Pacific Multi-Country CPF Document

2013 – 2017

For

The Cooperation and Partnership

Between

FAO and its 14 Pacific Island Members

December 2012

Cook Islands, Fiji, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

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Acronyms and Abbreviations

AAACP	All ACP Agriculture Commodities Program (EU funded program)
ABNJ	Area Beyond National Jurisdiction
ACIAR	Australian Centre for International Agricultural Research
ACP	Africa, Caribbean and Pacific
ADAM	Agriculture Development Assistance Mapping tool
ADB	Asian Development Bank
ASP	Agriculture Sector Plan
AusAID	Australian Agency for International Development
CBD	Convention on Biological Diversity
CBS	Central Bank of Samoa
CCA	Climate Change Adaptation
CFC	Community Fishing Centre
CI	Cook Islands
CMI	College of Marshall Islands
COM-LGP	College of Micronesia Land Grant Program
CPF	Country Programming Framework
CPI	Consumer Price Index
CROP	Council of Regional Organizations in the Pacific
CRP	Comprehensive Reform Program
DAFF	Department of Agriculture, Forestry and Fisheries (Niue)
DARD	Department of Agriculture and Rural Development (Vanuatu)
DHS	Demographic and Health Survey
DRR	Disaster Risk Reduction
DWFN	Distant Water Fishing Nation
EEZ	Exclusive Economic Zone
ENSO	El-Nino Southern Oscillations
EU	European Union
FAD	Fish Aggregating Device
FAO	Food and Agricultural Organization of the United Nations
FAOR	FAO Representative
FBS	Food Balance Sheet
FFA	Forum Fisheries Agency
FIBOS	Fiji Bureau of Statistics
FICI	Food Import Capability Index
FLEGT	Forest Legislation Governance and Trade (EU funded program)
FOB	Freight On Board
FPAM	Forest Protected Area Management (GEF project)
FSA	Farmer Support Organization
FSM	Federated States of Micronesia
FSSLP	Food Security and Sustainable Livelihoods Program
FTF	Falekaupule Trust Fund (Tuvalu)
FVSS	Fruit and Vegetable Sector Strategy
GAP	Good Agriculture Practice
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GEFPAS	GEF Pacific Alliance for Sustainability
GHP	Good Hygienic Practice
GIZ	German Agency for International Cooperation
GFRP	Global Food Crisis Response Program
HACCP	Hazard Analysis and Critical Control Points

HDI	Human Development Index
HIES	Household Income and Expenditure Survey
HRBA	Human Rights-Based Approach
HTFA	High Temperature Forced Air
IACT	Increasing Agriculture Commodities Trade (EU funded project)
IDA	International Development Association
IFAD	International Fund for Agriculture Development
IFCP	Island Food Community Pohnpei
IMF	International Monetary Fund
IPPC	International Plant Protection Convention
ISFP	Initiative on Soaring Food Prices
ITC	International Trade Centre
IUU	Illegal, Unregulated and Unreported (fishing)
IWRM	Integrated Water Resource Management
JNAP	Joint National Action Plan for Disaster Risk Reduction and Climate Change
JICA	Japan International Cooperation Agency
KAP	Kiribati Adaptation Program
KDP	Kiribati Development Plan
LDC	Least Developing Country
MAF	Ministry of Agriculture and Fisheries (Samoa)
MALQFF	Ministry of Agriculture, Livestock, Quarantine, Forestry and Fisheries (Vanuatu)
MAPI	Ministry of Agriculture and Primary Industries (Fiji)
MELAD	Ministry of Environment, Land and Agriculture Development (Kiribati)
MDG	Millennium Development Goal
MIMRA	Marshall Islands Marine Resources Authority
MORDI	Mainstreaming of Rural Development Innovations (IFAD program)
MRV	Monitoring, Reporting and Verification
MTCIT	Ministry of Trade, Commerce, Industry and Tourism (Vanuatu)
MTDS	Medium Term Development Strategy
NAB	National Advisory Board
NACCC	National Advisory Committee on Climate Change
NAPA	National Adaptation Plan of Action
NAS	National Adaptation Strategy
NBSAP	National Biodiversity Strategic Action Plan
NCD	Non Communicable Disease
NFMRA	Nauru Fisheries and Marine Resources Authority
NGO	Non-Governmental Organization
NIEP	National Integrated Environment Policy
NISP	Niue Integrated Strategic Plan
NMDP	National Master Development Plan
NMTPF	National Medium Term Priority Framework
NPOA	National Plan of Action
NSDP	National Sustainable Development Plan
NSSD	National Strategy for Sustainable Development
NZ	New Zealand
ODA	Official Development Assistance
OFCF	Overseas Fishery Cooperation Foundation (Japan)
OFMP	Oceanic Fisheries Management Project
OPSP	Overarching Productive Sector Policy
PA	Protected Area

PAA	Priorities and Action Agenda (Vanuatu)
PAPP	Pacific Agriculture Policy Program (EU funded project)
PHAMA	Pacific Horticulture and Agriculture Market Access (AusAID funded project)
PICTs	Pacific Island Countries and one Territory (which are Members of FAO)
PIF	Project Identification Form
POPs	Persistent Organic Pollutants
PRC	Peoples Republic of China
RAP	Regional Office for Asia and the Pacific (FAO)
RBM	Results Based Management
RDP	Rural Development Plan
RDSSED	Roadmap for Democracy and Sustainable Socio-economic Development (Fiji)
REDI	Rural Economic Development Initiatives
REDD	Reduced Emissions from Deforestation and Degradation
RERF	Revenue Equalization Fund (Kiribati)
RMI	Republic of the Marshall Islands
RPFS	Regional Program for Food Security
SACEP	Samoa Agriculture Competitiveness Enhancement Project
SAP	FAO Sub-regional Office for Pacific Islands
SBS	Samoa Bureau of Statistics
SDS	Strategy for the Development of Samoa
SI	Solomon Islands
SIDS	Small Island Developing States
SFM	Sustainable Forest Management
SMA	Special Management Area (fisheries)
SLM	Sustainable Land Management
SPC	Secretariat of the Pacific Community
SPCR	Strategic Program for Climate Resilience
SPS	Sanitary and Phyto sanitary standards
SPREP	Secretariat of the Pacific Regional Environment Program
SROS	Scientific Research Organization Samoa
TA	Technical Assistance
TCP	Technical Cooperation Project (FAO)
TCPF	Technical Cooperation Program Facility (FAO)
TNSD	Tuvalu National Strategy for Development
TOP	Tongan Paaga ($ currency of Tonga))
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women (now merged with UN Women)
US	United States
USDA	United States Department of Agriculture
USP	University of the South Pacific
VNSO	Vanuatu National Statistics Office
VT	Vatu ($ currency of Vanuatu)
WB	World Bank
WHO	World Health Organization
WTO	World Trade Organization

Preamble

The FAO Country Programming Framework (CPF) for the Pacific Sub-Region is a five year strategic program framework covering the period 2013-2017. It details outcomes and outputs in four priority result areas to which FAO assistance will be focused to address the development challenges and national priorities in thirteen Pacific Island Countries and one Territory, namely Cook Islands, Fiji, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Marshall Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu.

The result areas to which FAO will focus assistance have been identified through wide stakeholder consultation and analysis of the national agriculture sector situation, and are closely aligned to national development needs and priorities as articulated in national sustainable development plans. On-going and planned interventions of other key development partners have been taken into consideration to enhance harmonization and ensure that FAO assistance builds on and complements other partner support. The overall goal of FAO assistance to the Pacific is improved food security and income earning opportunities in the 13 countries and one territory covered by this framework.

The framework establishes four priority areas across the region where FAO assistance will be focused. These are:

1. Evidence-based Policy and Strategic Planning
2. Food and Nutrition Security Resilient to the Impacts of Disasters and Climate Change
3. Value/Supply Chain Efficiency and Market Access
4. Environmental Management and Resilience.

Additionally, the CPF aims to mainstream gender and capacity building at all program phases: development, implementation, monitoring and reporting.

The focus areas chosen reflect FAO's comparative advantages and corporate strategic objectives in agriculture, food security, natural resource management and rural development sectors while ensuring synergy with the Pacific Plan and the United Nations Development Assistance Framework (UNDAF) 2013-2017 for the Pacific. Successful implementation will contribute to Pacific Plan goals of 'Economic Growth and Sustainable Development' and UNDAF result areas 'Environmental management, climate and disaster risk management and poverty reduction and inclusive economic growth', and to the achievement of Millennium Development Goals 1 and 7 (poverty reduction and environmental sustainability).

The Sub-regional Office for the Pacific Islands, in close cooperation with national partners, will shoulder the main responsibility for the design and delivery and monitoring of the in-country interventions agreed with countries to achieve the targeted outputs identified in the CPF. Support, where necessary, will also be forthcoming from FAO Regional Office for Asia and the Pacific and from specialist Technical Divisions in Rome.

The full implementation of the multi-country CPF depends on the availability of financial and technical resources. The indicative resource estimate for implementing all fourteen national frameworks plus regional interventions is US$44 million. The scope of the CPF engagement will require support from the core budget of FAO, Trust Funds and special projects from external donors.

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By endorsing the Pacific CPF 2013-2017, the Governments of the 14 FAO Members in the Pacific covered by this framework are committed to providing collaboration, to the fullest possible extent with regard to available capacity and resources, to facilitate the achievement of the objectives and actions proposed in this document.

Introduction

1. The FAO-Pacific Country Programming Framework (CPF) 2013-2017 is a multi-country document that provides a regional framework within which country-specific priorities and expected outcomes are defined, while recognizing that the depth and composition of country-specific assistance will be primarily demand-driven and flexible. This is the second Programming Framework prepared for the Pacific Sub-Region and it builds on the experiences and lessons from the implementation of the CPF 2009-2012 [formerly known as the National Medium Term Priority Framework (NMTPF)].

2. The CPF document defines the medium-term priorities for the Food and Agriculture Organization of the United Nations (FAO's) technical cooperation with its 14 Pacific Island Members[1] for the period 2013-2017; it also identifies areas where regional and sub-regional interventions may be supported. The outcome areas to which FAO will focus assistance have been identified through wide stakeholder consultation and analysis of the national agriculture sector situation, and are closely aligned to national development priorities as articulated in national sustainable development plans. On-going and planned interventions of other key development partners have been taken into consideration to enhance harmonization and ensure that FAO assistance builds on and compliments other partner support. A series of national meetings/ workshops followed by a regional stakeholder workshop have been conducted to help build ownership and to validate the priority outcome areas selected. In all countries stakeholder consultations included government representatives from relevant sectors including planning and aid coordination, private sector producers and processors, and producer organizations, NGOs particularly those representing women's groups, key regional organizations and development partners. The focus areas chosen reflect FAO's comparative advantages and corporate strategic objectives[2] in agriculture, food security, natural resource management and rural development sectors while ensuring synergy with the Pacific Plan and the regional United Nations Development Assistance Framework (UNDAF) 2013-2017 for the Pacific Sub-Region. Successful implementation of the framework will contribute to Pacific Plan goals of *Economic Growth* and *Sustainable Development* and UNDAF result areas *Environmental management, climate and disaster risk management* and *Poverty reduction and inclusive economic growth*, and to the achievement of Millennium Development Goals (MDGs) 1 and 7 (poverty reduction and environmental sustainability).

3. The CPF, which is integral to the UN-supported country programming, embraces five principles of engagement that have been agreed by UN Member States. The principles provide the basis for reasoning and action and are different from priorities and goals which are defined in a more contextual manner (both in time and geographically). The five principles are:

1) Human rights-based approach (HRBA)
2) Gender equality
3) Environmental sustainability
4) Capacity development
5) Results-based management (RBM)

[1] Cook Islands, Fiji, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu.

[2] Eradicate hunger, food insecurity and malnutrition; Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner; Reduce rural poverty; Enable more inclusive and efficient food systems at local, national, regional and international levels; Increase the resilience of livelihoods to threats and crises.

These principles apply to FAO's engagement with and support to national development processes and frameworks, as well as its efforts in providing global public goods and will be systematically applied throughout all CPF country program implementation activities.

4. FAO's planned assistance aims to balance demand-driven country specific initiatives with regional-level initiatives which take advantage of economies of scale to address issues that are common to a number of countries in the region. At national level the CPF focuses on a limited set of priorities reflecting the importance the government attaches to the areas where FAO has a strong capacity to deliver and demonstrable comparative advantages vis-à-vis other development partners. Overall the framework identifies four priority areas to which FAO assistance will contribute to across the region. These are: (1) Evidence-based Policy and Strategic Planning; (2) Food and Nutrition Security Resilient to the Impacts of Disasters and Climate Change; (3) Value/Supply Chain Efficiency and Market Access; (4) Environmental Management and Resilience.

5. Whilst the CPF document primarily provides a strategic framework to focus FAO assistance to countries in the region, it should also enable strategic partnerships and joint programs with other organizations active in the region, particularly the UN agencies and the CROP agencies. It is thus, an important input into the UN *Delivery as One* process and should help to further the aid effectiveness agenda set out in the Paris Declaration, Accra Agenda for Action and the Cairns Compact on Strengthening Development Coordination in the Pacific. The CPF provides a rolling framework which will be regularly reviewed and adjusted as necessary. It will be used to mobilize both financial and technical resources to achieve the specified priority outcomes effectively and in a timely manner. The CPF process will remain iterative and the framework document amenable to adjustment and updating based on feedback from monitoring and evaluation of its implementation. In this way it will help maintain continuity of FAO assistance in a strategic programmatic way.

Defining Features of the Agriculture Sector in Pacific Island Countries

6. The Pacific region includes a heterogeneous group of countries and territories with diverse resource endowments, economies and political situations. The total population of the 13 Pacific Island countries and one territory included in this framework is about 2.2 million, but national populations range from around 840 thousand in Fiji down to less than two thousand in Niue and Tokelau. Agricultural conditions also vary both among and within countries. The countries do, however, share a number of characteristics and trends. In general, the FAO Members included in this framework face significant development challenges and rely considerably on the support from development partners to help address these. With few exceptions, such as Fiji, the island nations have small economies and limited natural resources. Agriculture, fisheries and tourism[3] are extremely important to the economies of many of the countries. Furthermore the agriculture sector is fundamental for most countries in providing subsistence security and livelihood options. The high degree of dependence on such sectors, however, makes the relatively weak island economies vulnerable to externally induced economic shocks, natural disasters, environmental problems, and the impacts of climate change. Their geographical isolation, poor access to commercial and capital markets, poorly developed infrastructure and limited institutional capacity hinder economic development. Across the region, these problems are compounded by weak policy and regulatory frameworks.

[3] Tourism currently plays an important role in Cook Islands, Fiji, Palau, Samoa, Tonga and Vanuatu and has potential for growth in a number of other countries.

7. In many countries the private sector is poorly developed and there is a shortage of trained personnel to meet development challenges. Strengthening the environment for private sector development in the Pacific therefore remains a crucial challenge for development of the agriculture sector. A combination of factors, including high global food prices, climate change impacts and urbanization, are undermining food security in the region. Lack of development in rural areas is increasing rural–urban migration, youth unemployment and its associated social problems. Due to lack of employment opportunities, increasing hardship and social instability, inequality is disproportionately impacting vulnerable groups, such as rural poor, women and youth. In several countries in the sub-region rural women increasingly bear the burden of food production, but with limited access to the resources and services they need. Mechanisms to encourage full and real participation by women and other vulnerable groups are critically needed. A stronger performing agriculture sector is fundamental for the Pacific's overall economic growth. A thriving agriculture sector is crucial for addressing food security, poverty and inequality. More than 70 percent of total population and the majority of poor live in rural areas. A healthy agriculture sector will mean more jobs, more income and more food for the poor.

8. The development strategies of the FAO Members in the region have common elements which *inter alia* include: strengthening policy, legal and regulatory frameworks, increasing agricultural productivity and food self-sufficiency, reducing food imports, improving nutrition and diets, sustainably developing aquaculture and fisheries, improving marketing and export performance, enhancing sustainable resource management, and developing human capacity.

9. Future gains in crop and livestock production will have to come from increases in both land and labour productivity as population growth and climate change place even greater pressure on food production in the Pacific. Under-resourced extension and research services currently prevent farmers receiving the technical assistance required to improve productivity. Access to inputs such as improved planting material, home garden tools, improved livestock feed, health and breeds, credit and land, and the increasing costs of livestock feeds, fertiliser and fuel inputs, also limit the opportunities for increased agricultural production. Availability of and efficient use of water is also becoming a critical factor particularly for the small atoll islands.

10 Access to, management of, and proper utilization of land and marine resources underpins food security. Land tenure and access rights to inshore marine resources are complex and vary across Pacific island countries. Land ownership and tenure systems will need to be assisted to ensure security of ownership while at the same time unlocking the economic development potential of land and marine resources for food security and other commercial exploitation. However, resource ownership (land and marine) issues in the Pacific are very sensitive and initiatives involving these resources for agricultural, forestry, fisheries or aquaculture production will need to be led by resource owners and national authorities, and assisted where appropriate through focused regional initiatives. The governance of tenure is a crucial element in determining if and how people, communities and others are able to acquire rights, and associated duties, to use and control land, fisheries and forests. Many tenure problems arise because of weak governance, and attempts to address tenure problems are affected by the quality of governance. FAO has facilitated development of Voluntary Guidelines (VG) to enhance responsible governance of tenure of land, fisheries and forests. The VG serve as a reference and set out principles and internationally accepted standards for practices for responsible governance of tenure of land, fisheries and forests[4].

[44] Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Food and Agriculture Organization of the United Nations, Rome, 2012.

11. Outside the very small island states, the enhancement of food security for most countries will require an expansion in their export earnings. Market access, quality assurance, consistency of supply and deteriorating marketing infrastructure – including post-harvest storage and transport – have been identified as constraints to expanding export earnings. For the atoll micro-states, there is little opportunity to expand export earnings. Sustaining and improving domestic food production through appropriate applied research and soil improvements is vital to avoid any worsening in the vulnerability of these countries to food insecurity. Additionally, attention needs to be devoted to increasing the income and employment opportunities through sustainably developed inshore fisheries and aquaculture, whilst ensuring maximum national value is attained from their relatively large off-shore fisheries resource. The fisheries resources of the Pacific represent a major source of food and income for Pacific Island countries and offer the main prospects for sustainable development for many countries particularly the land resource poor atoll nations. Recognizing the significant threats to the ocean environment including from ocean acidification, pollution, and IUU fishing and the need to maximize returns from these resources it is clear that their protection and sustainable management is fundamental to the long-term socio-economic wellbeing of the region.

12. The region's fishery can be broadly divided into two main categories: oceanic and coastal or inshore. Tuna constitutes the region's primary catch. The Pacific Islands region and the wider western and central Pacific Ocean is the most important tuna fishing area in the world. At present, the main benefits from tuna fisheries include license fees, direct employment in fishing activities, spin-offs from locally based fishing fleets and processing facilities. In some countries access fees form a very large part of government revenue. In the case of FSM, Tuvalu, Tokelau, Nauru and Kiribati, these fees provide from 10–40% of annual government revenue. One of the major issues regarding tuna fisheries in the region is the relative benefits of receiving access fees versus pursuing domestic industry development. There are, however, constraints to the onshore development of the processing facilities needed to domesticate the benefits of oceanic fisheries in the smaller countries. These constraints include limited freshwater supplies, high freight charges, relatively high wage rates compared to Southeast Asia and the limited capacity of the environment and society to absorb such large-scale operations.[5]

13. In the region fish is a cornerstone of food security. Characteristically, women are involved in inshore fishing activities, such as reef gleaning and invertebrate collection, and the preparation of food from the products of fishing activities. Men are usually involved in the more strenuous work of fishing further offshore, for large species of fish, and in diving activities. There are, however, important exceptions to this generalization. Several observers of the Pacific Island subsistence fisheries situation estimate that fishing activity by women actually results in a greater amount of family food than produced by men.The average annual consumption of fish (including shellfish) by coastal rural populations is estimated to range from 30–118 kg per person in Melanesia, 62–115 kg in Micronesia, and 50–146 kg in Polynesia[6]. Most of the fish used for food in the region comes from subsistence fishing in coastal waters, particularly around coral reefs. But, in general, the coastal fisheries resources are heavily fished and often show signs of over-exploitation, especially in areas close to population centres and particularly for fishery products that are in high demand by the rapidly-growing Asian economies. The coastal fisheries are also negatively affected by habitat degradation, which occurs from destructive fishing practices, urbanization, siltation from mining/logging and competing uses of the coastal zone. Climate change impacts and natural disasters such as cyclones also threaten reef health and coastal fisheries productivity. As a result, there are now

[5] . Bell JD, Johnson JE and Hobday AJ (eds) (2011) Vulnerability of Tropical Pacific Fisheries and Aquaculture to Climate Change. Secretariat of the Pacific Community, Noumea, New Caledonia.…
[6] Ibid

serious concerns about the capacity of coastal fisheries to supply the fish needed for food security by the region's growing populations[7]. Consequently conservation of stocks and improved management of coastal fisheries are high priority issues.

