectors.

COUNTRY PROFILES

The Cook Islands

1. Economic Statistics

Population: 17,900 (2000)

Land Area: 200 square kilometers

Exclusive Economic Zone: 1,830,000 square kilometers

Political Status: self-governing nation in 'free association with New Zealand', since 1965

GNP: \$82 million (1999)

Major Industries: tourism, black pearl cultivation

Merchandise Exports (FOB): US\$9 million (2000)

Major Exports: pearls; papaya, maire and clothing

Merchandise Imports (CIF): US\$51 million (2000)

Major Imports: machines, transport equipment; food and live animals; and mineral fuels

Currency: New Zealand Dollar

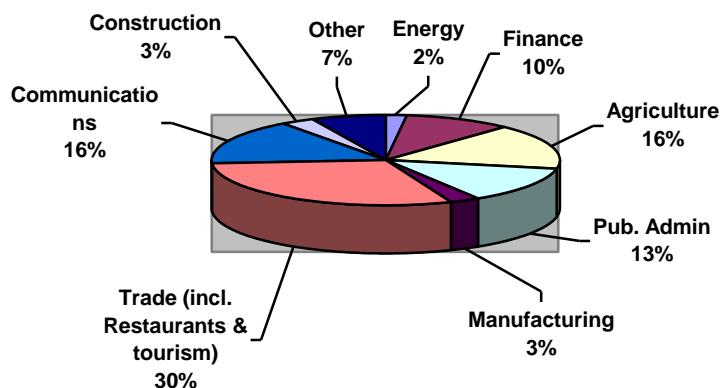
Average Exchange Rate: US\$1 = NZ\$2.2012 (2000)

2. Economic Profile and Performance

The Cook Islands' economy faces many of the development impediments common to other small island states in the Pacific region: relatively limited natural resources, remoteness from major trade and industrial centres, and a diminishing labour force. Despite these constraints, the Cook Islands has developed a successful tourism industry and the government has given high priority to its further growth. The development of the marine resources contained within the Cook Islands' large Exclusive Economic Zone (EEZ) has also been given priority, including black pearl farming in the northern group of islands. Despite some economic diversification in recent years, development assistance from New Zealand and Australia and remittances from the large number of Cook Islanders living in New Zealand and Australia remain very important to the economy. The GDP in the Cook Islands was US\$82 million in 2000 and the country enjoys one of the highest GDPs per capita in the South Pacific region.

Real GDP grew by 3.2% in 2000, led by growth in tourism. Tourism receipts improved by 8% to US\$32.3 million as visitor numbers reached a record 64,500. This was partly due to more visitors from the northern hemisphere, reflecting a strong United States dollar, and political instability in the Fiji Islands that prompted tourists to switch destinations. The black pearl industry and the commercial agriculture sector also showed moderate growth rates of 6% and 4%, respectively. A breakdown of GDP by industry is shown in the figure below (Figure 1.1), followed by a table outlining total GNP and GNP per capita (Table 1.1). Table 1.2 shows the growth rates of GDP and major sectors in the Cook Islands.

**GDP by Industrial Origin (%) Calendar Year 2000
(At current market prices)**



Source: Asian Development Bank: *Growth and Change in Asia and the Pacific Key Indicators 2001*.

3. Food & Agriculture

3.1 Status of Development

Agriculture remains the backbone of the Cook Islands particularly in the outer islands.

In 2001 an estimated 76% of the population was involved in subsistence farming and only 9% farmed for a commercial basis. Other than black pearls, agricultural exports have not traditionally played a strong role in the country's gross domestic product, although fresh fruits and vegetables have always been exported to New Zealand. Exports have decreased in recent years and from 1997 to the beginning of 2002 represented approximately NZ\$4 million.

The food industry within the Cook Islands is comprised mostly of subsistence agricultural farming and small cottage industries. The main food production within the Cook Islands is fruits, juices and other beverages, vegetables and root crops, baked goods, pork and ham and eggs. The fresh fruits and vegetable sectors are estimated to comprise N\$13 million of domestic earnings per annum and this is extremely important in supporting the economy and in particular the tourism sector. The pork and egg industry satisfies most of the domestic market. Commodities such as mangoes, beans and chilies also have a potential to produce further export earnings if production can be increased, as markets are apparent.

The seafood sector is new and expanding both in providing food domestically and for the export market. This is now the most important agricultural export and has increased from being negligible in 2001 to comprise over NZ\$2 million of export earnings in 2002. The next most important food export is paw-paw, contributing on average NZ\$200,000 to 250,000 in export earnings per annum, having decreased in recent years due to production problems. The production and export of Noni juice has become important to the economy and has developed a strong niche export market. This may increase further as the industry embraces quality management and organic production.

In the forestry sector the main forests are in the outer islands were planted to protect from soil erosions mainly eucalyptus. The Government also planted 2000 acres of forests and 20 acres of sandalwood but no plans yet on when to harvest

The Ministry of Agriculture plays a facilitating role through extension work, assisting in new technologies and advisory services. The Ministry also assists in helping farmers in accessing loan financing from the Development Bank.

3.2 Issues and Constraints

Agricultural growth and technological development has been constrained by numerous factors including:

- Land is a problem especially in Rarotonga. Although there is plenty of land available in the outer islands, the disincentive is the high transportation costs
- High turnover and lack of skilled labour
- Inconsistent local supply of agricultural produce and low access to land
- A lack of programs to facilitate and support small scale value added food processing industries
- A lack of expertise in food technology and quality management systems
- Insufficient agricultural extension services in crop management and pest control
- High set up and maintenance prices (energy, utilities) for small businesses
- High level and cost of imported raw materials
- The lack of food standards and integrated quality assurance in production and processing systems that could potentially facilitate and optimize comparative advantages.

The food industry in the Cook Islands is heavily dependent on the importation of foods. Imported foods contribute approximately 65% of the food volume, and of these, processed and canned foods (fish), frozen poultry, rice and flour are major imports. Most of the processed food and ingredients are imported from New Zealand and Australia.

- Several small operations including the production of Taro chips, cassava flour and juice products have operated in the Cook Islands. These establishments have operated in an environment where isolation, availability of lower priced imports, and limited support from local consumers and Government has caused many to cease or reduced operations.

Most of the food manufacturing that occurs in the Cook Islands is on a small scale and without integrated assurance and HACCP systems. There is little skilled labour and food technology expertise available within the food industry.

3.3 National capabilities to meet importing country food safety requirements

The Cook Islands became a member of Codex in 1998. In 1999 the Ministry of Agriculture in conjunction with the FAO Sub-regional Office coordinated a national workshop on the administration of a national Codex committee for the Cook Islands. Although a coordinating mechanism amongst agencies and a National Contact Point (Ministry of Agriculture) was established, the Codex Committee has not been very active in providing technical advice to the Government on food safety and quality and in helping to establish food standards and quality systems. The Cook Islands has not yet established a competent authority that can certify HACCP systems.

Food standards do not exist in the Cook Islands. The application of good manufacturing practices within food industries in the Cook Islands focuses on pest control and general sanitation programs. Few industries have HACCP and/or quality assurance systems and would not meet international standards for production.

The following issues were also identified:

- Little awareness of and training in the requirements of non-tariff technical barriers to trade exists within the agricultural sector.
- There are limited resources and technical capacity at the government level to facilitate the development of and enforce modern food safety and quality systems that would meet overseas market requirements.
- There is very little expertise in food technology within the Ministries of Health or Agriculture.

Public health food inspectors have a role in the inspection of food premises for food safety, but largely focus on food hygiene and sanitation requirements.

With respect to SPS and quarantine (animal and plant health):

- Personnel within the Ministry of Agriculture have some understanding of the technical requirements to undertake import risk analyses for animal and plant health, but have inadequate resources to undertake independent import risk analyses.
- Technical assistance in quarantine is required and usually obtained from New Zealand.

3.4 Exports Performance

Paw paws are the flagship agricultural export of the Cook Islands and have been successful in being able to meet the technical requirements of the New Zealand market. This has been facilitated by technical assistance and funding provided by NZ. Through this assistance, the Cook Islands established a High Temperature Forced Air (HTFA) treatment facility, which renders produce free of fruit fly and larvae. Other bilateral agreements with New Zealand have been made for the export of chilies, mangoes, egg plant and beans utilizing HTFA treatment.

- A number of agricultural crops including fruits, root crops and fresh vegetables have previously been exported and continue to be important to the domestic economy. There is potential for production of these commodities to increase, and with this, develop value added products and create niche markets through further processing.
- While the fresh fruit and vegetable industry of the Cook Islands strives to maintain existing markets, it also needs to explore other markets and attempt to utilize its comparative advantages. The latter may include diversifying the mango industry to organic production and examining value added products from this and other fruits. Organic production has been a successful strategy in helping to promote the noni juice industry of the Cook Islands and creating niche export markets.
- On a technical level, there is a need for the government to facilitate the establishment of an independent authority for the certification of organic production, preferably through the International Federation for Organics. Presently, only one body certifies organic production and this is a commercial enterprise. This has reputably presented some difficulties with accessing some markets in the past.

Value of principal exports and balance of trade - 1998 to 2002 (NZ\$ '000)

Year	Exports				Total Exports	Total Imports	Deficit
	Pearls & pearl shells	Fish fresh or chilled	Live fish	Agriculture, textiles, others			
1998	5,035	-	214	762	6,011	70,716	64,705
1999	5,376	2	138	1,223	6,739	78,637	71,898
2000	18,397	-	252	1,318	19,967	111,703	91,736
2001	14,595	-	100	1,437	16,132	111,616	95,484
2002	6,411	2,334	211	1,972	10,928	102,149	91,221

Source: *Quarterly Statistical Bulletin, 2002*

3.5 Food legislation, regulations and standards

There are currently no domestic food safety or quality (labeling and composition) standards in place within the Cook Islands. The Food Act 1996 gives health inspectors power to:

- Examine premises that store, prepare and sell food and take samples as required.
- Seize and destroy food unfit for human consumption and that has passed its use by date.
- Require good premises to obtain a health license and employees to require an annual health examination.

Comprehensive food safety and quality regulations and standards are required. A lack of standards results in:

- A lack of assurance against quality and safety of food on the domestic market potentially resulting in reduced consumer protection. This is particularly important, as the confidence in the domestic food supply is a vital ingredient also necessary to attract tourism.
- A failure to comply with the safety and quality requirements of food for export, leading to loss of an importing country's confidence in the food supply and a potential loss of market.

Internationally, there is a requirement that food businesses and the processing industry should apply process controls at all steps of the food production and handling process (e.g. receipt, storage, processing, packaging, display and distribution) to ensure food quality and safety. Generally, this does not occur in the Cook Islands. This means that:

- There is a greater risk that food will become unsafe or unsuitable.
- The local food industry is vulnerable to low quality and potentially unsafe imported ingredients due to their high dependency on imported ingredients.

3.6 Institutional framework

The Food Unit within the Ministry of Health (MOH) performs hygiene inspections on all food premises at regular intervals. Issues identified in institutional capacity were the following:

- MOH has minimal resources within the food area and lacks the resources and expertise to extend inspection activities beyond that of basic food hygiene inspections.
- The Ministry of Agriculture has a lack of well-trained agricultural officers that are able to advise farmers and the agricultural industry on technical standards and quality assurance systems.
- Although the Cook Islands have established a national codex committee that is chaired by the Ministry of Agriculture, it has not been effective in developing Codex-based standards for food.
- The Cook Islands has not yet established a competent authority that can certify quality assurance and HACCP systems for export products.

There is currently no capacity to perform chemical or detailed microbiological analysis of food. The hospital laboratory can perform generic (Standard Plate Counts) microbiological analyses but these are rarely requested and accorded low priority.

An absence of routine testing of foods results in:

- An inability to objectively assess compliance against food standards.
- The food industry having a difficult task to develop added value products.
- A failure to facilitate the development of plant and product certification systems, which would help in export promotion.

There is currently no inspection or analysis at the border for imported processed and packaged foods and ingredients.

Trained officers using official protocols and checklists carry out quarantine inspection of animal and plant-based products at the border. The system is largely based on that of the New Zealand quarantine import risk analyses and requirements. There is not adequate technical capacity within the Cook Islands to assess the quarantine risk posed by animal and plant products.

3.7 Food hygiene and HACCP training

The Food Act 1996 takes an inspectorial approach to the control of food premises such that the hygiene standards observed in premises preparing and selling food depends on the vigilance and skills of the inspector. There is currently little onus on the operator to have skills or experience or any obligations to develop and maintain a safe process. The Government has developed programs in food hygiene for food operators. To better ensure consumer safety, industry training needs to encompass preventive and risk-based food safety systems that focus on process controls.

Knowledge of and training in the evaluation of quality assurance and food safety and HACCP systems is required within the health sector.

There is a need to establish a competent authority to certify HACCP systems. This would help ensure safety and quality of food products and may also facilitate access to further export markets.

4. Fisheries Industry

As per the Census of Agriculture and Fisheries (2000), the total number of fishery households in the Cook Islands numbered 1703. Out of these 59 owned motorized boats (5-6m) while 192 non-motorized boats with an average length of 3.6m. Out of 1703 fishery households, majority (1479) carried out fishing purely for own consumption and not for sale while 135 households sold about 1/4 of the catch, 69 households sold half of the catch, 10 households 3/4 of the catch and the balance 10 who operate on commercial basis sold all the catch. The most common method of fishing is net fishing, mainly gill netting (235 households), followed by collection of shells/molluscs (218), hook and line (217), spear gun (205) and trolling (57%). The frequency of fishing ranged from 3-10 fishing trips per month.

Main fishery of commercial importance in Cook Islands is tuna long lining which started in the mid-90s by licensing foreign fishing vessels operating out of American Samoa. During 1994-96 period nearly 1230mt of tuna, mainly albacore, valued at NZ\$ 1.7million were taken to Pago-Pago for canning. Since then, licensing of foreign fishing vessels has been discontinued, with the exception of 3 American Samoan long line vessels licensed for test fishing. In contrast, since the beginning of 2001 the domestic long line fishery has grown rapidly from 3 boats to 20 of 12-43 meter vessels as of April 2003, 11 of which are based in the capital Rarotonga in the southern islands while the rest are based in the northern islands. Catch data analysis suggests that northern waters are almost 35% more productive than southern waters.

The boats operating from the southern waters, which have easy access to land-based processing and storage facilities as well as air transport, target tuna/ big eye sashimi market in Japan and the US. In 2002 the southern fishery has air freighted nearly 175mt of sashimi tuna, out of a total landing of 317mt. The balance was released to the local market. Fishery in the northern waters, which primarily target albacore, deliver the catch to canneries in American Samoa.

Cook Islands long line landings in 2002 (mt)

Species	Northern EEZ	Southern EEZ
Albacore	758	189
Yellowfin	33	20
Bigeye	46	27
Striped marlin	3	15
Mahi-mahi	4	18
Wahoo	9	10
Moonfish	4	8
Swordfish	2	15
Bluefin tuna	-	2
Others	30	13
Total	885	317

Source: Ministry of Marine Resources, Tuna Long Line Fishery Summary, 2002

The main destinations of the southern longline fishery catch are Japan (58%), US (38%) and New Zealand (4%).

Cook Islands – Price received for tuna and other species (NZ\$/Kg) (average price received during September 2001-June 2002)

Species	Japan	US	Cannery*
Albacore	5.90	8.80	4.69
Yellowfin	16.00	12.00	2.41
Bigeye	18.00	12.00	1.58
Striped marlin	20.00	-	-
Mahi-mahi	-	10.77	-
Wahoo	-	11.23	-
Swordfish	16.50	-	-
Skipjack	-	-	1.58
(Air freight)	4.70	2.75	NA

*cannery/ non-cannery use in American Samoa and Bangkok

Source: Ministry of Marine Resources, Tuna Long Line Fishery Summary, 2002

To cater for the growing demand for ice as a result of rapid fleet expansion, land based freezing/ storage facilities in the port of Avatu is now being further developed to supplement the facilities at Rarotonga. The government has also developed fishery policy and legislation to assist development of the sector, including an observer port sampling program and a Maritime training center.

5. Trade Policies and the WTO

Cook Islands is a member of the PICTA and with the Agreement enforced, would be trading with the other members under the Free Trade arrangement. This provides opportunities for Cook Islands products to enter the Fijian, Samoan and Tongan markets at reduced or zero rates.

The tariff policy of the Cook Islands is very liberal with duties mainly from 0-10% which is already very low and more open for incoming trade.

Government's overall policy in relation to international trade includes:

- Maintain existing markets and explore and exploit new and diverse international market opportunities, paying particular attention to possibilities for involving the outer islands either directly or indirectly in international trade
- Provide the infrastructure necessary for the development of international trade policy issues and initiatives
- The putting into place and regular maintenance of the wide range of infrastructure essential to support private sector development, including physical infrastructure (roads and airport) and legal infrastructure (eg, laws to protect and promote desired investment, the protect intellectual property rights etc)
- The opening up of new market and investment opportunities (through trade agreements) that can be exploited by Cook Islanders to establish and expand their commercial ventures and
- Capacity building in both the key institutions of the public sector and the private sector

Cook Islands is not yet moving towards becoming a member of the WTO as this would require considerable human resources, however Cook Islands would still be indirectly linked to the WTO and would like to follow the proceedings as Cook Islands is part of the Pacific region and would be negotiating economic arrangements with the European Union.

The benefits of WTO membership for the Cook Islands would mainly be in the area of market access for its products to the developed markets. For instance fisheries has become an important export product and the WTO Agreements could protect the industry for any bans or restrictions which may be imposed on these exports by WTO member countries. The private sector and exporters must still be educated on the possible effects of globalization and the increasing efforts by developed countries to impose restrictions on trade bypassing the WTO Agreements.

6. Recommendations

6.1 Improve Facilitation role of Ministry of Agriculture

The role of Agriculture in supporting farmers is very important and improvements could be made in the areas of organic certification, market information support through extension officers and ongoing research on new plant varieties. The provision of planting materials to farmers in the outer islands on fruits and vegetables under the Bilateral Quarantine Agreement with New Zealand would enhance supply capacities.

6.2 Improve the Trade Facilitation Role of Government Agencies

There is now a coordinated role between Agriculture and Customs on customs and quarantine however in linking trade policies to agriculture, fisheries and food industries, it is recommended that a committee be set up amongst key departments including members of the private sector to share information and develop policies pertaining trade.

6.3 Improve Infrastructure

The main problem of internal transportation from the outer islands to the main island of Rarotonga could be improved and this could be done through government requesting for assistance from donors and/or attracting investments from abroad in providing such services.

6.4 Fisheries Development

Strengthening on-board fish holding facilities and land-based infrastructure facilities for the Northern fleet to promote air-shipment of quality tuna and other species thus diverting at least part of the fish for non-cannery use including fresh/ frozen loins.

Expansion of the domestic-long line fleet and land-based processing operations to cater for domestic market requirements, including development of products for the lucrative domestic market, as well as processing and value-addition for export.

Foreign investment through joint-venture arrangements in the fisheries sector would enhance the capacity of the Cook Islands in fishing its EEZ. Government incentives in attracting foreign investment could be in the reduction of duties and taxes for fishing boats, equipment etc.

6.5 Trade and Agricultural policies

Capacity building is needed for agricultural officials to gain more knowledge of the international trade in agriculture as well as the WTO rules on Agriculture. This would enhance their capacity in advising farmers and agricultural exporters on trade policy matters and the impact this would have on their products. Furthermore, the private sector needs awareness training on the impact of international trade especially with all the perceptions on globalization and how the private sector could take advantage of the opportunities arising out of globalization.

6.6 Control of imported foods

The implementation of a system for the inspection and testing of imported foods and ingredients would be beneficial for the Cook Islands in preventing mislabeled, low quality and potentially unsafe foods from entering and/or being dumped onto the domestic market and therefore better protecting the consumer. It would also give assurances to food processors, which rely heavily on imported ingredients for their food manufacturing. In order to implement a system that is compatible with WTO/ SPS and TBT requirements, domestic food standards must first be established and a greater capacity developed for their enforcement.

6.7 Quality management systems

Very little of the food industry within the Cook Islands currently operates under quality assurance and/or HACCP systems. The exception to this is the seafood industry and some noni juice manufacturers. The lack of quality systems makes such products unacceptable to potential export markets, many of which require the favourable auditing of the food premises as a total quality assurance system. Also, because there is no law or standards concerning the supply of goods from unregistered plants, quality assurance systems are not actively pursued. Quality assurance and HACCP systems are also essential to help minimize food safety risk and to convey the perception of safe and quality food to consumers.

KIRIBATI

1. Economic Statistics

Population: 89,600 (2000)

Land Area: 700 square kilometers

Exclusive Economic Zone: 3,550,000 square kilometers

Political Status: independent republic

GNP: US\$81 million (1999)

Major Industries: fisheries, remittances, agriculture, copra

Merchandise Exports (FOB): US\$3 million (2000)

Major Exports: fish, copra

Merchandise Imports (CIF): US\$39 million (2000)

Major Imports: food and live animals; machines, transport equipment; manufactured goods; mineral fuels; and beverages and tobacco

Currency: Australian Dollar

Average Foreign Exchange: US\$1 = US\$1.7248

2. Economic Profile and Performance

While Kiribati's land mass is small and isolated, it has a huge EEZ with a wealth of marine resources. Income is generated from license fees of foreign fishing vessels fishing within Kiribati's EEZ, and from the export of copra, seaweed and, more recently pearls. There are also over 1,000 Kiribati seamen working on foreign ships, who send money and goods valued at over US\$1 million back home to their families. Real GDP contracted by 4% in 2000. This contrasts with growth of 2.3% in 1999 and 7.3% in 1998, when copra production was higher than normal. The fishing license revenue was also unusually high in 1998. With population growth estimated at 2.2% a year, real per capita GDP declined to US\$469 in 2000, from US\$554 in 1999.

The Revenue Equalisation Reserve Fund (RERF), which returns investment income equal to around 33% of GDP, continues to underwrite government recurrent expenditure. Fishing license revenue, seamen's remittances, and income from the RERF make up almost half of Kiribati's national income. Consequently, the economy is open and sensitive to international influences. Current expenditure in 2000 was US\$33 million, while US\$11 million was development expenditure. Revenues exceeded expectations, as income from fishing licenses was considerably higher than budgeted. The budget deficit was 5.7% of GDP. The fiscal deficits in recent years have been financed from external concessionary loans and accumulated balances in the Consolidated Fund. However, if budget deficits grow larger, there is a risk that the real value of the RERF could deteriorate.

3. Agriculture, Fisheries and Food

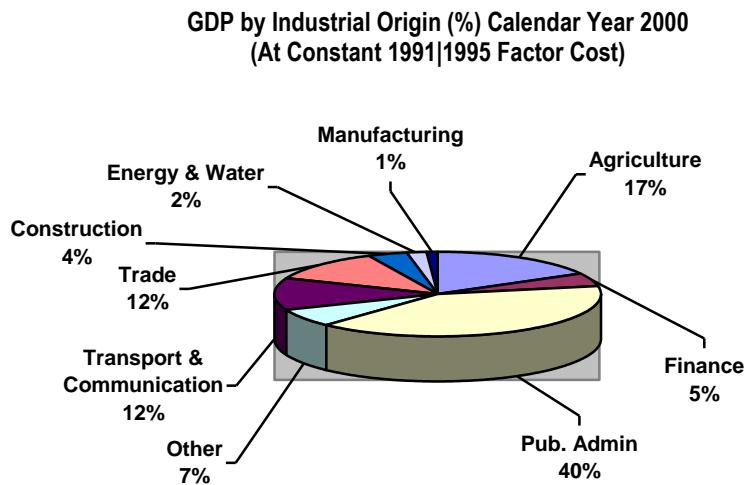
3.1 Current status of Development

Fisheries and agriculture play an important role in supporting the local economy of Kiribati and contributing to the country's food security. While fishing and subsistence agriculture is an integral part of most of the population, its combined economic value is low and represented only 2% of the country's real GDP in 2000. In general the poor soils and dry weather conditions make agricultural production difficult. Additionally, the small market and poor access to land make it difficult to take advantage of economies of scale that make commercial agriculture successful. Agriculture in Kiribati consists mostly of breadfruit, vegetables and fruits. Pork and poultry are produced for the local market, the latter mainly for eggs that satisfies approximately 50% of the local demand.

Kiribati's most significant food exports are copra and fisheries. The fisheries sector shows great potential for growth if resources can be managed effectively and the capacity of the local workforce and associated infrastructure are improved. The copra industry is a vital source of local cash income, with over 90% of the outer island population involved in production to varying extents.

In 2000, total exports for Kiribati were valued at \$A6.2 million. Of this, copra exports comprised \$A2.5 million, most of this was exported to Bangladesh and the Philippines. The country is very dependent on the importation of foods to maintain food security. Approximately 85% of food imported into Kiribati is from Australia and food imports represent 30% of the total import bill.

There is very little food manufacturing within Kiribati. Processed food includes tuna jerky, biscuits and bakery products.



Source: Asian Development Bank: *Growth and Change in Asia and the Pacific Key Indicators 2001*.

The Ministry of Natural Resources Development has developed a policy aiming at:

- Improving domestic food production hence reducing to some extent the country's reliance on imported foodstuffs
- Promote and encourage development of the private sector in livestock, fruit and vegetable and marketing;
- Develop and provide a range of farming opportunities whereby farmers could increase their returns and identify value added coconut products for the domestic and export markets

The programs implemented by the Ministry include:

- Coconut improvement aiming at increasing copra production through replanting and rehabilitation
- Distribution and planting materials to outer islands for agro-forestry
- Encourage private sector production and marketing of fresh fruits and vegetables and
- Improving manpower availability for extension services

3.2 National capabilities to meet importing country food safety requirements

Food standards do not exist in Kiribati and the food processing industry is not sufficiently diverse and knowledgeable to have the capacity to implement quality assurance and HACCP systems. There are also limited resources and technical capacity at the government level to facilitate the development of and enforce modern food safety and quality systems that would meet overseas market requirements. For example, there is currently no expertise in food technology within the Ministries of Health or Agriculture. Having said this, public health food inspectors have a role in the inspection of food premises for food safety, but largely focus on food hygiene and sanitation requirements.

As agricultural production is fragmented and on a small scale, Good Agricultural Practice (GAP) and Good Manufacturing Practice (GMP) systems have not been developed and there is no integrated control of the hazards likely to be associated with the various agricultural commodities and products.

3.3 Lessons from recent experiences and barriers to expanding exports

With the assistance of the US, the fisheries industry has established HACCP systems on Christmas Island that comply with international guidelines. This system has helped facilitate the export of products to the US and Japan. The development of similar systems is being pursued in the main urban center of Tarawa where the Government has established the Central Pacific Producers (CPP) Company to domesticate and diversify the fisheries industry. CPP purchases domestic fish catches for marketing in urban areas and will play a role in the domestic marketing of fisheries products by providing support services and infrastructure to fisherman, particularly those on the outer islands. It is also hoped that the operations can be geared up to export.

3.4 Deficiencies in institutional and legislative frameworks

Food legislation, regulations and standards -

Current food legislation in Kiribati is confined to basic food hygiene requirements. A Food Bill has recently been introduced into Parliament that will strengthen the requirements for food safety and enable more comprehensive standards to be enforced.

Under existing food hygiene regulations in Kiribati food establishments must comply with requirements relating to food hygiene and sanitation. The lack of standards on labeling, contaminants and microbiological agents in foods, combined with no active food-testing laboratory make it difficult to objectively support food inspection and enforcement activities. In the absence of assurances against established food standards, the consumer is potentially vulnerable to foods of low quality and questionable safety. The incapacity to test imported ingredients and locally manufactured foods against standards also exposes the food industry to safety failures and potentially compromises markets.

The Government of Kiribati recognizes the value in improving the safety and quality of food and the benefits this may bring in promoting confidence in the food supply and facilitating development of plant and product certification systems to satisfy standards. It is currently, through the Ministry of Health, examining the options for more comprehensive food legislation and standards, while also ensuring that any such standards are consistent with those of Codex.

With the assistance of the US, the fisheries industry has established HACCP systems on Christmas Island that comply with international guidelines.

The Ministry of Health is responsible for inspecting food establishments to ensure that they are safe and protect the health and safety of consumers. Every food establishment is required to have a health permit to sell food. The health permit is issued after completion of an inspection in which the requirements under the Food Act have to be met. The Environmental Health Division has minimal properly trained health inspectors within the food area and lacks the resources to extend inspection activities beyond that of basic food hygiene inspections.

Kiribati has a national Codex committee based in the Ministry of Health. The Committee has recently played a role in reviewing legislation for food. There is a now further need to draft food standards and regulations. Staff within Health and Agriculture has received training in HACCP systems but currently have insufficient expertise to effectively audit and certify such systems. Audits of fisheries facilities on Christmas Island are facilitated by US expertise.

There is currently no competent authority within Kiribati certifying exports.

Although food premises undergo periodic physical inspections, there is currently no capacity to perform chemical or comprehensive microbiological analysis of food within Kiribati. The public health laboratory mainly deals with clinical samples, with some water testing. The lack of objective testing against standards makes inspection problematic and potentially leaves the consumer vulnerable to products with inferior quality and safety. Greater access to an accredited analytical facility is needed and would play a vital role in certifying the quality and safety of food products destined for both the domestic and international market.

There is currently no inspection or analysis at the border for imported processed and packaged foods and ingredients. This leaves the consumer vulnerable to imported products with inferior quality and safety.

Trained officers using official protocols and checklists carry out quarantine inspection of animal and plant-based products at the border. The system is based on that of Australia's Quarantine system. There is insufficient technical capacity to assess the quarantine risk posed by animal and plant products, and assistance is usually required from Australia.

3.5 *Fisheries*

Fisheries and agriculture play a vital role in food security of Kiribati with total population of around 90,000 of which 50,000 live in the two urban centers Tarawa and Betio, while the rest are in outer islands. Fishing, along with subsistence agriculture, is an integral part of the life of most of the population.

Nearly 3.5 million sq km of the EEZ holds much potential for providing opportunities for increased employment and income generation. Fishing vessel access fees at Aus\$ 31 million in 2000 accounted for 29% total government budget. In 2003 income is estimated at around A\$ 50 million, almost a 40% increase against the income in 2000. Nearly \$13 million is raised through taxes and duties. The fee is computed on the basis of 5-10% of the value of fish landed. The composition of the licensed fishing fleet operating in the EEZ is given in [Table 1](#). The government has embarked on a plan to enhance domestic investment in long-lining through a Fleet Domestication Program, and has established a Tuna Task Force to oversee the program.

Licensed fishing fleet (2003)

Country	Long-liners	Purse-seiners	Pole and Line	Others
Japan	37	35	1	-
Taiwan	23	47	-	-
Korea	165	28	-	7
China	-	3	-	-
New Zealand	-	4	-	-
Philippine	-	4	-	-
Spain	-	14	-	-
Sub-total	225	135	1	4

Total = 365

Source: *International Trade Statistics, Ministry of Finance*

Korean and Taiwanese boats are licensed under agreements with Korean and Taiwanese fishery Associations while Japanese and Chinese vessels come under a bilateral agreements at government level and US vessels under a multilateral treaty. Several Philippine and Spanish vessels have joined the fleet recently.

The domestication program plans to introduce initially 2-3 long-liner vessels, gradually going up to 6, each costing around Aus\$ 200,000, through support from government assisted development bank up to Aus\$ 60-80,000. The vessels would have a 5mt capacity and are capable of 7day fishing operations. Central Pacific Producers (CPP), a government owned business subsidiary, will play a key role in the program, introducing up to six boats in the near future, one to be based at Tarawa and two vessels at Christmas Islands. Purse-seiners transship the catch at Tarawa while only a small fraction of long-liner catch is unloaded locally at Tarawa and Christmas Islands, mostly sashimi quality tuna for air shipment.

Transshipment charges vary from Aus\$ 2.00/mt for purse-seiner catch while for landings from long-liner fleet are charged at Aus\$ 12.50/mt and 5-10% of the estimated landed value for fish meant for loining. There is growing focus on Christmas Island as a location for air-freighting sashimi tuna to Honolulu, which is only 2hrs away. Fish is flown through charter flights at a cost of around US\$ 1.70/kg.

CPP plays an important role in domestic marketing through provision of support services to fishermen, especially those in the outer islands, where infrastructure for handling, storage and marketing of catch is lacking. CPP provides the fishermen with canoes and support services, and purchase their catch, both lagoon and reef fish, for marketing in urban centers through the CPP outlets. CPP plays a key role in providing ice and refrigerated storage for fish for both fishermen and retailers who operate in the two urban centers. It has a total cold storage capacity of 110mt (2 x 50mt and 1 x 10mt).

Fishermen sell their surplus catch either directly to consumers from roadside vending boards or insulated boxes with ice, or to retailers who may sell it to consumers through small roadside retail outlets or vans. The retailing price can vary from Aus\$ 1.50 – 2.50/ kg depending on the variety. The high fuel cost (Aus\$ 0.98/liter) and poor availability of potable fresh water has made the cost of ice very high, at Aus\$ 2.00/ 4.5kg bucket. CPP uses both rain water and desalinated sea water in the production of ice.

Thus CPP plays an important role by providing an outlet for the catch of fishermen from the outer islands, who have very poor access to urban centers due to high cost of transportation and lack of a regular boat service. CPP also purchases by-catch from purse-seiners transshipping their catch from Tarawa. CPP is the sole supplier of fish to governmental institutions. The retailer/ fishermen, whose daily income has been estimated at around \$ 50-100/day, has to pay a daily Council fee of \$ 5.00.

Kiribati also has a long standing shark and bech-de-mer fishery. At present, the shark fishery is mainly focused on the export of shark fins. Most of the exports are handled by a New Zealand company. Bech-de-mer collected from outer islands is exported from Majuro. A licensing fee of Aus\$ 500- 5,000 is payable to local bodies, depending on the location, for collection. Community based aquaculture projects promoted by the fisheries department mainly focuses on milk fish (*Chanos chanos*). There are also projects on giant clam, black pearl, seaweed and bech-de-mer culture, some of which are operated by the private sector.

Danish assisted Seaweed (*Euchoma cottoni*) culture and export program mainly focuses on income generation among outer islanders. At present nearly 400-500 people are involved in seaweed collection in two outer islands, including Gilbert Island. Seaweed collection and bottom farming in open reservoirs supplements the islanders income apart from copra, which is the principal income source for most of them. Dried seaweed is collected from the islands and transported to Majuro for bailing (45kg/ bale) and bulk shipment to the Philippines. Annual exports are around 1200mt at US\$ 520-750/mt depending on the global market price. The farmers get \$ 0.45 per kilo of dried seaweed. The project plans to embark on seaweed value-addition with the view to enhancing domestic income generation and employment.

Total value of marine exports stood at around Aus\$ 3 million in 2000, accounting for almost 50% of total exports, including re-exports. Seaweed exports brought in around \$ 1.7 million, or around 50% of the value of marine exports.

Marine Exports by destination and value (Aus\$) – 2000

Country	Fish	Seaweed	Sea cucumber	Shark fins	Pet fish
Australia	165,857	-	5,490	57,024	23,636
Fiji	13,522	-	5,960	-	28,312
Philippines	-	1,667,020	20,020	-	-
Germany	1,875	-	-	-	-
Marshall	1,002	-	-	-	-
Singapore	8,798	-	18,297	-	8,704
USA	3,980	-	11,765	-	128,063
Hong Kong	-	-	488,772	347,394	4,231
Sub-total	195,034	1,667,020	550,304	404,418	192,945

Total marine exports by value = Aus\$ 3,009,721
 Total exports = Aus\$ 6,179,000
 Marine exports/total exports % = 48.7%

Source: *International Trade Statistics, Ministry of Finance*

4. Trade Policies and WTO Membership

Kiribati does not have any trade agreements with other countries other than those covering fish access licensing. Kiribati is in the process of ratifying the PICTA when a new Government is in place. Government apparently owns and runs all the major businesses and exports including the telecommunications and banking due to the smallness nature of the islands. A small business center was also set up to promote private sector involvements but these cater more for the local markets. Approximately 1000 people are employed in the private sector with 8,000 working for Government. Trade taxes range from 0% for rice, 20% for tinned fish and to 30-40% for food products. Cars and sin-categorized goods (alcohol & tobacco) are 200% duty. The duty for rice was recently reduced to take care of food security concerns.

The Department of Commerce looks after Kiribati's foreign trade regime as well as participating in training and workshops on regional and international trade.

In terms of WTO membership, Kiribati is too small to become a member of the WTO and with Government running mostly all the businesses, the impact on the government making commitments under the WTO would be great due to the following reasons:

- A reduction of tariffs means loss of government revenue
- Foreign investors may not be able to invest in the types of businesses already run by Government
- Limited capacity within Government to follow all WTO negotiations
- State trading enterprises do not comply with the WTO Agreement on State Trading Enterprises

The only benefit that the WTO would bring for Kiribati people is Government privatizing all its businesses and letting the private sector take over this sector. However this would depend on the capacity of the Kiribati private sector to take up such business activities.

Kiribati may benefit from the PICTA as this Agreement promotes access to neighbouring Pacific island countries such as exporting copra to Samoa rather than taking it all the way to Bangladesh. On the other hand, Kiribati people can get reduced prices for good imported from PICTA member countries.

5. Recommendations

- There is a need within Kiribati to build upon current agricultural diversification programs and to look at establishing good agricultural practice systems for selected agricultural commodities of importance to the economy.
- Government could promote cooperative bodies and community groups to purchase long line vessels for long line fishing. This would greatly develop the local capacity to get into tuna fishing as well as maintaining the value exported vis-à-vis money going out of the country from licensing.

- (iii) Accelerate the domestic fleet expansion program and broad-base the program to include export-processing of value added tuna products including fresh/frozen tuna loins as well as production of value-added products for the domestic market through by-catch utilization.
- (iv) Collective effort by CPP and the private sector in expansion of the domestic fish marketing network as well as providing improved infrastructure and support services, including fish purchasing/ marketing for outer islands.
- (v) Implementation of comprehensive sea food safety and quality regulations and standards to assure quality and safety of seafood exports/ imports as well as domestically produced/ marketed fish and fishery products including capacity building in this sector in partnership with industry (CPP).
- (vi) Sustainable utilization of shark and bech-de-mer resources including sea-cucumber stock management and seeding programs.
- (vii) Support expansion of seaweed culture, introduction of appropriate processing technologies and improvement to holding/transport network. Product / market diversification as well as improved domestic consumption through product development and marketing should be explored.
- (viii) Research and development in black pearl culture and ancillary industries and shell craft
- (ix) Needs for training and capacity building - Although the Government basically runs most of the businesses in Kiribati, it is important that officials running these businesses are familiar with the international trade policies and these may impact the future of Kiribati trade. Workshops and awareness programs on globalization and how Kiribati could benefit from globalization are important and may contribute to the development of the private sector in Kiribati.
- (x) Control of imported foods - The implementation of a system for the inspection and testing of imported foods and ingredients would be beneficial for Kiribati in preventing mislabeled, low quality and potentially unsafe foods from entering and/or being dumped onto the domestic market and therefore better protecting the consumer. It would also give assurances to future food processors, which would have to rely heavily on imported ingredients for their food manufacturing. In order to implement a system that is compatible with WTO/ SPS and TBT requirements, domestic food standards must first be established and a greater capacity developed for their enforcement.
- (xi) Quality management systems training - As there is essentially no processed food industry within Kiribati, there are no established quality assurance and/or HACCP systems. The exception here is the fisheries industry operating out of Christmas Island. There is a need for greater technical capacity within government and industry to understand the requirement of and to develop these systems.
- (xii) The Government in partnership with the food industry needs to take a proactive approach to facilitate the development of quality assurance and HACCP systems for food processing. Such systems will have benefits for production and will better assure the quality and supply of products. Assistance and training is required to better understand the requirements of these systems and to advise and train the industry in their establishment and implementation.
- (xiii) Food safety training - There are no apparent programs in Kiribati that educate food businesses on food safety requirements. Further training in the development and evaluation of process control and HACCP food safety systems is required within the health sector so that they can transfer this knowledge to the food sector.
- (xiv) Coordination and consultations - Coordination and consultations amongst Government Ministries and the State run enterprises as well as the private sector and farmers would assist Kiribati in developing trade policies which would benefit the country in the future.

MARSHALL ISLANDS

1. Economic Statistics

Population: 51,600 (2000)

Land Area: 200 square kilometers

Exclusive Economic Zone: 2,131,000 square kilometers

Political Status: independent democratic government since 1979

GNP: US\$99 million (1999)

Major Industries: fisheries, copra

Merchandise Exports (FOB): US\$7 million (2000)

Major Exports: copra cake; crude coconut oil; pet fish; and handicrafts

Merchandise Imports (CIF): US\$68 million (2000)

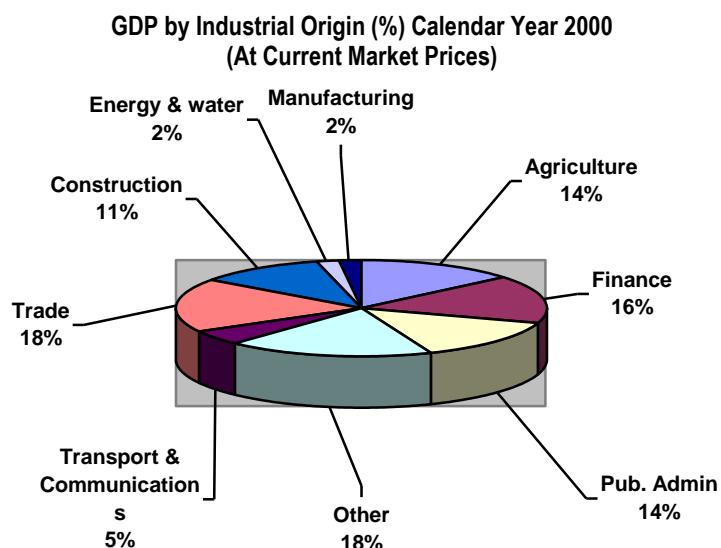
Major Imports: crude materials; machines, transport and equipment; food and live animals; manufactured goods; mineral fuels etc.

Currency: United States Dollar

2. Economic Profile and Performance

Due to contractions in trading and transport, primary production, and manufacturing, real GDP declined by about 2.3% in 2000, following growth of around 0.8% in 1999. Along with modest growth prospects in the medium term, the economy faces a major challenge in moving towards greater self-reliance and providing employment for the growing labour force.

Government expenditure grew marginally in 2000, while trading and transport, primary production and manufacturing fell. Due to the strengthening of the United States dollar and low demand, and despite the rise in world oil prices, price deflation of 1.9% was recorded, compared with inflation of 2% in 1999. The key economic indicators are shown in the tables below:



Source: Asian Development Bank: *Growth and Change in Asia and the Pacific Key Indicators 2001*.

3. Agriculture and Fisheries

3.1 Current status of Development

Agriculture within RMI is very limited due to poor soils and lack of land availability. However, market gardening is common and produces vegetables for the local market. Copra is the main source of income for farmers with very little piggery and poultry farms. Local egg production sustains approximately 75% of the market.

Ninety eight percent of the copra used by the Tobolar Coconut Oil Company is supplied from the outer islands. Given the falling prices of copra, the Government of RMI provides a subsidy to stabilize the price.

In terms of food businesses and processing, there are a number of bakeries and some businesses producing a range of beverages. The majority of food establishments are small family retail establishments selling imported processed foods and some fresh produce.

and bakery products. Noni juice and bottled water are produced locally. While many food businesses have in place pest control, sanitation and personnel hygiene programs none of the food industry operates under quality assurance or HACCP programs.

Exports from RMI 1998-2000 (f.o.b '000 US Dollars)

Product	1998	1999	2000
Copra cake	987	1053	1354
Coconut Oil	1459	1192	1110
Handicrafts			10
Pet Fish	306	473	
Other	626		50
Re-Exports Diesel	2306	4944	6600
TOTAL	5773	7662	9124

Source : RMI Statistical Abstract 2001

3.2 Issues and Constraints

The main issues facing the agricultural sector in the RMI include:

- Access to agricultural land – mainly in the main islands of Majuro and Ebeye;
- Transportation problems with the outer islands – this was highlighted as one of the main problems where transportation to the outer islands is inconsistent. The farmers in the outer islands cutting copra depend on these boats as the main source of income and the coconut oil mill produces oil from 98% of the copra produced in the outer islands. This also affects the quality of the copra for coconut oil processing and for exports. Transportation is mainly provided by government and some private boats operating could not carry the capacity of the copra produced;
- Exports of copra to the international markets face higher standards as some shipments of copra to China was rejected 40% tax as a barrier and copra cake exports to Hawaii was not accepted.

As in most of the Pacific Island countries, in the Republic of Marshall Islands, fisheries is a part time engagement for most of the population, numbering over 60,000, with most living in the outer islands. Over 2 million sq kilometers of sea area comes under the republic's EEZ. The Marshall Islands Marine Resources Authority (MIMRA) has embarked on several programs to enhance fisheries development, mainly through Coastal Fisheries Development Assistance (COFDAS) project, a series of cooperative programs administered by the Overseas Fisheries Cooperation Foundation (OFCF) of Japan, and designed towards comprehensive technical cooperation encompassing fish harvesting and handling, production, processing, distribution, consumption and engine repairs and maintenance, refrigeration, fiberglass works, training, etc.

Concerned over the relatively fragile resource base, its susceptibility to over-fishing and costly logistics, the current NFDP (National Fisheries Development Policy) proposes detailed review of collateral opportunities whereby developments in the industrial fishery may nurture small developments in the community fishery. In particular this could apply to farming baitfish for the industrial pole and line and longline fleets. Additionally an influx of longliners would result in an increase in airfreight capacity thereby improving the prospects for the underutilized deep-water snapper fishery, which is substantially reliant on airfreight access to USA and Asian markets. Both of these activities favor the involvement of outer island communities and small-scale development.

MIMRA has also embarked on several Regional Technical Assistance programs as well as an atoll project for conservation and management of coastal fishery resources and habitat environment in coral reef areas including enhancement of giant clam populations using hatchery-reared juveniles and transplanted wild adults to establish giant clam sanctuaries. Inclusive with the above proposal under the Atoll Project is a plan to establish a resource management program whose purposes are as follows: fishery, giant clam, trochus, sea cucumber stock assessment, data collection and analysis in standing stock, catch data analysis etc.