14. The dispersed nature of the region's land among a vast area of water has several consequences for fisheries management. In regard to coastal resources, the presence of numerous patches of land and their associated coastal and coral reef areas, separated by large distances and sometimes abyssal depths, means that many species with limited larval dispersal can be effectively managed as unit stocks. On the other hand, management of shared stocks of highly migratory species such as tunas can only be effective if carried out on a multi-country basis. The presence of extensive areas of international waters among the region's EEZs greatly complicates the region's fishery management efforts[8].

15. With declining coastal fish stocks the potential for aquaculture is being explored in many countries to fill the gap in food fish supply and to provide alternative livelihood opportunities for communities who strive to conserve their coastal resources. While there has been a long history of aquaculture development in the region wider scale expansion and commercial successes have been relatively limited. Many aquaculture species and systems that have been trialed have proven technically feasible, but have failed to become economically viable. Favorable outcomes in the aquaculture sector will require a shift in emphasis towards identifying and building comparative advantages and promoting an enabling business and policy environment for private sector-led aquaculture enterprise development. There will also need to be additional attention paid to environmental sustainability and biosecurity issues, especially formulating and implementing policies and procedures to reduce risks and safeguard biodiversity. Future successful aquaculture industries in the region will have to be founded on appropriately located sustainable business ventures and be carried out in accordance with high standards of environmental and ecological protection[9].

16. A recently concluded Regional Aquaculture Scoping Workshop: Development of a Pacific Aquaculture Regional Cooperative Program organized by FAO and SPC[10] drafted a vision of a sustainable aquaculture sector that meets food security and livelihood requirements based on economically viable enterprises supported by enabling governance arrangements. To achieve this vision, a Pacific Regional Aquaculture Strategy was prepared and the overall outcomes of this strategy are envisioned to include the following: (i) successful, competitive and biosecure aquaculture enterprises, using and adapting proven technologies to meet local requirements (technical, social and environmental); (ii) recognition of the actual and potential contributions of the aquaculture sector towards regional livelihoods and food security (in response to the pressures of population growth, depleted/overfished inshore fisheries resources and climate change); and (iii) framework for aquaculture development that builds cooperation among PICT government aquaculture institutions, national, regional and international agencies, farmer groups/associations, and other stakeholders. To meet these objectives, the strategy proposes six broad program elements including biosecurity,

[7] Bell JD, Kronen M, Vunisea A, Nash WJ and others (2009) Planning the use of fish for food security in the Pacific. *Marine Policy* 33, 64–76.

[8] Gillet R, (2011) Fisheries of the Pacific Islands: Regional and national information. RAP Publication 2011/03, Food and Agriculture Organization of the United Nations, Regional Office for Asia and the Pacific, Bangkok.

[9] Gillet R and Cartwright I (2010) The future of Pacific Island fisheries. Secretariat of the Pacific Community, Noumea and Pacific Islands Forum Fisheries Agency, Honiara.

[10] FAO. 2012. Report of FAO/SPC Regional Aquaculture Scoping Workshop: Development of a Pacific Aquaculture Regional Cooperative Programme. Nadi, Fiji. 11-14 October 2011. FAO Fisheries and Aquaculture Report *No*. 1023, Rome, FAO. 2012. 69p.

capacity building, feasibility assessment, statistics and data, markets and trade and technology transfer and improvement.

17. Throughout the region, it is generally the case that the value of production for home consumption significantly exceeds the value of produce for sale. However over the last two decades the level of food self-sufficiency has been declining. With increasing urbanisation reliance on imported food is rising. This has resulted in many cases in deterioration in the nutritious quality of the foods consumed and an increasing prevalence of nutrition-related non-communicable diseases such as vitamin and mineral deficiencies, diabetes, hypertension etc. Compounding this is a general lack of capacity to develop and implement food quality and safety standards. It is now a high priority throughout the region to better link agriculture and health policies to bring health and farming objectives closer together.

18. Furthermore, developments in technology, globalization of the food supply and changes in consumers' expectations of food have led to significant changes in food safety and quality requirements for both importing and exporting countries. Increasingly strict food safety and quality regulatory requirements have been impediments to fully exploiting potential markets. Building capacity in this area will facilitate trade by enabling access of Pacific food products to potential export markets, thereby increasing income opportunities for farmers. Additionally, strengthening national food control systems will also protect the health of Pacific consumers by reducing exposure to food-borne and food-related risks. On the other hand, trade liberalization has resulted in the removal of policy measures that could help improve nutritional standards by reducing or preventing the importation of low nutritional value foodstuffs.

19. Given the limited capacity for international trade, foreign exchange constraints, and recurrent emergencies, increasing and stabilizing domestic food production is essential for food security in the Pacific region. High international food and oil prices have brought a renewed emphasis on domestic food production in countries across the region. The 2008 food price crisis shifted the policy focus to national food security through food self-sufficiency, rather than through trade. Almost with one voice, leaders throughout the region have urged people back to their roots – to tend their gardens and increase production of local staples and agricultural produce. As commodity prices remain volatile, revitalization of the agriculture sector (including a strengthened local food production and marketing system) remains the best medium-term policy option for most countries in the region. As family farming forms the core of smallholder agriculture systems in the Pacific, greater policy attention needs to be given to sustain the benefits provided through small farms for employment creation, poverty reduction, food security, respecting the environment and restoring life to rural areas. Particular attention needs to be paid to linking small producers (farmers and fishers) to markets, and to building business skills to enhance opportunities for commercialization. Effective incentives to achieve sustainable increases in smallholder productivity and the development of input and output markets in rural areas will also be important. Farmer (and fishers) organizations are playing an increasingly important role in several countries and need to be provided with appropriate support to adopt good governance and business practices and to enable them to build networks and share experience.

20. Urbanization is providing bigger domestic markets to rural producers and for some countries, the growth in tourism also offers potential increased market opportunities. But supplying the tourist food market shares similarities with the export market; local producers (and fishers) will have to meet international health and quality standards and also international standards in the reliability of delivery of their products. This implies a need to improve supply chain coordination and to address problems such as seasonality in production. Nevertheless, the opportunities for the substitution of significant proportions of current levels of imports, both for consumption by domestic consumers, and by the

growing tourist sector, often outweigh opportunities for export to markets requiring increasingly stringent Sanitary and Phytosanitary Standards (SPS) to be met.

21. Countries in the region rely heavily on primary commodity production, marine-based resources and tourism, therefore maintenance of the environment is vital for sustainable growth and poverty reduction. The competing demands on the environment and differentiated impacts of climate change must be assessed and taken into consideration when formulating strategies to address the significant development challenges the Pacific countries are facing. The vulnerability of food and farming systems to the new fundamentals of climate change and scarcer, costlier oil is not well considered in current policy. There is still insufficient consideration placed on resilience within food and farming systems especially in terms of biodiversity, sufficient skilled labour and supporting infrastructure that a 'low-carbon, more resource constrained future' necessitates.

22 Forests and trees have huge environmental, cultural and economic significance for people in the Pacific. Forests and trees have a significant role in mitigating the impacts of climate change. Forests contribute significantly to biodiversity, protection and maintenance of ecosystem services. Unfortunately, despite their essential role in sustainable development for present and future generations of Pacific Islanders, these valuable resources have been under continuous threat from human activities such as agricultural expansion and unsustainable logging. Loss or degradation of forests due to unsustainable harvesting of timber and non-timber products is a serious concern in Melanesian countries (Fiji, Solomon Islands and Vanuatu). Loss of mangroves to aquaculture and settlement expansion in these countries, as well as in several smaller nations in Micronesia and Polynesia, has increased the vulnerability of coastal zones to natural disasters. Threats to biodiversity due to the spread of invasive tree species and pests are common to all Pacific Island countries. Changes in the availability of natural resources, due to depletion and/ or impact of climate change can significantly compromise food security. Overall, the degradation of the natural resource base results in less water for people, crops and livestock, in lower crop, livestock and tree yields and in higher risks from natural disasters.

Development Partners' Priorities and Activities in the Sector

23. There are currently many bilateral and multilateral development partners who provide substantial assistance to the Pacific Island countries, and in order that this assistance translates into better sustainable development gains priority must be given to aid coordination and harmonization of support across development agencies. In the context of FAO programming assistance to the Pacific region the Sub-Regional Office (SAP) maintains a mapping exercise which details and analyses current and planned activities of key development partners and regional agencies in the broader agriculture sector. At the global level FAO has constructed an Agriculture Development Assistance Mapping tool (ADAM) which maps priorities and actions at country, regional and global levels. The overall objective is to identify complementarities and improve coordination of development resources based on respective comparative advantages.

24. The agriculture sector remains central to economic growth and poverty reduction, but funding for rural development has failed to keep pace with the need in many countries. In most cases this under-funding has been evident since at least the early 1990s. Rebuilding rural infrastructure (notably transport systems) and agriculture extension and research services now are seen as priority areas needing support. There is also a focus for increased public-private partnerships to ensure sustainable infrastructure development in the region. However, much of what happens in the agriculture sector lies in the hands of the private sector. Thus providing an enabling environment for private-sector led growth has been targeted for support by key development partners in the region.

25. Significant support is going to the larger Melanesian countries where progress in achieving Millennium Development Goals has been weak. These are also countries which have considerable potential to improve economic growth and alleviate poverty through development of the productive sectors. However, many of the smaller island countries, particularly the atolls, are facing increasing challenges regarding food security (including nutritional health) and will need an additional focus of development assistance to address these challenges.

26. The Pacific island countries are among the most environmentally vulnerable nations in the world. There is a heightened awareness of the consequences of climate change for the region. The evidence to date indicates that extreme events such as drought, extreme high tides, violent winds, and storm surges are the major risks to the continued habitation of low-lying islands in the Pacific. Climate change adaptation and mitigation, and disaster preparedness are becoming a key focal area for increased development assistance.

27. Specific development partner activities in the agriculture, natural resources and rural development sector at national level are covered in the CPF country chapters. More detailed information on both national and regional programs of the major development partners in the Pacific are available in the FAO Mapping Study Reports[11]. Key donor funded regional initiatives that FAO activities will seek complementarities and synergies with include the Pacific Horticultural and Agricultural Market Access Program (PHAMA) and the Pacific Agribusiness Research for Development Initiative (PARDI) funded by Australia; the Increasing Agricultural Commodity Trade (IACT) project and the Pacific Agricultural Policy Program (PAPP) both funded by the EU and implemented by SPC. The Forum Fisheries Agency (FFA) and SPC also run a number of regional fisheries programs with which FAO's planned assistances aims to complement.

Lessons Learned from Implementation of the Current CPF 2009-2012[12]

28. The CPF 2009-2013 was the first FAO Pacific Sub-Regional programming framework and therefore involved an important learning process for both FAO and partner countries. The framework identified outcomes in five thematic areas to which FAO assistance should contribute. These areas were: Food safety, quality and nutrition; Aquaculture and fisheries development; Agriculture (including livestock and forestry) production and productivity; Agribusiness, marketing and trade; and Sustainable management of terrestrial, freshwater and marine resources (which is a cross cutting area and includes disaster preparedness and climate change mitigation/adaptation). Additionally, most countries indicated the need for support to strengthen policy, legislative and regulatory frameworks, whilst other priority outcomes identified at national level fell under one or more of the five thematic areas. At the inception of the CPF program cycle much anticipation was placed on mobilizing resources through a regional food security and sustainable livelihoods program (FSSLP) under which a wide range of activities were envisaged. Unfortunately, realization of the FSSLP implementation has been delayed and available funding less than anticipated, this has meant that the CPF delivery has also been less than anticipated.

29. Delivery of the CPF has also been challenged by the spread of resources across 13 widely dispersed small island countries. Limited national capacity in the partner agriculture sector ministries

[11] Food Security and Sustainable Livelihoods Program in the Pacific Island Countries: Development Partners Mapping Study, May 2008. Updated in 2011(available http://www.fao.org/asiapacific/sap/home/en/)

[12] Formerly known as the National Medium Term Priority Framework (NMTPF)

for project planning, implementation and monitoring has resulted in considerable capacity support being required from the relatively small FAO Sub-Regional Office located in Samoa. Whilst additional technical support has been provided from the Regional Office for Asia and the Pacific (RAP) located in Bangkok and FAO Headquarters in Rome this has time and cost implications. A move towards more integrated development outcomes in the CPF, rather than sector discipline oriented ones, would better foster coherence and support by the FAO multi-disciplinary teams at the sub-regional, regional and headquarters levels and could thus relieve some of the burden of supervision and travel.

30. Reviewing the current regional and country situations during the preparation of this CPF has confirmed the relevance and emphasis of the previously identified priority areas. But it has also indicated that going forward there is need for a sharper focus and appropriate sequencing to better target FAO assistance. This implies clearer definition of deliverable outputs and objectively verifiable indicators to better monitor progress towards achieving the identified priority development outcomes and a more rigorous evaluation process. Across the region the absence of good agriculture, forestry and food security data also restricts effective program monitoring. Therefore FAO should continue to focus assistance to build capacity to collect, systematize and analyze agriculture and food security data.

31. In the Pacific FAO already works in productive partnerships with regional CROP agencies including SPC, SPREP, FFA and USP as well as with members of the UN family most notably WHO, IFAD and UNDP. But there is still room to build stronger partnerships and programmatic linkages especially with other United Nations agencies through the UNDAF process and particularly where there is already a joint United Nations presence in a country.

32. During the 2009-2012 program cycle FAO has been successful in helping four countries mobilize GEF resources and to commence implementation of project activities. Additionally, FAO has assisted several countries with the preparation of Project Identification Forms (PIF) for the GEF 5 allocations. FAO has also successfully implemented support to countries under the European Union funded All ACP Agriculture Commodities Program (AAACP), the EU's Forest Law Enforcement, Governance and Trade (FLEGT) facility and UN Trust Funds. For the effective implementation of global, regional and sub-regional arrangements for the conservation and management of tuna fisheries for the sustainable benefits, the GEF-funded regional project OFMP-II (Oceanic Fisheries Management Project–II) and global project ABNJ (Area Beyond National Jurisdiction) are under preparation. Continuing enhancement of donor partnerships should result in additional resource mobilization.

FAO Comparative Advantage in the Pacific

33. FAO has a long history of cooperation with countries in the Pacific region. The FAO Office in Apia, Samoa was upgraded to a sub-regional office for the Pacific in 1996; a reflection of FAO's desire to decentralize and to bring its operations closer to its member countries in the Pacific. The presence of FAO's long-term technical expertise located in the region gives the agency strong comparative advantage to provide appropriate and culturally sensitive support for institutional capacity building and for partnership building at national and regional levels. Strong linkages with the Regional Office for Asia and the Pacific (in Bangkok) and Headquarters (in Rome) strengthen opportunities to build international partnerships, leverage financial resources and share global knowledge. FAO has a recognized role of being a neutral forum and host to internationally recognized standard setting bodies such as Codex and International Plant Protection

Convention (IPPC). This enables direct (forward and backward) linkages between the field application level and the global normative work backed up by sound scientific advice.

34. FAO's basic mandate to Member countries is to raise the level of nutrition, improve agricultural productivity, better the lives of rural populations, contribute to the growth of the economy, and promote sustainable management of the natural resource base. FAO's services, especially in the areas of focused technical cooperation and capacity building, advocacy and knowledge sharing, policy advice, organization of neutral forums and networking, building partnerships and mobilization of external resources remains important to assist countries in the region meet their development challenges.

35. FAO's assistance is principally to facilitate and catalyze national institutions to build their own capacity and to help them mobilize and coordinate resources. It should not be considered as a substitute for what government lacks in financial resources and capacity.

Regional Framework

36. Review and synthesis of the development priorities identified through the consultations and situation analysis undertaken across the 14 Pacific Member countries (and one territory), documented in the CPF Country Chapters (pages 22 to 192), has indentified four priority areas for FAO partnership and assistance during the 2013-2017 CPF cycle. The four priority areas are: (1) Evidence-based Policy and Strategic Planning; (2) Food and Nutrition Security Resilient to the Impacts of Disasters and Climate Change; (3) Value/Supply Chain Efficiency and Market Linkages; (4) Environmental Management and Resilience. In contrast to the thematic focus areas in the CPF 2009-2013, the new priority areas reflect a more interdisciplinary and development oriented approach in their focus.

1. Evidence-based policy and Strategic Planning

37. All countries have indicated the need to strengthen policy, legislative, regulatory and strategic planning frameworks and to build national capacity for data collection, systematization, analysis and policy formulation. The achievement of food and income security and sustainable resource management depends critically on the development and implementation of a comprehensive, coherent, and stable set of policies and strategies. In many countries there remain gaps, inconsistencies, fragmentation, and at times contradictions in the existing portfolio of macroeconomic, sector and cross-sector policies and programs. This situation undermines development efforts and dissipates already scarce development resources. Furthermore the necessary legal and regulatory frameworks to support policy implementation are outdated or absent. FAO will continue to provide technical assistance to build national and regional capacity to strengthen the evidence base and to analyze and formulate relevant gender-sensitive policies and strategies. Strengthening the evidence-base may involve support for national agriculture census, targeted surveys or case studies. Emphasis will be placed on collecting gender and age disaggregated data in order that policies and programs can be better targeted and monitored. Technical assistance will also be provided to develop the capacity of key stakeholders to use the evidence base in improved processes of policy design, implementation and evaluation. Support for review and revision of legislation and regulatory frameworks will also be made available. At the regional level partnerships will be forged with agencies active in supporting evidence-based policy and to support mainstreaming of issues such as climate change, environmental sustainability, resilience and disaster risk management in to policy frameworks. FAO's global public goods related to policy (research and analysis products, policy-relevant flagship publications, data and statistics, regulatory standards and instruments, capacity

development tools) will be better linked to the policy assistance work in the region. For example the "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VG)" will be promoted to serve as a key reference and benchmark document, particularly for the development/implementation/support of policies and laws related to land access, agricultural productivity, sustainable natural resource management, forest management and fisheries tenure. The VG are internationally accepted guidelines, initiated by FAO, to enhance responsible governance of tenure of land, fisheries and forests. They promote secure tenure rights and equitable access to land, fisheries and forests as a means of eradicating hunger and poverty, supporting sustainable development and enhancing the environment.

Priority Area 1: Evidence-based Policy and Strategic Planning

Key Issues	Outcomes	Indicators	Countries
• **Lack of clear evidence-based sector plans that provide coherent policy and financing frameworks for promoting primary sector development and food and nutrition security**	• **Strengthened policy, legal and regulatory frameworks for sustainable agriculture, and food security in place** **Increased public sector spending for primary sector**	**Number of gender sensitive and evidence-based policies/ plans / strategic documents adopted by National government and under implementation by 2017.** **Clear articulation of food and nutrition security issues in national policies/strategies** **Public sector spending on primary sector activities**	All 14
➢ *Weak data collection and management systems*	➢ *Strengthened data collection and management systems in place*	Number of gender and age disaggregated agriculture & food security surveys/studies successfully completed Number of countries with improved agriculture sector data and statistics in place and able to report Minimum Development Indicators.	
➢ *Weak capacity for policy analysis and formulation* ➢ *Lack of appropriate legislation & regulations*	➢ *Strengthened capacity for policy analysis and formulation* ➢ *Strengthened legal and regulatory frameworks in place*	Credible Food Balance Sheets available Number of relevant government institutions strengthened in policy analysis and formulation Number of new/revised legislation & regulations in place by 2017	

2. Food and Nutrition Security Resilient to the Impacts of Disasters and Climate Change

38. Across the region there is an increasing reliance on imported food whilst most countries also carry a significant trade deficit. The rapid rise in food commodity prices, impacting on prices for consumers in the region in 2008, and the continued price volatility since then, has raised important questions for governments in the Pacific including:

- How much food do countries need to produce themselves?
- Are there optimum levels of sustainable national self-sufficiency?
- How resilient is the national food system (including traded food commodities)?

A critical issue in regard to answering these questions is the dearth of food supply and utilization data and food and nutrition security monitoring systems and information management on the vulnerability and risks for multi-hazards. Without improved data, particularly on subsistence food production, making a definitive statement on food security is problematic.

39. While imports do contribute to food security by making more foods available, they also threaten it by exposing populations to cheaper and poor quality foods. Cheap imported foods compete with

domestic foods, increasing dependence on outside providers which also increases risk and vulnerability to price shocks and economic downturns. Foods that are of poor nutritional quality (high in calories and low in vitamins and minerals) are contributing to high rates of diabetes, heart disease, stroke and cancer throughout the region. Furthermore, consumption of fruits and vegetables is low and vitamin and mineral deficiencies widespread. Also domestic and imported foods are sometimes unsafe (old or contaminated), leading to food-borne illnesses. Natural disasters and climate change are also negatively impacting food security in the region[13]. All of the countries across the region recognize food and nutrition security as an important concern and nine FAO Members have selected this area as a priority focus for FAO assistance.