The JICA assisted Project for Development of Fishing Communities in Jaluit Atoll" envisages to improve the production and marketing system of coastal fisheries as well as to promote fishing, fresh fish marketing to meet the fresh fish demand in Majuro and Kili Island, to stimulate the local economy of Jaluit, and to contribute to improving fish marketing in Majuro. Other areas of focus include seaweed farming and pearl farming.

3.3 Vessel Licensing program

The tuna industry of the RMI mainly involves the licensing of foreign vessels to fish in EEZ through bilateral arrangements. During 1997/98 and 1998/99, the Republic earned about \$3.9 and \$5 millions respectively through licensing while during 1999/2000 collection was down to \$2.9 million due to the reduction of operational fishing vessels. The situation has made the government to focus on enhancing domestic fleet expansion through the introduction of small-scale tuna long lining vessels. MIMRA is also conducting

explorations on the Deep Sea Snapper Fishery which focuses on a wide range of deep water fishes, deploying fishing lines with 5-6 hooks to a depth of between 100 and 200 meters.

Tuna fishing is mainly through fishing agreements with United States of America, Taiwan, Korea, Japan and FSM. Longline and pole and line fishing continues to be dominated by the Japanese fleet. For the coming year, the sector will increase in this fishery with the addition of the locally based longline fleet. Under the Fishing Access agreements a license fee for each vessel is required for actual fishing operation in the Republics Exclusive Economic Zone. This fee remained at 5% of the landed value of the catch with a non-refundable advance payment of US\$ 8,000.

Access Agreements in the RMI Exclusive Economic Zone for 2000/2001

Country/Party	Type	Administrator	Type
USA	Multilateral	FFA	Regional
Japan	Bilateral	MIMRA	Government to Government
Taiwan	Bilateral	MIMRA	Industry to Government
Korea	Bilateral	MIMRA	Industry to Government
FSM Arrangement	Multilateral	FFA	Regional
Fong Seong Co.	Bilateral	MIMRA	Industry to Government

Source: *Annual Report, Marshall Islands Marine Resource Authority, 2000/2001*

The RMI became a party to the FSM arrangement in early 2000. The Arrangement is administered by the Forum Fisheries Agency (FFA), and operates similar to the U.S treaty. Members of the FSM arrangement are considered a sub-regional group of the FFA, mostly from the Parties to the Nauru Arrangement group; Micronesia, Palau, Kiribati, Solomon Islands, PNG, Nauru, and the RMI.

Number of Vessels Licensed in RMI for 2000/2001

Country/Party	Purse Seine	Pole & line	Longline	Carriers/bunkers	Total
USA	30	-	-	-	-
Japan	36	68	27	-	-
Taiwan	43	-	5	-	-
Korea	27	-	-	-	-
FSM Arr.	12	-	-	-	-
Fong Seong Co.	2	-	-	-	-
Others	-	-	3	63	-
Total	150	68	35	63	316

Note: Figures do not include the Locally Based Foreign Boats.

Source: *Annual Report, Marshall Islands Marine Resource Authority, 2000/2001*

Foreign Licensed Revenue in RMI for 2000/2001 (U.S\$ 000)

Country/Party	Purse Seine	Pole & line	Longline	Carriers/bunkers	Total
USA	147	-	-	-	147
Japan	280	891	405	-	1,576
Taiwan	390	-	40	-	430
Korea	251	-	-	-	251
FMS	-	-	-	-	-
Fong Seong Co.	20	-	-	-	20
Others	-	-	-	63	47
Total	1,088	891	445	63	2,471

Source: *Annual Report, Marshall Islands Marine Resource Authority, 2000/2001*

3.4 Trans-shipment

The Trans-shipment activity continues to be dynamic in the Majuro port. The following table is indicative of the number of vessels and fee associated with the transshipment activity for the year.

Trans-shipment Trips and Fee Revenue in RMI for 2000/2001

Country/Party	Purse Seine	Pole & line	Longline	Carriers/bunkers	Total
USA	5				5
Japan					
Taiwan	157		9	12	180
Korea	60			3	63
FSM Arrangement	57				
Fong Seong Co.	7				
Others				61	61
Total Vessels	286		9	76	374
FEE (US\$ 000)	171		5.4	45	221

Source: Annual Report, Marshall Islands Marine Resource Authority, 2000/2001

Total number of Vessels transshipped in Majuro at 374, with an earning of \$221,000 as transshipment revenue. The Taiwanese fleet continues to be dominant in port calls, with 157 purse seine transshipment. The declining market forced the vessel operators and owners to make drastic operation cuts, and limit the fishing effort. The boats had to stay in port fifteen (15) days after transshipment as a result. It should be noted that all fish transshipped in Majuro are not caught in the RMI EEZ and vice versa. In the case of the Japanese boats, they go directly back to Japan.

Catch and Earnings in RMI for 2000/2001

Country/Party	Purse Seine	Pole & line	Longline	Carriers/bunkers	Total
USA	1,346 tons				238
Japan	9,758 tons				319
Taiwan	7,765 tons				-0-
Korea	12,855 tons				236
FSM Arrangement	N/A				
Fong Seong Co.	Nil				
Others					
Total	31,724 tons				793

Source: Annual Report, Marshall Islands Marine Resource Authority, 2000/2001

Total Revenue/Earnings in RMI for 2000/2001 (US\$ 000)

Country/Party	Purse Seine	Pole & line	Longline	Carriers /bunkers	FEE (US\$ 000)
License fee	1,088	891	445.0	47	2,471
Transshipment	171		5.4	45	221
Catch/Value					793
Total					3,485

Source: Annual Report, Marshall Islands Marine Resource Authority, 2000/2001

3.5 Domestic long lining program

Majuro Tuna Longline Fish-Base, set up to assist the Marshall Islands in developing a national fishing industry closed down in 1998. Fish-Base has had two (2) previous operators: Mehau Fishing Co., a Hawaiian based company and Ting Hong Co., a Taiwanese based company. In 2001, Marshall Islands Fishing Venture (MIFV) was established. A subsidiary of Luenthai Holding LTD., based in Hong Kong, the MIFV services locally based longline fishing vessels.

PM&O Processing Co (Majuro loining plant) began its operations in November 1999. The plant employs 400 people mostly women. PMOP has a contract with Starkist Seafoods to supply frozen tuna loins. Starkist delivers fish to Majuro by purse seiner fishing vessels. The fish is offloaded at Majuro commercial dock and delivered to PMOP. PMOP ships the frozen loins in forty-foot refrigerated containers to the Starkist cannery in Pago Pago, American Samoa for canning. PMOP also processes the fish waste into dried fishmeal

which is exported to Taiwan and the Philippines.

PMOP is currently producing about 4,000 tons of frozen tuna loins annually and have plans to increase production up to 10,000 tons annually. As of end 2001, the plant had bought fish from 37 vessels, including purse seiners, carriers, and jig boats.

4. Food Sector

The food industry within the Republic of the Marshall Islands (RMI) is under-developed and relies heavily on the importation of foods to maintain food security. Copra and fisheries are the only food industries of export significance. Total exports are small and were valued at US\$9.1 million in 2000, but US\$6.6 million of this was attributable to re-export of diesel oil. Food and agricultural exports in 2000 represented US\$2.5 million, equivalent to 2.5% GDP of which copra cake and coconut oil comprised virtually all (99%). It is also estimated that frozen tuna loins exports from the recently established plant in Majuro could be up to US\$5.3 million per annum. The plant processes frozen tuna under contract to a foreign company (Starkist) that are then exported to American Samoa for canning.

4.1 National capabilities to meet importing country food safety requirements

Food standards do not exist in RMI and the food processing industry is not sufficiently diverse and knowledgeable to have the capacity to implement quality assurance and HACCP systems. There are also limited resources and technical capacity at the government level to facilitate the development of and enforce modern food safety and quality systems that would meet overseas market requirements.

As agricultural production is very fragmented and on a small scale, Good Agricultural Practice (GAP) and Good Manufacturing Practice (GMP) systems have not been developed and there is no integrated control of the hazards likely to be associated with the various agricultural commodities and products.

Within the Agriculture Ministry there is little technical capacity and resources to undertake risk assessment of food safety hazards (chemical, microbiological) and advise on the integrated control of these hazards at the farm level.

4.2 Lessons from recent experiences and barriers to expanding exports

The fragmented and small –scale production of agriculture within RMI and high costs of transport and fuel, make it difficult to establish integrated production systems with the capacity to supply quality products to the export market. Having said this, the copra cake and copra oil industry has been successful in meeting technical quality requirements for the US and Asian markets, although quality issues occasionally arise with coconut oil and stem largely from supply and transportation difficulties of obtaining the raw product from outer islands.

The foreign owned tuna loining plant in Majuro has successfully established a world-class operation that operates under approved FDA HACCP requirements.

RMI would like to sell food to US military base on Kwajalein Atoll. However, due to the absence of domestic food standards, the US will not currently accept locally produced food from RMI. The Government is working with the US Food and Drug Administration in relation to building the capacity to develop food standards.

4.3 Deficiencies in institutional and legislative frameworks

There are currently no domestic food safety (chemical, microbiological, additives) or quality (labeling and composition) standards in place within RMI. Under the Public Health, Safety and Welfare Act – Chapter 1, Public Health and Sanitation, there are regulations that require food offered for sale to do so under good sanitary conditions with a focus on hygiene and pest control. The Act gives Health inspectors the powers to inspect premises that store, prepare and sell food and destroy food unfit for human consumption. Food premises are required to obtain a health license and employees require an annual health examination.

Comprehensive food safety and quality legislation and standards are required for RMI. In the domestic market, lack of assurance against safety and quality of food, for example mislabeled and expired foods, is common and potentially results in reduced consumer protection. This is particularly important, as the confidence in the domestic food supply is a vital ingredient necessary to attract tourism. The high dependency on the United States for food imports, has until recently, made food standards a low priority. However, as markets are progressively freed up, RMI is witnessing a greater amount of imports from other countries, particularly Asian markets. Such products often do not have English labels and their quality and safety is unknown.

The lack of comprehensive food safety and quality regulations and standards means that there is a lack of assurance against quality and safety of both imported food and that produced domestically. The Government of RMI recognizes the value in improving the safety and quality of food and the benefits this may bring in promoting confidence in the food supply. The presence of standards has benefits for the economy in being one of the platforms on which tourism can be promoted and the benchmark that the food industry must work to in its implementation of product quality and safety systems.

4.4 Institutional framework

RMI's food inspection activities are currently located within a Food Unit of the Environmental Protection Agency. The Food Unit performs hygiene inspections on food premises at regular intervals. There are minimal resources within the food area and a lack of resources and expertise to extend inspection activities beyond that of basic food hygiene inspections.

The Ministry of Agriculture has a lack of well-trained agricultural officers in agronomy and entomology that are able to advise farmers and the agricultural industry on technical standards and good agricultural practice programs.

Quarantine regulations are harmonized throughout the Federated States of Micronesia and are largely based on US requirements. There is insufficient technical capacity and resources to undertake independent risk analyses for plant and animal health related issues.

There is currently no capacity to perform chemical or detailed microbiological analysis of food. An absence of routine testing of foods results in:

- An inability to objectively assess compliance against food standards.
- The food industry having a difficult task to develop added value products.
- A failure to facilitate the development of plant and product certification systems, which would help in export promotion.

There is currently no inspection or analysis at the border for imported processed and packaged foods and ingredients.

Trained officers using official protocols and checklists carry out quarantine inspection of animal and plant-based products at the border. The system is based on that developed by the SPC and is largely harmonized throughout Micronesia. Although there is a lack of technical capacity to assess the quarantine risk posed by animal and plant products, assistance is usually provided by SPC.

5. Trade Policies and the WTO

The Compact of Free Association agreement (Compact) signed by RMI and the US entered into force in 1986. Under the trading clauses of the Compact, RMI gains access to the US market on reciprocal MFN terms. With some exceptions, entry to the US market is largely duty-free and quota-free to RMI originating goods (defined broadly as goods with at least 35% RMI value added). RMI currently levies import tariffs on US goods. As yet, RMI has taken very little advantage of the opportunities offered by the opportunities offered by the availability of preferential access to the US.

Given this commitment by RMI under the Compact Agreement, it has yet to ratify PICTA and PACER.

The new strategic development plan provides clear endorsement for further involvement in the trade deregulation and regional and global integration once the Compact Issue is settled.

The Trade priorities of the RMI include:

- Strengthening institutional structures and mechanisms dealing with trade (in terms of Government personnel)
- Encouraging exports – particularly of fish and aquaculture products, and tourism
- Improving and implementing policies and programs designed to assist the private sector in the trade sphere
- Improving the competitive skills of, and the extent of competition along, potential exporters
- Improving and implementing policies aimed at promoting exports, tourism, inward foreign investment and the acquisition of modern technology
- Encouraging inward private foreign investment

Trade tariffs range from 5-10% for most basic products allowing RMI to depend on so much imported foodstuffs mainly from the United States.

Most of the trade policies are in line with the WTO requirements such as the non-existent of export taxes and import licensing requirements.

The main challenges of RMI from the multilateral trading system would be through the reduction of subsidies given by the US government to its producers. This would raise the price of goods in the RMI posing a major threat to the food security issue.

Being a member of the WTO would allow RMI to deal with some of the trade restrictions it currently or would be facing in the future. The main constraint would be in the area of expertise available to educate the private sector in following the trading patterns governed by the WTO agreements. The subsidy imposed by the Government of RMI would not be a major issue in terms of WTO measure of aggregate support.

6. Recommendations

- (i) *Consultation with the private sector* – for RMI to successfully implement its policies and plans, involvement of the private sector in all sectors is very important particularly in the facilitation of trade and business activities. Ongoing workshops and dialogues could be developed to promote this consultative role.
- (ii) *Privatization of Internal Transportation* – it may be beneficial for Government to privatize the internal transportation to the outer islands by contracting it out to the private sector. This would provide efficiency in the services and improving the regular access to the outer islands supplying foodstuffs and income for the copra for the farmers. This would enhance the productive capacity of the private sector.

(iii) Fisheries Development

- Promote domestic long-line fleet expansion and by-catch landings from locally-based licensed vessels as a means satisfying domestic demand for fish as well as improve export earnings and employment
- Encourage expansion of domestic fish processing sector including fresh/ frozen loin exports
- Use of tuna processing waste for animal/ fish feed development including feed development incorporating copra cake and other agricultural feed ingredients
- Implementation of comprehensive sea food safety and quality regulations and standards to assure quality and safety of both imported (canned) fish products as well as domestically produced/ marketed fish and fishery products including capacity building in this sector in partnership with established industry.
- Encourage farming baitfish for the industrial pole and line and longline fleets, especially in the outer islands.
- Improved sustainable utilization of deep water snapper resources including market diversification, including Asian markets
- Encourage eco-tourism and sustainable commercial utilization of resources through management of coral reef areas and their resources including giant clam, trochus, sea cucumber, pet fish .
- Expand coastal fish production and upgrading domestic fish marketing systems to meet the fresh fish demand in Majuro and Kili Islands
- Expansion of pearl farming and seaweed culture

(iv) Needs for training and capacity building

Control of imported foods

The implementation of a system for the inspection and testing of imported foods and ingredients would be beneficial for RMI in preventing mislabeled, low quality and potentially unsafe foods from entering and/or being dumped onto the domestic market and therefore better protecting the consumer. It would also give assurances to future food processors, which would have to rely heavily on imported ingredients for their food manufacturing. In order to implement a system that is compatible with WTO/ SPS and TBT requirements, domestic food standards must first be established and a greater capacity developed for their enforcement.

Quality management systems training

As there is essentially no processed food industry within RMI, there are no established quality assurance and/or HACCP systems. The notable exception here is the foreign owned tuna loining plant in Majuro. There is a need for greater technical capacity within government and industry to understand the requirements of and to develop these systems.

There is a need within RMI to build upon current agricultural diversification programs and to look at establishing good agricultural practice systems for selected agricultural commodities of importance to the economy.

The Government in partnership with the food industry needs to take a proactive approach to facilitate the development of quality assurance and HACCP systems for food processing. Such systems will have benefits for production and will better assure the quality and supply of products. Assistance and training is required to better understand the requirements of these systems and to advise and train the industry in their establishment and implementation.

Food safety training

There are no apparent programs in RMI that educate food businesses on food safety requirements. Training in the development and evaluation of process control and HACCP food safety systems is required within the health sector so that they can transfer this knowledge to the food sector.

NAURU

1. Economic Statistics

Population: 12,000 (2000 est)

Land Area: 21 square kilometers

Exclusive Economic Zone: 320,000 square kilometers

Political Status: independent democratic republic

GNP: US\$50 million (1998 estimate)

Major Industries: phosphate mining, financial services, coconuts

Merchandise Exports (FOB): US\$25.1 million (1996)

Major Exports: phosphates, coconuts

Merchandise Imports (CIF): US\$15.4 million (1996)

Major Imports: Food and live animals; manufactured goods; building materials; and machines, transport and equipment

Currency: Australian Dollar

Average Exchange Rate: US\$1 = A\$1.7248 (2000)

2. Economic Profile and Performance

Nauru's rich phosphate deposits have made it one of the wealthiest nations among the Pacific Island countries; however, since 1989, demand for phosphate has declined and the cost of extraction has increased. Adding to this, Nauru's phosphate resources are estimated to have a life expectancy of between five and ten years. The rehabilitation of mined land and diversifying the economy pose a serious long-term challenge for Nauru.

In the financial year (ending 30 June) 2000, Nauru's budget deficit was over US\$5.8 million, about 18% of GDP. Profits from phosphate mining fell because of the stronger United States dollar, which impacted negatively on the cost of imported inputs (fuel, machinery, etc.). With phosphate mining likely to be less economic, the government aims to develop other industries, including offshore fishing, financial services and tourism. There are substantial fish resources in the water surrounding Nauru, but no local commercial fisheries base exists. Revenue from overseas fishing agreement license fees registered a 60% increase in the 2000 financial year.

Under Nauru's Constitution, the Nauru Phosphate Royalties Trust (NPRT) administers the investment of income generated from the sale of phosphate. The NPRT has extensive investments in Australia and other places overseas. Under the Constitution of Nauru, the NPRT is required to pay a percentage of phosphate royalties into a special Rehabilitation Fund set up by the government to finance the rehabilitation of the lands that have been destroyed as a result of the mining activity. The value of the NPRT's investments has diminished considerably over the past few years to between US\$116 and US\$174 million. There are few statistics available on Nauru's economy, however, it is estimated that GDP per capita is likely to have been US\$2,900 in 1998.

The Nauru government took steps towards much-needed economic reform with its first economic summit held in March 1999. The summit, aimed at producing a national development strategy for the next century, was successful as a first step in the process of consultation between the government and the people of Nauru on the reform measures needed to turn the economy around. A freeze on wages, a reduction in public service departments, privatization of numerous government agencies and closure of some overseas consulates, will also reduce costs during the transition.

3. Agriculture and Food

Primary production is confined to fruit and vegetables for domestic consumption, although the country is nowhere near self-sufficient and commercial fishing does not exist. Primary production comprises the subsistence production of coconuts, figs, mangoes, wild cherry and pandanus. Pork and chicken are also grown for domestic consumption. Rice has become an important staple food for Nauru as well and the demand for food has increased because of the asylum seekers staying in Nauru.

Import-replacement investment opportunities involving the production of fruit and vegetables to support the local market are actively promoted by the government. The government is focusing much attention on the rehabilitation of topsoils destroyed by mining activity. While there is limited land available, the government is also keen to reinvigorate the country's agricultural sector, including the production of traditional crops such as cassava, taro, mangoes and bananas, and non-traditional crops such as vanilla beans, noni fruit and ginger.

4. Fisheries

There are substantial fish resources in the water surrounding Nauru, but no local commercial fishing base. However, the Japanese Fisheries Department assisted with the funding of a small-boat harbour in Anibare Bay, which was officially opened in September 2000.

With the relatively extensive EEZ, the opportunity exists for investors to develop the fishing of a range of migratory species, including vast tuna stocks; the development of a viable onshore and offshore fishing industry is a priority of the government. Direct flight services to Asia, Australia, the Fiji Islands and Kiribati augur well for investors keen on exporting fresh, chilled or frozen seafood from Nauru to these lucrative markets. Because of its strategically central location, Nauru also has the potential to be a viable fishing boat repair and refit centre. An extensive number of foreign-owned vessels from Japan, the United States, Taiwan, the Republic of Korea and the People's Republic of China operate in the Pacific Islands and present overseas investors with a ready market.

5. Trade Policies

Nearly all consumer and processed goods in Nauru are imported. Despite this, the country has enjoyed a trade surplus with its main export being high-quality phosphate. In 1996 Nauru imported goods valued at US\$15.4 million, largely from Australia and New Zealand. Over the same period its exports totalled US\$25.1 million.

Nauru has ratified PICTA and PACER which provides opportunities for Nauru in the future and also for Nauru to source products from nearby Pacific island markets at reasonable prices.

Nauru would not greatly benefit from WTO membership because of the insignificant size of the domestic industries. However, Nauru is one example of an island country that would be greatly impacted in terms of food security once subsidies are reduced for farmers in the developed markets.

6. Recommendations

- (i) *Promote farming systems in Nauru* – to address the threat from food insecurity, Nauru people must be encouraged to grow more food rather than depending on imported foods. A project involving the asylum seekers in Nauru where everyone is engaged in some sort of subsistence farming or fishing or raising livestock might benefit the food stocks in the long run.
- (ii) *Promote foreign investment in the fisheries sector* – Nauru has an extensive EEZ to be promoted for fisheries investors especially as the resource is running out in the neighbouring PICs.
- (iii) *Capacity Building for Nauru Officials* – building the capacity and knowledge of Government officials not only within Nauru but also at the Nauru missions abroad broadens the knowledge on how Nauru could take advantage of opportunities for growth.

NIUE

1. Economic Statistics

Population: 1700 (2003 est)

Agriculture - products: coconuts, passion fruit, honey, limes, taro, cassava (tapioca), sweet potatoes; pigs, poultry, beef cattle

GDP : \$7.6 million (2000 est.)

GDP per capita : \$3,600

Exports: \$137,200 (1999)

Exports - commodities: honey, root crops, limes, vanilla, noni

Exports - partners: NZ 89%, Fiji, Cook Islands, Australia

Imports: \$2.38 million (1999)

Imports - commodities: food, live animals, manufactured goods, machinery, fuels, lubricants, chemicals, drugs

Imports - partners: NZ 59%, Fiji 20%, Japan 13%, Samoa, Australia, US

Currency: New Zealand dollar \$Z

Exchange rates: New Zealand dollars (NZ\$) per US\$1 - 1.9451 (January 2000),

2. Economy

The economy is heavily dependent on aid and remittances from New Zealand. Government expenditures regularly exceed revenues, and the shortfall is made up by grants from New Zealand which are used to pay wages to public employees. Niue has cut government expenditures by reducing the public service by almost half. The agricultural sector consists mainly of subsistence gardening, although some cash crops are grown for export. Industry consists primarily of small factories to process passion fruit, lime oil, honey, and coconut cream. The sale of postage stamps to foreign collectors is an important source of revenue. The island in recent years has suffered a serious loss of population because of migration of Niueans to New Zealand. Efforts to increase GDP include the promotion of tourism and a financial services industry.

3. Agriculture and Food

3.1 Current status of Development

Fisheries and agriculture play an important role in supporting the local economy of Niue and contributing to the country's food security. While fishing and subsistence agriculture is an integral part of most of the population, its combined economic value is low. The small population and poor access to land make it difficult to take advantage of economies of scale that make commercial agriculture successful. Agriculture in Niue consists mostly of root crops (taro and breadfruit), copra, vegetables, fruits and vanilla.

Niue's low capital base and high labour cost makes most exports uncompetitive. However, Niue does successfully export taro, vanilla and honey to niche markets. Most of the vanilla now produced in Niue is organically certified. The taro industry is a vital source of local cash income, with over 90% of the population involved in production to varying extents. In 1999, the export of taro was valued at NZ\$350,000 and all of this was exported to New Zealand. However, the high export freight costs combined with competition on the world market now make it increasingly difficult to compete with countries such as Fiji, who now grow similar varieties for which Niue once had a competitive advantage. As a result, taro exports have diminished in recent years with local supply often exceeding the export market demand.

The country is very dependent on the importation of foods to maintain food security. Most food imported into Niue is from New Zealand and food imports represent a high proportion of the total import bill.

There is very little food processing within Niue. Processed food includes meat, honey, confectionary, preserves and bakery products. There is one small abattoir and butcher that processes meat for the local market and poultry are produced for local egg production.

In terms of market access for taro and limes, Niue has experienced market access difficulties due to an inability to demonstrate freedom from pests and disease, and pest monitoring programs.

For the above reasons, many farmers are shifting their emphasis away from the traditionally farmed commodities such as root crops and citrus to those such as vanilla and coffee that have fewer problems with diseases and pests and for which high prices are currently being paid on the world market. However, investment in strategies to ensure quality and markets are not yet apparent and in the case of vanilla, producers are experiencing difficulties with ensuring its quality for export markets. This may have a detrimental effect on the reputation of Niue's vanilla industry that is currently highly sought due to its high quality. There is a need for Government and industry to jointly develop quality and safety management strategies and systems for important crops such as taro and vanilla, so that production and quality are better assured and export markets are maintained.

Noni is also grown and exported from Niue but in very small quantities. Efforts are also underway to have the noni plantations organically certified.

The Niue Organic Farmers Association (NIOFA) is an association of around 100 farmers involved in organic farming mainly focusing on vanilla and noni. The New Zealand government has assisted in funding a facilitator to assist the farmers in the process of organic farming however NIOFA farmers still require technical support in terms of equipment and capital to clear land as well as techniques to upgrade the quality of vanilla produced.

3.2 National capabilities to meet importing country food safety requirements

Food standards do not exist in Niue and the food processing industry is not sufficiently diverse and knowledgeable to have the capacity to implement quality assurance and HACCP systems. There are also limited resources and technical capacity at the government level to facilitate the development of and enforce modern food safety and quality systems that would meet overseas market requirements. Having said this, the Agriculture Department has invested in the training of a food technologist that will help capacity in this area.

Public health food inspectors play a role in ensuring the safety of locally produced food in their routine inspection of food premises, but largely focus on visual inspection of foods, together with hygiene and sanitation and premise requirements. There is little attention given to process controls such as temperature control during food preparation, storage and display.

With respect to demonstrating freedom from specific diseases to facilitate export of plant-based products, there is currently inadequate capability and infrastructure to establish and maintain procedures and systems that demonstrate freedom from diseases, and greater expertise and resources are needed.

3.3 Barriers to expanding Niue's export markets

It is difficult to see how a small economy such as Niue can expand its current export markets. Growth is constrained by numerous factors including:

- Low level of agricultural production due to small population base
- High international freight costs
- Lack of skilled and very high cost of labour
- High set up and maintenance prices (energy, utilities) for small businesses
- Lack of storage and processing facilities for downstream production and value adding of agricultural crops
- The lack of integrated quality management and food standards in production and processing systems that could potentially facilitate and optimize Niue's comparative advantages
- Lack of post-harvesting food technology expertise and investment both within Government and industry to develop value added food processing.
- Adherence to Codex standards is seen as a means of enhancing market acceptance of exported food products. However, there is currently very little investment in the food industry and no real manufacturing industry of note. As a result, the private and business sector forces have not reached a critical mass whereby they can effectively lobby Government for modernization of infrastructure and standards development.
- The Chambers of Commerce and Food Industry Associations are now working more closely to establish needs for the food industry so that recommendations can be made to Government on where to target development activities. The Chamber of Commerce is seeking improvements to infrastructure and the development of food standards, and is seeking to work more collaboratively with government to identify opportunities with respect to aid and technical co-operation programs. The government needs to be responsive to the issues put forward by the private and business sectors and develop better collaborative working relationships.

3.4 Deficiencies in institutional and legislative frameworks

Current food legislation in Niue is set out in regulations within the Public Health Ordinances under Part IV- the Manufacture and Sale of Food. The regulations apply to all food businesses that are involved in the production and/or sale of food. All food businesses must be registered with the Health Department, with an annual renewal subject to meeting the requirements. Requirements of food businesses are largely confined to food premise, sanitation and personal hygiene and pest control requirements.

The legislative framework covering food requires updating. It needs to allow for the enforcement of risk-based and outcomes-based food safety systems that advocate process control, rather than prescriptive and end product based inspection.

The lack of safety (e.g. microbiological, additives), labeling or quality (compositional) standards for foods and the lack of a food-testing laboratory make it difficult for inspectors to objectively support their findings. In the absence of assurances against established food standards, the consumer is potentially vulnerable to foods of low quality and questionable safety. The incapacity to test imported

ingredients and locally manufactured foods against standards also exposes the food industry to safety failures and potentially compromises markets. \

A new Bio-security (quarantine) Bill has recently been drafted for Niue that will be consistent with SPS requirements. The Government of Niue recognizes the value in improving the safety and quality of food and the benefits this may bring in promoting confidence in the food supply and facilitating development of plant and product certification systems to satisfy standards. The Government is currently examining the options for more comprehensive food legislation and standards, while also ensuring that any such standards are consistent with those of Codex.

3.5 *Institutional framework*

Health

The Public Health Division of the Department of Health is responsible for inspecting food establishments to ensure that they are safe and protect the health and safety of consumers. Every food premise is required to have a certificate of registration that permits it to manufacture and/or sell food. The permit is issued after completion of an inspection in which the requirements under the Public Health Ordinances have to be met. Institutional issues identified were the following:

- The Public Health Division lacks the expertise to extend inspection activities beyond that of basic food premise and hygiene inspections.
- Public health inspectors require training in the establishment, control, and audit of risk based food safety systems such as HACCP.
- More effective consultative and collaborative working relationships with the food businesses need to be developed.

Agriculture

The lack of capital, resources and technical capabilities within the private sector makes it difficult for the agricultural and food industry to further develop and diversify, as well as to upgrade quality systems. Within agriculture the following institutional issues were identified:

- Field officers need further guidance and training on how to assist farmers to establish quality systems for production of important export crops such as taro and vanilla.
- Training in and development of good agricultural practice systems would be of great benefit to the agricultural industry in lifting standards and better complying with export market quality expectations.
- The Department of Agriculture needs assistance and capacity building to establish systems that demonstrate freedom of pests and diseases in key agricultural crops so that export markets can be maintained and potentially expanded.

Codex activities

Niue has not yet established a national Codex committee, but is looking at setting up a food standards committee in response to their obligations under the PICTA Agreement.

There is currently no competent authority within Niue certifying exports.

Adequacy of national food analytical and inspection services

There is no laboratory in Niue that currently has a capacity to test foods for microbiological contamination or composition requirements. An absence of routine testing of foods results in:

- An inability to objectively assess compliance against food standards.
- The food industry having a difficult task to develop added value products.
- A failure to facilitate the development of plant and product certification systems, which would help in export promotion.

There is currently no inspection or analysis at the border for imported processed and packaged foods and ingredients.

Trained officers using official protocols and checklists carry out quarantine inspection of animal and plant-based products at the border. The system is largely based on that of the New Zealand quarantine system. There is little technical capacity within Niue to assess the quarantine risk posed by animal and plant products. They are assisted in this area by databases supplied by SPC, but recognize the need to improve their technical capacity in plant and animal health risk assessment.

4. Fisheries

In 2003, Niue had 100 registered boats of which 40 are active and about 120 canoes. The main fishing activities catering mainly toward subsistence living and to sell to the domestic market.

There is currently no commercial export of fishery products from Niue. The only fishery exports are those carried by traveling Niueans as baggage and an estimate of 5 mt of fish and 2 mt of crabs were exported annually during periods when there was direct air service to New Zealand.

The Fisheries Division is currently undertaking a feasibility study on the possibility of long lining fisheries in Niue and is working closely with the Niue Fishermen Association on this study.

The main constraints in fisheries in Niue include:

- Infrastructure support – given the geographic origin of Niue as a rock island, the infrastructure available for fisheries is very expensive and require high capital set up costs. It require winches to lift the boats up from the water after fishing and there is only one electrically operated winch in Alofi and the other ramps have manually operated winches.
- High Costs of Fuel – Government is presented subsidizing all fuel sold to the island however the costs are still high. The cost of petrol is NZ\$1.45 per litre and diesel is NZ\$1.50 per litre.
- Declining number of fishing boats – due to the declining population, the number of fishing boats and canoes has decreased making the price of fish in the local market very high. The current price of pelagic fish species is around NZ\$8 - \$10 a kilogram and the average price of a coconut crab is around NZ\$30 - \$40 for one crab.

Niue has issued a foreign fishing license to a Taiwanese company in addition to the inclusion of Niue under the Multilateral Treaty with US through the Forum Fisheries Agency.

The Niue Fishermen Association was set up in 1990 with 37 financial members to promote and develop the fisheries industry and to assist Government in the development of the infrastructure for fisheries activities. The Association has been successfully working with Government in seeking finances for the purchasing of winches and is currently seeking further grants to improve the current facilities.

5. Trade Policies

Niue currently applies 10% duties on major agricultural and food products with the exception of eggs and honey having 20% duty rates. The highest duties are on kava, hobbs and oats and soft drinks with 50%-60% rates. Other duties applied include NZ\$20/ton port fees for air freighted good and NZ\$50/ton for sea freighted goods.

Niue has yet to develop trade statistics and would soon be using PC Trade system to record all trade data.

Niue has ratified the PICTA and PACER Agreements and has yet to decide whether to become a member of the WTO. However, the Government is committed to raise more awareness on the opportunities that Niue could benefit from the international trading environment.

6. Recommendations

- (i) Strengthening the Partnership with the Private Sector – it is important for the government and the private sector to work together especially in encouraging Niueans living abroad to return to Niue and to encourage foreign investment.
- (ii) Production and Marketing of the Organic Certified Products – Niue has great potential in the export of organic vanilla and continuous assistance in the production and marketing of vanilla is warranted.
- (iii) Marketing of Niue Taro to PICs – with the PICTA now in place, the marketing and promotion of Niue taro to neighboring Pacific island countries provide an alternative market to New Zealand for the taro.
- (iv) Development of Long line fishing using other PICs as hubs – With the vast EEZ, Niue could develop its long lining fleet commercially using other PICs as hubs for their catches. For example, Samoa could be used by the boats to service their crews, fuel and food and American Samoa to sell their catches. This takes care of the problems of offloading the catch in Niue then having to process and repack the fish for exports. A bilateral fishing agreement with Samoa could benefit both countries.
- (v) Strengthening the linkages to other private sector associations in the Pacific – The Niue Chamber of Commerce could liaise with the private sector associations in the PICs for information sharing, business opportunities and capacity building.

- (vi) Needs for training and capacity building - Increase awareness on the PICTA and PACER Agreements – increasing public and private sector awareness on the international trade policies that Niue has signed on to would assist Niue in developing policies pertaining to agricultural and business development.
- (vii) Control of imported foods - The implementation of a system for the inspection and testing of imported foods and ingredients would be beneficial for Niue in preventing mislabeled, low quality and potentially unsafe foods from entering and/or being dumped onto the domestic market and therefore better protecting the consumer. It would also give assurances to future food processors, which would rely heavily on imported ingredients for their food manufacturing. In order to implement a system that is compatible with WTO/ SPS and TBT requirements, domestic food standards must first be established and a greater capacity developed for their enforcement.
- (viii) Quality management systems training - As there is essentially no processed food industry within Niue, there are no established quality assurance and/or HACCP systems. There is insufficient technical capacity within government or industry to develop these systems at the moment.
- (ix) There is a need within Niue to develop good agricultural production systems for selected agricultural commodities of importance to the economy such as taro and vanilla. The Government in partnership with the Chamber of Commerce, processed food associations and the agricultural industry needs to take a proactive approach to facilitate the development of quality management systems in these areas. Such systems will have benefits for production and will better assure the quality and therefore the reputation of products. Assistance and training is required to better understand the requirements of these systems and to be able to advise and train the industry in their establishment and implementation.
- (x) Food safety training - The Health Ordinance takes an inspectorial approach to the control of food premises such that the food safety standards observed in premises preparing and selling food depends on the vigilance of the inspector. There is currently little onus on the operator to have skills or experience or any obligations to develop and maintain a safe process. The Government needs to develop proactive training programs in food hygiene for food operators so that food is produced safely and the consumer is protected. A good reputation for safe food and water is also an important element in attracting tourists to the country.
- (xi) Knowledge of and training in the evaluation of process control and HACCP food safety systems is required within the health sector.

PALAU

1. Economic Statistics

Population: 19,129 (2001)

Land Area: 497 square kilometers

Exclusive Economic Zone: 629,000 square kilometers

Political Status: independent republic in free association with the United States since 1994

GNP: US\$133.6 million (1999)

Major Industries: agriculture, tourism, subsistence fishing

Merchandise Exports (FOB): US\$11 million (1998)

Major Exports: handicrafts; agricultural goods; taros and coconuts

Merchandise Imports (CIF): US\$79 million (1998)

Major Imports: mineral fuels; manufactured goods; machinery; food

Currency: United States Dollar

2. Economic Profile and Performance

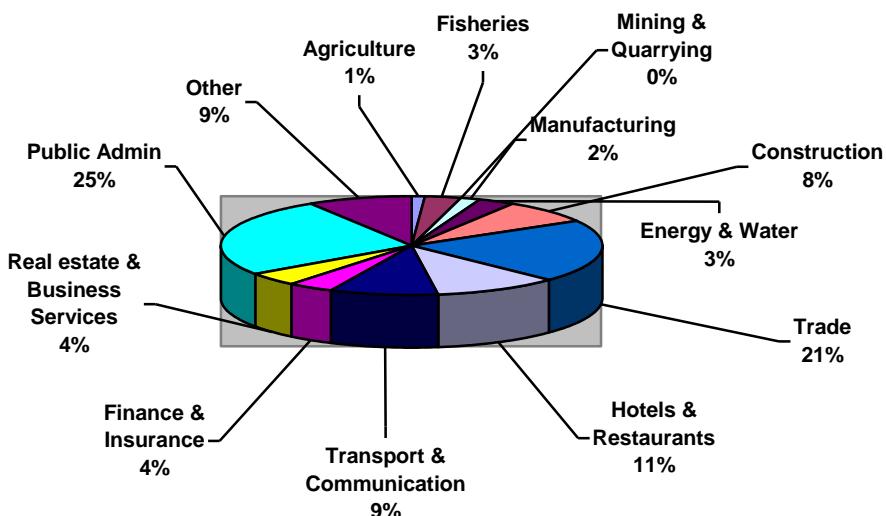
Palau is a small developing economy, generating a total GDP of US\$133.6 million in 1999. Despite the fact that it is a remote country, it enjoys a relatively high standard of living which, in the main, is a result of support funds drawn down annually from the Under the Compact, the United States government agreed to pay Palau US\$447 million over the first 15 years (1994–2009) of the 50-year Compact. There is also provision for major infrastructure projects, including the construction of a road around Babeldoab and the continuation of some United States federal programmes. Palau also receives preferential trade access to the United States under the Compact.

The Republic of Palau has started down a new path of economic and social development. Palau's economic future is based around the opening up of opportunities afforded by its unique natural resources and culture, its modern and open economy. The areas of growth in Palau have been in construction, transport and communications, real estate and business services. The key areas of development that have been prioritized are roading, improving its international gateways, electrification, communications and general infrastructure. The potential remains for significant growth in agriculture and fisheries in the next few years given Palau's natural abundance in fisheries and its proximity to the Asian market.

The Compact obliges the United States to defend Palau. It also commits the United States to continue to provide, at no cost to Palau, many services including air safety, weather prediction, health services and assistance in the event of a natural disaster. Tourism, the main source of income in Palau, has recovered from a decline in 1998 and the first six months of 1999, effected by the Asian economic downturn. Palau's tourism is focused on high-income, small-volume tourism, in order to achieve a balance between maintaining its pristine environment and tourism infrastructure development.

Small-scale agriculture is experiencing an increase in demand, and fishing is also important to Palau. Japan is a major importer of Palau's tuna and Mackerel, and Chinese and Taiwanese long-line fishing fleets also fish in Palau's Exclusive Economic Zone (EEZ).

GDP Contributions 2001 (at current prices)



Source: Palau Statistical Abstract 2002

3. Agriculture and Fisheries Sectors

There is limited agricultural production beyond the subsistence farming of taro, cassava and sweet potato. With a small area of land to cultivate and a small domestic market, large-scale commercial agriculture is not viable. Palau has only limited forest reserves and there are no plantations of introduced species. Apart from high-quality manganese in the seabed of Palau's EEZ, yet to be quantified, there are no other known mineral resources.

Agriculture, livestock, forestry and fishing comprise a small share of the total national output and income. While there certainly is potential for growth, especially in agriculture to meet more domestic demand for food and fiber from domestic production, the likelihood of that happening soon is small. The reason for agriculture's limited role is Palau's small market, which cannot take advantage of economies of scale that make commercial agriculture financially successful.

As pointed out in the findings of a recent presidential task force on agricultural development, it costs less to import foods and fiber than to produce them in Palau. While exceptions do exist, this situation of imports meeting more of the demands for food and fiber is common to the small Pacific Island economies where small markets and small landmasses prevent the establishment of large commercial agricultural enterprises.

In rural Palau, most households earn a part of their livelihood from subsistence farming and fishing. Women grow staple crops such as taro, cassava and sweet potato. Men provide the protein for the household's diet by catching fish. Rice has recently become an important staple food. Bread made of imported wheat flour has gained popularity as a staple also mainly in urban Koror, where several commercial bakeries operate.

Among the most pressing problems agriculture faces, especially in small economies, is the availability of adequate labor willing to work on farms and capital to invest in both skills and facilities. As agriculture is always subject to uncertainties dictated by nature, and demand for food does not necessarily go up with rising income, its earning potential is both limited and unpredictable. That is one of the main reasons agriculture often receives subsidies in most economies, usually in Europe, Japan and the United States. Since an adequate supply of food and fiber is always a high priority, governments readily justify subsidies and other assistance programs to agriculture.

Beyond subsistence fishing and a small local market, including restaurants, Palau's main source of income from this sector is generated through the sale of licenses to foreign fishing vessels from Japan and Taiwan that are involved in catching tuna in its extensive EEZ.

Palau, with a total land area of 188 square miles, has an EEZ of 237,835 sq miles out of which 0.2% (560sq miles) constitute inshore waters with a diverse ecosystem hosting a wide range of species. Coastal waters are fished by the population on a subsistence basis while Coastal State Fishing Cooperatives, numbering 11 with a total membership of around 90, engage in commercial fishing as well. The cooperative network operates nearly 50 out-board motor boats.

Palau - Total catch of fish in coastal waters by species 1997/2001 (lbs)

Species	1997	1998	1999	2000	2001
Assorted reef fish	189,463	167,450	308,493	286,483	294,761
Parrot fish	37,031	25,009	27,861	12,098	57,516
Surgeon & unicorn	22,565	8,706	29,699	23,428	101,613
Emperors	12,366	36,990	17,591	9,204	20,586
Rabbit fish	9,071	6,836	17,571	10,433	25,613
Groupers	1,311	3,475	9,033	2,424	23,835
Others	39,337	85,392	67,658	58,769	69,594
Total (lbs)	311,141	333,858	477,906	402,839	593,473
Total (kg)	141,427	151,753	217,230	183,108	269,760

Source: 2001 Government of Palau, Statistical Yearbook

The recorded annual landings from coastal fisheries amounted to around 270,000kg in 2001 (Table 1). Regulatory provisions are strictly implemented to manage the coastal and reef resources while the management plan for fisheries is also under development by the Department of Fisheries, with a total staff of 34.

Only a small fraction of landings from coastal fisheries is traded, most being used for consumption by the household. There are three market outlets for fish, one in the capital Koror, the other two in the eastern and western locations of the country. Around 300-400kg of

fish are air freighted to Guam and Saipan weekly by three exporters operating from Koror. Airfreight charges to Guam is around \$ 1.95/kg to Guam. If the consignment exceeds 100kg the rate is half, i.e. 0.98cts/kg.

**Palau - Employed population (> 16 yrs) by industry and income
1999/2000**

Industry	Total	Total with Income	Median Income	Meat Income
Total employed	9,383	8,068	5,583	8,520
Agriculture	167	151	3,011	4,468
Forestry and fisheries	501	387	5,579	6,855
Construction	1,232	850	4,367	6,661
Manufacturing	65	63	5,150	6,108

Source: 2001 Statistical Yearbook

Fishing in the off-shore waters is carried out by a fleet of 3 locally based foreign long-line fishing vessels and 36 licensed foreign long liners. Licensing fee for foreign vessels ranges from US\$1,500(< 21mt), US\$ 2,500 (21-70mt) to over US\$3000 (>70mt). Several Japanese Fishing Associations too operate in the EEZ. High priced fish such as sashimi quality tuna caught by the fleet of locally-based foreign fishing companies are air freighted, mainly to Japan (Osaka) and Guam, from Koror (Table 4).

**Palau - Migratory fish* exports by locally-based foreign fishing companies
1996/2001 (mt)**

Year	1996	1997	1998	1999	2000	2001
Quantity	2,256	1,813	1,855	2,559	2,334	2,031

* tuna and other migratory species

Source: 2001 Statistical Yearbook

All exports are subjected to an export levy of US\$0.25/kg. In 2001, total fish exports by the fleet of locally-based foreign fishing companies amounted to over 2000mt . Foreign vessels do not land their catch locally.

Except for some root crops and fresh fish, the domestic market heavily depends on food imported duty free. Fish is relatively costly when compared to imported animal products such as poultry, which is marketed around US\$ 0.70/lb upward, whereas most varieties of fresh fish would cost US\$ 1.50- 2.50/lb. Imported canned fish is popular in Palau, especially among the urban population and among foreigners, numbering around 6500, employed in Palau.