40. Widespread inadequate eating habits and related nutritional imbalances and health problems call for major changes to establish more sustainable and healthy diets. Meeting this challenge implies the modification of consumption patterns and habits. This will require a range of actions including behavioral and/or cultural changes, the reinstatement of the true value of food (nutritionally, culturally and economically) and the integration of nutrition as a core concern in policy directed to food systems. Gender-sensitive education and information also needs to be strengthened and show the links between meal preparation, nutrition and health. In turn, the concept of nutrition has to be better integrated into agricultural policies and programs. Leverage points in supply chains need to be identified in order to influence the choices of consumers and of the main actors of the complete food chain, including public sector authorities. The inter-relation between education, health and agriculture needs to be further developed and internalized in policies and programs.

41. FAO support will work towards ensuring that national development policies, sector strategies and programs include explicit food security and nutrition objectives, backed by information systems and adequate mechanisms for monitoring and evaluating progress. Support will also ensure specific DRR/CCA policies for agriculture, fisheries, forestry and other natural resource sectors and strengthening of related institutional capacities for risk reduction and crisis management. This will necessitate strengthening capacity for data collection and analysis. Support could also be provided towards formulation and implementation of policies, strategies and programs in food safety and quality control and in developing capacity in these areas. Technical assistance will aim to build capacity for implementation of effective programs by countries to promote food safety and product quality at all stages of the food chain, in conformity with international standards and norms.

42. Attention will also be directed towards improving production and productivity in local food systems (including aquaculture) and strengthen domestic food marketing channels. More equitable access, especially by women and disadvantaged people, to productive resources, including extension and financial services and risk management instruments will be promoted. Integrating young people into farming will also be an important objective.

43. For FAO, “resilience” is the ability to prevent disasters and crises as well as to anticipate, absorb, accommodate or recover from them in a timely, efficient and sustainable manner. This includes protecting, restoring and improving livelihoods systems in the face of threats that impact agriculture, nutrition, food security and food safety (and related public health). Support will therefore be directed towards ensuring that countries are better prepared and have developed capacities for effective response to natural disasters and emergencies and to address environmental challenges affecting food and agriculture, particularly climate change related. Efforts will be geared to prevention and impact mitigation measures for food and agriculture related sectors in order to reduce risks for vulnerable people.

[13] Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific

Priority Area 2: Food and Nutrition Security Resilient to the Impacts of Disasters and Climate Change

Key Issues	Outcomes	Indicators	Countries
• **High levels of food and nutrition related non-communicable diseases** ➢ *Poor nutrition and dietary practices* ➢ *Lack of public awareness on food security & nutrition related diseases* ➢ *Lack of knowhow on preparation and utilization of nutritious local food* ➢ *Difficulty in meeting food quality and safety standards*	• **Reduced levels of food and nutrition related disorders** ➢ *Improved nutrition and dietary practices in targeted communities* ➢ *Increased awareness in target communities on food security and nutrition issues* ➢ *Improved knowledge and skills in preparation and utilization of local nutritious foods* ➢ *Countries successfully meeting established food quality and safety standards*	**Prevalence of food and nutrition related disorders** Composition of local diets Prevalence of stunting Prevalence of iron deficiency and anemia Prevalence of food related diseases/ food contamination	Federated States of Micronesia; Fiji; Kiribati; Marshall Islands; Nauru; Niue; Solomon Islands; Tokelau; Tuvalu
• **High dependency on food imports coupled with deep trade deficit** ➢ *Inadequate domestic food production and productivity to meet food security and market demands for quality, consistency and price competitiveness* ➢ *Poor local food supply chain coordination and market linkages* ➢ *Poor targeting of vulnerable groups (including women)*	• **Reduced dependence on food imports** ➢ *Sustainable increases in local food production and productivity (crops, meat, fish) realized, with smallholders, and particularly women farmers, at the centre of action.* ➢ *Enhanced local food supply chain coordination and market linkages* ➢ *Improved targeting of support services to women and other vulnerable groups*	**Ratio of food imports to total imports** Food production indices Proportion of local foods in CPI basket Availability and prices of local foods Volume and prices of local food on domestic markets Proportion of food expenditure on locally grown or produced food	
• **Vulnerability of food systems to adverse impacts of disasters and climate change**	• **Increased resilience of local food systems to adverse impacts of disasters and climate change**	**Reduction in disaster-related damages and losses in food and agriculture sectors** Number of policies and strategies for monitoring risk developed and implemented by countries Disaster preparedness and management plans available to protect food and agricultural systems 'Climate smart[14]' technologies being applied by target communities Vulnerable communities apply prevention and impact mitigation measures to reduce risks for food and agricultural systems Countries are prepared for and manage effective responses to food and agricultural disasters and crisis	Region

[14] Climate-smart agriculture is defined as: agriculture that sustainably increases productivity, resilience (adaptation), reduces/removes GHGs (mitigation), and enhances achievement of national food security and development goals.

3. Value/Supply Chain Efficiency and Market Linkages

44. A demonstrated market demand and facilitated access to markets is necessary to stimulate smallholder commercialization. For this to be realized improvement in domestic and overseas market linkages are needed. Urbanization and growing tourist arrivals in some countries are creating bigger potential domestic markets for agricultural products. But for small producers to successfully access these markets they need to be able to consistently meet health and quality standards and reliability of delivery of their products. This implies a need to improve supply chain coordination and to address problems such as seasonality in production. Domestic products must also be price competitive with imports and this requires improved efficiency in value chains. In the region, farmers' organizations and cooperatives are playing a critical role to ensure quality and consistency of supply from groups of small farmers and facilitating market linkages.

45. FAO support will be directed towards strengthening the capacity of farmers' organizations to support small farm commercialization. Support could also be provided to build institutional capacity for value chain analysis, facilitation and promotion and to identify, appraise and promote commercially oriented cooperative business models including contract farming. Support and training will also focus on developing capacities to implement Good Agricultural Practices (GAP) and recognized industry standards /codes and schemes to ensure food safety/quality at all stages of the food chain.

46. Compliance with international food safety, biosecurity and quality standards is critical for the development of agriculture, fishery and aquaculture sectors in order to gain market access for export commodities, as well as to supply the growing tourism industry and protect the health of consumers within the Pacific Island Countries. The Codex Alimentarius is the pre-eminent internationally recognized food code and forms the basis for updating and harmonizing national food standards across the region. In support of this, FAO will continue to assist countries (in close collaboration with WHO) to strengthen national food control systems and build capacity of the private sector in relation to food safety and quality assurance, such as Good Hygienic Practices (GHP) and Hazard Analysis and Critical Control Point (HACCP) systems. With respect to aquaculture, FAO will continue to assist Pacific Island countries in strengthening aquaculture and biosecurity governance of competent authorities to support responsible and sustainable aquatic food production.

Priority Area 3: Value/Supply Chain Efficiency and Market Linkages

Key Issues	Outcomes	Indicators	Countries
• **Lack of consistent supplies of good quality agricultural/fisheries and aquaculture products to meet domestic, tourist and export market opportunities and demands**	• **Consistent supplies of good quality agriculture/fisheries and aquaculture products to meet market opportunities and demands**	**Level of commercialization of small farms & small fisheries**	Cook Islands; FSM; Samoa; Solomon Islands; Palau; Tonga; Vanuatu
➢ *Lack of capacity in farmers' organizations*	➢ *Strengthened capacity of farmers' organizations*	Number of farmers/fishers organizations with strategic/business plans; Enhanced networking among established farmers' organizations	
➢ *Poor supply chain coordination and market linkages for small farmers and fishers*	➢ *Improved supply chain coordination and market access for small farmers and fishers*	Level of small farm commercialization	
➢ *Limited capacity for processing & value adding of agriculture/fisheries products*	➢ *Improved knowledge and skills in target communities for processing and value adding agriculture/fisheries products*		
➢ *Difficulties in meeting quality, safety and SPS standards*	➢ *Farmers & processors successfully meeting established food quality and SPS standards*	Market satisfaction with quality and standards	
➢ *Lack of capacity and skills in farming as a business*	➢ *Increased capacity and skills in farming as a business*	Level of commercialization and profitability of small farms	
➢ *Lack of competitiveness of agriculture/fisheries products*	➢ *Increased competitiveness of agriculture/fisheries products*	Volume of market sales	
➢ *Unexploited opportunities to access growing tourist market*	➢ *Increased access of local produce to tourist markets*	Volume and value of sales to tourist markets	

4. Environmental Management and Resilience

47. Population growth of above 2% in some Pacific Island countries, pressure on agricultural land, increasing demands on limited water resources from urban sectors, overfishing, intensified cropping, deforestation and land degradation, make the sustainable management of the natural resource base critical to food security and agricultural productivity.

48. FAO is supporting four countries in the region (Fiji, Niue, Samoa and Vanuatu) to implement GEF financed projects to help establish Protected Areas (PA) of forest conservation. The main output areas will be: improved policy and legal frameworks to underpin PA networks; strengthened capacity for community-based conservation management; establishment of new protected areas; and mechanisms developed for sustainable financing for the PAs. However, the area of forests in the region which are designated or potential PAs is relatively limited, therefore, sustaining environmental services will continue to rely primarily on sustainable management of productive forests.. This is a significant challenge across the region due to the overwhelming economic drivers behind unsustainable extraction of forest products and conversion of forest land for other purposes. This is compounded by the lack of economic incentives for improved forest management practices, and the shortage of land availability for reforestation/ afforestation

49. Many factors, including policies, legal frameworks and institutions will have an impact on the ability of a country to manage its forests in such a way as to provide stable or increasing environmental services together with sustainable income for the forest resource owners. Most countries in the region have National Forest Policies which are largely directed at an overarching objective of sustainable forest management (SFM), and also focus specifically on sustainability issues such as: conservation, illegal logging, deforestation and forest degradation, watershed management, land-use planning and people participation. Overall, the broad trend in development of Pacific forest policies has been towards a broadening of the dimensions of forests and forestry far beyond timber harvesting. Forest policies are generally backed up by forest legislation and other related laws that encompass forestry, but what may be of particular significance in several countries is the lack of capacity (and will) for enforcement of these regulatory frameworks. Such institutional weaknesses continue to frustrate the overarching policy goal of sustainable forest management. FAO under the EU funded ACP-FLEGT Support Program will continue assisting countries to address forest law enforcement, governance and trade issues.

50. As growing coastal populations exert increasing pressures on natural resources aquaculture production has potential to play an increasing role in satisfying demand for human consumption of fish and fishery products. Coastal fisheries resources, which are targeted by both commercial and subsistence fishers, are now generally overfished and subject to increasing pressures from growing populations. In most countries in the region sustainable management of inshore resources is now a high priority. Therefore, with the amount of fishery products originating from coastal fisheries that are accessible to urban residents declining there will be an increased need for alternative fish sources including from aquaculture. FAO technical support will be directed both towards enhancing management of inshore resources, and to strengthen strategic planning for aquaculture development, aquatic risk assessment and improved productivity through better management practices. A key objective will be to increase and diversify the supply of fish in rural and urban areas by developing small-scale aquaculture for freshwater fish such as tilapia and brackish-water fish such as milkfish. Networking among countries will be promoted to share experience and build capacity.

51. Declining fish stocks, a lack of compatibility in measures, illegal fishing and lack of actions on broader ecosystem impacts and climate change are indicators of threats to the sustainability of the region's oceanic fisheries and the health of the regional marine ecosystem. It is critically important for the Pacific Small Island Developing States (SIDS) to effectively implement necessary measures for the conservation and management of tuna resources in the region, such as through the systematic application of an ecosystem approach to fisheries. FAO will continue to support Pacific SIDS for their effective implementation of global, regional and sub-regional arrangements for the conservation and management of tuna fisheries for the sustainable benefits, particularly under the GEF-funded regional project OFMP-II (Oceanic Fisheries Management Project–II) and global project ABNJ (Area Beyond National Jurisdiction) through regional and inter-regional organizations (i.e. FFA, SPC and Western and Central Pacific Fisheries Commission).

52. To enable the transfer of aquatic commodities with minimum biosecurity risks (affecting human and aquatic organisms and communities) to PICTs, a number of actions are needed. These include, for example, development of minimum standards in the region, based on a compliance with international norms, adoption of protocols and procedures to meet international standards, developing regional capacities including by building on existing facilities, networking and a biosecurity unit, for prevention (e.g. risk analysis), detection/diagnosis and notification of aquatic diseases, implementing improved national strategies and inter-departmental linkages for aquatic animal health management and reporting and improving national capacity to utilise available data collection and aquatic disease information systems.

53. An overriding aim of FAO assistance will be to help countries in the region build policy and institutional frameworks that provide the right incentives for environmentally sound and resilient agriculture development. The outcome sought is that countries have enabled capacities, both human and institutional, for the sustainable management and use of fisheries, forestry, land, water, and biodiversity resources.

Priority Area 4: Environmental Management and Resilience

Key Issues	Outcomes	Indicators	Countries
• **Potential loss of valuable biodiversity and ecosystem services due to unsustainable resource management**	• **Enhanced biodiversity conservation and ecosystem services through sustainable resource management.**		Fiji; Kiribati; Marshall Islands; Niue; Samoa; Solomon Islands; Tokelau; Tonga; Vanuatu
➢ *Lack of sustainably managed Protected Areas*	➢ *Community Managed Protected Areas established*	Number (and area) of viable community managed Protected Areas formally established with associated policies and financing plans	
➢ *Declining forest resources* ➢ *Land degradation*	➢ *Increased capacity for sustainable land and forest management*	Area forested land as a proportion of total land Annual rate of deforestation	
➢ *Inshore fisheries are being harvested at unsustainable levels*	➢ *improved management of inshore fisheries*	Community fisheries management plans in place and being implemented	
➢ *Slow development of aquaculture*	➢ *Development and expansion of small scale aquaculture enterprises*	Number of viable small-scale aquaculture enterprises establish	
➢ *Lack of measures and actions in tuna resources conservation and management*	➢ *Effective management and conservation of tuna resources in the region*	Systematic application of Ecosystem-based management across the regions fisheries	Region
➢ *Limited capacity of biosecurity services*	➢ *Strengthened biosecurity services*	Capture fish production as a percentage of fish stock	
➢ *Increased risk of introductions of foreign pests and diseases (including invasives)*	➢ *Reduced risk of introductions of foreign pests and diseases and invasives*	Incidence of foreign pest, disease and invasive species incursions reduced	

54. Improving outcomes in the above four priority areas has high potential for positive impact on some of the most vulnerable sections of the population including poor households, women, youth and outer island residents. It will directly contribute to achievement of the UNDAF Outcome 1: *Each of the Pacific SIDS has built up greater resilience and further enhanced its capacity to apply integrated approached to environmental management, climate change adaptation/mitigation, and disaster risk reduction*; and UNDAF Outcome 3: *Each of the Pacific SIDS realized enhanced inclusive economic growth, increased sustainable employment, expanded livelihood opportunities and food security for women, youth and vulnerable groups, including enhanced social safety nets for all citizens*.

55. The CPF 2013-2017 priorities for the Pacific Sub-region reaffirm the priority areas identified in the FAO Regional Priority Framework for Asia and the Pacific (2010-2019): Towards Food Security in the Region, namely:

A) Strengthening food and nutritional security.
B) Fostering agricultural production and rural development.
C) Enhancing equitable, productive and sustainable natural resource management and utilization.
D) Improving capacity to respond to food and agricultural threats and emergencies.
E) Coping with the impact of climate change on food and agriculture.

Successful implementation of the FAO supported activities will also contribute to the five FAO Global Objectives: Eradicate hunger, food insecurity and malnutrition; Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner; Reduce rural poverty; Enable more inclusive and efficient food systems at local, national, regional and international levels; Increase the resilience of livelihoods to threats and crises; and to cross cutting themes of gender equality and governance.

Balancing Regional and Country-Level Focus

56. There is wide variation in resource endowments, capacities, opportunities, and development constraints across the Pacific region. As a result, the areas of common development interest existing among the countries vary both across the region and from issues to issue. Even where issues and problems appear similar, the context for developing an appropriate solution may be quite different. Therefore interventions at the regional (or sub-regional) level should reflect common interests of the group of countries to be involved. And adopt an approach which accommodates both the needs and capacities of the recipients and thus ensures mutual benefit among the participating countries. Regional initiatives supported under the CPF will need to demonstrate how they can effectively address development challenges by adding value to specific country-level priority objectives. A selective approach to regional engagement will be adopted, including interventions which can demonstrate tangible benefits to all the participating countries involved. Criteria that will be used to identify opportunities for a regional or sub-regional operational focus will be:

- ✓ Clearly addresses a national priority need.
- ✓ Allows for scarce resources (financial and human) to be used in a way that enhances efficiency in analysis and dissemination of global knowledge.
- ✓ It demonstrates an economy of scale in building appropriate knowledge and technology for specialized but common needs of a group of countries.
- ✓ Enhances harmonization of standards, systems or processes.
- ✓ Due to common characteristics and issues among a group of countries, a component is highly portable and hence offers potential for cross learning and demonstration effects.
- ✓ Builds skills where the lack of specific skills is common to a group of countries.
- ✓ A clear strategic operational advantage is demonstrated which results in a more cost effective approach.

57. Areas which could be targeted for multi-country approaches include, agricultural and forestry data, statistics and policy analysis; institutional strengthening of national statistics offices to generate, analyse and use sex-disaggregated data for purpose of equitable policy formulation; policy and regulatory frameworks for promoting organic agriculture; food safety, harmonized standards and risk-based assessment; networking for farmers' associations; aquaculture networking; livestock feed development, biosecurity (including aquatic) and trans-boundary pest and disease management; establishment of a common inter-island nation's policy for disease risk assessment and contingency plan for disease prevention, detection and early intervention; pesticide registration, education, awareness and communication.

58 The quality of data provided by Pacific Island countries in their Forest Resource Assessments (FRAs) over the past 20 years is highly variable. Apart from Fiji and the Solomon Islands, no countries have conducted regular national forest inventories, largely due to limited human resources and infrastructure. The apparent rise in the forest area of countries such as Cook Islands, Niue, Palau and Samoa in the 1990s was due to a change in forest classification or data collection methods, not to any change on the ground. The differences between the summary FRA data for the Oceania region as a whole and the Pacific Island Countries in particular argues for the consideration of the Pacific as a distinct region for future Global FRAs carried out with the support of FAO.

59 The Solomon Islands is a member country of the UN-REDD Program (a joint Program between FAO, UNDP and UNEP) and received support for an Initial National Program. Fiji and Vanuatu are receiving support from other sources to develop Readiness for REDD+. In 2011 the UN-REDD Program supported the development of a regional REDD+ Readiness Support Strategy for the Pacific, complementing existing initiatives of SPC and GIZ. REDD+ is an important element of a portfolio of policy tools to integrate climate change issues into forestry and land-use strategies in the region. All countries may benefit from a combined regional REDD+ Readiness Support Strategy through access to information, technical resources and investment in their forest and land use sectors, including the smaller countries which will not be viable for national REDD+ programs. Such a regional strategy would include the development of capacity and resources for forest monitoring and for measurement, reporting and verification (MRV) of greenhouse gas emissions from the forest sector. FAO has comparative advantage to support the development of these elements, in collaboration with SPC and other regional partners. Accordingly, FAO staff within the UN-REDD program have developed a proposal for a 'Regional Pacific Support Structure for National Forest Monitoring Systems for REDD+' and will seek financial partners for implementation during the 2013-17 CPF cycle.

60. The areas for regional intervention will continue to evolve and will be identified in a participatory way together with cooperating countries. Partnerships will be strengthened with regional organizations (particularly with SPC in agriculture statistics, policy analysis and biosecurity) to avoid duplication, enhance capacity and develop synergies. In special cases regional organizations could be involved directly in FAO project implementation.

Partnerships

61. Within countries, partnerships will be encouraged between relevant Ministries (agriculture, livestock, forestry, fisheries/marine resources, environment, trade, health, planning etc.), private sector and farmers' organizations, and NGOs. To bring out the development potential of communities and private entrepreneurs, especially women, a targeted and fully participatory approach will be promoted for forming partnerships and implementing activities. Ensuring aid effectiveness and resources mobilization, implementation of the framework will require robust engagement with other development partners, including UN agencies (e.g. IFAD, UNDP, WHO, UNICEF), Asian Development Bank (ADB), Australian Agency for International Development (AusAID), European Union (EU), Global Environment Facility (GEF), Japan International Cooperation Agency (JICA), New Zealand Aid Program, World Bank, the Council of Regional Organizations in the Pacific (CROP) agencies and other learning and research institutions in the region. As much as possible FAO will use existing country mechanisms for development partner coordination particularly where there is a clear intention of government ownership and leadership of these processes.