Retail market price of canned fish in Koror

Product	Origin	Weight	Price (US\$)
Sardines in tomato sauce	Philippines	155 gm	0.50
Light meat tuna in oil	Thailand	7 oz	0.90
Light meat tuna in oil	Japan	7 oz	0.90
Solid white tuna	US	6 oz	1.89

Source: Price information collected during the study

The Department of Fisheries plans to embark on a project promoting value addition of fish through a Japanese assisted program. The project envisages to introduce a wide range of fishery products targeting the local market and the tourists, who are predominantly Japanese and Taiwanese. The products identified for such promotion includes smoked/ dried fish, kamaboko, sashimi tray pack, tuna jerky etc.

4. Food Sector

In general, Palau's small market makes it difficult to take advantage of economies of scale that make commercial agriculture successful, and the country is very dependent on the importation of foods to maintain food security. The Republic of Palau has no significant food

exports outside the fisheries sector. Palau is developing a commercial fishing industry, but commercial fishing still consists predominantly of foreign ships catching tuna in Palau's exclusive economic zone for sale and production elsewhere.

Food is mainly imported into Palau from the US, Japan and Korea. Although there is a large balance of trade deficit, subsistence agriculture and fisheries are critical in sustaining the domestic cash market and supporting the growing tourism sector. Agriculture in Palau consists mostly of root crops, vegetables and fruits, with some pork and poultry production, the latter mainly for eggs that satisfies most of the local market. Fisheries and agriculture combined represented on average 5% of the country's GDP for the period 1990-1998.

As with other US affiliated Pacific markets, Palau can sell manufactured goods in the United States duty free. The country has yet to take advantage of these favourable conditions with respect to the export of food products. Palau's processed food industry consists of one brewery, a number of bakeries, a few meat processing/packaging plants and an ice cream plant. The majority of food businesses are restaurants, hotels, snack bars, food vendors and fast food outlets and stalls. None of the establishments operate under HACCP or quality assurance systems.

4.1 National capabilities to meet importing country food safety requirements

Food standards do not exist in Palau and the food processing industry is not sufficiently diverse and knowledgeable to have the capacity to implement quality assurance and HACCP systems. There are also limited resources and technical capacity at the government level to facilitate the development of and enforce modern food safety and quality systems that would meet overseas market requirements. Having said this, the Ministry of Health is examining options for the development of comprehensive and Codex-based food standards for Palau.

The Bureau of Environmental Health and Sanitation of the Ministry of Health, under the provisions and guidelines on basic food safety in Chapter 34 of the Palau National Code, carry out food inspection. Public health food inspectors play a role in ensuring the safety of locally produced food in their routine inspection and assessment of food premises. This largely focuses on visual inspection of foods, together with hygiene and sanitation and premise requirements. Attention is also given to process controls such as temperature control during food preparation, storage and display.

4.2 Issues and barriers to exports

Other than the fisheries sector, Palau has no established food exports. Palau will need to focus on agricultural policies that aim to diversify agricultural production and improve marketing and production efficiency in order to have opportunities to create food export markets. It has several technical cooperation programs that are addressing these areas. In general, development of export markets is constrained by numerous factors including:

- Low level of agricultural production due to small land holdings and population base
- Lack of skilled and high cost of labour
- Lack of storage and processing facilities for downstream production and value adding of agricultural crops
- The lack of integrated quality management and food standards in production and processing systems that could potentially facilitate and optimize comparative advantages
- Lack of post-harvesting food technology expertise and investment both within Government and industry to develop value added food processing.
- Other issues identified as barriers for exports include:
 - There is currently very little investment in the food industry and no real manufacturing industry of note.
 - The private and business sector forces have not reached a critical mass whereby they can effectively lobby Government for modernization of infrastructure and standards development.
 - The Chamber of Commerce is seeking improvements to infrastructure and the development of food standards, and is seeking to work more collaboratively with government to identify opportunities with respect to aid and technical co-operation programs.
 - The government needs to be responsive to the issues put forward by the private and business sectors and develop better collaborative working relationships.

4.3 Deficiencies in institutional and legislative frameworks

There are no domestic food safety or quality standards currently within Palau. Under the Palau National Code (PNC), food establishments are required to comply with requirements relating to food preparation, storage, equipment, personnel, waste disposal and pest and insect control. A Consumer Protection Act that could have strengthened the requirement for the preparation and sale of food was introduced into the National legislature recently but failed to gain support from the Government.

The lack of standards such as labeling, contaminant and microbiological criteria for foods and the lack of a food-testing laboratory make it difficult to objectively support food inspection and enforcement activities. In the absence of assurances against established food standards, the consumer is potentially vulnerable to foods of low quality and questionable safety. The incapacity to test imported ingredients and locally manufactured foods against standards also exposes the food industry to safety failures and potentially compromises markets.

The high dependency on the United States for food imports, has until recently, made food standards a low priority. However, as markets are progressively freed up, Palau is witnessing a greater amount of imports from other countries, particularly Asian markets. Such products often do not have English labels and their quality and safety is unknown.

The lack of comprehensive food safety and quality regulations and standards means that there is a lack of assurance against quality and safety of both imported food and that produced domestically. The Government of Palau recognizes the value in improving the safety and quality of food and the benefits this may bring in promoting confidence in the food supply. The presence of standards has benefits for the economy in being one of the platforms on which tourism can be promoted and the benchmark that the food industry must work to in its implementation of product quality and safety systems.

Seafood export standards and regulations are currently being developed for Palau.

4.4 *Institutional framework*

The Division of Environmental Health within the Ministry of Health is responsible for inspecting food establishments to ensure that they are safe and protect the health and safety of consumers. Every food establishment is required to have a health permit to sell food. The health permit is issued after completion of an inspection in which the requirements under the PNC have to be met. Food businesses are also given a risk ranking, based on the degree of non-compliance in certain areas. The lower the ranking, the more frequently a food premise is inspected.

Issues identified were the following:

- The Environmental Health Division has only four properly trained health inspectors within the food area and lacks the resources to extend inspection activities beyond that of basic food hygiene inspections.
- Palau does not have a national Codex committee, although the Ministry of Health is actively reviewing Codex food standards with a view to drafting similar standards for Palau.
- Staff within Health and Agriculture has received training in HACCP systems but have insufficient expertise to effectively audit and certify such systems.

Quarantine regulations are harmonized throughout the Federated States of Micronesia and are largely based on US requirements. There is insufficient technical capacity and resources to undertake independent risk analyses for plant and animal health related issues.

Palau is not a member of Codex and there is currently no competent authority. It is proposed that the Ministry of Health will take on the role for quality certification of exports. The seafood industry would like to access the EU market and there is a requirement for a competent authority to certify HACCP and quality assurance systems.

Palau has a hospital laboratory that can test foods for basic (standard plate counts) microbiological contamination. Low priority is given to testing of food samples and it is rarely undertaken. There is currently no capacity to perform comprehensive microbiological and/or chemical analysis of foods within Palau. An absence of routine testing of foods results in:

- An inability to objectively assess compliance against food standards.
- The food industry having a difficult task to develop added value products.
- A failure to facilitate the development of plant and product certification systems, which would help in export promotion.

There is currently no inspection or analysis at the border for imported processed and packaged foods and ingredients.

In enforcing the Food safety Regulations requirements, food inspectors utilize a risk-based approach that is dependent on the nature of the business and its compliance record in a number of food safety areas. For example, there is a requirement for food businesses to ensure that foods are stored, handled cooked and displayed at appropriate temperatures. However, it does not require monitoring of temperatures and records to be kept by businesses. Inspectors do not currently have the capacity to test temperatures of foods, nor can they objectively assess safety and suitability of foods for consumption against established microbiological and chemical standards. Trained officers using official protocols and checklists carry out quarantine inspection of animal and plant-based products at the border. The system is based on that developed by the SPC and is largely harmonized throughout Micronesia. Although there is a lack of technical capacity to assess the quarantine risk posed by animal and plant products, assistance is usually provided by SPC.

5. Trade Policies and WTO Membership

Palau has also signed a Compact Agreement with the United States. The Compact of Free Association (the Compact) is a 50-year political, strategic and economic treaty between the Republic of Palau and the United States. Under the Compact, Palau conducts its own domestic and foreign affairs as any sovereign nation would, while the United States retains control of defense and security matters as well as exclusive strategic access to Palau's waterways. For this exclusive access, the United States is to pay the government of Palau a specified sum of money in the first 15 years of the Compact.

Palau being a net food importer relies on imports for food security and at the same time a large portion of the population rely on subsistence agriculture and fishing. Imported foods are subject to 3% tariffs plus 3% Gross and Revenue Tax. This liberal tax scheme makes it difficult for local industries to be set up especially if all the raw materials and capital are to be exported.

Market access is not a major issue especially the access arrangement with the Japanese market and the US markets.

Palau has not ratified the PICTA and PACER due to obligations under the Compact Agreement which is to be reviewed in the near future.

In terms of WTO membership the benefits that Palau would gain would be in the following areas:

- Improved access for garment exports to international markets;
- Improved legislation relating to food standards, intellectual property protection, transparent service sectors (given tourism is a major source of foreign exchange); and
- Improved access to technical support and capacity building.

The challenges to Palau would be the limited resources available to look after trade policies requirements under the WTO. The agriculture sector is very small and there would not be much impact at all if it becomes a member.

6. Recommendations

- (i) Promote diversification on agricultural products – there is certainly a lot of potential to develop the agricultural sector and attracting foreign investment through joint venture arrangements would enhance the production of vegetables and fruits. There is certainly potential for such to be exported to the nearby markets of Guam and Saipan.
- (ii) Commercial farming in giant clams – the market opportunities for giant clams would boost Palau's export earnings. Again attracting foreign investment through joint venture arrangements would facilitate such developments.
- (iii) Establishment of a modern domestic fish processing/ marketing network with increased focus on production of value added seafood for domestic market as well as speciality products for the tourist market. This would also help import substitution and increase earnings through exports.
- (iv) Explore possibility of using by-catch from foreign fleets for domestic marketing / processing operations as well as encourage land-based export-processing of tuna.
- (v) Further development of sustainable utilization of coastal and reef fishery resources including exploratory marketing in non-traditional markets in Asia.
- (vi) Strengthening of the seafood inspection system including quality assurance of exports through capacity building and implementation of appropriate HACCP-based process control measures in association with industry as well as speedy identification of a Competent Authority to ensure equivalence compliance for EU .
- (vii) Needs for training and capacity building - Trade policies and awareness raising – for Palau government officials and private sector to be aware of the international trade policies particularly the regional and multilateral arrangements, it is important to undertake awareness programs, consultations and training to assist the government in developing policies in the future.
- (viii) Control of imported foods - The implementation of a system for the inspection and testing of imported foods and ingredients would be beneficial for Palau in preventing mislabeled, low quality and potentially unsafe foods from entering and/or being dumped onto the domestic market and therefore better protecting the consumer. It would also give assurances to future food processors, which would have to rely heavily on imported ingredients for their food manufacturing. In order to implement a system that is compatible with WTO/ SPS and TBT requirements, domestic food standards must first be established and a greater capacity developed for their enforcement.

- (ix) Quality management systems training - There is a need within Palau to build upon current agricultural diversification programs and to look at establishing good agricultural practice systems for selected agricultural commodities of importance to the economy.
- (x) The Government in partnership with the food industry needs to take a proactive approach to facilitate the development of quality assurance and HACCP systems for food processing. Such systems will have benefits for production and will better assure the quality and supply of products. Assistance and training is required to better understand the requirements of these systems and to advise and train the industry in their establishment and implementation.
- (xi) Food safety training - Knowledge of and training in basic food hygiene is good across food businesses in Palau as the Ministry of Health has established ongoing programs for food businesses. The Government and industry should build on this and encompass training in the development and evaluation of process control and HACCP food safety systems. Further training is required within the health sector so that they can transfer this knowledge to the food sector.

SAMOA

1. Economic Statistics

Population: 170,700 (2000)
Land Area: 2,800 square kilometers
Exclusive Economic Zone: 120,000 square kilometers
Political Status: independent democratic government since 1962
GNP: US\$270 million (2002)
Major Industries: agriculture, fisheries, tourism, light industry
Merchandise Exports (FOB): US\$14 million (2000)
Major Exports: fish, garments, noni, taro, ,
Merchandise Imports (CIF): US\$77 million (2000)
Major Imports: food and live animals; machines, transport and equipment; manufactured goods; and mineral fuels etc.
Currency: Tala
Average Foreign Exchange: US\$1 = T3.2864 (2000)

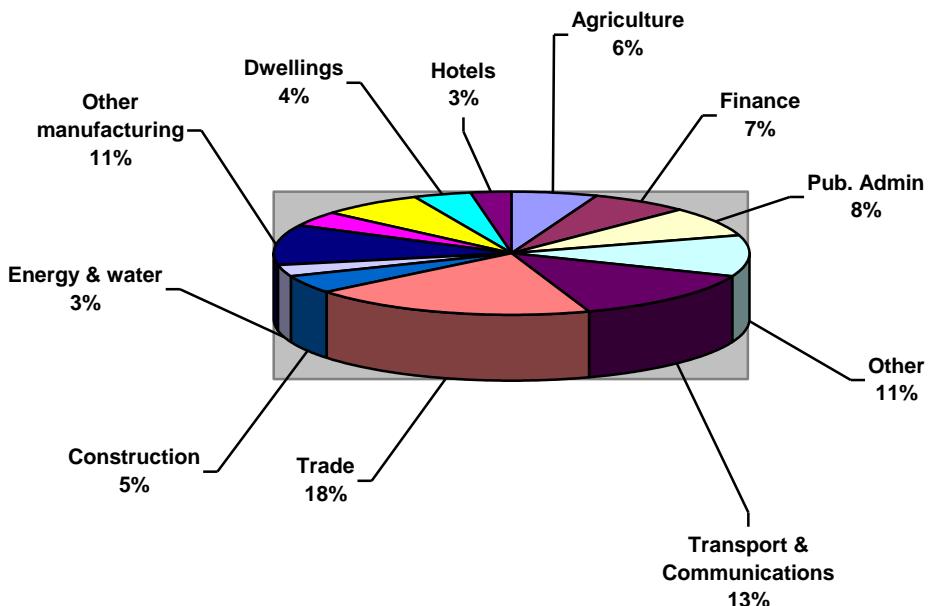
2. Economic Profile and Performance

After two years of robust performance, the Samoan economy weakened in 2002. The slowdown in the economy reflects a decline in investments as well as the drop in exports mainly in the fisheries sector. This was due to uncertainty in overseas markets and as well as the Samoan economic vulnerability to an unstable global economy. However, according to the Government, the economy's performance in 2002 should be viewed in light of extraordinary high growth in the previous two years.

Total GDP at current prices was at ST\$890.4 million (US\$270 million) in 2002 up from 4.9% from the previous year.

Agriculture and Fisheries being the backbone of the Samoan economy has declined further in 2002 with a combined negative contribution of 1.3% which is of concern especially the strong linkages of the sector to food security as well as its significance to the village economy.

**GDP by Industrial Origin (%) Calendar Year 2002
(At Current Market Value)**



Source: Samoa Ministry of Finance April 2003

3. Agriculture

Small-scale farmers who grow a range of root crops taro and taamu, bananas, breadfruit, kava, etc dominate the agriculture sector in Samoa. The taro industry was a significant exporter prior to the blight that struck the crop in the early 1990s. Samoa has extensive coconut plantations and these provide the raw materials for the coconut oil mill, the recently established desiccated-coconut factory and for the companies exporting canned coconut cream. Pure coconut oil is also produced as basic income for the grassroots level and is also exported. Kava, which also contributed to the agricultural export sector, declined substantially; as a result of the ban from the European markets. Organic farming has been promoted in the coconut and noni plantations throughout the country.

Only limited quantities of fruit and vegetables are grown in Samoa most are imported from New Zealand and Australia. The beef industry remains underdeveloped and there is no abattoir in the country.

Being vulnerable to international prices, the fall in copra prices had impacted the coconut industry leading the Samoan government to impose a price stabilization subsidy on the copra produced.

The Ministry for Agriculture takes a leading role in the research and development and facilitating the development of plantations in the country.

4. Forestry

Samoa has only limited forest reserves and there are no substantial plantations of introduced species. Five companies are involved in the harvesting and milling of local timber – primarily the Taun hardwood (*Pometia pinnata*) – but sales to date have been restricted to the local market. The government is now planting exotic species of hardwood catering for high value added products for the local and export markets.

5. Fisheries

5.1 Status of Development

The fishing industry is already a significant contributor to Samoa's social and economic development. It has become an important source of employment opportunities, has attracted considerable foreign and domestic investment capital, and introduced new technology and skills into the country. The total value of the contribution of the fisheries sector in 2001 was ST\$70.9 million Tala accounting for 8.3% of total GDP and contributed 0.5 percentage points to real GDP growth for the year.

The growth in offshore commercial fisheries in particular has been significant. However, the alia fleet has declined from around 350 in late 90's to around 120 in 2003. The main reasons for this has been identified as; poor efficiency in long line operations, inefficient and costly in terms of fuel use, limited onboard iced-storage capacity and hence poor quality of fish and competition from larger vessels.

Estimated tuna longline catch (Metric ton) from 1996 – 2002

Year	Vessels Active	Catch exported	Catch not exported	Catch rejected by exporters	TOTAL Tuna Catch
1996	90	2092	272	105	2369
1997	170	4872	633	215	5720
1998	200	5072	609	304	5985
1999	175	4407	529	176	5112
2000	155	4505	541	225	5271
2001	149	5150	618	412	6180
2002	214	4633	495	252	5360

Source: Fisheries Division 2002

Estimated Value of tuna longline fleet total catch in Tala Thousands ('000)

	1996	1997	1998	1999	2000	2001	2002
Exports	13844.4	27476.4	29581.4	27531.4	38971	45788	31581
Not Exported	805.1	1873.7	1802.6	1565.8	1601.4	1829.3	1465.2
Rejects from exporters	543.9	1117.2	1684.1	950.4	1782	3090	1336.3
Total Value	15193.4	30467.3	33068.1	30047.6	42354.4	50707.3	34382.5

Source: *Fisheries Division 2002*

Fisheries exports accounted for 63% of total exports in 2002 with a value of ST\$29 million Tala. The improvement in fish exports resulted from investment in new boats. The corresponding figures for 2001 were 60% and ST\$36 million respectively.

The industry estimates that it provides work to about 1000 fishermen and factory workers, and additional work in supply and service industries.

Existing market shares for Fish Exports 2000-2002

Country	2000	2001	2002
Am Samoa	19,148,666	24,057,525	17,411,766
USA	5,436,263	11,187,421	10,665,076
Hawaii	124,521	709,692	623,188
NZ		47,616	50,565
Japan	28,613	0	82,860

Source: *Central Bank of Samoa Bulletin September 2002*

5.2 Key Issues and Challenges facing the Industry

The Strategy for the Development of Samoa (2002-2004) identifies commercial fisheries as a 'high growth target activity' during the strategy period which would be supported by the following priorities:

- A fisheries policy to meet the industry needs
- Improved safety, licensing, certification and quality control
- Improved infrastructure with the establishment of a marina, and
- Improved market information

The industry is supportive and appreciative of the various initiatives the Government has taken in recent times to respond to the needs of the industry either specifically or through policy reforms and institutional strengthening projects in other sectors of the economy.

The rapid development of the fishing industry in recent years has highlighted some important policy and infrastructure issues which must be addressed responsibly by the industry and Government to meet the following objectives:

- Long term sustainability of the industry
- Commercial fisheries will remain one of Samoa's largest export industry
- The industry to enhance its position as a major contributor to Samoa's social and economic development

5.3 Quality Standards

National Seafood Safety Council - Government recently announced the establishment of a Council to develop standards and regulation guidelines for fish exported from Samoa to overseas markets. This council will need to work closely with industry members who have invested considerable resources to comply with the quality standards set by their key markets and have taken the necessary steps to have their facilities, operations and products meet those requirements.

The industry, especially the exporters, already have a good understanding of HACCP (quality assurance) requirements of other key markets. The Government through the Fisheries Division and the industry will need to ensure that the quality and standards required in

the key export markets, including those set by the cannery operations in American Samoa, are strictly complied with. There needs to be vigilant monitoring by the fish exporters of the quality of fish purchased from the local fishing fleet.

5.4 *Fishing in International Waters*

Samoa's limited EEZ and the increasing fleet in Samoan waters has led some fishers to register to fish in other EEZs. Some vessels have been caught fishing illegally in territorial waters thus bringing disrepute to the industry as well as to Samoa's respect for international law.

There are now vessels fishing in international waters as well as registering to fish in the Cook Islands waters. The catch is brought back to Samoa and is exported to overseas markets. The International Law of the Sea according to the Fisheries Division requires these boats to declare their catch and pay trans-shipment fees upon unloading their catch at any port. Hence when the foreign registered boats enter the Samoa fishing zone and offload at the ports, they must pay trans-shipment fees. The current trans-shipment fee is ST\$10 per ton of fish brought into Samoa. Furthermore, these foreign registered boats operating out of Apia are subject to customs and immigration laws and are required to pay the fees and duties imposed on any products coming into the country. The industry is keen on Government agencies to assist in facilitating the trade by simplifying procedures and by not imposing additional costs through the levying of trans-shipment fees and other port charges. The industry is requesting the Government to consider a policy to exempt Samoan fishers from the duties to bring in their catch fished in other fishing zones. This leads to another policy matter which could address the issue of many fishing vessels fishing and competing for resources within Samoa's EEZ.

5.5 *Bilateral agreements with neighbouring EEZs*

The Fisheries Division has prepared a proposal for Government to negotiate reciprocal fishing agreements with Cook Islands, Niue, Tokelau, Fiji and Tonga. However this has been put on hold until the taxation issues relating to such agreements could be resolved.

6. Food Sector

6.1 *Current Status of Development*

The food industry within Samoa mostly comprises agricultural farming and small-scale food processing facilities, the latter mostly catering for the domestic market, but some such as coconut cream and desiccated coconut has successfully expanded to create strong export markets. The main agricultural and food production sectors within Samoa are fisheries, coconut cream and oil, fresh and processed fruits and vegetables, bakery and biscuits, cocoa, beverages, and dairy products.

Food and agricultural exports play a strong role in the country's gross domestic product and in 2002 contributed approximately 90% of the total export earnings, valued at approximately ST\$42 million. The most important export commodities are currently fisheries (58% of export earnings), beer (10%) coconut cream (9%), desiccated coconut (6%) and taro (3%). The fisheries sector has grown enormously within 5 years and the coconut cream industry growing and demonstrates high export potential. The noni juice industry has developed recently and has established export markets. There is an increasing trend to produce organic fruits and vegetables in Samoa and this has helped in securing niche export markets. The main destinations of Samoan food and agricultural exports are American Samoa, New Zealand, Australia and other PICs.

The food industry in Samoa is heavily dependent on the importation of foods, ingredients and packaging materials. Imported foods contribute approximately 30% of total imports, and of these, processed and canned foods (fish and beef), frozen poultry, rice and flour are major imports. Most of the processed food and ingredients used in the domestic industry are imported from Australia and New Zealand. There is an increasing trend to import from Asian countries.

Most of the food processing that occurs in Samoa is on a small scale and without integrated quality assurance or HACCP systems, although many have pest control, sanitation and hygiene programs. Quality assurance and HACCP is most developed within the fisheries sector that has developed and implemented comprehensive fish processing and export regulations that include quality and safety standards and procedures, largely a result of overseas market requirements.