Assumptions and Risks

62 Successful implementation of the CPF will require effective and timely resource mobilization (by FAO and partner governments), political and social stability (at national level), political and national budget support for sector development, strong involvement by NGOs, private sector (farming community) in implementation of activities to achieve priority outcomes, and infrastructure capacity constraints (particularly transport) being mitigated. Realization of the development outcomes will also be dependent on the successful outcomes of other development partner and government programs in related areas. The region's susceptibility to natural disasters poses a significant risk and therefore a specific focus of the CPF is to strengthen national disaster preparedness and response.

Management, Monitoring and Evaluation

63. The FAO Sub-regional Office for the Pacific Islands (SAP) will take a lead role in direct partnership with relevant government Ministries in the 14 participating countries/territories for implementation, management, monitoring and evaluation of the CPF. Technical and managerial support will also be provided by the Regional Office for Asia and the Pacific (RAP) in Bangkok and from FAO headquarters divisions in Rome. Implementation of special programs or projects within this framework (e.g. the GEF projects, UN Trust fund and other programs funded from extra-budget resources) may require additional institutional support arrangements to be put in place.

64. In field monitoring of the agreed activities will be carried out by national governments and by regular field missions of FAO staff. FAO, jointly with participating countries will prepare annual progress reports on implementation, which will be fed into the national, FAO and UNDAF monitoring processes. Following the annual review the CPF document may be adjusted as necessary to keep it focused and relevant to the needs of the countries. During 2015 a mid-term evaluation will be undertaken and a final independent evaluation in 2017 which will provide guidance for the new phase of implementation from 2018 onwards. Monitoring activities will be harmonized and synchronized as much as is possible with the UNDAF monitoring and review process.

65. At country level, prior to implementation of activities, specific plans for results-based monitoring will be developed for countries where these do not already exist. These will establish key performance indicators for targeted outputs as well as refining outcome indicators in the priority focus areas to facilitate the monitoring and evaluation process. Efforts will be made to utilize monitoring frameworks and indicators which are common to national monitoring processes and which have identified sources of data available. FAO support will also seek to strengthen data collection and management systems to facilitate monitoring. Participation of CSOs and NGOs in monitoring and evaluation of the CPF will be actively encouraged, particularly if these organizations have been involved in the implementation phase.

Resource Mobilization

66. The full implementation of the multi-country CPF depends on the availability of financial and technical resources. The indicative resource estimate for implementing all fourteen national frameworks plus regional interventions is US$44 million. The scope of the CPF engagement will require support by regular program resources (core budget, TCP and TCP Facility), Trust Funds and special projects from external donors, such as the Global Environment Facility (GEF), UN-REDD, EU FLEGT, EU/ACP etc. As an immediate step, FAO's TCP resources will be utilized for implementation of small and medium sized national projects with a budget of up to US$500,000 of

each selected priority project which meets TCP criteria. TCP facility for FAOR (total budget up to US$200,000 per biennium per country and US$200,000 for regional interventions) will be used for implementation of projects which fall under the following categories:

- ✓ Rapidly solve a specific technical problem of which expertise may not be immediately available within government services.
- ✓ Formulate project proposals, or documents in the areas of FAO mandate, required for submission to potential funding sources,
- ✓ Prepare background documents required by Governments, and
- ✓ Carry out small sector and subsector related studies or assessments as required by a Government, including facilitating field program development and participation in related UN processes.

67. Based on past trends in FAO resource allocation it is estimated that regular program resources (plus Telefood) could be around US$16 to17 million (39%) for this CPF cycle. Additionally, resources already secured (or under consideration) from extra-budgetary sources amount to about US$12.5 million (28%). FAO and the Governments of the 14 Member Countries (and one Territory) covered by this framework will jointly facilitate the mobilization of additional external donor resources for funding of projects (which are usually larger than US$500,000) through donor consultation and active joint resource mobilization efforts.

68. Each of the following 14 country chapters identifies areas for FAO assistance which should contribute to achieving the priority outcomes, however, the specific activities and project interventions to be supported will have to meet the qualifying criteria of the specific funding source (e.g. TCP, Trust Fund, Telefood or GEF etc.) and show clear linkages to the national prioritized development outcomes. Assistance under the different funding sources may include technical support, supplies, commodities and equipment, procurement services, transport, funds for advocacy, research and studies, consultancies, program development, monitoring and evaluation, training activities and project staff support. Part of the support may be provided to Regional Agencies and Non-Governmental system agencies as agreed within the framework of the individual project documents.

Pacific Member Country Chapters

1. Cook Islands
2. Federated States of Micronesia
3. Fiji
4. Kiribati
5. Marshall Islands
6. Nauru
7. Niue
8. Palau
9. Samoa
10. Solomon Islands
11. Tokelau
12. Tonga
13. Tuvalu
14. Vanuatu

Cook Islands

I. Country Summary

Land Area (km^2): 237; 58% arable	Sea Area/EEZ (km^2): 1.8 million
Population (No.): 17,791 (2011)	Annual Growth (%): -1.6% (2006-2011) - due to emigration
Density (inhabitants/km2): 83	Rural Population (% of total population): 30
GDP: NZ$ 334.8 million (2010) (approx US$242.6 million)	GDP per caput :NZ$ 14,188 (2010) (approx US$10,281)
GDP Real Growth (average 2001-2010): 5.3 % per annum	Primary Sector (Agriculture & Fisheries) GDP (% of total GDP): 5.1 % (2010)
Trade Balance : -US$ 179.6 million (exports as % of imports: 1.5 % ; Imports as % GDP -87.8%(2009)	Food & Live Animals as % of total imports: 29.4 % (2010)
Budget allocation agriculture , forestry & fisheries (2008/09): % of Total Budget 3.7 %	Human Development Index: N/A

Sources: Cook Islands Statistics office; ADB Key Indicators for Asia and Pacific 2011

II. Situation Analysis and Agriculture Sector Overview

2.1 The Cook Islands (CI) consist of 15 islands widely dispersed over some 2 million square kilometers of the Pacific Ocean. Geographically the country is divided into two groups of islands, the Northern Group (atolls and sand cays) and the Southern Group (volcanic and makatea islands) that includes Rarotonga where 74% of the population reside. A decline in the population in the outer islands is a significant policy concern. The number of people on the 11 smaller islands fell by more than 40% between the mid-1990s, and a census in 2006, with many leaving for better jobs and services overseas. Preliminary results from the 2011 Population Census indicate that the total population has declined by a further 8% since the last Census in 2006. Demographic changes resulting from the emigration of working age people, leaving the elderly and their grandchildren carry important repercussions for the future of the agriculture sector. and the productive economy as a whole. A major challenge is how to make agriculture competitive, profitable and an attractive choice for income generation. Because of the different resource endowments and constraints to agriculture development in the different islands of the groups, strategic development of the sector will require island specific oriented development plans. The country is particularly vulnerable to natural disasters with cyclones in 2005 and 2010 causing considerable damage to agriculture and tourism infrastructure.

2.2 The Cook Islands has a small economic base reliant on tourism which now accounts for about two-thirds of GDP. Although the tourism industry remains vulnerable to global economic conditions visitor numbers to Cook Islands have been growing steadily and are estimated to reach 125,000 in 2013/14. Merchandised exports provide a relatively small contribution to GDP (approximately 1.5%)

and are composed mainly of fish, black pearls and noni juice. Total exports for 2011 were NZ$4.0 million predominantly driven by the export of fresh or chilled fish accounting for 61 per cent of total exports, followed by noni (16 per cent) and pearls (9.3 per cent). The country runs a wide trade deficit being heavily import dependent, and tourism foreign exchange receipts largely cover the merchandise trade deficit. Food imports are increasing and account for almost 30% of total imports in 2010. The import leakage for the country is estimated at around 58 per cent, representing NZ$0.58 leaking out of the economy for every NZ$1 spent in country. This is because of the heavy reliance on imported products to meet local demand including demand driven by the tourism industry. A high priority for government is to meet some of the rising food import costs through domestic substitution with local agricultural products which would also spread some of the increased economic returns from tourism to rural producers. The growing numbers of tourist visitors represents a significant potential market for fresh produce, fish and some specialty processed products. To service this market with local produce will require enhanced production, higher quality (including food safety), and for processed products better packaging and labeling.

2.3 However, the potential for agricultural production to expand has been restricted due to, amongst other things, labour constraints, limited agricultural land availability especially on Rarotonga, lack of agricultural infrastructure in the outer islands, weak market linkage, the high costs of fuel for local production combined with high freight costs and competition from international producers. Nevertheless, there is potential for the revival of agriculture as the economic driver of the outer islands in the Southern Group, where agricultural land is currently underutilized, if transport infrastructure can enable producers to get their produce into the main centers in a cost effective way and improved supply chain coordination can be achieved. Better technical support to farmers will also be required along with new technologies for intensified production, water management and off-season production. Currently the Department of Agriculture lacks a strategic approach to promote import substitution based on priority products, production opportunities and constraints, market demands and economic viability of selected supply and value chains. Furthermore agriculture remains a largely informal sector with many producers operating on a part-time basis and enterprise support will be required to grow agriculture as a business.

2.4 Water is an important requirement for increasing agriculture productivity, but droughts and floods are a strong feature of the Cook Islands risk profile and these events may at times also be attributed to El Niño and La Niña conditions. For example, during El Niño the Southern Cook Islands experience drought conditions (40% less rainfall than average) and many households go without water for periods ranging from several weeks to some months. At the same time islands in the Northern Group may experience up to 300% more rainfall. During the contrasting La Niña phase, flash flooding is a frequent problem for the volcanic and Makatea Southern Group islands, while the Northern Group islands suffer drought (JNAP). Clearly agriculture is severely affected by these extreme fluctuations in rainfall. Increased production and quality of fresh vegetables and fruit will be crucially dependent on both availability of adequate water and protection from excessive rainfall. At present irrigation water for agriculture is drawn from the system supplying water for domestic use. This system, it is anticipated, will not be able to meet the increasing demand for domestic, industrial and agricultural use. It is therefore, highly probable that agriculture production and particularly productivity and quality of output may be severely affected by inadequate water supply. For intensive crop production including off-season production in Rarotonga and increased production in outer islands an improved water management strategy and techniques to alleviate water shortage issues will be required. This is particularly important in the light of potential impacts of changing rainfall patterns due to climate change.

2.5 The marine sector is vitally important as a major food source, and to the economy for its export earnings, employment opportunities and tourism development. With limited economic opportunities in the outer islands commercial development of marine resources is a high priority. Capture fisheries

are dominated by Long Line fishing in the Northern Cook Islands for albacore tuna with some activity in Rarotonga (Southern Cook Ialands) for export fresh and local sales. The Northern fishery lands the majority of its catch in Pago Pago, American Samoa, with the remaining stock dispersed to smaller markets in Japan, Thailand and Brazil while the Southern fishery service is expanding the local market on Rarotonga and exporting to markets such Japan, New Zealand, and USA. The preliminary estimates of raised catch from northern fishery vessels totaled just over 8,200 metric tonnes in 2011, and valued at NZ$24.2 million dollars, albacore tuna was the dominant catch species worth NZ$16.8 million dollars. However, the return in revenue to the Cook Islands is much lower and mainly in the form of licensing fees charged. Southern fishery catches from vessels based out of Rarotonga totaled 106.5 metric tonnes and was valued at NZ$1.5 million dollars on the local market.

2.6 The high number of tourist visitors means that there is also potentially a strong domestic market for livelihood opportunities in fishing. The challenge is to incorporate the small scale fisheries in the Southern Group and Northern Group so that these economically underprivileged regions can also get access to the domestic markets on Rarotonga and potentially to overseas export markets. Whilst there are still relatively abundant coastal fish resources in the outer islands supply to Rarotonga is more limited and supply constraints currently exist. Also in Rarotonga the general health of the inshore marine environment is degrading based on the typical indicators such as live coral cover, fish composition and water quality. Public health issues are also becoming of concern as well, for example increasing incidences of ciguatera fish poisoning[15], high levels of ecoli bacteria, and in 2004 there was aerosolized algal bloom that led to an irritant syndrome amongst residents of parts of the coastal area.There is therefore a disparity in fish food security on Rarotonga compared to the Southern Group or Northern Group which also needs to be addressed. The Ministry of Marine Resources has proposed a range of options that could be adopted to stimulate fish security and livelihoods which include: increasing domestic landings to Rarotonga from the tuna industry, develop aquaculture, supply of ciguatera certified-free reef fish to Rarotonga from outlying islands, increase usage of FADs, establish supply chains for small scale fisheries and identify new stocks for sustainable exploitation.

2.7 Dispersed island geography coupled with expensive transport costs has resulted in lack of competitiveness of primary agricultural products on domestic and international markets. Value adding of agriculture and fisheries products is therefore being explored. Furthermore, seasonal gluts of some products offer the opportunity through preservation to strengthen preparedness for disasters, improve food security and also increase marketable products. Small scale processing has provided livelihood opportunities for rural women, but techniques and practices need to be upgraded and extended to a wider group of beneficiaries. The primary target is to develop products for the domestic market and tourist market.

III. Key issues shaping priorities for FAO assistance.

- Increased reliance on food imports as agricultural and livestock production levels decline nationwide and tourist visitor numbers increase.
- Constraints on availability of food fish landed in Rarotonga
- Lack of a strategic approach by the Department of Agriculture to address potential import substitution opportunities
- Limited livelihood options for people on outer islands.
- Isolation of Northern Group and very expensive transport costs

[15] Ciguatera toxin is a natural occurrence in the marine tropic chain and found in over 400 species of reef fish. The toxin is produced by marine phytoplankton (dinoflagellates, particularly *Gambierdiscus toxicus*) which are consumed by the fish and accumulated up the food chain. The common symptoms of ciguatera poisoning are gastrointestinal (nausea, vomiting, diarrhea) and neurological (headaches, muscle ache, hot/cold sensation and etc).

- Labour constraints for growth in the agriculture sector, including limited skilled workers in technical and specialised fields.
- Limited land available for agriculture production on Rarotonga.
- Limited water supply for competing demands between domestic and agricultural uses.
- Lack of competitiveness of agricultural products on domestic and international markets.
- Meeting food quality and safety standards for domestic and overseas marketing.
- Increased risk of introduction and establishment of foreign plant and animal pests and diseases.
- Vulnerability of agriculture and food security to adverse impacts of Natural Disasters and Climate Change.

IV. Country Program Context

4.1 The National Sustainable Development Plan (NSDP 2011-2015) sets national goals, the expected results and effective strategies to guide policy decisions over the medium term in order to realize the 2020 Development Outcomes that aim to deliver on Te Kaveinga Nui National Vision: *'To enjoy the highest quality of life consistent with the aspirations of our people, and in harmony with our culture and environment'*. The NSDP strategy focuses on fostering private sector development by providing a favorable macroeconomic environment as well as institutional and political stability, in addition to critical physical and social infrastructure. The NSDP has eight overarching national goals for Cook Islands sustainable development: a vibrant economy, good infrastructure development, energy security, opportunity for all, resilience to disasters and climate change impacts, a healthy environment, good governance and law and order. National strategies to achieve a vibrant economy include unlocking the potential from marine resources and agricultural production and to identify and exploit trade opportunities. The NSDP also recognizes the importance of sustainable ecosystems and the necessity to use the limited and fragile natural resources efficiently and build resilience against disasters and climate change. In light of this Cook Islands have already developed a Joint National Action Plan for Disaster Risk Management and Climate Change Adaptation (JNAP) 2011-2015 which should allow closer alignment of climate financing to the NSDP.

4.2 New Zealand and Australia through their harmonized aid program continue to be the Cook Islands' biggest donors. New Zealand under its Joint Commitment for Development is providing support to revitalize the pearl industry and increase income and employment for those involved in the black pearl sector, particularly farmers in Manihiki and to increase sustainable production and value of black pearl exports with a goal of NZ$4.5 million per annum exports by 2016. Under a program for partnerships which leverage NZ expertise support is being given to development of aqua-ponics farming. Other development support to the sectors of interest is principally through programs of the CROP agencies (SPC, FFA and SPREP). UNDP is the implementing agency for a GEF sponsored climate adaptation program which plans some activities in agriculture and fisheries, but these have not yet been clearly defined. The World Health Organization is providing core program support for improved nutrition, food hygiene and safety. Having a long history of providing development assistance to the Cook Islands, New Zealand and Australia's ODA program is aligned to the country's development policies and the use of local institutions and budgetary systems for implementation, Likewise other donors such as India, Italy, the European Union and regional and international organizations predominantly also utilize local processes and systems in delivering their programs.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.3 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) increased agricultural production (particularly on the Southern Group of islands) for local consumption and to meet domestic market demands; (ii) increased income and employment opportunities (particularly in the Outer Islands) through further development of aquaculture and commercial inshore fisheries; (iii) enhanced capacity in food processing and value adding of

agriculture and fisheries products; and (iv) strengthened data collection and management systems. To date outcomes 1, 2 & 4 have received priority focus Under priority outcome 1 capacity has been strengthened to develop floriculture through import of disease-free planting materials and training in floristry particularly targeted at improving livelihood for women. Other project support has enhanced youth skills through training in farm management, marketing and in agriculture as a business. Under outcome 2, technical assistance was provided to develop a framework for opportunities for aquaculture fish farming. Under outcome 4, technical assistance is ongoing to strengthen data collection and management through the implementation of a national Agriculture Census. Additional activities supported which were not identified in the NMTPF priorities included development of a Land-use Manual and implementation of a national consultation on policy and program actions to address high food prices.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus area for the CPF 2013-2017 will be on import substitution and strengthened linkage with the growing tourism market. Support will be delivered under the following four priority outcomes:

1) Strengthened Strategic Planning.
2) Enhanced Crop and Fisheries Production.
3) Improved Supply Chain Coordination and Efficiency
4) Enhanced capacity in food-processing and value adding

Strengthened Strategic Planning

5.2 To meet national development objectives, particularly for revitalizing agriculture and reducing the level of food imports there is need to strengthen capacity in the Department of Agriculture for strategic planning. Currently there is lack of a clear strategy based on up to date detailed assessment of opportunities for import substitution which identifies priority products, production opportunities and constraints, market demands (calendar monthly requirements in volumes and prices) and detailed food import analysis, specific supply chain issues and economic viability of selected supply and value chains. Investigating opportunities for off-season production and feasibility of supplying Rarotonga markets from outer islands will also be necessary. FAO will provide technical assistance to support strategic planning and economic analysis to establish potential viability of selected product supply chains. Capacity building support will also be provided to improve sector data collection and management systems. Recognising potential competing demands and constraints on the national water supply, and changing rainfall patterns impacted by climate change, support will be provided to develop a water use and irrigation strategy for agriculture. Policy work and strategic planning will also be a focus area for the marine resources sector to establish a sustainable harvesting regime of key fish and invertebrate food species.

Enhanced Crop and Fisheries Production

5.3 Enhanced agricultural production for import substitution, food security and rural livelihoods is a key priority for Cook Islands. There are potential opportunities for Cook Island farmers to gain from import substitution**,** which could lead to increased farmer returns, a reduction in the import expenditure of the country but also to the overall development of the agriculture sector. Fruit and vegetable imports provide a good opportunity because of the large quantities imported annually and the high market prices of these commodities. The makatea islands have soil derived from weathered volcanic rocks and therefore have good potential for agriculture production and can grow a variety of crops. In the past, these islands contributed to economic growth through producing crops for

marketing and processing. Increasing production (and productivity) of root crops, fruits and vegetables to ensure local food security and for marketing in Rarotonga is being promoted by government on these islands and FAO will support this. There is a need for improved supply of inputs – planting materials, fertilizer (including organic approaches) and for better technology and husbandry practices, including for off-season production, supported by appropriate research and information/extension services. Support of the national Fish Aggregate Device (FADs) program (including deep-water FADs on Rarotonga and shallow-water FADs in outlying islands) will help increase the supply of coastal pelagic fish in a cost effective and sea-safe manner.

Improved Supply Chain Coordination and Efficiency

5.4 Lack of coordination and integration in agricultural supply chains reduces efficiency, raises costs and increases risks. Added challenges are faced integrating many small rural producers, particularly from outer islands, with new domestic markets (e.g. for tourism and processing operations) and for potential export markets. FAO will provide technical assistance and training to facilitate value chain analysis, coordination, promotion and upgrading of selected value chains. Agriculture is not widely seen as an attractive business opportunity and business enterprise capacity in the sector is not high especially amongst youth. Further business enterprise and entrepreneurship skills need to be fostered. Support to enhance enterprise and business skills in order to grow agriculture as a business will therefore be required. Food safety/certification and good agricultural practices/traceability are increasingly being demanded in overseas markets for food products (fresh and processed) and accessing tourist food product supply chains will also require improved food quality/safety standards. FAO will provide training and technical support to build capacity to meet internationally recognized food quality and safety standards.

Enhanced capacity in food processing and value adding

5.5 The JNAP proposes strategies to provide training for improved food storage and processing techniques to promote agricultural livelihood resilience and food security. The Cook Islands National Policy on Gender Equality and Women's Empowerment & Strategic Plan of Action 2011-2016 priority outcome 3 is an "*enabling environment for the full participation of women in economic development*". There have already been demonstrated development benefits particularly for women from the outer islands from enhanced skills in processing of agricultural products, but techniques and practices need to be upgraded and extended to a wider group of beneficiaries. FAO will provide technical assistance in an integrated way to upgrade capacity in processing and value adding, strengthen appreciation of food safety and quality standards and build business, marketing and enterprise skills.

CPF Priority Matrix Cook Islands

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Import substitution and strengthened linkage with the growing tourism market.	NSDP 2011-2015 Goal 1: A vibrant economy - unlocking the potential from marine resources and unlocking the potential from agricultural production.	Fostering agricultural production and rural development	UNDAF Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens	Pacific Plan Goal s: Economic Growth and Sustainable Development MDG 1

CPF Results Matrix Cook Islands

Priority Area A: Import substitution and strengthened linkage with the growing tourism market

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome1: Strengthened Strategic Planning which fosters sustainable agriculture production and rural development	Agriculture Strategic Plan in place to guide Agriculture Department work plans and actions by end of 2013 Sustainable harvest regime for key fisheries in place by end 2016 Yields, production volumes and market prices for targeted products	Strategic Plans, Department of Agriculture Fisheries Resource Use Plans, Ministry of Marine Resources National Statistics/Fresh produce market records	Strategic plans adopted and successfully implemented. Producers adopt new technology, approaches, and practices	**272,000**
Output 1.1: Strengthened capacity to develop strategic action plans for import substitution and linkages to the tourism market	Opportunity study and strategic action plan for import substitution and linkage to the tourism market available by end 2013	Study Reports Punanganui Market fresh product records and slaughtering records available	Government and stakeholder support Close collaboration with SPC	50,000
Output 1.2: Strengthened capacity to plan water use and irrigation for agriculture production	Water use and irrigation strategy for agriculture in place by end 2015	Irrigation study published		50,000?
Output 1.3: Strengthened capacity to prepare fisheries resource profiles, harvest quotas and trade controls	Sustainable harvest regime of key fisheries in place through resource profiles, management plans and regulations available by end 2016	Data resource profiles, management plans, and regulations completed and being implemented		172,000
Outcome 2: Enhanced crop and fisheries production	Production volumes, yields and prices of selected crops and fish	National statistics Fresh produce market reports	Farmers adopt new technology and practices	**500,000**
Output 2.1 Strengthened technical capacity (particularly of youth) for intensified and off-season crop production.	Production, yields and calendar yield patterns from selected farm enterprises	Project reports	Farmers adopt new production practices and technology	300,000
Output 2.2: Strengthened FAD program	Number of new FADs deployed and consequent catches increased by 2017	MMR reports		200,000

Priority Area A: Import substitution and strengthened linkage with the growing tourism market

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 3: Improved supply chain coordination and efficiency	Well coordinated and integrated supply chains for 2 key selected products operating by 2017	Project reports, Market survey report/ Dept Agriculture	Priority value chains selected	**200,000**
Output 3.1: strengthened capacity for value chain analysis and facilitation	Two Selected key value chains elaborated and promoted	Value Chain reports/ Dept Agriculture	Good stakeholder participation	100,000
Output 3.2: enhanced knowledge and skills in farming enterprise and business	10 farmers with enhanced business enterprise skills	Training reports, participatory evaluation/ Dept Agriculture	Good participation by targeted farmers	50,000
Output 3.3: Strengthened capacity in Good Agricultural Practices and food quality and safety (including for fish)	Percentage of target farmers (100%) aware of GAP principles Percentage of target farmers applying GAP (70%) on farm by 2017	Extension officers reports/ Dept Agriculture	Good participation by targeted farmers	50,000
Outcome 4: Enhanced agro-processing and value adding	Number of agro-processing enterprises established or upgraded by women by 2017	Project reports, participatory evaluation/ Dept IA	Good participation by targeted women stakeholders	**280,000**
Output 4.1:training and technology transfer for agro-processing and value adding targeting rural women delivered	Number of women demonstrating increased skills in agroprocessing and marketing value added products by 2016 Target: 15	Project reports/Dept IA		200,000
Output 4.2:training in business enterprise skills delivered	Number of women with enhanced business enterprise skills by 2016 Target: 15	Training reports, participatory evaluation/ Dept IA		40,000
Output 4.3: Enhanced capacity in food safety and awareness in Codex and HACCP	Number of agroprocessors practicing food safety practices and procedures by 2016 Target: 15	Particpatory evaluation/ Dept IA		40,000

CPF Action Plan

Action Plan: Cook Islands	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Core Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Import substitution and strengthened linkage with the growing tourism market																
Outcome 1: Strengthened Strategic Planning																
Output 1.1: strategic action plans											SAP PO	Secretary Agriculture	50	50		
Output 1.2: Water use/irrigation strategy											SAP PPO	Secretary Agriculture	50	50		
Output 1.3: fisheries resource profiles											SAP FO	Secretary Mar. Res.	172	172		
Outcome 2: Enhanced crop and fisheries production																
Output 2.1: Intensified/off-season crop production											SAP PPO	Secretary Agriculture	300	300		
Output 2.2: FAD Program											SAP FO	Secretary Mar. Res.	200			200
Outcome 3: Improved supply chain coordination and efficiency																
Output 3.1: Value chain analysis/ facilitation											RAP/AGS MO	CI Gov Secretary Agriculture	200	200		
Output 3.2: skills in farming business											RAP/AGS MO					
Output 3.3: capacity in GAP practices											SAP FNO					
Outcome 4: Enhanced agro-processing and value adding																
Output 4.1: training/ technology for agro-processing											SAP FNO	Dept IA NCW	280	280		
Output 4.2:training business/ enterprise																
Output 4.3:Capacity in Codex/ HACCP																
Resource Mobilization		350	200	280	50		372						**1,252**	**1,052**		200

Federated States of Micronesia

I. Country Summary

Land Area (km^2): 700	Sea Area/EEZ (million km^2): 2.9
Population (No.): 102,843 (2010)	Annual Growth (%): - 0.4%
Average Density (inhabitants/km^2): 147 (2010), but varies by State	Rural Population (% of total population): 78% (urban areas include Colonia in Yap, Weno in Chuuk, Kolonia in Pohnpei and Lelu in Kosrae),
GDP (US$ million): 297.5 (2010)	GDP per caput (US$): 2,898 (2010) The real GDP per capita was estimated to be $3,653 for Yap, $1,477 for Chuuk, $3,163 for Pohnpei and $2,398 for Kosrae in FY2010.
GDP Real Growth (ave.2001-2010): 0.24 % per annum	Agriculture and fisheries GDP (% of total GDP in 2006): 3.15%
Trade Balance: - US$126,470,000 (exports as % of imports): 11 % (2007)	Food & Live Animals as % of total imports: 39% (2007)
Budget Expenditure Agriculture and Fisheries: N/A	Human Development Index (2010) : 0.614; position 103

Sources: Population Census 2010 preliminary results; Federated States of Micronesia Division of Statistics.

II. Situation Analysis and Agriculture Sector Overview

2.1 Located in the Western-central Pacific, the Federated States of Micronesia (FSM) is a sovereign nation consisting of four states: Kosrae, Pohnpei, Chuuk and Yap. The country has a close relationship with the United States of America through the Compact of Free Association, through which substantial funds are provided for the government. The nation faces many challenges in achieving national food security and ensuring sustainable livelihoods for a growing population. FSM economy has contracted in five out of the last seven years, with real GDP falling by 3.6% in 2007 and the weak economy in recent years is reflected in a decline in living standards and in emigration[16]. The trade account of the balance of payments runs a significant deficit reflecting the excess of imports over exports. The economy is still firmly dependent on US aid and Compact funding provides about 65% of revenues for national Government and 75% of revenues for the states, and is the major component of balance of payments. The International Monetary Fund (IMF) estimates that the private sector's share of GDP has remained stagnant at 25% over the past 20 years. The outlook for economic growth therefore remains heavily dependent on public sector construction activities (ADB, 2012). Achieving sustainable growth will depend on reforms that support private sector development and increased foreign investment. Stagnant economic activity, limited employment opportunities and an increasing incidence of poverty are the priority development issues government faces. The agriculture sector provides a solid basis for food security, but also offers significant (as yet under-exploited) opportunities for gainful employment and income generation. Farming as a business needs to be more fully developed.

[16] The 2010 Population Census preliminary results indicate that population has fallen from 107,000 in 2000 to 103,000 in 2010. This fall is largely attributed to emigration.

2.2 Data on the primary economic sectors of FSM are weak; there are no indicators on agricultural production, limited information on agricultural exports, and fisheries information is also generally poor. Accessing reliable data is a significant issue and poses a serious challenge to monitoring the agriculture sector performance and the effectiveness of policy and investments. Lack of data constrains efficient planning and budgeting for the sector. Without good sector data it is difficult to assess development outcomes and draw lessons. Subsistence activity is still considered to be very significant, but there is lack of data and poor understanding in this area. Without specific-information on amounts of food available and the potential to produce more a solid statement on food security and vulnerability is difficult. In the absence of an agriculture census basic structural information on the sector is not available to provide baseline data on the production and economic value and use of existing agricultural systems. Equally without regular surveys and reliable administrative data sources monitoring production trends and trade in agriculture commodities is severely constrained.

2.3 Agricultural and livestock raising activities are almost universal among FSM households (94.6 percent and 81.8 percent respectively); in addition, 71 percent of all households are involved in fishing activities (2010 Population Census). These activities were carried out predominately for household or family use with only 10 percent of households reported to be engaged in agriculture and fishing activities for cash sales. Food is grown for local consumption and to support relatively small export sales in regional markets, primarily Guam and the Marshall Islands. Main export products include fish, betel nut, kava, banana and root crops; small amounts of pepper leaves and citrus are also exported. The small land area generally limits large-scale commercial farming for export. Farmstead livestock production is important throughout the FSM, particularly for subsistence and cultural use.

2.4 Total food imports have shown a steep increase from around US$17 million in 2000 to US$43.6 million in 2009. Convenience starch foods including rice, ramen, noodles, flour and bread have been the major food items imported and this group has shown a steep rise over the last 10 years reflecting a change in diets away from traditional staples. The high global prices for food and oil mean the costs of imports will continue to rise. Food expenditures now dominate household expenditures, particularly for poorer families, with up to half of total household expenditures on food. Nationally, around 70% of households have income below US$15,000 and these households incur annual dis-savings resulting in increased hardship. An increasing shift back to subsistence farming in some states reflects the rise in global food prices and the loss of employment in the public sector. Agricultural production for food security and livelihoods remains crucially important and must be addressed by a socio-culturally sensitive community-based approach which addresses the different priority needs across the four States.

2.5 Increasing levels of poultry, egg and pork imports imply an opportunity for some import substitution; however local commercial production relies heavily on imported feed and thus struggles to be price competitive with imports. Other issues for local production include limitations on air transport by the current monopoly air carrier of day-old chicks, suitable slaughter and hygiene facilities and appropriate food standards and regulations governing production and sales. Opportunity for import substitution of fruits and vegetables is probably considerably less than $1.5 million a year as not all currently imported fruit and vegetable products can be readily grown in FSM. A better potential opportunity would be if significant substitution of imported starch products such as rice, noodles, ramen and flour could be achieved by encouraging greater consumption of local staples. This food group is now the largest import and reached a value of almost $15 million in 2009. Important in achieving such a goal would be increasing farm productivity to reduce prices, improving local transport and market facilities and developing processed products to reduce transport costs, extend shelf life and improve convenience. Promotion of community programs to grow and eat local foods for their nutritional and health qualities should also be supported. Additionally it may be

possible to regulate the proportion of local food content used in government sponsored institutional canteens (hospital, government functions, school meals etc.) and review price policy to see where a competitive advantage may be provided for local produce.

2.6 Serious problems of nutritionally-related diseases occur in FSM, including vitamin A deficiency and anemia among children, diabetes, heart disease, and certain cancers among adults. These nutrition problems are mainly linked to the types of food eaten which is influenced not only by personal choices, but also by cost, ease of preparation, availability and accessibility. The National Plan of Action for Nutrition 2007-2012 sets out a clear strategic framework to help address nutrition-related health priority problems. It advocates incorporating nutrition goals and components into national development policies and sector plans, programs and projects, particularly in the areas of food and agriculture, fisheries, forestry, health, education, and environment. Increased production of local nutritious foods and strengthened local markets are important outcomes to be achieved. Additionally, use of endemic nutritious plants should be encouraged through education, outreach and effective communication. Most traditional FSM subsistence crops are of high nutritional value. These crops include - coconut, banana (particularly the *karat* and *uht en yap* variety which are rich in β-carotene), breadfruit and root and tuber crops (taros, yam and sweet potato) plus a variety of leaf vegetables and fruits. Most serve both as food and cash crops, have fairly flexible harvest period, and are grown successfully without heavy dependence on external inputs or extension services. In the atolls giant swamp taro *Cyrtosperma chamissonis*, and pandanus are also important food crops.

2.7 Each state in the FSM has extensive forest cover, although on the low atoll islands, and the littoral slopes of the high islands, the forest cover is better described as an agro-forestry complex with a scattered secondary forest on long-fallow within the traditional gardening system. Scattered use of forest resources occur across all states. Timber is cut by subsistence farmsteads for construction and firewood. Mangrove timber is used for handicrafts, and both upland and mangrove timber is used for some local furniture making. Privately-owned sawmills have operated at one time or another in each state, selling rough sawn timber in the local market for construction. Government wishes to explore the potential of coconut timber processing in association with a coconut replanting program. Many islands in the FSM contain rich rain forests, which provide important resources for local inhabitants and a refuge for biodiversity. These forests are also critical to island hydrology, providing regular supplies of clean water and protecting the island's delicate coral reefs, mangroves and seagrass beds from sedimentation. But economic growth and changing cultural practices, combined with population growth and demographic shifts continue to pose threats to sustainable resource management in FSM. Deforestation, unplanned development, and unsustainable agricultural practices, and extreme weather patterns were the main issues identified in the FSMs “First National Report to UNCCD.

2.8 FSM's exclusive economic zone covers some 2.9 million square kilometers of ocean which contains one of the most productive tuna fishing areas in the world. Although the nation has full ownership of tuna stocks capable of a sustained yield of well over 100,000 tons each year, there is limited national participation in its exploitation. The majority of this fish is caught under licence by DWFNs (some now operating under FSM flag). The fishing access fees represent about 10 percent of all national government revenues and grants. Furthermore, in the five year period 2003-2007, marine products represented from 70 percent to 94 percent of all exports of the country. The fisheries sector is therefore an important component in the economy of the FSM. However, lack of clear trends for tuna catches as purse seine fishing conditions in the FSM zone vary considerably from year to year make licensing revenue unpredictable. Nevertheless, a large amount of money is generated from licensing foreign fishing vessels and a major issue is whether licensing could and should be used to leverage domestic tuna industry development through a requirement for shore based activities or transhipment in attribution of a fishing licence.

2.9 Subsistence fishing is also important to most households in the country, and is a critically important component of the food supply in the outer islands, but the large number of government agencies involved in aspects of coastal fishing tends to stifle management and development initiatives. In FSM there are three levels which have special significance for fisheries management: – *National government:* has jurisdiction over fisheries management in the zone outside 12 miles from islands up to the outermost limits of the exclusive economic zone. – *State governments:* the four states (Chuuk, Kosrae, Pohnpei, and Yap) have jurisdiction over fisheries management in the waters in their respective 12-mile zones. Each state has its own administrative organizations, several agencies involved in fisheries, and its own plans for fisheries development and management. – *Local governments:* In some of the states, local communities have a high degree of autonomy in the management of nearshore fisheries resources. At the FSM state level there is a belief that there is considerable potential to derive additional benefits from coastal fishery resources, whereas the reality is that most of the resources that are economically viable to exploit, are fully- or over-exploited (FAO, 2011). At the state level the most common type of fishery management measure used are various types of bans (e.g. destructive fishing techniques) and closed seasons. Example of common ban is the prohibition of fishing for trochus except during short open seasons. The use of marine protected areas is also increasing. Greater use of management partnerships (community, government, NGO) in the management of coastal fisheries could result in greater sustainability of the coastal fisheries.

210 The coastal marine fisheries production in recent years has been about 12 500 tonnes, of which about one-quarter is sold. The general situation is that on the main islands of each FSM state, small-scale fishers sell catch in excess of their own requirements through various outlets. Major factors affecting the local supply of fish are overfishing, siltation, destructive fishing, the availability of FADs, and the landing of non-export grades of fish by the offshore fleet. The government has several strategies to increase the national fish supply. This involves facilitating private sector growth, promotion of aquaculture, stabilizing the production from inshore areas by improved management, encouraging the harvesting of tuna resources by small-scale fishers, encouraging the landing of bycatch from longlining, and supporting the local marketing of fishery products.

2.11 Aquaculture has been the focus of technical and development attention in FSM for over 30 years. Numerous documents, reports and reviews exist, most of which emphasize the potential of specific forms of aquaculture for development as well as for other purposes, such as reef re-seeding. The National Aquaculture Centre was established in Kosrae in 1991 to explore aquaculture potential and to undertake research, demonstration and training. Its primary work involved propagation of giant clams for farming and re-seeding in other states. Other aquaculture initiatives have been and continue to be supported both by the Government and by several local and international organizations working in FSM, including the College of Micronesia, Japan Overseas Cooperation Volunteers, the Pohnpei Agricultural Training School, and FAO. Sponge culture trials were begun in Pohnpei about 10 years ago and several pilot farms started in Pohnpei with donor funding support, but none of these has grown to become a commercial operation. The culture of *Eucheuma* seaweed was attempted in Pohnpei during the mid-1980s, but relatively low returns to farmers and other problems prohibited it from developing despite success in growing the seaweed. Black pearl culture trials began on Nukuoro atoll in Pohnpei state in 1995. Presently, the only significant aquaculture operations in FSM are the culture of giant clams from the government aquaculture facility on Kosrae and black pearls on Nukuoro Atoll. Aquaculture has been highlighted by the national and state governments as having the potential to provide significant benefits to FSM, including local job creation, but the results to date have been modest at best. Any impact of aquaculture on rural development is likely to come from the production of non-perishable products, such as pearls (FAO, 2011). There is a need for a well thought-out strategic development plan for aquaculture which also includes economic viability and environmental risk assessments. Given government policy to encourage private-sector-led economic

growth, such a plan would have to go beyond general terms and toward specific activities to support and encourage business ventures by the private sector.

V. Key issues shaping priorities for FAO assistance.

- Weak data on primary economic sectors limiting the basis for planning.
- Limited human resources and institutional capacity to implement development programs
- High and volatile food and oil prices and a deep trade balance deficit.
- Increasing levels of food and nutrition related non communicable diseases, which impact negatively on health system, families and national economy.
- Limited market opportunities and low competitive advantages of local agricultural products.
- The potential for aquaculture development remains unrealized.
- Vulnerability to adverse impacts of natural disasters and climate change, including salt water intrusion, drought and storms

VI. Country Program Context

4.1 The Strategic Development Plan (SDP) 2004–2023: *Achieving Economic Growth and Self-Reliance* and the *Infrastructure Development Plan* are the principal planning documents used by FSM and the US for implementation of the Compact programs. These plans are also intended to guide programming of assistance from other development partners. The SDP is a broad document which outlines that the agriculture sector, including forestry, shall provide (1) food security, cash incomes and healthy livelihoods: and (2) opportunities for domestic and export markets, while promoting environmentally sustainable production within a stable and consistent policy framework. Focus needs to be given to improving strategic use of annual Compact funding to achieve prioritized outputs by each state through individual annual budget cycle.

4.2 With assistance of FAO the national government facilitated the formulation of the Agriculture Policy 2012-2016 which has been adopted by FSM Congress in September 2012. The Agriculture Policy renews the emphasis on domestic food production in the Federated States of Micronesia with a priority policy focus to national food security and nutritional health through increased food self-sufficiency. It addresses the key challenge of developing pathways for commercialization of smallholder farming systems (for import substitution and export) building on traditional systems and practices, which allow increased employment and cash-generating opportunities for rural households, but without sacrificing family and community cohesion and ultimately food security. The policy also promotes the formation and or strengthening of nascent farmer associations to outsource some of the services currently being provided by the public sector and to facilitate farmer access to inputs, credit, output markets, market research, and technical training. The policy also highlights the need to enhance the synergies between Agriculture and Tourism to increase the access of small scale producers to the tourist market. An express goal of the policy is that through invigorating traditional agriculture to strengthen socio-cultural safety nets. This overarching agriculture policy framework will be the means for coordination of investments from national and state budget revenue together with all other sources of public funds for the sector development.