6.2 *National capabilities to meet importing country food safety requirements*

With respect to modern food safety systems, the following issues were identified:

- In general, the application of good manufacturing practices within food industries in Tonga focus on pest control and general sanitation programs and few industries would meet international standard requirements in terms of process control and risk-based preventive food safety programs such as HACCP.
- Resource capacity within Government to develop risk based food standards and a comprehensive understanding and knowledge around the requirements for their enforcement is limited.
- Little awareness of and training in the requirements of non-tariff technical barriers to trade exists within the private sector.

The exception here is the seafood industry. This sector, in collaboration with government has developed a strong export market, has established HACCP systems and built up expertise and infrastructure to satisfy technical market requirements.

With respect to SPS and quarantine (animal and plant health), personnel within the Ministry of Agriculture have some understanding of the technical requirements to undertake import risk analyses for animal and plant health, but recognize that they need additional resources and expertise to undertake independent import risk analyses if a country was to request market access for a new animal or plant commodity. Quarantine technical assistance and aid has been received from Australia and/or New Zealand and to improve and update bio-security legislation. New legislation has recently been approved by the Attorney General and is expected to go to Cabinet by the end of 2003.

With respect to demonstrating freedom from specific diseases to facilitate export of plant-based products, there is some capability and infrastructure to establish and maintain procedures and systems that demonstrate freedom from diseases, but greater expertise and resources are needed. The establishment of plant quarantine protocols has been facilitated through assistance and information from SPC. Additional assistance is received from importing countries when establishing export requirements on a specific commodity basis.

The beef industry within Samoa is expanding but is disadvantaged in that there is no centralized abattoir that conforms to quality management systems. Nor is there an established disease inspection and monitoring system to demonstrate freedom from specific diseases. This is currently seen as a particular disadvantage for exporting beef to American Samoa who will not accept Samoa's beef until quality management systems for slaughter and disease monitoring are established. Samoa is not currently a member of the OIE but is seeking to join.

6.3 Deficiencies in institutional and legislative frameworks

There are no domestic food safety or quality standards currently within Samoa. The safety of the food supply in Samoa is currently covered in the Health Ordinance (1959), the Food and Drug Act (1967) and the Poisons Act (1968). These enable health inspectors within the Ministry of Health (MOH) to condemn any food they believe to be contaminated and to make regular visits to food processing plants, restaurants and street vendors to ensure food is prepared in a hygienic manner. Health inspectors usually rely on visual inspection to judge whether food is fit to eat, as there is no routine testing for microbiological or agricultural contamination of foods. The focus of enforcement is on sanitation and food hygiene requirements.

The Food and Drug Act makes provisions for regulations that control food ingredients and food additives, but no regulations have been drafted. The Food and Drug Act also cover the safety of the drinking water.

The lack of safety (e.g. microbiological, additives), labeling or quality (compositional) standards for foods and the lack of a food-testing laboratory make it difficult for inspectors to objectively support their findings.

Through a World Bank funded technical support program, the MOH is currently reviewing health legislation in conjunction with the National Food and Nutrition Policy.

Fish processing and Export Regulations (2002) have recently been enacted in Samoa under an amendment to the Fisheries Act (1988) to provide a system for the regulation of processing and trade of fish and fish products. The development of the standards and the associated upgrades to infrastructure required to implement the system were funded through New Zealand aid money. The regulations apply only to exported products and were developed through the establishment of the Samoan Seafood Standards Council. The Council is a collaborative Government and Industry body that sets standards and regulations for seafood products and advises government on their implementation and enforcement. Officers within the Fisheries Department undertake the certification of export products and the auditing of exporters.

6.4 Institutional framework

Health

The Environmental Health Unit within the Ministry of Health performs random hygiene and sanitation inspections on all food premises in the city area. However, under the current legislation the MOH does not have the power to approve food premises prior to them gaining a license.

Institutional issues identified were the following:

- MOH has only three trained health inspectors (one of these has received training in the Fiji School of Medicine) within the food area and lacks the resources and expertise to extend inspection activities beyond that of basic food hygiene and sanitation inspections.
- Although there is a basic understanding of HACCP and process control, environmental health officers lack the training and expertise to provide advice to industry on the establishment of HACCP-based food safety systems and their audit and enforcement.

- Currently there are no established food safety training programs for the food industry and the knowledge of safety and hygiene within the food industry is poor.

Agriculture/Fisheries

The Ministry of Agriculture has insufficient well-trained agricultural officers that are able to advise farmers and the agricultural industry on technical standards and good agricultural practice systems. There are several new development programs being implemented that will train additional agricultural field officers to assist farmers in sustainable management and on how to better utilize appropriate farming technologies and other varieties of crops.

The Fisheries sector has invested heavily in the training of competent officers who can advise the industry on modern quality and safety systems and their audit. The Fisheries Department now has four officers that have been trained through the Agri-quality training course in New Zealand. Three of these are certified HACCP auditors.

6.5 Codex activities

Samoa has a national codex committee that is chaired by the Ministry of Commerce, Industry and Labour. The Committee has not been effective in terms of establishing Codex-based standards for food.

Samoa has a competent authority based in Fisheries that certifies the exports of fisheries products as conforming to the requirements of the Fish Processing and Export Regulations 2002.

6.6 Harmonization of national standards and regulations

There are currently no domestic food standards in force within Samoa. Although there are hygiene and sanitation requirements for food businesses and processors under the Health Ordinances and provisions to control food ingredients and additives under the Food and Drug Act, comprehensive food safety and quality regulations and standards are still required. In the domestic market, lack of assurance against quality and safety of food, for example mislabeled and expired foods, is common and potentially results in reduced consumer protection. This is particularly important, as the confidence in the domestic food supply is a vital ingredient also necessary to attract tourism. A failure to comply with the safety and quality requirements of food for exports leads to considerable loss of importing country's confidence in Samoa's food supply and a potential loss of market.

Fish processing and export standards and regulations were passed in January 2003. The standards and regulations establish quality and safety procedures and parameters for which fish processing establishments intending to export must comply. Controls and procedures apply to all stages of the fishing continuum from the boat through to shipping of the final product. The standards take a preventive risk-based approach and target key processes such as adherence to temperature control. In this way, they are consistent with SPS requirements. The approval of export establishments, their certification for export and requirement for auditing adheres to TBT requirements. Qualified fisheries personnel carry out certification and audits.

Internationally, there is a requirement for food businesses and the processing industry to apply process controls at all steps of the food production and handling process (e.g. receipt, storage, processing, packaging, display and distribution) to ensure food quality and safety. Other than the seafood export sector, this does not occur in Samoa. This means that there is a greater risk that food will become unsafe or unsuitable. The high dependency on imported ingredients for food processing and the lack of appropriate inspection and testing at the border makes the local food industry vulnerable to low quality and potentially unsafe imported ingredients.

6.7 Adequacy of national food analytical and inspection services

Although Samoa has a public health laboratory, this is only used for water analysis and chemical or microbiological analysis of food samples is not currently performed. An absence of routine testing of foods results in:

- An inability to objectively assess compliance against food standards.
- The food industry having a difficult task to develop added value products.
- A failure to facilitate the development of plant and product certification systems, which would help in export promotion.

There is currently no inspection or analysis at the border for imported processed and packaged foods and ingredients.

Trained officers using official protocols and checklists carry out quarantine inspection of animal and plant-based products at the border. The system is based on that of Australian and New Zealand quarantine import risk analyses and enhancements to quarantine infrastructure have been facilitated through aid programs. There is some technical capacity within Samoa to assess the quarantine risk posed by animal and plant products. They are assisted in this area by databases supplied SPC, but recognize the need to improve their technical capacity in plant and animal health risk assessment.

6.8 Lessons from recent experiences and barriers to expanding Samoa's export markets

In the mid 1990s Samoa's seafood industry suffered high rejection rates in its tuna exports to American Samoa. In addition to this, reports from New Zealand during the same period linked two episodes of histamine poisoning to fish exported from Samoa. The industry recognized that it had to be proactive and develop quality and safety systems for the industry to safeguard its viability and reputation on export markets. The Samoa Seafood Standards Council was developed to guide the establishment of seafood standards and regulations and advise government on their implementation and enforcement. Importantly, it was ensured that the Council was a collaborative Government and Industry body with strong consultative mechanisms. As a result of this work, new fish processing and export regulations were enacted in Samoa in early 2003 under an amendment to the Fisheries Act (1988). They provide a system for the regulation of processing and trade of exported fish and fish products. The development of the standards and the associated upgrades to infrastructure required to implement the system and train Government and the industry were funded through New Zealand aid money.

The system takes a "gate-to-plate" approach to the management of food safety hazards and assurance of quality and presents a model to other sectors and countries on how an internationally compliant food safety and quality system can be successfully developed. Officers within the Fisheries Department undertake certification of export products and the auditing of exporters.

There are a number of agricultural crops including taro, coconut and breadfruit, and their value-added derived products, that have the potential to grow, diversify into import substitution and produce additional export earnings for Samoa. Growth is constrained by numerous factors including:

- Inconsistent supply of agricultural products in terms of quantity and quality
- High international freight costs
- Lack of skilled labour and high turnover of personnel
- High set up and maintenance prices (energy, utilities) for small businesses
- Lack of storage and processing facilities for downstream production and value adding of agricultural crops
- The lack of integrated quality management in production and processing systems that could potentially facilitate and optimize the comparative advantages of Samoa
- Lack of post-harvesting food technology expertise and investment both within Government and industry to develop value added food processing.

Exports of desiccated coconut to New Zealand have recently encountered access problems due to the detection of metal fragments in some consignments. The industry has had a difficult task to convince the New Zealand market that this was an isolated problem and not more widespread to their products. The company has not apparently in the past, manufactured under a quality assurance or HACCP system and therefore did not have process controls in place to prevent the risk from physical hazards such as metal fragments. This issue emphasizes the need to implement preventive and risk based food safety systems that target the control of specific processes.

7. Trade Policies

Samoa applied to become a member of the WTO in April 1998 and is now processing its accession process. The process that Samoa adopted in its accession process is the involvement of most stakeholders from the beginning of the accession process. This application coincided with the economic reforms in 1998 where Government drastically reduced its tariff regime to encourage private sector development as the engine to growth. This opened up Samoa's local market and many foreign products entered the market squeezing some of the local producers within the domestic market.

Samoa currently applies tariffs ranging from 0%, 8% and 20% with minimal exceptions. The tariff revenue impact from the reforms was not as bad as was expected and with the Value Added Goods and Services Tax (VAGST) at 12.5% and this has assisted Government in revenue earning.

Samoa is a member of the PICTA and PACER agreements and is one of the countries sitting in the Rules of Origin committee under the agreements.

Samoa would benefit from WTO membership in the following areas:

- Gain protection from any trade discrimination
- Improve market access to markets imposing non tariff barriers on exports - Samoan banana chips are not allowed into the Australian market and protection provided by the WTO may help in getting the right justification from Australia
- The need to protect intellectual property rights especially in trying to protect folklore and traditional knowledge
- Promote Samoa as a foreign investment destination with a more liberal and transparent investment environment

- Improved legislation and regulations – particularly raising the standards of the local products to the international level where export market opportunities are available. This would also assist the Government in restricting any imports that do not meet the local standards
- Improved trade facilitation policies and implementation strategies

Challenges

- Reduction of tariffs on finished products implicates the survival of the local industries especially in agricultural food processing
- Implications on any further subsidies or grants given to the agricultural sector
- The challenges to Government of the process of accession and the need to build capacity within the agencies involved in the WTO process. The Government also cannot afford being represented in Geneva.

8. Recommendations

- (i) Coordinated efforts to be improved – all stakeholders involved in the agricultural sector such as the farmers, exporters, the non-governmental organizations and the government must coordinate efforts in developing products which have greater potential in the export markets. For instance the growth of noni exports has salvaged the negative impact of kava and for noni to survive in the international markets, all stakeholders must be involved in looking at research into the noni and noni by-products, market information, potential health risks and the trends in demand. Being proactive in maintaining success for an export product would greatly facilitate any potential risks of problems.
- (ii) Improving marketing information – market prices on products and market trends provide useful information for farmers and exporters. There are already agencies established internationally which provide such information on a regular basis for farmers.
- (iii) Promoting organic certified products – with the falling international prices, the promotion of organically certified products aiming for niche markets is the way to go for farmers to obtain high margins. Support for the organic certification organizations would facilitate the development of such products.
- (iv) Establishment of an abattoir – the beef industry in Samoa is in great need of a quality-accredited abattoir. Such an establishment would assist in raising standards across the food sector in general.
- (v) Establishment of enquiry points for SPS within the Ministry of Agriculture similar to the role of the FAO National Correspondents would facilitate the administration of WTO matters on agriculture and SPS relating to Samoa.
- (vi) At present most of albacore caught by domestic fleet is exported for canning. Improved handling of such fish on-board, would facilitate landings of quality tuna suitable for value added processing. Encourage land-based export-processing of value-added tuna products including fresh/ frozen loins.
- (vii) Establishment of a modern domestic fish processing/ marketing network with increased focus on production of value added seafood for domestic market, to help import substitution and improved domestic consumption of fish.
- (viii) Strengthening of the seafood inspection system including quality assurance of exports through capacity building and implementation of appropriate HACCP-based process control measures, through effective collaboration between industry and Ministry of Fisheries (designated Competent Authority for EU).
- (ix) Improved vocational/ technical training in fishery related activities including fishing, fish handling, processing and marketing.
- (x) Control of imported foods - The implementation of a system for the inspection and testing of imported foods and ingredients would be beneficial for Samoa in preventing mislabeled, low quality and potentially unsafe foods from entering and/or being dumped onto the domestic market and therefore better protecting the consumer. It would also give assurances to food processors, most of who rely heavily on imported ingredients for their food manufacturing. In order to implement a system that is compatible with WTO/ SPS and TBT requirements, domestic food standards must first be established and a greater capacity developed for their enforcement.

- (xi) Quality management systems - Very little of the food industry within Samoa currently operates under quality assurance and/or HACCP systems. The major exception to this is the export seafood industry. Government in partnership with the Chamber of Commerce, processed food associations and the agricultural industry needs to take a proactive approach to facilitate the development of integrated quality management systems in food and agricultural production.
- (xii) Food hygiene training - The Health Ordinance takes an inspectorial approach to the control of food premises such that the hygiene standards observed in premises preparing and selling food depends on the vigilance of the inspector. There is currently no onus on the operator to have skills or experience or any obligations to develop and maintain a safe process. The Government needs to develop proactive training programs in food hygiene for food operators so that food is produced safely and the consumer is protected. A good reputation for safe food and water is also an important element in attracting tourists to the country. Knowledge of and training in the evaluation of quality assurance HACCP food safety systems is required within the health sector.
- (xiii) More training and awareness programs on the WTO - Although there have been workshops undertaken on WTO matters, ongoing training and awareness programs must be developed for all stakeholders involved to be aware of the latest developments and how to develop strategies to take advantage of the multilateral trading system.

TONGA

1. Economic Statistics

Population: 100,300 (2000)

Land Area: 800 square kilometers

Exclusive Economic Zone: 700,000 square kilometers

Political Status: an independent monarchy since 1970

GNP: US\$172 million (1999)

Major Industries: fisheries, agriculture, manufacturing and tourism

Merchandise Exports (FOB): US\$9 million (2000)

Major Exports: squash, fish, root crops and vanilla

Merchandise Imports (CIF): US\$70 million (2000)

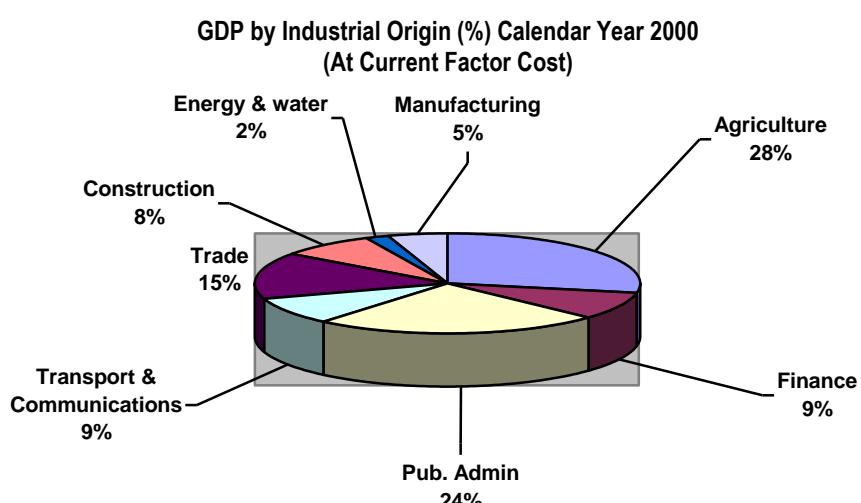
Major Imports: food and live animals; machines, transport equipment; manufactured goods; and mineral fuels, etc.

Currency: Tongan Dollar – Pa'anga

Average Foreign Exchange: US\$1 = T 1.7585 (2000)

2. Economic Profile and Performance

The economy of Tonga has traditionally been dominated by the agricultural sector, with manufacturing contributing to a relatively small percentage of GDP. Over recent years, the fishing industry and the service sector, including tourism, have become more important. The economy recorded robust growth of 5.3% in 2000. This was led by a large increase in the trade and services sector (tourism) related to millennium celebrations, together with the income effect from increased workers' remittances. Growth was also supported by a recovery in agricultural production, which had declined significantly in 1999 as a result of cyclone Cora in December 1998.



Source: Asian Development Bank: *Growth and Change in Asia and the Pacific Key Indicators 2001*.

The economy is expected to grow at quite modest rates of around 2% in 2001 and 2002. Growth will be supported by continued recovery in agriculture and further expansion of fishing operations. In line with government policy, the budget is expected to remain in balance over the next two years, with small surpluses of around US\$0.2 million to US\$0.5 million. Inflation is expected to remain at around 5% in 2001, mainly as a result of increasing world prices and some further devaluation of the pa'anga.

Remittances will continue to make an important contribution to the economy. The public-enterprise sector is both large and diverse, with more than 35 enterprises. However, only four pay dividends to the government. No timetable has been set for their privatisation or corporatisation, although the government has signaled its intention to sell some of them.

3. Agriculture

- Domestic food production and sale in Tonga is focused on traditional root crops and vegetables. The domestic farming of some commodities such as bananas and coconut have decreased in recent years, largely due to falling world prices and a reluctance to invest in agriculture within the local community. As an example, the slump in world prices for copra has resulted in it no longer being exported. Exports of agricultural crops in 2000/2001 were valued at T\$ 9.4 million, of which 60% came from the sale of squash to Japan.

Taro, kumara, cassava, watermelon and yams are exported to New Zealand and Australia. The most successful export crops are squash pumpkin, sold exclusively to Japan and vanilla purchased by France, Japan and the United States. Vanilla is another important export crop, while increasing quantities of kava, watermelons and eggplants are sold to world markets. These have been successful predominantly due to establishing niche export markets. Although other crops are produced, they are not competitive with other countries.

There is very little food processing that occurs in Tonga. A meat processing plant has recently been established through a Fiji company and is producing tinned canned corned beef competitively. All the primary ingredients are imported.

The Ministry of Agriculture plays an active facilitation role in agricultural development in the provision of advice and technical support through extension services to the rural farmers.

One of the problems identified is the limited access of population to agricultural land. Because of the falling prices of copra, farmers had diversified into other high valued produce such as squash and vanilla. Very few coconuts are exported and there is a surplus supply of coconuts available in the country.

There are currently no subsidies given to the farmers and access to finance is through the Tonga Development Bank and through commercial banks.

The Tongan Friendly Islander Marketing Cooperative with 3000 members is a cooperative society in which 80% are farmers, 15% engaged in fisheries and 5% handicrafts. The Marketing cooperative has been exporting squash, vanilla, root crops, and handicrafts for the past twenty years. The cooperative provides a supply store for farm equipment, fertilizers, pesticides and seeds to its members as well as providing technical advice and training on productivity. The cooperative has managed to supply its markets efficiently except in cases of natural disasters and droughts. The long term success of the cooperative relies on the development of infrastructure support and modern facilities for the storage and transportation of produce. A cooling facility is needed on the wharf for storage and sorting of squash prior to exports. The set up of the marketing cooperative provides a successful case of small farmers coming together to improve production for exports and at the same time sustaining income for the farmers.

Exports and Re-exports by Value – FOB (Millions pa'anga)

Year	Total	Fish	Root crops	Squash	Vanilla	Others**
1996	14.6	2.6 (18%)	1.1	6.6	0.9	3.4
1997	12.9	3.1 (24%)	0.7	6.2	0.1	2.5
1998	11.6	2.4 (21%)	0.4	4.3	0.2	4.3
1999	20.0	5.9 (29%)	0.7	8.9	1.0	3.3
2000	16.0	6.4 (40%)	1.5	5.3	0.5	2.0
2001	14.6	3.8 (26%)	2.1	7.1	0.6	2.3
2002*	5.6	4.6	0.5	0.1	0	0.4

() = percentage of total exports and re-exports

* values for first two quarters of 2002

** others = other agricultural products, manufactured goods and other exports and re-exports

Source: Compiled using the Budget Statement 2002/03

4. Forestry

Tonga has limited resources of timber because large proportions of the natural forests have been cleared for agricultural purposes. The scarce resources of tropical hardwoods are sold in the local market and imported timber construction materials supplement these. Some coconut timber was exported to Hawaii in 2000. The government forestry plantations in the island of Eua would provide hardwood for high value added products and timber for exports.

5. Fisheries

The fishing industry has continued to expand with increased investment in the sector and expansion of the export sector. The sector provides direct employment to nearly 500 persons. Tuna is the main variety of fish exported followed by snapper, grouper and seaweed. During 2001 the value of tuna and snapper exported by the fleet of 29 vessels which operated during 2001 amounted to over T\$ 15 million. The average unit value of fish exported was almost four times the value of the fish sold to the local market. Nearly 25-30% of fish caught by the fleet of long line vessels are released to the local market.

Fish landed by vessel fleet during 2001 for export and domestic marketing

Locally marketed

	Quantity (kg)	Value (\$T)	Unit value (\$T/kg)
Tuna	405,241	1,085,575	2.68
Snapper	115,454	384,988	3.33
Sub-total	520,695	1,470,563	

Exported

	Quantity (kg)	Value (\$T)	Unit value (\$T/kg)
Tuna	1,242,331	13,262,606	10.68
Snapper	137,141	1,814,379	13.23
Sub-total	1,379,472	15,076,985	

Source: Budget Statement for Year ending June 2003

At present six companies are engaged in export-processing of fish. Seafood exports from Tonga mainly target Japan and US. Even though there is interest in exports to EU, Tonga is unable to do so due to the lack of an EU approved competent authority. Currently there are 34 tuna long-line vessels licensed in Tonga.

Of the total of 34 Tuna Fishing Vessels Licensed, 18 are below 100 gross registered tonnage (GRT) while 14 are between 100-200grt. There are two vessels which exceed 200grt. The tuna catch mainly consists of albacore (50-60%) and smaller amounts of yellow-fin and big-eye tuna. Tuna fishery is supervised and monitored by the Tuna Management Committee with representation from industry and several related governmental bodies.