4.3 The US is by far the most significant development partner and provides approximately US$76million annually through the amended Compact of Free Association disbursements and various Federal Grants. Compact assistance targets six sectors: education, health care, private sector development, environment, public sector capacity building and infrastructure. The College of Micronesia-FSM Cooperative Research and Extension (CRE) program provides support to community groups and farmers through efforts including research, demonstration and outreach. The USDA (NCRS) provides technical support to agriculture at State Agriculture agencies. Its purpose is

to promote efficient production, marketing, distribution, and utilization of products of the farm as essential to the health and welfare of people and to promote a sound prosperous agriculture and rural life. The USDA (forestry) is providing support for forest health, urban and community forestry, and advancement of forest resources management, including encouragement for production of timber. A grant from the department of State provides support for the Micronesian Challenge, and the FSM Protected Area Network. China (PRC) and Japan also provide significant assistance which is focused on infrastructure. China supports a long established agriculture demonstration and training farm on Pohnpei.

4.4 JICA has provided technical assistance for training in coastal fisheries and grants for small agriculture/environment projects such as raising pigs on dry litter. Australia also funds a small grants scheme, which supports community organizations or supplements the work of government agencies to provide direct assistance to small-scale community development by targeting governance, education and health. Australia provides specialist technical assistance, scholarships, small-scale procurement, small grants and volunteers targeted at partnership priorities of budget and economic management, donor coordination, and environmental management. EU assistance aims to contribute to outer island development through the identification and use of new and renewable sources of energy, and support to the work of non-state actors in the areas of conservation and environmental protection. ADB is providing technical assistance for economic and financial management and capacity building and preparing loan projects for water and sanitation. UNDP's focus has been on enhancing small business development and trade in products from local micro-enterprises in order to increase income generation and sustainable livelihoods development. WHO has provided support for drafting food standards and for web-based reporting of imported food control and introduction of risk based assessment. The College of Micronesia-FSM Cooperative and Research Extension and Land Grant programs follow a demand needs approach to assistance for the four States to encourage local food production and diversification. SPC has a sub-regional office located in Pohnpei and provides support in the areas of SPC mandate including land resources and fisheries. The Forum Fisheries Agency (FFA); and the Western and Central Pacific Fisheries Commission, located in Pohnpei, also provide support for offshore fisheries management and development. Collaborative partnership amongst national, regional and international organizations donor agencies/organizations need to be organized to maximize benefits given limited capacity of absorption.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.5 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthened policy, legal and regulatory frameworks for sustainable agriculture, fisheries (including aquaculture) and forestry development; (ii) expanded production, increased productivity and resilience of root crops, livestock and fisheries systems to changing environment, local and marketing demand; (iii) a strengthened and diversified coconut industry; and (iv) Improved product development, marketing systems and market access for high value specialty commodities. FAO support has strengthened capacity in policy formulation and enabled FSM to formulate a national agriculture policy. Additional support has helped draft '*go local'* guidelines and assisted the NGO Island Food Community Pohnpei (IFCP) implement outreach activities in the four states. TCP project support has also been provided to strengthen food control systems and for a risk assessment in aquaculture development.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus area for the CPF 2013-2017 will be on national food security and nutritional health

through increased food self-sufficiency. Support will be delivered under the following two priority outcomes:

1) Strengthened policy, legislative, regulatory and strategic planning frameworks.
2) Increased availability and utilization of local food.

Strengthened Policy, Legislative, Regulatory and Strategic Planning Frameworks

5.2 At national government level there is limited technical capacity for policy analysis and strategic planning, there is also lack of reliable data which poses a serious challenge to monitoring the agriculture sector performance and the effectiveness of policy and investments. In the absence of an agriculture census basic structural information on the sector is not available to provide baseline data on the production and economic value and use of existing agricultural systems. FAO will focus technical assistance to support a strengthened policy framework for sustainable agriculture and fisheries development to enhance food security and livelihoods through improved data collection and analysis, and for specific reviews and studies to strengthen the evidence-base for strategic planning.

Increased Availability and Utilization of Local Food

5.3 Dietary patterns in FSM have undergone significant changes away from traditional nutritious foods to increased consumption of imported, often highly processed starchy foods, low grade fatty meats and high sugar content soft drinks. As a result, the country now faces a wave of dietary and lifestyle-related health problems, increasing dependence on food imports and a rising food import bill. Tackling this issue requires a holistic approach involving increased production and productivity of traditional foods, better information on nutritional quality of foods, improved capacity for processing, preparing and marketing safe nutritious local foods, appropriate policy and regulatory frameworks to promote local food and penalize health damaging products, together with strengthened promotion and information campaigns. FAO support will be used to build capacity in all these areas to increase availability and utilization of local foods. An increased utilization of local foods should also imply improved livelihood opportunities for local farmers, fishers and food processing enterprises. The FSM Government in their Agriculture Policy 2012-2016 have expressed the need to encourage and facilitate formation of producer groups and associations to coordinate consistent supplies of high quality marketable products to meet market demands, and that these associations should be encouraged to develop strategic plans and business plans to ensure they can be sustainably operated and funded. FAO could provide capacity building and technical assistance to strengthen operation of nascent farmers' associations.

CPF Priority Matrix FSM

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: National food security and nutritional health through increased food self sufficiency	SDP 2004-2023 - The agriculture sector, including forestry, shall provide (1) food security, cash incomes and healthy livelihoods: and (2) opportunities for domestic and export markets, while promoting environmentally sustainable production within a stable and consistent policy framework. Agriculture Policy 2012-2016 – Increased sustainable production (and productivity)of traditional farming systems and aquaculture to provide for household nutrition, traditional needs and cash income	Strengthening food and nutrition security; Coping with impact of climate change on agriculture and food and nutrition security	UNDAF Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens. FSM UNDAF Results Matrix – Enhanced sustainable production and consumption of local foods and products for food security, healthy livelihoods and sustainable income	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific MDG 1

CPF Results Matrix FSM

Priority Area A: National food security and nutritional health through increased food self-sufficiency

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Strengthened policy, legislative, regulatory and strategic planning frameworks	Coherent consistent gender sensitive policy in place and being implemented	R & D Agriculture Policy Monitoring Reports	Government continues to prioritize agriculture Close partnership with SPC	**900,000**
Output 1.1: Strengthened capacity to implement agriculture surveys/census	National agriculture survey/census conducted by end 2013	Agriculture Census Report available at National Statistics Office	National Government raises counterpart funding for implementation of survey	600,000
Output 1.2: Technical assistance for a nationwide review of extension services	Review report available by end 2014	Review Report Document in Department of R & D	Close partnership with SPC and FSM COM	100,000
Output 1.3: Technical assistance for feasibility study for livestock feed production	Study report available by end 2013	Study Report	Close partnership with SPC	50,000
Output 1.4: Strengthened capacity to develop a national biosecurity strategy (including aquaculture)	Draft national biosecurity strategy available by end 2015	Strategy Document in Department of Resources & Development	Close partnership with SPC	100,000
Output 1.5: Technical assistance to review pricing policies (taxes and subsidies) to promote equitable, sustainable production of local farm products and to deter environmentally degrading and polluting activities	Review report available by end 2013	Review Report Document in Department of Resources & Development	Close partnership with SPC	50,000

Priority Area A: National food security and nutritional health through increased food self-sufficiency

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 2: Increased availability and utilization of safe local food	Food Production Index Prevalence of nutrition related diseases		People make nutritious local food choices	**1,050,000**
Output 2.1. Strengthened capacity for local food production meeting safety/quality standards	Farmers identified and trained % of local products in CPI basket	R&D reports CPI report	Extension services active	150,000
Output 2.2: Strengthened capacity of nascent farmers association to support consistent quality and quantity of production and facilitate market access	Four farmers associations with clear strategic plans in place by end 2015 Number of agricultural products being consistently marketed with facilitation by active farmers associations Target two successful commodity market chains operating by end 2016	Strategic plans Trade reports	Farmers committed to associations	150,000
Output 2.3: Strengthened capacity for aquaculture production	National Aquaculture Strategy in place by 2015 Number of successful private sector aquaculture ventures. Output of aquaculture farms	R&D reports	Successful implementation of strategy	300,000
Output 2.4: Strengthened capacity of private sector, households and communities to process, prepare and market nutritious and safe local food products (including fisheries products)	A recipe book for nutritious foods developed and distributed Training conducted on value added fisheries products	Training report	Close partnership with SPC (CETC)	450,000

CPF Action Plan

Action Plan: FSM	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: National food security and nutritional health through increased food self-sufficiency																
Outcome 1: Strengthened policy, legislative, regulatory and strategic planning frameworks																
Output 1.1: agriculture survey/census											RAP SO	FSM R&D NSO/SBOC SPC	600	200		400
Output 1.2: Review of extension services											RAP EO	FSM R&D FSMCOM	100	100		
Output 1.3: Feasibility study livestock feed											RAP LO	FSMR&D.	50			50
Output 1.4: National biosecurity strategy											SAP PPO/ SAP FO	FSM R&D/ Mar. Res.	100	100		
Output 1.5:Review Price Policy											SAP PO	FSM R&D/ SBOC	50	50		
Outcome 2: Increased availability and utilization of safe local food																
Output 2.1: capacity for production of safe local food											SAP PPO AGS MO SAP PPO	R&D FSM Farmer's Assoc.	300	300		
Output 2.2: Strengthened Farmers Associations																
Output 2.3: capacity for aquaculture											SAP FO	Mar Res SPC	300	300		
Output 2.4:safe food preparation and marketing											SAP FNO	IFC SPC (CETC)	450	300		150
Resource Mobilization		650	400			100	750						**1950**	**1,350**		**600**

Fiji

I. Country Summary

Land Area (km^2):18,333	Sea Area/EEZ (million km^2): 1.26
Population (No.): 837,271 (2007)	Annual Growth (%): 0.7
Density (inhabitants/km2): 45 (2007)	Rural Population (% of total population): 49 (2007)
GDP real F$4,352 million: (2009) US$ 2,256 million	GDP per capita :F$5,760 (2009) US$2,987
GDP Real Growth (ave.2006-2009): 0.18 % per annum	Agriculture Sector GDP (% of total GDP): 12 1% (2011)
Trade Balance -US$768.4 m [exports (excluding re-exports) as % of imports]: 28.9% (2010)	Food as % of total imports: 16.4 % (2010)
Budget allocation agriculture/forest/fisheries (2008): F$23.8 million % of Total Budget 1.5%	Human Development Index (2011):0.688 position 100 out of 187 countries, medium human development category

Sources: Fiji Bureau of Statistics (FIBOS).

II. Situation Analysis and Agriculture Sector Overview

2.1 Fiji has experienced four coups in a period of 20 years and its economic performance has steadily declined and poverty levels have increased. Most of the social indicators have worsened in Fiji over the past three decades. These include the Human Development Index (HDI) and the Millennium Development Goals (MDGs) in relation to the proportion of the people living in poverty, and maternal and child mortality rates. Sluggish economic growth over recent years has been attributed to underperforming exports (particularly sugar sector), declining remittances, reduced investment levels and increasing imports. The country has also been subject to a number of natural disasters (cyclones and floods) which have been compounded by the global financial crises and economic slowdown. Imports have continued to increase more rapidly than exports resulting in a significant trade deficit. High food and oil prices and an escalating food import bill have put pressure on balance of payments. The interim government has identify the key macroeconomic issues that need to be addressed which include maintaining macroeconomic stability; raising exports, raising domestic production, increasing foreign and domestic investment; and making more land available for social and economic development. In 2011, the economy grew by 2.1% after 2 years of contraction. The improvement reflects recovery in agriculture, which had been affected by cyclone damage in 2010 and an increase in tourist arrivals. But the forecasted growth and macroeconomic outlook remains weak and foreshadows greater poverty challenges ahead (ADB, 2012).

2.2 The rural areas continue to be the home for about half of Fiji's population, though declining. Urbanisation remains the dominant contributing factor to this decline. However, Fiji's key economic opportunities are rural based, providing the greatest potential for future development and prosperity, particularly in the tourism, agriculture, forestry and fisheries sectors. But over recent years the rate of growth in agricultural production has stagnated and failed to keep pace with the needs of a rapidly growing population, resulting in a progressive increase in import bills

for food and industrial raw materials. Low agriculture productivity has a serious implication on the country's ability to produce enough food for its growing population and thus undermines food security. Government recognizes the need for a demand driven approach both for export and import substitution. This will require greater commercialization of small farmers, strengthening of industry organizations and agri-business networks and promotion of young farmer training. Current government policy prioritises invigorating exports and effective implementation of import substitution programs to increase self-reliance and reduce imports. Key targets are to increase non-sugar agriculture exports to $100 million by 2014 and reduce the value of fruit and vegetable imports from$150 million (annual average) to $80 million by 2014 [Agriculture Strategic Development Plan (ASDP) 2010-2012].Reviving the livestock sector is also a priority with assistance targeted at breeding of genetic resources, the provision of training on pasture management, and sustainable animal feeding, good animal health and welfare provisions and for management and marketing. The Government has attempted to encourage livestock farming through the Import Substitution Program (Food Security Program) which has sheltered the Dairy, Beef, Goat and Sheep sectors.

2.3 Subsistence farming and sugar cane production still dominate the agricultural sector. Sugar contributes a little over 2% to Fiji's GDP and accounted for nearly 11.7% of Fiji's total merchandise export in 2009 (FIBOS). The sugar sector used to be the backbone of Fiji's economy; however, production had declined by around 34% from a total of 3,380,000 tonnes in 1991 to 2,197,950 tonnes in 2009. The total area under sugarcane has also decreased from 112,192 hectares in 1991 to 57,177 hectares in 2009 (Agriculture Census, 2009). A major contributing factor in the reduction in area has been the insecurity of land tenure. Assistance is required in land reforms which the Government has tried to bring to the forefront, particularly in terms of working out a fair rental mechanism, security of tenure that will bring about investment to improve productivity of the land rather than mining of the land, and assistance in analyzing and determining the economic size of holdings that would provide a sustainable livelihood to the grower. Production has also been affected severely by floods, drought, inefficiencies in the mills that affected the level of sugar extraction, the amount of unharvested cane, loss of preferential access to higher priced markets in the EU as a result of changes in the world trading environment and expiring land leases which resulted in an increase in the number of farmers leaving the industry. In terms of trade, initially there was little impact from the erosion of Fiji's preferential access to the EU, because 60 percent of sugar exports were to other destinations. However, as output fell, the contribution from the EU became extremely significant. Focus for the sugarcane industry should be on: good quality cane yield; efficient and effective processing; and increase in revenue through multiple products and multiple customers.

2.4 But while the traditional commodity sectors – sugar and copra – are struggling, horticultural exports have begun to perform better. This entirely small farm-based sub-sector includes ginger, tropical fruit, root crops and vegetables. The core market opportunities for these products are provided by: (i) exporting to the Indo-Fijian, Asian and Pacific Island communities in Australasia; (ii) enhancing household self-sufficiency; and (iii) supplying the expanding urban and tourism markets. These are readily obtainable markets for which a marketing structure is already in place. A number of other significant export potential market opportunities have been identified, however, for these there are no marketing structures in place at present and substantial agribusiness investment is required to create them (ASDP).

2.5 Pawpaw, pineapple, and banana are considered as the major fruit commodities in Fiji. The area planted with pawpaw increased from 54 hectares in 1991 to 220 hectares by 2009. A total of 392 hectares of pineapple were planted in 1991; this area had increased to 445 hectares in 2009. The higher demand for pineapple in the local market has been influenced by the hotel industry, diversification of crops and favourable market prices. The area planted with banana increased as a result of high local demand, especially from the local hotel sector, and from the export markets. The area planted with banana increased from 901 hectares in 1991 to 1,087 hectares in 2009 (Agriculture Census).

2.5 Despite the successes in horticultural sector, evidence points to life becoming more difficult for some rural communities as food resources become scarcer with declining soil fertility, soil erosion, the encroachment of pests and diseases and the impacts of natural disasters. Protecting and enhancing the subsistence base of the economy through measures such as the protection of the environment, the re-planting of food trees, and improving village farming systems remains an important priority. Improvements in adaptive research and extension can have high dividends, particularly in management of pests and diseases and for making farmers aware of unsustainable agricultural practices. With an ageing farming population ramping up the training of young farmers in good agricultural practices including soil management (especially organic practices), integrated pest management, post harvest handling and safe food chain practices, along with skills related to farming as a business is a vital strategic focus. To achieve this a '*farmer field school*' approach is currently being used successfully in some areas, but this needs to be extended further for a wider impact.

2.6 Fiji has a large and diverse fishery, encompassing many different resources and with significant on-shore processing and value adding. Consequently fish and fishing are extremely important to the economy of Fiji. A large number of people are employed in the fisheries sector and fish makes an important contribution to the diet of local population. In relative terms, fisheries is the third largest natural resource sector, behind sugar and 'other crops'. The fisheries sector also has important linkages with Fiji's substantial tourism industry both for food and amenity value. Fish, both local and imported, is an important element of food security in Fiji. The per capita consumption of fish in Fiji, based on the 2005 FAO food balance sheet, is 36.8 kg. Various other studies have made estimates ranging between 44.0 and 62.0 kg. Considering Fiji's population, 40 kg of fish consumption per capita translates into a 2010 demand for about 34, 200 tonnes of fish. The government has several strategies to increase the national fish supply. This involves facilitating private sector growth, promotion of aquaculture, encouraging the harvesting of tuna resources by small-scale fishers, and supporting the marketing of fishery products landed in remote parts of the country. Major factors affecting the local supply of fish are overfishing, siltation, destructive fishing, transport links to the outer islands, the availability of FADs, and the production of non-export grades of fish by the offshore fleet (FAO, 2011). Sustainable development in the fisheries sector will require strengthened policy, strategic and regularity frameworks which are developed with full stakeholder participation. The national development policy proposes a multi-pronged approach to fisheries development which takes account of economic, environmental, and social performance. This model also recognizes the need to move away from simply production orientation towards a resource management, conservation and service orientation [Roadmap for Democracy and Sustainable Socio-economic Development (RDSSED) 2009-2014]. Protection of marine areas, sustainable management of inshore fisheries and reef enrichment programs are recognized as important priorities.

2.7 The aquaculture sector of the Fiji Islands is noted for the dominance of freshwater fish farming. Tilapia and freshwater prawn have been the major species farmed, with tilapia comprising the largest share of the farms, and output. Carps are also farmed. The marine species of giant clam, trochus and sea cucumber are cultured for stock restoration, enhancement and to some extent the aquarium trade, while seaweed is cultured as a supplementary source of income. Brackish water species are shrimp and milkfish. A major commercial venture is pearl oyster farming, currently with two major players. But it is evident that increasing aquaculture production, especially by village level operations, has been the government's primary objective in the sub-sector. Various policy documents indicate that the increased production is intended to improve the nutritional status of rural populations, generate supplementary income, diversify activities, stem the flow of migration from rural to urban areas, and reduce inshore fishing pressure.

2.8 The government's socially oriented policy to promote aquaculture as a rural activity for food security and income has effectively accomplished its immediate objective: aquaculture, especially

freshwater aquaculture, became popular and gained a fairly widespread adoption, but the heavy government subsidy of inputs, which was the cornerstone of the policy, is now seen as counterproductive from an economic standpoint. It is also technically difficult to sustain. Furthermore, results from a national survey in 2010 reveal a large percentage of inactive farms (i.e. 104 out of 229). One constraint raised by farmers in the survey was problems with slow supply of seed from the government's central hatchery. An option considered is to decentralize hatchery operations, but this will require focused training and technical assistance on hatchery management and operation, health management and a good seed distribution system. A decentralized private hatchery system would enable the government to focus its efforts on improving and maintaining the broodstock and on research. To empower this sector, appropriate policy and incentives are needed to stimulate private sector activity and the public sector needs to avoid competing with private enterprise once it is established (FAO, 2010).

2.9 The loss of forest cover, forest degradation and agro-deforestation is prevalent in Fiji. Most of the deforestation in the hilly areas has been caused by sugar cane and taro farmers clearing sloping areas for farming. These areas have experienced soil depletion, soil moisture deficits and hydrological imbalances and decreasing productivity. Measures need to be taken to get at the source of the problem, which is the soil erosion following the cultivation of steep hillsides. The problem is due in part to lack of appropriate land-use planning and regulations, and also because there is demand for using the sloping land when flatter arable land is unavailable - due to leasing issues or because of frequent inundation. There is some potential for large denuded forest areas (grasslands) to be converted into forest plantations. Reforestation could employ an important number of skilled and unskilled people that are displaced from the sugar industry. Fiji also recognizes the importance of maintaining watershed forests which play an important role in protecting coastal water quality and reef health. Furthermore, with the harvesting of the high value mahogany resource, issues of sustainable forest management, value adding and effective involvement of resource owners are prominent in the sector strategies. Developing a longer-term policy/strategic plan for the plantation forest sector is also a priority.