Government has extended several concessions to 30 long liners including liberal duty concessions on fuel including duty rebate, bringing down the price to about 60% of the retail price. An annual licensing fee of US\$ 10,000 is applicable to the long-liners. Under the two year "Development License Period" taxes applicable to import capital goods (20% port and services and 15% duty) are waived.

Relatively high freight costs are an impediment for export of sashimi grade tuna. Airfreight to Honolulu/ Hawaii is around US\$ 2- 3.00/kg, Los Angeles US\$ 5/kg while for Japan it is around US\$ 6.00/kg. Sea freight to major destinations range from US\$ 250- 350/ cu mt. Export license fee of T\$10-30 is applicable for seafood exports on a consignment basis.

A fleet of 25 local deep sea, bottom fishing vessels operate in near shore and reef areas, 15 off the capital Tongatapu (8 vessels < 10grt, 6 < 10-20 grt and 1 > 20grt) and 10 in Vava'u (6 vessels < 10grt and 1 < 20grt). The high valued species are air flown to Honolulu, Fiji or Japan by 11 exporters. There are 5 exporters of ornamental fish.

In 1995 three companies Capricorn/ KM Fishing and Tonga Seafood were exporting tuna with by-catch going to Australia and New Zealand Monofilament long-lines. Seastar Fishing exports Albacore to Pago Pago in American Samoa.

Government has embarked on a reform program encompassing economic reform (private sector involvement) as well as public sector reform, the latter through a Public Sector Reform Act of March 2003.

Government has identified the importance of fisheries production from a nutritional and food security angle and has decided to realign the National Nutrition Committee under a separate Food Division to be set up under Ministry of Agriculture, Forestry and Food in July 2003. There is concern on the growing incidence of life-style health problems such as diabetes, estimated at 13-15% of the population, and believed to be largely due to unhealthy food habits.

Quality assurance of fish and fishery products comes under the Fisheries act No.18 of (1989) which supercedes the Public Health Act of 1992. Section 21(1) of the Fisheries act states that "any person engaged in fishing, processing, marketing or export shall provide to the Registrar such information relating to such fishing, processing, marketing or export activities and in such forms as may be prescribed. Section.59 states "Minister responsible for Fisheries may make regulations for regulating the landing, marketing and distribution of fish". The Strategic Development Plan 7 (SDP7 / 2001-2004) identifies agriculture, fisheries and tourism as priority sectors for policy development. Policy guidelines identified for the fisheries sector in SDP7 includes:

- ensure enforcement and successful implementation of fishery management plans.
- invest and adopt a plan in administering and promoting tuna development.
- review and abolish, where appropriate, existing fiscal disincentives to the development of tuna fisheries.
- encourage and enhance private sector participation especially in commercially viable fishery like tuna and pearl farming.
- consider privatizing governmental fisheries operations.
- establish a strategy for foreign involvement in commercial fishing interests for tuna and pearl farming.
- establish an efficient, effective marketing strategy, with special focus on high value fishery.
- strengthen fisheries institution and stakeholder input in the Ministry's institutional reform as well as fisheries.

6. Food

6.1 Current Status of Development

Tonga is a member of the Codex Alimentarius Commission (CAC) and is in the process of accession to the WTO. The Kingdom of Tonga has a National Codex Committee that has been established to advise the Government on the development of food control systems and the use and implementation of Codex standards. Tonga has also established a SPS enquiry point. Both this and the Codex committee are coordinated within the Ministry of Agriculture. While this is a positive move, the following issues were identified:

- In general, the application of good manufacturing practices within food industries in Tonga focus on pest control and general sanitation programs and few industries would meet international standard requirements in terms of process control and risk-based preventive food safety programs such as HACCP.
- Resource capacity within Government to develop risk based food standards and a comprehensive understanding and knowledge around the requirements for their enforcement is limited.
- There is uncertainty over roles and responsibilities of the various agencies with respect to the establishment and enforcement of food standards, as well as little coordination between Ministries.
- There is insufficient understanding and knowledge of the SPS and TBT agreements within government and the private sector.
- There are limited resources and technical capacity to implement the requirements of the agreements.
- There are only a few qualified and trained personnel in the food safety and quality area working across different Ministries within Tonga and better coordination of efforts is needed to harness these skills and expertise.

With respect to SPS and quarantine (animal and plant health):

- Personnel within the Ministry of Agriculture have some understanding of technical requirements to undertake import risk analyses for animal and plant health, but have little capacity to undertake independent import risk analyses.
- Quarantine policies largely reflect those of Australia and New Zealand, both of whom have provided technical assistance and aid in this area.
- There are no veterinarians working within the Tongan Civil Service.

With respect to demonstrating freedom from specific diseases to facilitate export of animal based products:

- Current infrastructure and resources are not adequate to establish and maintain procedures and systems that demonstrate freedom from diseases.
- Tonga is not a member of the OIE and in general has to seek assistance from countries with greater expertise.

Successes in meeting quality requirements of export markets have been seen with some agricultural commodities:

- The pumpkin squash and vanilla industries have developed niche export markets in Japan and Europe through complying with quality requirements.
- The Tongan fish processing industry has accessed the USA market by adopting HACCP for process control.

There are a number of other crops that have the potential to grow and produce further export earnings but growth is constrained by numerous factors including:

- Climatic effects on the volumes produced.
- Supply and demand factors.
- The lack of integrated quality management in production and processing systems that optimize the comparative advantages of Tonga.
- Insufficient expertise within Government and industry in the areas of agronomy and entomology.

- Insufficient Government agricultural extension programs advising farmers on the strategic control of disease and pests of agricultural crops.

Within the fisheries sector, a major barrier is seen in the lack of a competent certification authority or body for the certification and audit of HACCP and quality assurance systems. The EU has raised this as an issue that needs to be addressed in order to gain access to their markets. There is currently a lack of resources and expertise within Government agencies to undertake this function.

6.2 *Food legislation, regulations and standards*

There are no domestic food safety or quality standards and minimal and outdated food safety regulations in force within Tonga. Under the Public Health Act 1992 health inspectors undertake the following:

- Approve and inspect all premises involved with preparing and/or selling food.
- Enforce sanitation and food hygiene requirements.
- Rely on visual inspection to judge whether food is fit to eat as no routine microbiological or chemical testing of foods is undertaken.

The Consumer Protection Act 2000 creates an opportunity to put a system for food standards in place because it creates the offence of selling, trading or distributing goods that do not comply with a standard. The appropriate standards and regulations need to be developed.

The Ministry of Agriculture and Forestry has responsibility for:

- The quality of fresh crops for export.
- Implementing the Plant Quarantine Regulations, the Fruit Export Act (Vanilla) Regulations of 1993 and Fruit Export Act (Buttercup Squash) Regulations of 1993, and the Law on Pesticides that controls their importation and use.

6.3 *Institutional framework*

General

There has been a recent cabinet decision to relocate most of the food functions into the Ministry of Agriculture. These functions will include the development of food standards and regulations, based on those of Codex, and the National Food and Nutrition Committee functions that were previously vested in the Department of Central Planning. The responsibility for food safety is currently within the Ministry of Health and it is envisaged that only those functions relating to the inspection of slaughterhouses will move into MAF under the new structure.

There is currently some uncertainty over which agency will be practically responsible for updating food legislation and standards. In addition, the decision to restructure has been made in the absence of any overarching policy and strategy on food and nutrition. Tonga is aware that it will need technical assistance to develop food standards and update legislation.

Health

Officers within the Food Control Unit of the MOH have the responsibility of:

- Approving building plans of food premises, inspecting new food premises prior to approval for operation, providing health certificates to food employees, issuing food certificates of registration for food premises (permit), and routinely inspecting food premises and their products.

Issues identified by MOH were the following:

- There is little manpower and expertise to focus on food safety beyond that of basic food hygiene and sanitation inspections.
- Although there is a basic understanding of HACCP and process control, environmental health officers lack the training and expertise to provide advice to industry on the establishment of HACCP-based food safety systems and their audit and enforcement.
- Although there are health promotion activities within the community and in schools that focus on nutrition and food hygiene, there are no established food safety training programs within the food industry and the knowledge of safety and hygiene is poor.

Agriculture

The Ministry of Agriculture identified the following issues:

- There are insufficient well-trained agricultural officers able to advise farmers and the agricultural industry on technical standards and good agricultural practice systems.
- There is a need for further expertise in disease and pest control (including the appropriate use of agricultural chemicals) of crops within Agriculture.
- Information on and knowledge of good agricultural production systems needs to be transferred to farmers and agricultural industry and export associations so that systems to ensure quality and safety can be jointly developed and implemented.

There are several new development programs being implemented that will train additional agricultural field extension officers to assist farmers in sustainable management and on how to better utilize appropriate farming technologies and other varieties of crops.

Codex activities

Tonga has a national codex committee that is chaired by the Ministry of Agriculture. Although high-level officials represent the Committee, it has been relatively inactive and ineffective in terms of establishing Codex-based standards for food. There is a need to establish technically based working groups that amongst other areas focus on the needs for and development of food standards.

Competent authorities

There is no competent authority currently established within Tonga to certify and audit HACCP and quality assurance systems for export of goods. This is a particular issue and requirement to enable fisheries products to gain access to the EU market.

Although Tonga has established a national Organic Coordination and Development Committee for the promotion and certification of organic foods, it does not have the capacity and expertise to certify organic foods. Tonga would like to be able to certify exports such as squash and vanilla as being organically produced to secure further niche export markets.

6.4 Harmonization of national standards and regulations

In general, internationally harmonized food safety and quality regulations and standards do not exist in Tonga. This results in:

- A lack of assurance against quality and safety of food on the domestic market potentially resulting in reduced consumer protection. This is particularly important, as the confidence in the domestic food supply is a vital ingredient also necessary to attract tourism.
- A failure to comply with the safety and quality requirements of food for export, leading to loss of an importing country's confidence in Vanuatu's food supply and a potential loss of market.

Internationally, there is a requirement that food businesses and the processing industry should apply process controls at all steps of the food production and handling process (e.g. receipt, storage, processing, packaging, display and distribution) to ensure food quality and safety. Generally, this does not occur in Tonga. This means that:

- There is a greater risk that food will become unsafe or unsuitable.
- The local food industry is vulnerable to low quality and potentially unsafe imported ingredients due to their high dependency on imported ingredients.

6.5 Adequacy of national food analytical and inspection services

Tonga has a public health hospital-based laboratory that has the capacity to perform microbiological analysis of foods. Analyses of foods are rarely undertaken as the priority of the laboratory is on clinical analysis and diagnostic work. Only water samples from the industry are being tested for microbiology.

An absence of routine testing of foods results in:

- An inability to objectively assess compliance against food standards.
- The food industry having a difficult task to develop added value products.
- A failure to facilitate the development of plant and product certification systems, which would help in export promotion.

There is currently no inspection or analysis at the border for imported processed and packaged foods and ingredients.

Trained officers using official protocols and checklists carry out quarantine inspection at the border. The system is based on that of Australia's import risk analyses. There is little capacity to assess the risk posed by animal and plant products that have not been previously assessed for quarantine risk.

7. Trade Policies

Tonga applied for WTO membership in 1995 and is now in the process of accession. Tonga is a member of PICTA and PACER.

Tariff rates range from 0% - 40% plus 20% Ports and Services Tax. A 5% tax is imposed on imports only and on restaurants and hotels and a 5% Wharfage fee. These tariff rates are quite high and Tonga would soon be undertaken a trade liberalization reform. The Chamber of Commerce strongly supports protection through high tariffs however this would affect those industries relying on imported raw materials and capital equipment. Tonga has yet to introduce a broad based value added tax.

A Government committee has been set up to look after Tonga's accession process however the limited contribution by the private sector in policy formulation has led to increasing complaints from groups such as the Chamber of Commerce and other private exporters.

Benefits of WTO membership

- Gain protection from any trade discrimination
- Improve market access to markets imposing non tariff barriers on exports - squash is exported to Japan and there is potential to target other markets, WTO provides the legal framework to look after any market access problems that could be encountered by Tonga. Vanilla is also another example of a Tonga export to the WTO member markets.
- The need to protect intellectual property rights especially in trying to protect folklore and traditional knowledge
- Promote Tonga as a foreign investment destination with a more liberal and transparent investment environment
- Improved legislation and regulations – particularly raising the standards of the local products to the international level where export market opportunities are available. This would also assist the Government in restricting any imports that do not meet the local standards
- Improved trade facilitation policies and implementation strategies

Challenges of WTO membership

- Reduction of tariffs on finished products implicates the survival of the local industries especially in agricultural food processing
- Implications on any further subsidies or grants given to the agricultural sector
- The challenges to Government of the process of accession and the need to build capacity within the agencies involved in the WTO process. The Government also cannot afford being represented in Geneva.

8. Recommendations

- (i) Coordinated efforts to be improved – all stakeholders involved in the agricultural sector such as the farmers, exporters, the non-governmental organizations and the government must coordinate efforts in developing products which have greater potential in the export markets. For instance the growth of noni exports has picked up the negative impact of kava and for noni to survive in the international markets, all stakeholders must be involved in looking at research into the noni and noni by-products, market information, potential health risks and the trends in demand. Being proactive in maintaining success for an export product would greatly facilitate any potential risks of problems.
- (ii) Improving marketing information – market prices on products and market trends provide useful information for farmers and exporters. There are already agencies established internationally which provide such information on a regular basis for farmers.
- (iii) Promoting organic certified products – with the falling international prices, the promotion of organically certified products aiming for niche markets is the way to go for farmers to obtain high margins. Support for the organic certification organizations would facilitate the development of such products.
- (iv) Improved partnership with the private sector – for Tonga to gain the support of the private sector in the development of new policies strengthening the partnership with the private sector is very important. Private sector awareness workshops and consultations on WTO issues, taking advantage of the opportunities arising out of the PICTA would allow the private sector to assess the benefits and costs of the proposed tariff reforms.
- (v) Enhance direct or foreign collaborated private sector participation in commercial tuna fishery and removal of any existing fiscal disincentives for such development.
- (vi) Explore possibility of increased use of by-catch from domestic-based foreign fleets for domestic marketing / processing operations.

- (vii) Establishment of a modern domestic fish processing/ marketing network with increased focus on production of value added seafood for domestic market as well as specialty products for the tourist market. This would also help import substitution and increase earnings through exports.
- (viii) At present most of albacore is used raw material for canning. Encourage improved handling of such fish on-board, to facilitate landings of quality tuna suitable for value added processing. Encourage land-based export-processing of value-added tuna products including fresh/ frozen loins.
- (ix) Strengthening of the seafood inspection system including quality assurance of exports through capacity building and implementation of appropriate HACCP-based process control measures in association with industry including special focus on addressing EU requirement of having a equivalent system in place and identification of a Competent Authority .
- (x) Further development of sustainable, carefully managed utilization of deep-water fishes and snapper resources including exploratory marketing in non-traditional markets in Asia.
- (xi) Improved vocational/ technical training in fishery related activities including fishing, fish handling, processing and marketing.
- (xii) Needs for training and capacity building - Training of Agricultural Officials on the provisions of the Agreement on Agriculture, the SPS and TBT Agreements. Setting up an enquiry point for SPS within the Ministry would build the capacity and knowledge on WTO issues.
- (xiii) Control of imported foods - The implementation of a system for the inspection and testing of imported foods and ingredients would be beneficial for Tonga in preventing mislabeled, low quality and potentially unsafe foods from entering and/or being dumped onto the domestic market and therefore would better protect the consumer. It would also give assurances to food processors, most of who rely heavily on imported ingredients for their food manufacturing. In order to implement a system that is compatible with WTO/ SPS and TBT requirements, domestic food standards must first be established and a greater capacity developed for their enforcement.
- (xiv) Quality management systems - Very little of the food industry within Tonga currently operates under quality assurance and/or HACCP systems. The major exception to this is the export seafood industry. Government in partnership with the Chamber of Commerce, processed food associations and the agricultural industry needs to take a proactive approach to facilitate the development of integrated quality management systems in food and agricultural production.
- (xv) Knowledge and evaluation of quality assurance and preventative food safety systems needs to be enhanced within health and agriculture sectors along with expertise in food technology.
- (xvi) Food hygiene training - The Public Health Act 1992 takes an inspectorial approach to the control of food premises such that the hygiene standards observed in premises preparing and selling food depends on the vigilance of the inspector. There is currently little onus on the operator to have skills or experience or any obligations to develop and maintain a safe process. The Government needs to develop proactive training programs in food hygiene for food operators so that food is produced safely and the consumer is protected.

VANUATU

1. Economic Statistics

Population: 187,700 (2000)

Land Area: 12,190 square kilometers

Exclusive Economic Zone: 680,000 square kilometers

Political Status: independent democratic government since 1980

GNP: US\$227 million (1999)

Major Industries: plantations, fishing and tourism

Merchandise Exports (FOB): US\$26 million (2000)

Major Exports: copra; beef; timber; cocoa

Merchandise Imports (CIF): US\$89 million (2000)

Major Imports: machines, transport and equipment; food and live animals; mineral fuels; and manufactured goods

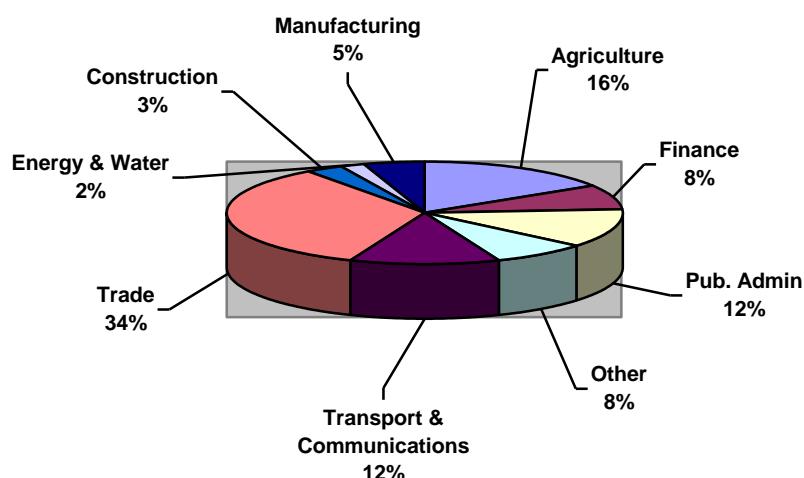
Currency: Vatu

Average Exchange Rate: US\$1 = Vatu 137.64 (2000)

2. Economic Profile and Performance

The economy recovered in 2000 with 2.8% growth in real GDP, led by tourism and construction. Growth is likely to continue at about this level in the medium term. Following a contraction of 3% in 1999, the economy recovered in 2000 with estimated growth of 2.8% in real GDP. Sustained marketing campaigns in Australia by the National Tourism Office and political instability in neighbouring countries boosted the number of visitors to Vanuatu. Major construction projects included the Efate ring road, the expansion of the main airports on Efate and Santo, rehabilitation works from cyclone Dani, and an urban infrastructure project. The agriculture sector continued to experience weaknesses. Copra and beef exports weakened but kava exports strengthened significantly in 2000; imports stayed at around the previous year's level. Despite a trade deficit, a small surplus on the current account is estimated in 2000, compared with a deficit in 1999. However, a sizeable deficit of at least 4% of GDP is estimated on the capital account in 2000, largely due to outflows from commercial banks.

**GDP by Industrial Origin (%) Calendar Year 1999
(At Current Market Prices)**



Source: Asian Development Bank: *Growth and Change in Asia and the Pacific Key Indicators 2001*.

3. Agriculture

The agricultural sector comprises approximately 16% of GDP and the key sub-sectors include beef production, fishing, copra, cocoa and kava. All of these products are exported to world markets and Vanuatu beef is well regarded for its quality in the Japanese market. Nearly 80% of the population in Vanuatu lives in rural areas while only 12% has access to land.

The most important export commodities in 2001 were kava, beef, copra, coconut oil and cocoa. The domestic farming of some commodities such as coconut and cocoa has decreased in recent years. This has been attributed to falling world prices and a subsequent reluctance to invest in agriculture within the local community. For example, in 1999 copra comprised 48% of the total export earnings. The slump in world prices for copra in recent years resulted in this value decreasing to 14% in 2001. Copra remains the main source of rural income for farmers and the world price instability leaves the economy extremely vulnerable. Hence the Government had committed to provide price stabilization subsidies to provide income for the farmers and to encourage the steady supply of copra for the coconut oil mill and to maintain the export markets.

Vanuatu has identified agriculture, forestry, livestock and fisheries as thrust areas for economic development. The population is mainly involved in casual, subsistence farming, with little or no down stream processing. In spite of the vast potential for production of root crops and root crop based products, rice imports have shown a steady growth.

The focus has shifted from cash crops to small-holder income generation and food security. Activities of the Department of Agriculture, with a total staff of 40 and 8 provincial centers, are supported by a reduced budget of VT 89 million in 2003, and through several donor funded projects in Livestock, Farming systems development (FAO), Root crop research (EU), Small-holder producer organization (EU) etc.

4. Forestry

Vanuatu's timber reserves have been depleted over recent years and there is considerable potential for new-forest plantations, including sandalwood. An associated project would be the supply of seedlings for the plantations. Some of the constraints faced by the forestry industry in Vanuatu include:

- National codes for logging not fully adhered to by traditional communities – for instance cutting down trees before a certain size for domestic purposes
- Impacts and high occurrence of land disputes limit level of harvesting
- Limited expertise to meet international requirements – as in the case of Vanuatu where they are finding it difficult to meet the sustainable forests certification principles due to limited knowledge and expertise
- Commitment of landowners to plant trees unpredictable especially those landowners being paid licensing fees by milling companies in Vanuatu
- Off-cuts of wood not utilized for value added products and are wasted
- Environmental pressure on logging and sustainable forests – in the case of Vanuatu the Forestry Department and Environment must work together but with limited personnel this has not been fruitful
- Local industries facing competition from cheap imported woods – Vanuatu facing major competition with cheap pines from Fiji

5. Fisheries

Under the off shore licensing program, there are around 110 tuna long liners operating in Vanuatu waters in 2003. The fleet includes Taiwanese, Chinese, Korean, Fijian and Cambodian vessels. The fish are off loaded mainly in Fiji or Pago Pago for cannery use or for transshipment to other markets. Licensing of Taiwanese vessels comes under a bilateral fisheries agreement whereby boats pay an annual fee of US\$ 5000/ annum while the fee for other boats depends on the tonnage; < 100grt US\$ 11,000 and an additional US\$ 9,000 for those over. As per the fisheries officials, the present rate of extraction by the fleet is sustainable as only 1/3 the Maximum Sustainable Yield (MSY) is presently extracted. The country's tuna fishery comes under the supervision of Vanuatu Tuna Management Committee. In 2002 vessel licensing revenue stood at VT 116 million. Vessel Monitoring is carried out by FFA.

In addition to subsistence fishing, domestic fishing activity also encompasses deep water and reef fishery, mainly focusing on high valued species for export such as "poulet" (Pacific Snapper) for New Zealand and Australia markets at V 700/kg, gilled and gutted (G/G). Exports are mainly from Port Villa and Santo. There are also several (3) fish aggregation devices (FADs) setup and managed by the department of fisheries in Santo, for mainly targeting tuna for export to New Zealand/ Australia at VT 250/kg. Among other things, high fuel cost (VT 100-120/liter) is an impediment to expansion of the domestic fishing effort. The department of fisheries under the Global Coral Reef Management Program does management and monitoring of the coastal and reef resources.