2.10 Fiji contains globally significant biodiversity on both land and sea and much of Fiji's flora and fauna are species found nowhere else in the world. In spite of this globally significant biodiversity, no comprehensive system of Protected Areas (PAs) exists in the country and PA legislation – which dates from colonial times – is inadequate. There is a need for a policy and legal framework that would allow for innovative, community-based management of PAs and empower local people to participate and benefit from PA management. The country is also vulnerable to natural disasters and potential impacts of climate change and sea level rise which could adversely affect agriculture, forestry and fisheries. There are increased risks of cyclones, storm surges and floods. The country was devastated by serious flooding in early 2009 and again in 2012, and suffered impact of Cyclone Tomas and a drought in 2010. Climate Change mitigation/adaptation and disaster preparedness/management are priority areas for developing appropriate policy and strategies.

III. Key issues shaping priorities for FAO assistance.

- Weak policy analysis, formulation and coordination capacity across the broad agriculture sector.
- Inadequate domestic food production & productivity to meet food security and market demands for quality, consistency and market competitiveness.
- Lack of consistent supplies of good quality fruit and vegetables to meet tourist market and export market demands & opportunities.
- Rapidly increasing levels of food and nutrition related non communicable diseases, which impact negatively on health system, families and the national economy.
- Inadequate/inefficient agricultural extension services and the lack of technologies responsive to local conditions.

- An aging farmer population and need to build appropriate skills for a younger farmers.
- Slow development of the aquaculture sector.
- High rates of soil erosion and soil degradation.
- Depletion of forest and fisheries resources and vital need for sustainable management.
- Potential loss of valuable biodiversity because of a lack of community managed Protected Areas.
- Vulnerability to adverse impacts of natural disasters and climate change.

IV. Country Program Context

4.1 The Ministry of National Planning, under the Fiji interim government, has prepared the Roadmap for Democracy and Sustainable Socio-economic Development (RDSSED) 2009-2014 which sets out a framework to achieve sustainable democracy, good and just governance, socio-economic development and national unity. The key foundation of the Roadmap is the Peoples Charter for Change Peace and Progress. The Roadmap identifies strategic priorities in governance, economic development and socio-cultural development. Under economic development key strategies include export promotion, sugar industry reform and import substitution which includes a focus on value addition, increased self-sufficiency, food security and reduced imports.

4.2 The Ministry of Agriculture and Primary Industries (MAPI) has prepared an Agriculture Strategic Development Plan 2010-2012 which indicates that the focus in the agricultural sector will be on introducing demand driven approaches both for the export as well as import substitution commodities, promoting investment, commercialization and strengthening industry organizations and agri-business networks, promotion of young farmer training and recognition by government of industry priorities. Reviving the livestock sector will be a priority with assistance targeted at improved livestock genetic resources, the provision of training on pasture management, good animal health and welfare provisions and for management and marketing. Investment in the industry will be encouraged, particularly in the dairy and beef segments of the industry.

4.3 Traditional major bilateral donors to Fiji include Australia, Japan, EU, and New Zealand, whilst China is also becoming an increasingly important partner. Donor coordination in the sector currently relies predominately on initiatives of the various development partners. Fiji also benefits from assistance through regional programs and following the 2006 Coup a greater proportion of assistance to Fiji has been channeled through these programs making up about 50 per cent of total official development assistance in 2012.

4.4 The Secretariat of the Pacific Community (SPC) are implementing an EU funded program (€3.7 million) in Fiji to improve key services to agriculture which aims to help cushion the economic and social impacts of the sugar sector restructuring by supporting a diversified market driven agriculture sector. The program focuses on enhancing production and marketing of horticultural crops and also supports sugar cane research and extension. Key activities will centre on strengthening farmers' associations and private sector partnerships as well as improving access to agricultural inputs and extension services. The program will also work with the National Crop and Livestock Council to provide 'farming as a business' support. AusAID's Market Development Facility will focus on stimulating sustainable, private sector-driven, pro-poor market development in targeted sectors in the economy. The Australian Centre for International Agriculture Research (ACIAR) provides assistance in the agriculture, forestry and fisheries sector. Currently ACIAR projects in Fiji include floriculture development, pearl aquaculture, value added coconut wood products, management of soil borne diseases in ginger and improving soil health for vegetable production, developing commercial breadfruit production and value chain/supply chain work with papaya and sweet potato. IFAD, drawing on experience through an earlier

implemented Mainstreaming of Rural Innovations program (MORDI) will implement a project to help smallholder farmers in highland communities in the central area of Viti Levu improve incomes by improving consistency of production and marketing of high value crops and strengthening partnerships and linkages between growers and buyers. In the fisheries sector FFA are providing technical assistance to strengthen Fiji's offshore fisheries monitoring, control and surveillance capacity and to finalize the Ecosystems Approach to fisheries management and include this in the Tuna Management and Development Plan. FFA also supports review and drafting of fisheries legislation and regulations.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.5 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthened policy, legal, regulatory and strategic frameworks for sustainable agriculture, forestry and fisheries development; (ii) increased production, productivity and resilience of crop and livestock systems; (iii) improved marketing systems and market access for livestock, traditional food crops and high value specialty commodities and (iv) sustainably managed terrestrial, freshwater and marine resources. Support to outcome 1 has focused on strengthening data and capacity for policy analysis and planning. FAO technical assistance helped Fiji implement the Agriculture Census in 2009 and prepare the Census Report. Building on this, technical assistance has been approved to strengthen capacity for formulation of an agriculture sector policy framework. Further support to evidence-based policy and strategic planning was through participation in a sub-regional agriculture for growth study where a case study of the 'Natures Way Cooperative' and the High Temperature Forced Air (HTFA) quarantine treatment facility elaborated lessons learned. A study was also supported which assessed opportunities and requirements to replicate the experience of the Tutu Rural training Centre. Technical assistance has also been provided to review Fiji's food inspection services. Under outcome 2 FAO has provided technical assistance to provide guidance on the development of a dynamic, stable and market responsive rice production system which included recommendations for enhancing productivity and strengthening institutional arrangements. FAO also is supporting a government planned flatland development in Cakaudrove Province to allow utilization of fertile flatlands which suffer from water-logging and inundation. About 200 farmer households with a total population of 2,000 at the 5 project sites will directly benefit from this land-drainage development.

4.6 Under the EU funded All ACP Agriculture Commodities Program (EU/AAACP) FAO provided support which contributed to outcomes 1 and 3. This included support for strategic planning in the fruit and vegetable sector and for building capacity in value chain analysis which helped identify critical constraints to linking commodity dependent smallholders through farmers' organizations to markets. Further technical assistance under this program worked to strengthen producer-buyer linkages. The key component of this work was to improve the 'Fiji Red' papaya export supply chain. The work directly resulted in a significantly improved relationship between farmers and exporters by providing information that accurately reflects the costs and returns of each other's business. Training materials were also developed and the preparation of simple gross margins for growing and exporting papaya was a first for the industry and was successful at highlighting many of the 'hidden costs' in the papaya business. Under outcome 4 the GEFPAS-FPAM – Forestry and Protected Area Management project is being implemented by FAO and activities will continue as a priority under the CPF 2013-2017. FAO also has provided emergency assistance to support the recovery of agriculture livelihoods following Cyclone Tomas in 2010.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus areas for the CPF 2013-2017 will be on food and income security resilient to the impacts of natural disasters and climate change and protecting and enhancing the natural resource base. Support will be delivered under the following four priority outcomes:

1) Strengthened policy, legislative, regulatory and strategic planning frameworks.
2) Enhanced capacity of rural communities for increased production and productivity of safe local food and for simple food processing/value adding operations.
3) Enhanced biodiversity conservation via and integrated system of protected areas.
4) Improved hydrological balances through reforestation, improved land management and livestock waste management.

Strengthened policy, legislative, regulatory and strategic planning frameworks.

5.2 Improving performance and sustainability of the broad agriculture sector will require clear sector policy and strategies based on credible evidence and which clarify the roles of government, private sector and civil society. Improving institutional capacity for data collection, analysis and evidence-based policy formation will therefore remain a priority for FAO assistance to the agriculture, forestry and fisheries sectors. Assistance may also be provided to build capacity for studies, reviews and surveys which inform and enhance strategic planning and help guide implementation of policy.

Enhanced capacity of rural communities for increased production and productivity of safe local food and for simple food processing/value adding operations.

5.3 With rising levels of poverty, particularly in rural areas, and an increasing reliance on imported food government recognizes the need to strengthen the capacity of smallholder farmers for local food production and to increase productivity and improve quality in order to meet domestic, tourist and international market demands. Working together with farmer groups and organizations, NGOs and other Civil Society Organizations the government aims to promote the '*Farmer Field School* ' approach to building capacity particularly for young farmers. FAO has global experience in implementing Farmer Field Schools and is therefore well placed to provide technical assistance to further develop this approach in Fiji. A fundamental to increasing agricultural productivity is good soil husbandry which includes maintaining or increasing soil organic matter to build biological activity and increase plant nutrient levels. FAO may provide technical assistance to enhance capacity for developing organic soil amendments and compost from locally available waste materials.

5.4 Additional opportunities to strengthen food security and incomes for rural communities stem from simple food processing and value adding operations. Fiji has already developed models for successful small scale community food processing which have proved viable and a profitable activity particularly for women in rural communities to improve their incomes. There is need now to expand further this simple value adding operations to other village communities and to diversify by utilizing additional crops and developing new product ranges. FAO will provide technical assistance, training and capacity building to assist rural communities to develop and promote technologies for simple food processing to develop value added products which have good market demand.

Enhanced biodiversity conservation via an integrated system of protected areas.

5.5 Fiji signed the Convention on Biological Diversity (CBD) in 1992, and pledged their support to halt the continuing decline in global biodiversity. Subsequently they have prepared a National Biodiversity Strategy and Action Plan (NBSAP 2003) in line with the requirements of Article 6 of the CBD. Fiji fully recognizes the need to protect its valuable and unique biodiversity and the importance of community involvement in this process. Biodiversity promotes ecosystem services important amongst which are: food production, provision of raw materials, recreational opportunities and cultural values. In 1994, the total estimated value of Fiji's ecosystem services was F$ 973 million, over 42% of the GDP[17]. Through GEF-PAS funds, FAO will continue to

[17] National Biodiversity Strategy and Action Plan – Fiji Islands - , Ministry for Labour, Industrial Relations, Tourism and Environment, 2007.

support the government of Fiji to implement a project for conserving Fiji's biodiversity via an integrated system of protected areas (PAs). The main output areas will be: strengthened policy, legal and institutional arrangements for biodiversity conservation and, monitoring and evaluation framework established for PA network expansion; expansion of PA network with adequate financing; strengthened local capacity for community-based biodiversity conservation and sustainable land and forest management; improved local livelihood opportunities through enhanced capacity for marketing of biodiversity goods and services and sustainable land and forest management practices.

5.6 The Ministry of Forestry and Fisheries is undertaking an initiative for reef enrichment which encapsulates the holistic approach to sustainable fisheries management and is an extension of the 1 Million Tree Campaign which was recently successfully executed by the Ministry. Together, the two initiatives emphasize the Ridge to Reef concept of sustainable managing ecologically linked ecosystems. FAO could provide technical assistance, training and capacity building to enhance the reef enrichment project and further work programs in this area.

Improved hydrological balances through reforestation, improved land management and livestock waste management.

5.7 Fiji has suffered from droughts and flooding which have been exacerbated by land degradation, unsustainable farming practices and deforestation. Particular problems have been experienced in the Western District where land has been deforested for farming activities which have negatively impacted watershed areas. FAO is assisting selected ACP countries including Fiji to prepare a project for ACP-EU funding to address desertification for sustainable livelihoods and productive landscapes. Dependant on the approval of funding by the EU, FAO will support Fiji build capacity for sustainable land management and reforestation in the Nadi Water Catchment Basin. One of the key interventions is to reforest and address the hydrological imbalances impacting farms and developments in the area.

5.7 The issue of waste management has never been factored into any farming system in Fiji. Whilst agriculture has evolved from traditional subsistence farming systems to commercial intensive systems, the technology of waste disposal has not kept pace and so the large increase in production of both crops and livestock continues to dump its waste on wasteland and waterways. This has now become an environment problem. Dairies and piggeries are two intensive livestock production systems which generate a lot of waste. Of the 220 dairy farms in the central division only two have some form of environment friendly waste disposal system and of the 524 piggeries only eight practice waste management. FAO may provide technical assistance and capacity building to improve and develop viable sustainable livestock waste management practices.

CPF Priority Matrix Fiji

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Food and income security resilient to the impacts of natural disasters and climate change	Fiji Roadmap for Democracy and Sustainable Socio-economic Development 2012-2014. Under economic development key strategies include export promotion, sugar industry reform and import substitution which includes a focus on value addition, increased self-sufficiency, food security and reduced imports.	Fostering agricultural production and rural development	UNDAF Outcome 3.1:Inclusive economic growth is enhanced, poverty is reduced, sustainable employment is improved, livelihood opportunities and food security are expanded for women, youth and vulnerable groups, and social safety nets are enhanced for all citizens	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific MDG 1
CPF Priority Area B: Protecting and enhancing the natural resource base	Fiji Roadmap for Democracy and Sustainable Socio-economic Development 2012-2014Chapter 4.1.12 and 4.1.14)	Enhancing equitable, productive and sustainable natural resource management and utilization	UNDAF Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management	Pacific Plan Goal of Sustainable Development Convention on Biological Diversity Hyogo Framework for Action 2005-2015 MDG 7

CPF Results Matrix Fiji

Priority Area A: Food and income security resilient to the impacts of natural disasters and climate change

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: **Strengthened policy, legislative, regulatory and strategic planning frameworks**	Consistent and coherent policy, legal and regulatory frameworks for the broad agriculture sector in place by end 2016	Cabinet endorsed Forest & Fisheries Policy	Close collaboration with SPC programs	**571,000**
Output 1.1: Strengthened capacity to develop an Agriculture Policy	Draft Agriculture Policy available by end 2013	Gazetted Agriculture Policy	Good participation by stakeholders and government commitment	65,000
Output 1.1: Strengthened capacity to develop a Fisheries Policy Framework	Draft National Fisheries Policy available by end 2013	Gazetted Fisheries Policy	Good participation by stakeholders and government commitment	80,000
Output 1.2: Strengthened capacity to review and develop a participatory longer-term forest plantation sector policy/strategy	Draft forest plantation sector policy/strategy available by end 2014	Endorsed Forest Plantation Sector Policy/Strategy	Good participation by stakeholders and land resource owners	60,000
Output 1.3: Technical assistance to investigate opportunities and feasibility for agriculture/crop insurance in the face of natural disasters	Study report available by end 2014	Study Report MPI files		50,000
Output 1.4: Strengthened capacity to implement a nationwide avifauna disease survey	Up-to-date avifauna disease survey report available by end 2015 Last disease survey which covered only one disease, Newcastle Disease in 2001	Published Survey Report		300,000
Output 1.5: TA to develop a Codex Strategic Plan	Strategic Plan available by end 2013	MAPI Plans		16,000
Outcome 2: Enhanced capacity of rural communities for increased production and productivity of safe local food and for simple food processing/ value adding operations	Food Production Index			**650,000**
Output 2.1: The **'***Farmer Field School Approach***'** to enhance safe local food production extended	Farmer Field School Operating successfully in two targeted areas by 2016. Number of farmers (disaggregated by gender and age) benefiting from FFS training. Target 200 (at least 50% women and at least 75% under 30 years of age) by 2017	MAPI Extension reports	Farmer participation in schools	300,000
Output 2.2: Increased capacity of rural communities to process and market local food produce	Three equipped village food processing training centres established within existing community centres by 2016 Training extended through Success Case Replication, to around 200 farming community families by 2017	MAPI and FAO project reports	Good community participation	300,000
Output 2.3: Strengthened capacity to produce organic fertilizers/ compost	Appropriate compost mixes identified and being used by end 2016	MAPI reports		50,000

Priority Area B: Protecting and enhancing the natural resource base

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: **Enhanced biodiversity conservation via an integrated system of protected areas and through reef enrichment.**	Increased number of terrestrial and marine areas and critical ecosystems and species protected Number of species threatened with extinction decreased			**3,956,000**
Output 1.1: Strengthened policy, legal and institutional arrangements for biodiversity conservation and , monitoring and evaluation framework established for PA network expansion	1. Legal and policy and decision making Gaps identified. 2. Agreed response to gap analysis. 3. Protected Area legislation formalized 4. 200 government officials and relevant stakeholders trained for implementation and enforcement 5. Continual improvement of legal, policy and community based decision making frameworks.	Policies and legislation endorsed, training reports, analysis	Broad political support	522.000
Output 1.2: Component 2: Extending and consolidating the Protected Area Network	1. One existing Protected Area given formal legal protection and nationally recognised. 2. Baseline data collected, analysed and used to formulate management plans. 3 Two new Protected Areas given formal legal protection and nationally recognised. 4. Baseline data collected, analysed and used to formulate management plans. 5. Management arrangements for three PAs established and operating. 6. Minimum of 60 landowners in each PA trained in PA management and implementing high-priority activities.	Gazettement of Protected Areas. Baseline data reports. Management plans. Training reports and participants' feedback	Adequate law enforcement, Landowner's agreement to set aside area for conservation purpose	716.000
Output 1.3 Capacity building in biodiversity conservation and sustainable land management.	1. Minimum of 50 government and NGO staff trained in biodiversity assessment, threat identification and monitoring. 2. Regular surveys of biodiversity in all PAs implemented, recorded and reported. 3. Monitoring and Evaluation system in place for biodiversity and used for international reporting, policy formulation and identification and develop 4. Training materials for Protected Area management produced for long-term use. 5. Minimum of 50 government and NGO staff trained in Protected Area management. 6. Awareness and understanding of Protected Areas increased through seminars, reaching a minimum of 100 relevant national and local government staff. 7. Education materials about biodiversity conservation produced, disseminated and used in every secondary school in Fiji. 8. News/documentary item about biodiversity conservation on local television/radio stations at least four times per year. 9. At least one interpretative facility installed and maintained at each of the five PAs. 10. Increased political and community support for long-term management and expansion of Protected Area system	Training and survey reports. International reporting and M & E system in place for Protected Areas	Adequate support and implementation capacity from Government	1.012.000

Output 1.4: Mechanisms for sustainable PA financing developed and implemented	1. Strategic plan for financing long-term PA management activities. 2. Minimum of 30 stakeholders (government and NGO staff) trained in PA financing. 3. Marketing package for fundraising development. 4. Protected Area funding obtained from at least one new source in final year of project. 5. Policy framework for PES developed. 6. Minimum of 30 stakeholders (government and NGO staff) trained in resource valuation and PES. 7. Three small-scale PES schemes pilot-tested and evaluated. 8. Sovi Basin Trust Fund operational and sustainable. 9. Management of Sovi Basin PA fully funded from Trust Fund.	Strategic financing plan, training report, audit report, policy for PES, reports about Sovi basin trust fund	Adequate support and implementation capacity from Government, willingness to participate in training	980.000
Output 1. 5: Sustainable use of biodiversity to support income generation for communities from eco-tourism and non-wood products	1. Three small-scale eco-cultural tourism developments initiated and operating successfully. 2. Local income from eco-cultural tourism increased by end of project, with a share of revenue devoted to covering PA management costs. 3. Policy on NT and NWFPs and bio-prospecting in protected areas.	FPAM project reports	Adequate markets for tourism and non-wood products	328.000
Output 1.6: Sustainable land management in forest margins to support and implement tikina based land-use planning and management.	1. Enhanced capacity for tikina based land management systems in Fiji. 2. Agricultural extension workers trained in crop suitability and farm budgeting and using soil manual in their daily activities.	Soil resource interpretive manual, training reports and evaluations	Support from Government, landowners and communities	148.000
Output 1.7: Strengthened capacity for aquaculture production for reef enrichment				250,000
Outcome 2:Improved hydrological balances through reforestation, improved land management and livestock waste management				1,150,000
Output 2.1: Enhanced capacity to develop improved management systems for livestock waste to reduce pollution of waterways	Two prototype model farm biogas digesters successfully operating by 2015 Number of farmers trained in waste management technology by 2017 target: tbc	MAPI reports	Good farmer participation	150,000
Output 2.2: Increased capacity for reforestation and improved land management in critical watersheds			EU ACP funding secured	1,000000

CPF Action Plan

Action Plan: Fiji	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Food and income security resilient to the impacts of natural disasters and climate change																
Outcome 1: Strengthened policy, legislative, regulatory and strategic planning frameworks																
Output 1.1: Agriculture Policy	TCPF 2012										SAP PO SAP FNO	Fiji Gov MAPI	65	TCPF 65		
Output 1.1: Fisheries Policy											SAP FO SAP PO	Fiji Gov Min F&F FFA; SPC	80	80		
Output 1.2: Forest Plantation Sector Policy											SAP ForO	Fiji Gov Min F&F SPC	60	60		
Output 1.3: Feasibility study agriculture/crop insurance											SAP PO	Fiji Gov. MAPI	50	50		
Output 1.4: Avifauna disease survey											SAP PPO	Fiji Gov MAPI	300	300		
Output 1.5 Codex Strategic Plan											SAP FNO	Fiji Gov MAPI	16,000	16,000		
Outcome 2: Enhanced capacity of rural communities for increased production and productivity of safe local food and for simple food processing/ value adding operations																
Output 2.1: Farmer Field School Approach promulgated											SAP PPO SAP FNO	Fiji Gov MAPI SPC	300	300		
Output 2.2:Capacity to process and market local food produce											SAP FNO	Fiji Gov MAPI NGO	300	300		
Output 2.3: capacity to produce organic fertilizer/ compost											SAP PPO	Fiji Gov MAPI	50	50		