Two fish inspectors, who also examine exports of live fish, mainly ornamental fish, from four exporters, carry out monitoring and quality control of fish exports. Live fish exports have to be carried out under a license issued by the Department of Fisheries and a health certificate and an export permit issued by the Animal Quarantine Unit.

Fish imports mainly constitute canned fish from Solomon Islands, Fiji, Japan and New Zealand which account for nearly 25% of total fish imports by value and imports of frozen fish from New Zealand (20%). Canned fish in oil is the main export while small quantities of value-added canned fish products are also imported.

Canned Fish Imports

Canned Mackerel in vegetable oil	450 gm	Fiji	VT 150
Sardines in tomato sauce	125 gm	Thailand	VT 120
Tuna flakes in vegetable oil	180 gm	Solomon Islands	VT 110
Light meat tuna, solid chunk	200 gm	Solomon Islands	VT 180
Chili tuna	200 gm	Solomon Islands	VT 185

Source: Prices collected from mission from retail store

Fresh fish caught by the artisanal sector is mainly marketed locally in the fresh form at village or urban market places. High cost of fuel/ transport limits intra-island marketing, the surplus fish being mainly targeted to buyers from inland/ highland areas who at the same time bring their produce to these centers. Small quantities are made into cassava/ smoke dried fish based product known as "lab-lab", which is consumed as a whole meal after cooking. The product is marketed at VT 200/portion at the Port Villa Central Market.

The supermarkets catering for the higher income bracket sell a wide variety of imported and local fish/ fish fillets such as Deep Sea Cod (VT 1150-1300/kg fillet), Poulet or Pacific Snapper (VT1300-1700/kg of fillet), Red Snapper (VT 860/kg whole fish) etc.

Fisheries development needs to be in coordination with other government services to facilitate marketing of reef fish in conjunction with the private sector by developing appropriate fish marketing centers in provincial locations and by improving marketing information between buyers and sellers.

The Fisheries Sector of the Business Forum 2002 organized by the Chamber of Commerce, chaired by the Minister of Agriculture and attended by the private sector and senior officers of Department of Fisheries and line Ministries has proposed a strategy to assure sustained growth of the fishery sector and to address urgent issues of importance to the stakeholders. The recommendations of the forum could be summed up as follows:

- The present target of 10,000mt of fish production to be increased to 20,000mt within a time frame of 5-10 years through:

Technical assistance and capacity building in long-line fishing, packaging and labeling, export marketing, promotion and exhibitions, business/financial management in the sector:

- Poulet (Pacific snapper) fishing to be regulated and restricted to certain locations.
- Develop a clear Marine Export Policy for both local and foreign investment.
- Urgent exemption of duty and VAT on fishing equipment, fuel and aquaculture material as well as establishment of an affordable credit line and expansion of the role of NBV (National Bank of Vanuatu) to undertake lending for development purposes.
- 50% of the surplus revenue generated by the Fisheries Department over its annual budget be reallocated back to the sector.
- Seek donor assistance to setup cold storage/ ice plants in all 6 provinces for multiple usage including cold storages at central markets in Port Villa and Luganville.
- Approval of the Tuna Management Plan and ratification of the Western and Central Pacific Tuna Convention and United Nations Fish Stock Agreement.

6. Food

6.1. Current Status of Development

The food industry within Vanuatu mostly comprises subsistence agricultural farming and small cottage industries. Food and agricultural exports have traditionally played a strong role in the country's gross domestic product and in 2001 contributed approximately 50% of the total export earnings, valued at approximately Vatu 1,100 million. The main food production sectors within Vanuatu are bakery, meat, tree nuts, spices, coffee, beverage, and dairy and poultry and fishery products.

The food industry in Vanuatu is heavily dependent on the importation of foods. Imported foods contribute approximately 43% of the food volume, and of these, processed and canned foods (fish and beef), frozen poultry, rice and flour are major imports. Most of the processed food and ingredients used in the domestic industry are imported from Australia and New Zealand. There is an increasing trend to import from Asian countries.

Most of the food processing that occurs in Vanuatu is on a small scale and without integrated quality assurance or HACCP systems. The food industry is lead by the red meat sector that has implemented HACCP procedures, largely a result of overseas market requirements.

6.2. National capabilities to meet importing country food safety requirements

Within Vanuatu, there are limited resources and technical capacity to implement the requirements of the SPS and TBT agreements with respect to food safety and quality and the application of technical standards to food production and agricultural commodities:

- Little awareness of and training in the requirements of non-tariff technical barriers to trade exists within the agricultural sector. The exception here is the beef industry and the quarantine area. This sector has developed a strong export market, has established HACCP systems and built up expertise and infrastructure to satisfy technical market requirements.
- In general, the application of good manufacturing practices within food industries in Vanuatu focus on pest control and general sanitation programs and few industries would meet international standard requirements in terms of process control and risk-based preventive food safety programs.

With respect to SPS and quarantine (animal and plant health):

- Personnel within the Ministry of Agriculture have excellent understanding of the technical requirements to undertake import risk analyses for animal and plant health, and have capacity to undertake independent import risk analyses. Quarantine policies largely reflect those of Australia and/or NZ.
- There is good capability and infrastructure to establish and maintain procedures and systems that demonstrate freedom from pests and diseases. The livestock industry within Vanuatu is fortunate to be free of many animal diseases and this is a particular advantage for market access. Vanuatu is a member of the OIE.

6.3. Deficiencies in legislative frameworks

There are no domestic food safety or quality standards currently within Vanuatu. Under the Food Control Act 1993:

- Health inspectors can examine premises that prepare and sell food and take samples as required.
- The focus of the regulations is on visual inspection of food, sanitation and food hygiene requirements.
- The lack of safety (e.g. microbiological), labeling or quality (compositional) standards for foods and the lack of a food-testing laboratory make it difficult to ensure the safety and quality of food as inspection findings cannot be objectively supported.
- There are powers to seize and destroy food unfit for human consumption and for inspectors to examine and test imported foods. The latter is not currently practiced.

The beef industry complies with the meat Industry Act and Regulations and conforms to OIE standards.

6.4 Institutional framework

Health

The Environmental Health Unit within the Ministry of Health (MOH), together with Municipal environmental health officers, performs hygiene inspections on all food premises within urban areas. Within provincial areas, there are additional environmental health officers. The MOH identified the following issues:

- Insufficient properly trained health inspectors within the food area.
- Insufficient resources and expertise to extend inspection activities beyond that of basic food hygiene inspections.
- Only a basic understanding of HACCP and process control and insufficient training and expertise to provide advice to industry on the establishment of HACCP-based food safety systems and their audit and enforcement.

MOH is currently examining options for an inspection program on imported foods.

Agriculture

Currently the Ministry of Agriculture has insufficient well-trained agricultural officers that are able to advise farmers and the agricultural industry on technical standards and good agricultural practice systems. There are several new development programs being implemented that will train additional agricultural field officers to assist farmers in sustainable management and on how to better utilize appropriate farming technologies and other varieties of crops. Vanuatu has recently passed an Agricultural Research and Technical Centre Bill. The Bill will establish funds and research programs to generate better yielding crops and varieties with greater pest resistance. In the long term this will assist in boosting production of important crops, and also improve their quality.

Codex activities

Vanuatu has a national codex committee that is chaired by the Ministry of Agriculture. The Committee has not been effective in terms of establishing Codex-based standards for food.

There is currently no competent authority within Vanuatu to approve the export of quality assured food products.

6.5. Harmonization of national standards and regulations

With the exception of Vanuatu's beef industry, internationally harmonized food safety and quality regulations and standards do not exist. This results in:

- A lack of assurance against quality and safety of food on the domestic market potentially resulting in reduced consumer protection. This is particularly important, as the confidence in the domestic food supply is a vital ingredient also necessary to attract tourism.
- A failure to comply with the safety and quality requirements of food for export, leading to loss of an importing country's confidence in Vanuatu's food supply and a potential loss of market.
- Internationally, there is a requirement that food businesses and the processing industry should apply process controls at all steps of the food production and handling process (e.g. receipt, storage, processing, packaging, display and distribution) to ensure food quality and safety. Generally, this does not occur in Vanuatu. This means that:
- There is a greater risk that food will become unsafe or unsuitable.
- The local food industry is vulnerable to low quality and potentially unsafe imported ingredients due to their high dependency on imported ingredients.

6.6. Adequacy of national food analytical and inspection services

There is currently no capacity to perform chemical or microbiological analysis of food within Vanuatu. This results in:

- An inability to objectively assess compliance against food standards.
- The food industry having a difficult task to develop added value products.
- A failure to facilitate the development of plant and product certification systems, which would help in export promotion.

There is currently no inspection or analysis at the border for imported processed and packaged foods and ingredients.

Trained officers using official protocols and checklists carry out quarantine inspection of animal and plant-based products at the border:

- The system is based on that of Australian and New Zealand quarantine import risk analyses.
- There is good technical capacity within Vanuatu to assess the quarantine risk posed by animal and plant products and they are assisted by SPC.

6.7 Lessons from experiences and barriers to expanding export markets

- Experience with developing systems to meet quarantine requirements for beef exports from Vanuatu is seen as a model on which further export trade could be based. The industry is now seeking access to the EU market and there are some technical obstacles that have been raised here. One obstacle identified is the lack of a national residue program to assure that levels of chemical residues in beef products satisfy market requirements. The Quarantine area is actively investigating the establishment of such a program.
- One abattoir within Vanuatu is now certified as organic under the New Zealand 'Certenz' organic certification scheme. Two veterinarians within the quarantine service are certified to approve meat as organically produced under this system.
- Other products such as Noni juice may also be certified as organic in the future. This may improve the acquisition of niche export markets.

There are a number of agricultural crops including taro, cassava and sweet potato (including value-added derived products) that have the potential to grow and produce export earnings but growth is constrained by numerous factors including:

- Poor farming practices and crop yields and the difficulties associated with encouraging farmers to change from subsistence to commercial farming
- Poor stability of government and its policies and extension services

- High set up and maintenance prices (energy, utilities) for small businesses
- Lack of storage and processing facilities for downstream production and value adding of agricultural crops
- The lack of integrated quality management in production and processing systems that could potentially facilitate and optimize the comparative advantages of Vanuatu
- Lack of food technology expertise both within Government and industry to develop value added food processing.

Within the fisheries sector, small to subsistence fishing operates with no centralized marketing activities. The fragmentation of operations and problems with transportation throughout the islands is a major barrier to integrating the fisheries sector. Most fish is sold domestically, although two companies have geared up their quality management systems and now export small quantities of reef fish to Australia and New Zealand.

There is currently no competent authority within Vanuatu that approves export establishments and verifies that they meet HACCP and/or quality assurance systems requirements. This, combined with the need to improve production efficiency, is seen as major barriers to accessing EU markets for beef and fisheries products.

With respect to cocoa, coffee and kava, problems have been encountered occasionally in meeting quality standards for access to international markets.

7. Trade Policies and the WTO

Vanuatu has experienced a long tedious accession process to become a member of the WTO which has ended in the Vanuatu government putting the accession on hold until such a time a revised accession package is developed and renegotiated with WTO members.

Vanuatu had undergone a major tariff reform, which included the reduction of duties and the introduction of a broad-based tax namely the Value Added Tax of 12.5%. Tariffs now range from 10%-40%.

Vanuatu is a member of the Melanesian Spearhead Group (MSG) a trade arrangement with Fiji, Solomon Islands and Papua New Guinea. It has yet to ratify the PICTA and PACER Agreement.

Benefits of the WTO membership

- Market access opportunities – Vanuatu beef has reached international standards and there shouldn't be any reasons why a country must restrict entry for Vanuatu beef. Other agricultural products, which have the potential to be marketed internationally, would gain access and protection under the WTO umbrella.
- Improve local standards – having domestic legislation that are in compliance with the WTO Agreements would allow locally produced products to enter the export markets. This would also allow Vanuatu to apply these standards to imported products, which may restrict inferior products entering the market thus allowing local industries to cater for the domestic market.
- Reduced duties would allow farmers and local industries to import equipment, fertilizers, raw materials at reduced costs. Access by many farmers to such products would enhance their production capacities.
- The modalities currently being negotiated at the WTO would highlight the importance of granting special and differential treatment to least developed and developing countries
- Transparency of procedures required by WTO provides a clear and fairer system which could benefit society in the whole

Challenges of WTO Membership

- Pressure by WTO members for Vanuatu to eliminate subsidies granted to copra farmers would greatly affect the farmers;
- Reduction of subsidies by developed markets to their farms would increase the price of imported products such as rice which has become an important stable food for Vanuatu people
- Reduction of tariffs would greatly impact the revenue of government derived from customs tariffs
- High costs involved in the accession process and negotiations
- Forestry – not yet covered under the WTO however restrictions could be imposed by markets which may impact on the exports of timber particularly markets posing behind standards and new requirements for timber products.

8. Recommendations

- (i) Ongoing support to the agricultural sector - The need for ongoing support in the agricultural sector is very important for Vanuatu to be address food security problems and to be able to support the improved export markets. The matrix of programs developed with the Chamber of Commerce provides a model of developing strategies linking subsistence farming

and fishing to commercial farming and processing industries. Given the strong linkages of the Chamber of Commerce to all sectors, any grants or direct support could be channeled through here using transparent criterion and procedures.

- (ii) Attracting foreign investment - Vanuatu's rich agricultural base provides good opportunities for a wide range of related processing and exports operations, particularly where the output can be certified as organic. Projects with identified prospects include processed coffee and cocoa; green and processed ginger exporting; spice processing and export; honey production; processing of pineapples for export; floriculture; and a heat-treatment plant for the export of suitable fruits and vegetables.
- (iii) There is also potential for seafood-processing operations (canning, smoking, etc.) to supply both the local and export markets. Aquaculture projects such as trochus, pearls and pearl shells, giant clams, milk and mullet fish, oysters and prawns also have good prospects. Other promising projects include bêche-de-mer, rock lobsters and the aquarium fish trade.
- (iv) By utilising the skills of the local workers in the forestry sectors and the quality tropical hardwoods that can be grown in Vanuatu, there is good potential for projects producing a wide range of timber products for the local market, other Pacific Islands and international markets, including quality, solid timber furniture; construction timbers and mouldings; plywood and veneers; flooring and parquetry; outdoor furniture components; and processing and export of coconut-based products and coconut timber and products
- (v) Considering the good potential for expansion of the fisheries sector, provide support facilities/ incentives including establishment of improved infrastructure facilities for handling/ storage of fish (and other perishable if required) including land-based processing operations where necessary including Port Villa and Luganville.
- (vi) FAD associated tuna fishing in Santo and other locations should explore market/ product diversification, through improved on-board handling and air-transport logistics.
- (vii) Further development of sustainable, carefully managed utilization of deep-water snapper resources and reef fishery resources including exploratory marketing in non-traditional markets in Asia.
- (viii) strengthening of the seafood inspection system including quality assurance of exports through capacity building and implementation of appropriate HACCP-based process control measures in association with industry.
- (ix) Establishment of a modern domestic fish processing/ marketing network with increased focus on production of value added seafood for domestic market to help import substitution as well.
- (x) Coordinated effort by governmental institutions to facilitate marketing of fish in conjunction with the private sector by developing appropriate fish marketing centers in provincial locations and by improving marketing information between buyers and sellers.
- (xi) Improved vocational/ technical training in fishery related activities including fishing, fish handling, processing and marketing.
- (xii) Capacity building is needed for agricultural officials to gain more knowledge of the international trade in agriculture as well as the WTO rules on Agriculture. This would enhance their capacity in advising farmers and agricultural exporters on trade policy matters and the impact this would have on their products. Furthermore, the private sector needs awareness training on the impact of international trade especially with all the perceptions on globalization and how the private sector could take advantage of the opportunities arising out of globalization.
- (xiii) The implementation of a system for the inspection and testing of imported foods and ingredients would be beneficial for Vanuatu in:
 - (xiv) Preventing mislabeled, low quality and potentially unsafe foods from entering and/or being dumped onto the domestic market and therefore better protecting the consumer.
 - (xv) Giving assurances to food processors, most of who rely heavily on imported ingredients for their food manufacturing.
- (xvi) In order to implement a system that is compatible with WTO/ SPS and TBT requirements, domestic food standards must first be established and a greater capacity developed for their enforcement.
- (xvii) Quality management systems - Very little of the food industry within Vanuatu currently operates under quality assurance and/or HACCP systems. The exception to this is the beef industry. Government in partnership with the Chamber of

Commerce, export Associations and the agricultural industry needs to take a proactive approach to facilitate the development of integrated quality management systems in food and agricultural production.

- (xviii) Food safety training - The Food Control Act 1993 takes an inspectorial approach to the control of food premises such that the hygiene standards observed in premises preparing and selling food depends on the vigilance of the inspector. The Government needs to develop proactive training programs in food hygiene for food operators so that food is produced safely and the consumer is protected. A good reputation for safe food and water is also an important element in attracting tourists to the country.
- (xix) Knowledge of and training in the evaluation of quality assurance HACCP food safety systems is required within the health sector.

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References

1. ADB, March 2001, *Draft for public discussion: Meto2000, Economic Report and Statement of development strategies*, Published by the ADB in Consultation with the Government of the Marshall Islands.
2. Bank of Hawaii, February 2000, *Republic of Palau, Economic Report*.
3. Bureau of Budget and Planning Ministry of Administration Palau, July 2002, *Republic of Palau 2001 Statistical Yearbook*, Republic of Palau
4. Central Bank of Samoa. *Quarterly Bulletin*, December 2002, Commercial Printers, Apia Samoa
5. Central Planning Department, July 2001, *Strategic Development Plan 2001-2004*, Kingdom of Tonga
6. Chutaro, B., July 18 2002, *Marshall Islands Tourism Association: Marketing Report-2002*, Majuro, Marshall Islands 96960
7. Chutaro, B. Inc, 1998, *Draft: Compilation of Laws on Business Activities In the Republic of the Marshall Islands*, Majuro, Marshall Islands 96960.
8. Department of Trade Industry and Investment, 27th March 2003, *Draft-Preparing for WTO accession: the perspective of Vanuatu, achieving policy autonomy in the multilateral trading regime*, UNESCAP 2003 regional seminar on preparing for WTO accession: country perspectives.
9. Foreign Investment Board, *Foreign Investment Act 28 ONC Sections 101 et seq.*, Koror, Palau.
10. Foreign Investment Board of Palau, *Palau: The Foreign Investor's Guide*, Official Publication of the Foreign Investment Board of the Republic of Palau.
11. Foreign Investment Board, *Regulations Implementing the Foreign Investment Act.28 PNC Sections 101 et seq.*, Koror, Palau.
12. Government of the Republic of Vanuatu, 2003, *Budget 2003, Volume 1, Fiscal Strategy Report, 2003*.
13. Government of the Republic of Vanuatu, 2003, *Budget 2003*.
14. Government of the Republic of Vanuatu, 2003, *Budget 2003 Volume 3- Program Budget Narrative*, Government of the Republic of Vanuatu, Port Vila Vanuatu
15. Grynberg, R.; Mickey Joy, R., December 2000, *The Accession of Vanuatu to the WTO- Lessons for the Multilateral Trading System*, 2000 Kluwer Law International. -Printed in the Netherlands.
16. Kingdom of Tonga and Legislative Assembly of Tonga, March 2001, *An Act to Amend the Customs and Excise Act (10th November, 1999)*, Kingdom of Tonga.
17. KVA Consult Ltd. 2003. *Pacific Island Economic Statistics*, Apia Samoa
18. Ministry of Agriculture and Forestry & Statistics Department with technical assistance from FAO, August 2002, *Agriculture Census 2001*, Kingdom of Tonga.
19. National Reserve Bank of Tonga, June 2002, *Quarterly Bulletin, June 2002 Volume 13, Number 2*.
20. National Reserve Bank Of Tonga, September 2001, *Annual Report 2000-01*, Nuku'alofa, Tonga.
21. National Statistics Office, October – December 2002, *Quarterly Statistical Indicators Republic of Vanuatu*, National Statistics Office, Port Vila Vanuatu.
22. National Statistics Office Vanuatu, 2002, *National Accounts of Vanuatu 1983-2001*, Port Vila, Vanuatu.
23. National Statistics Office, December 2000, *The 1999 Vanuatu National Population and Housing Census - Main Report*, National Statistics Office, Port Vila Vanuatu.

24. Office of Planning and Statistics, June 2002, *Republic of the Marshall Islands: Social Statistics Bulletin*, Majuro, Marshall Islands MH 96960.
25. Office of Planning and Statistics, September 14th 2001, *Marshall Islands Statistical Abstract 2000*, Republic of the Marshall Islands, Majuro, Marshall Islands
26. Reserve Bank of Vanuatu, September 2002, *Quarterly Economic Review*, Port Vila, Vanuatu.
27. Reserve Bank of Vanuatu, 2002, *Quarterly Economic Review September 2002 Volume 3*, Reserve Bank of Vanuatu, Port Vila Vanuatu.
28. Reserve Bank of Vanuatu, December 2001, *Quarterly Economic Review December 2001 Volume 4*, Reserve Bank of Vanuatu, Port Vila Vanuatu.
29. Reserve Bank of Vanuatu, December 2000, *Quarterly Economic Review December 2000 Volume 4*, Reserve Bank of Vanuatu, Port Vila Vanuatu.
30. Statistics Department Cook Islands, December 2002, *Quarterly Statistical Bulletin*, Rarotonga, Cook Islands
31. Statistics Department Cook Islands, June 2002, *Cook Islands Annual Statistical Bulletin 2002*.
32. Statistics Department Kingdom of Tonga, September 2001, *Statistical Indicators 2001*, Statistical Department, Nuku'alofa, Tonga.
33. Statistics Department, January 1999, *Kingdom of Tonga, Population Census 1996: Administrative Report and General Tables*, Nuku'alofa, Tonga.
34. Statistics Department Vanuatu, 2001, *Detailed Commodity Tables on Overseas Trade Annual Report 2001*, Vanuatu Statistics Office, Port Vila Vanuatu
35. Vanuatu Sustainable Forest Utilisation Project (Hassal Associates Pty Ltd, Margules Poyry PTY Ltd, Anutech Pty Ltd), June 1998, *Timber Properties Handbook- 24 Vanuatu Commercial Species*, The Vanuatu Department of Forests and AusAID.
36. The Ministry of Finance, Government of Tonga, 2003, *Budget Statement for the year ending 30th June 2003*, Ministry of Finance.
37. The Strategic Economic Development Plan, February 2002, *Draft: Marshall Islands Agriculture Sector Master Plan*, Republic of the Marshall Islands-Vision 2018: Majuro.
38. The Strategic Economic Development Plan 2003-2018, November 2002, *Marshall Islands Fisheries Sector Master Plan*, Republic of the Marshall Islands, Vision 2018.
39. The Strategic Economic Development Plan 2003-2018, January 2002, *Draft: Marshall Islands Environmental Sustainability Master Plan*, Republic of the Marshall Islands, Vision 2018.
40. Vanuatu Chamber of Commerce, 2002, *Business Forum-2002, Matrices and Outcomes document*, USP Vanuatu.