Year	2013		2014		2015		2016		2017							
Priority Area B: Protecting and enhancing the natural resource base																
Output 1.1: strengthened policy, legal, institutions and M&E											CTA GEFPAS/ SAP ForO	Fiji Gov Dep Env Min F&F	522		GEF 522	
Output 1.2: Extending and consolidating PAs											CTA GEFPAS/ SAP ForO	Fiji Gov Dep Env Min F&F	716		716	
Output 1.3: capacity in biodiversity conservation and SLMs											CTA GEFPAS/ SAP ForO	Fiji Gov Dep Env Min F&F	1,012		1,012	
Output 1.4: mechanisms for sustainable PA financing											CTA GEFPAS/ SAP ForO	Fiji Gov Dep Env Min F&F	980		980	
Output 1.5: sustainable use of biodiversity to support income generation											CTA GEFPAS/ SAP ForO	Fiji Gov Dep Env Min F&F	328		328	
Output 1.6: SLM in forest margins											CTA GEFPAS/ SAP ForO	Fiji Gov Dep Env Min F&F	148		148	
Output 1.7: capacity for aquaculture and reef enrichment											SAP FO	Fiji Gov Min F&F	250			250
Outcome 2: Improved hydrological balances through reforestation, improved land management and livestock waste management																
Output 2.1: management systems for livestock waste											RAP LO		150	150		
Output2.2: capacity for reforestation and land management in critical watersheds													1,000		EU/ ACP 1,000	1,000
Resource Mobilization	3,777	430	310	1,450			350						**6,327**	**1,371**	**3,706**	**1,250**

Kiribati

I. Country Summary

Land Area (km^2): 810	Sea Area/EEZ (million km^2): 3.6
Population (No.): 102,697 (SPC mid-year estimate 2011)	Annual Growth (%): 1.8%
Average Density (inhabitants/km^2):127 South Tarawa 2,588/ km^2	Rural Population (% of total population): 56
GDP (A$ million): 154.3m (2010) US$168.2m	GDP per caput (A$): 1499 (2010) US$1634
GDP Real Growth (ave.2004-2010):-0.71% per annum	Agriculture GDP (% of total GDP): 24.3% (2010)
Trade Balance -US$68,091,743 (Exports as % of imports 7.1%; imports as % GDP-51.9 % (2010)	Food as a % of total imports 31.6 % (2007)
Budget Expenditure Agriculture & Fisheries(2010) A$ 1.80 m % of Total Budget Expenditure 2.1 %	Human Development Index (2011): 0.624 – medium human development category – 122 out of 187 countries

Sources: Kiribati National Statistics Office; ADB Key Indicators for Asia and Pacific 2011

II. Situation Analysis and Agriculture Sector Overview

2.1 Kiribati is as an atoll nation with 33 island spread over some 3.5 million square kilometres of the Pacific Ocean. The distance between the eastern and western extremes of the EEZ is over 4, 500 km. The nation is facing numerous economic, social, demographic and environmental challenges, but the greatest challenge is the tyranny of distance. The country has limited natural resources and, for those natural resources it does possess (e.g. fisheries), insufficient capacity to exploit them for maximum national benefit. GDP per capita is near the lowest in the Pacific Island Forum group and the economic outlook is fragile. With limited exports and rising costs of imports the country runs a deep trade deficit[18]. The heavy dependence on imported staple foods (such as rice and flour), coupled with high global food prices poses a serious threat to food and nutrition security. Average annual household income in 2006 was about A$8,700 with an estimated 46 per cent being spent on food, which constitutes the single largest expenditure group[19]. While absolute poverty is rare, about one fifth of the population lives below the national poverty line, particularly in the outer islands and parts of the main urban settlements in Tarawa.

2.2 Increased urbanization on South Tarawa due to migration of population from the outer islands is accentuating social issues and environmental problems. The population density in South Tarawa, at 2,558/km in the 2005 census, was about 20 times the national average of 127. A high priority for government therefore is to provide sustainable livelihood opportunities on the outer islands. None of the inhabited atolls in Kiribati lie more than a few meters above sea level, and the effects of rising sea-levels and associated soil salination is reducing the amount of arable land

[18] Currently deficits in trade and services are substantially offset by external earnings from the Revenue Equalization Reserve Fund (RERF), fishing license fees, remittances and donor assistance.
[19] Household Income and Expenditure Survey (HEIS) 2006 Report, Kiribati National Statistics Office.

and beginning to threaten already limited water supplies. The underground freshwater lens is the major source of water if the atolls are large enough. Where there is underground water it is in danger of contamination with brackish water if overexploited or is already brackish. Water management is a particular area of concern given the strong effect of the El-Nino Southern Oscillations (ENSO) on water shortages and salt-water intrusion. Harvesting rainfall is an important option for both domestic and agricultural use. Competitive use of water by different sectors (crops, animals and human) is putting great pressure on the limited water available in the atolls and clear strategy for efficient water use in agriculture is needed. As a low-lying atoll nation, climate change adaptation and disaster risk reduction is being mainstreamed into national development processes through a series of legislative, policy and program initiatives.

2.3 Economic growth has averaged around 1.1% over the last ten years, but has been highly volatile ranging from -5% to 6%. Kiribati's growth prospects are constrained by its geographic isolation and high transport costs, its narrow export base, and impediments to private sector activity. External income sources which include investment earnings from the Revenue Equalization Reserve Fund (RERF), workers' remittances and sale of fishing licenses constitute about 50% of GDP whilst development assistance makes up a further 20-25% (World Bank). Public sector expenditure drives the economy and provides two-thirds of formal sector employment. The global financial crisis has impacted Kiribati through the reduced market value of the RERF, exchange rate shifts in the Australian dollar (the currency of Kiribati) against the US dollar (in which much external revenue is received), reduced remittances, and high inflation (ADB). Analysis of the 2006 HIES indicated that one household in five and almost one person in four may live below the basic needs poverty line. High household debt is also evident such that many households struggle on a daily basis to meet their basic living expenses. Considering the large ongoing role of Government in the economy efficient and sustainable management of government finances is vital as is expanding economic opportunities for a young and growing population.

2.4 Agriculture and fisheries remain vital for food security, sustainable livelihoods and present opportunities for national economic growth. Agriculture and fisheries development, particularly for the outer islands, are emphasized as priorities in the Kiribati Development Plan (KDP) 2012-2015. An overall strategic objective for the development of the agriculture sector is to maximize sustainable agricultural production to enable the Kiribati people to have: adequate food, a generally healthy diet and increased cash income. However, agricultural conditions are extremely difficult in Kiribati because of poor soil conditions and scarce fresh water on the atoll islands. Even islands with relatively high rainfall suffer from frequent drought conditions because of the porosity and thin layer of the soil. A central focus of the agriculture department is to increase availability of planting materials and improve soil management through organic amendments to increase production and productivity of traditional staple crops and for the development of home gardens to produce nutritious vegetables and fruits. However, the small land area and poor soil result in limited agriculture production. There is, therefore, a great reliance on marine resources for livelihoods, government revenue, and especially nutrition. By several estimates, Kiribati has the highest per capita consumption of fish of any country in the world.

2.5 Copra and coconut crude oil remain the principal agricultural export commodities along with sea weed, fish and shark fins, all of which are vulnerable to weather conditions or international price movements. The atolls are widely planted with coconut trees, but copra export value had fallen from around A$9 million in 1999 to A$769 thousand in 2007. However, processing to crude oil commenced in 2004 and oil exports had reached a value of A$5.3 million by 2007 constituting 51% of total exports. The coconut is still considered the "tree of life" with good potential to produce multiple valuable products both for food security and income generation. However, an estimated 40 per cent of the coconut population is senile, therefore rehabilitation and replanting of coconut plantations is a high government priority. Coconut value chain development is now the strategic objective, but because of the current vital importance of copra for livelihoods

on the outer islands the government continues to maintain a copra price subsidy scheme, but this is considered an inefficient way to protect rural incomes and imposes substantial fiscal costs.

2.6 Livestock production in the country is mainly at subsistence level, with pigs and free-range chicken being the main livestock kept. Most households at the outer islands keep a few pigs and a number of local chickens. Opportunities for import substitution through improved livestock management and production is a key strategic objective for the agriculture department. A decisive factor determining increased livestock production is the cost of animal feed since such feed has to be imported. Further experimentation with local feed materials and appropriate animal breeds is warranted. Improvement of local breed of pigs and chicken through breeding and introduction of improved breeds through artificial insemination is a priority. However, recognizing the scarcity of fresh water supply and the vulnerability of groundwater to pollution environmentally sound pig rearing practices need to be developed.

2.7 The importance of marine resources to the Kiribati economy cannot be overestimated. It is the sector with the greatest potential for providing income earning opportunities to people in the outer islands and enhancing the sustainable development of the fisheries sector is therefore given high priority. Currently license fees and transshipments represent the main economic activities. However, marine resources are vital also for food security and livelihoods and the Kiribati Government therefore puts strong emphasis on community-based sustainable management of fisheries resources.

2.8 The marine fisheries have two very distinct components, offshore and coastal. Offshore fisheries are undertaken on an industrial scale by foreign-based purse seine, longline, and pole-and-line vessels. Domestic fishery in this area is sporadic and very limited. Coastal fishing is primarily carried out for subsistence purposes and for sales in local markets. In addition, there are some coastal fisheries that are export oriented mainly aquarium fish and beche de mer. The government has several strategies to increase the national fish supply. These involve supporting the marketing of fishery products in Tarawa from other parts of the country by refrigeration and transport schemes, promoting aquaculture, and discouraging foreign tuna fishing close to the islands of Kiribati. Major factors affecting the local supply of fish are overfishing, transport links to the outer islands, the degree of domestic tuna industry development, and “leakage” from foreign industrial tuna vessels (FAO, 2011).

2.9 There has been increasing small-scale commercial landings of fish outside of Tarawa in recent years due to increasing ice production in the outer islands. However, difficulties of transferring fish economically from the outer islands (where stocks are abundant and cash income is badly needed) to South Tarawa where the bulk of the population reside remains a significant challenge. Consequently, continued exploitation of the inshore resource close to urban markets in South Tarawa coupled with the generally weak nature of coastal fishery management measures is threatening sustainability of fish supplies for the urban population. Improving the sustainability of inshore fishery resources through more active management and boosting mariculture food-fish (particularly milkfish) production are important priorities. The Ministry of Fisheries and Marine Resources Development is also working closely with Island Councils on establishing marine managed areas to address the issue of declining marine resources such as giant clam, sea cucumber, and shellfish species. Further developments in marine protected areas will emphasis coastal and near-coast land and seascapes, also addressing the interface between community livelihoods and the related resources they rely on. A major thrust will be an integrated approach to coastal fisheries management that involves appropriate agencies of the government as well as the communities at large. The conservation and sustainable use of biodiversity and the maintenance of the fragile atoll ecosystem goods and services will be the overall goal.

2.10 The formulation of the National Integrated Environment Policy (NIEP) within the Ministry of Environment, Lands and Agriculture Development (MELAD) towards the end of 2010, provides a comprehensive roadmap towards addressing national priority problems that affect the overall

health of the environment as well as affecting the environment protection and management at the national level. Biodiversity on the atolls is narrow and any loss of traditional food plants threatens food security. There is no significant forestland on the atolls, but landowners are being encouraged to grow vegetable crops between coconuts and to replant pandanus and breadfruit. Mangrove replanting for coastal protection is also an important activity. Reforestation is being pursued on Kiritimati the largest atoll. As a signatory to the United Nations Convention on Biodiversity, the Government of Kiribati actively seeks to fulfill its commitments. An important and high profile development in this area is the establishment of the Phoenix Islands Protected Area, which is one of the largest marine protected areas and a World heritage Site.

III. Key issues shaping priorities for FAO assistance

- High and volatile food and oil prices and a deep trade balance deficit.
- High dependency on imported foods
- Rapidly increasing levels of food and nutrition related non communicable diseases, which impact negatively on health system, families and national economy.
- Lack of good agriculture data for sector planning and monitoring food security.
- Lack of a cross-sector integrated food security policy framework.
- Limited livelihood options particularly for outer islands.
- Limited human resource capacity for sector development.
- Limited capacity for staple food crop and livestock production.
- Limited water supply for competing demands between domestic and agricultural uses.
- Need to replant coconut and sustainably develop value added industries.
- Vulnerability of coastal fisheries to overfishing and environmental degradation
- Vulnerability to adverse impacts of Climate Change and Sea level Rise

IV. Country Program Context

4.1 The Kiribati Development Plan (KDP) 2012-2015 with the theme of "*Enhancing aid effectiveness to support economic growth"* identifies six key policy areas for development: human resource development; economic growth and poverty reduction; health; environment; governance; and infrastructure. Individual line Ministries' strategies are aligned towards these key policy areas. Outcome 3 under Key Policy Area Environment is improved food security and strategies include: increase number of coconut trees and other food crops; improve livestock facilities and breeds; promote research on best agricultural practices including food crop varieties that withstand impacts of climate change; strengthen biosecurity and pest control; promote traditional preservation and processing methods; and protect water quality and quantity. Kiribati is highly vulnerable to extreme events, especially coastal flooding from storm surges and droughts. Government has prepared a National Adaptation Program of Action on Climate Change (2007) and implementation is being supported by World Bank (GEF), Australia and New Zealand.

4.2 Taiwan province of China provides significant bilateral support to Kiribati focused by government requests for assistance. The program includes support for infrastructure, community development and agriculture. A Taiwan Technical Mission is present in Tarawa which is providing support to horticulture, food processing, livestock and aquaculture (milkfish propagation by providing fingerlings, formula research to develop a cheaper supplemental feed for aquaculture use, and high value saltwater fish rearing techniques). Japan has provided support for infrastructure with an emphasis on fisheries. SPC/IFAD in cooperation with the department of agriculture has supported the development of an "Atoll Centre of Excellence" to undertake agricultural research and development. ACIAR are supporting research into soil management to improve vegetable production. UNICEF and WHO have provided support for awareness activities on healthy and nutritious diets and WHO has also assisted with development of food safety legislation and regulations. SPC is providing support for development of an agriculture sector

plan. New Zealand has recently agreed to progress the design of a Kiribati Fisheries Training Program to redevelop the Fisheries Training Centre in Tarawa.

4.3 The core focus of an increasing World Bank Group involvement with Kiribati will be to support adaptation measures that respond to Kiribati's extreme vulnerability to climate change and climate related natural disasters. Managing groundwater reserves, sustaining freshwater lenses, improving rainwater collection, and developing new sources of water (either from desalination, treatment of water from contaminated lenses, or piped from North Tarawa) will be especially important. The Bank proposes to work closely with partners and the Government to help coordinate a comprehensive approach to climate change adaptation on the main population centre of South Tarawa. This builds on earlier support through the Kiribati Adaptation Project (KAP), currently in its third phase, to fully integrate climate adaptation into development planning efforts with financing from the Global Environment Facility and the Australian and New Zealand Governments.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012.

4.4 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthened policy, legal and regulatory frameworks for sustainable agriculture and fisheries development; (ii) increased production, productivity and resilience of crop and livestock systems suitable for atoll conditions; (iii) a strengthened and diversified copra industry, and (iv) sustainably developed aquaculture, inshore fisheries and value added products. Support to outcome 1 has focused on strengthening data and capacity for policy analysis and planning through assistance to strengthen capacity to analyze market data. This work helped demonstrate the importance of developing and maintaining systems of domestic market data collection and use, and also the value of good data for improved decision making. Going forward, the constraint of the absence of good agriculture data collection, systematization and analysis in Kiribati to improve planning and monitoring for food security has been identified as a priority. Other support to strategic planning came from a review of aquaculture/mariculture which identified lessons learned and made recommendations on future developments. Support has also been provided for FAO attachment training of a key fisheries policy staff member and for development of a Project Identification Form for possible GEF funding to enhance integrated coastal resources management. Ongoing training support has also been provided in the area of food safety and Codex capacity building.

4.5 Under outcome 3 ongoing assistance is being provided for sustainable development of senile coconut palms. This support is promoting coconut timber milling by building Kiribati's capacity in a range of technical and policy areas. Through creating an enabling environment the aim is that local I-Kiribati will ultimately be encouraged to invest in small scale coconut timber milling, in a market environment wherein coconut timber is well accepted and in high demand as a quality substitute for home construction. Support for coconut sector development will remain a priority through this CPF period.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus area for the CPF 2013-2017 will be on food and nutrition security resilient to the impacts of disasters and climate change. Support will be delivered under the following three priority outcomes:

1) Strengthened national capacity for evidence-based policies and strategies to enhance food and nutrition security.
2) Increased availability, access and utilization of local food.
3) Strengthened capacity for environmental management and resilience (including disaster preparedness, emergency response and climate change).

Strengthened national capacity for evidence-based policies and strategies to enhance food and nutrition security

5.2 **A**griculture and fisheries constitute the mainstay of the everyday life of the I-Kiribati people and this should be fully reflected in the national development framework if Kiribati is to attain a high level of food security. As a first step, the national policy framework needs to be strengthened to clearly define what food security issues are, who are the key stakeholders and what are the cross sector institutional roles, and to set clear goals, targets, outputs, and activities. For effective planning and policy formulation and to monitor implementation improvements are critically needed for data collection, systematization and analysis. The general unavailability of data on the sector means that impacts of policy interventions aimed at improving levels of food security, and agriculture based development more broadly, are poorly understood and that policy is generally based on perception rather than evidence. There is no record of an agricultural census having been conducted in Kiribati and the main official source of agriculture data is that collected during the national Population Census conducted by the Kiribati Statistics Office. The agriculture division of the MELAD has relatively limited capacity and resources to collect agriculture data, but shows great interest and enthusiasm for doing this. They clearly recognize the need for good data for planning and monitoring and they are in the process of establishing dedicated staff and computer resources to store and manage what data they have. Their most significant undertaking is a national outer island survey (the Agriculture Survey Baseline 2010). The survey has been collecting information on crops grown and livestock kept with a total enumeration of all households. However technical assistance is required to collate, systematize and analyze the agriculture data available from various sources. FAO will focus technical assistance to support a strengthened policy framework for sustainable agriculture and fisheries development to enhance food security and nutrition security including the preparation of a credible Food Balance Sheet.

Increased availability, access and utilization of local food.

5.3 The atoll environment is one of the most challenging for crop and livestock production. Poor soils, scarcity of the water resource, and vulnerability to environmental degradation and impacts of climate change limit options to increase production. Nevertheless, rapidly increasing population density in urban areas, high international fuel and oil prices and deteriorating diets, make it imperative that the level of self-sufficiency in food production is improved. Furthermore, opportunities exist to improve livelihoods (particularly on outer islands) through improved agriculture (including livestock) and fisheries productivity. A thriving coconut industry remains vital for rural livelihoods and the economy. The sector needs to be restructured and revitalized with a stronger focus on whole nut processing and value added products. Extensive replanting is now required and a community-based approach to this needs to be encouraged and facilitated. FAO will provide resources and technical assistance to strengthen traditional food production systems and services to the sector. Particular attention will be accorded to Kiribati's inclement soil environment, water scarcity and the country's vulnerability to the impacts of climate change and sea level rise. Recognizing the strong demand for foodfish, particularly in urban areas, support could be provided to build capacity for community-based mariculture and improved management of inshore fisheries.

Strengthened capacity for environmental management and resilience (including disaster preparedness, emergency response and climate change.

5.4 Sustainable development of the marine resource offers the greatest potential for economic growth, sustainable livelihoods and food security in Kiribati. Kiribati has already established with GEF support one of the largest marine protected areas in the world, the Phoenix Islands Protected Area, comprising more than 184,000 sq km. While that initiative uses an integrated approach to conservation and sustainable development for atoll restoration, coastal/offshore/open-ocean/deep-sea fisheries conservation management, emphasis is also needed for coastal and near-coast land and seascapes which also addresses the interface between community livelihoods and the related resources they rely on. The geographic and population characteristics of Kiribati are increasingly contributing to pressures on coastal land and inshore biodiversity. These have placed stresses on

coral reefs that protect shorelines from erosion, and which provide habitats for fish and invertebrates. These threats include increased selective fishing effort, sewage pollution from increasing human population, and toxic outbreaks. Mangroves are also subject to human pressures as above, including harvesting for various human purposes and which also contribute to coastal erosion. In addition to over-harvesting, increased sedimentation, increased sea temperatures, increased erosion from climate impacts, will add to the human pressures including for example dredging and nutrient pollution. FAO technical assistance could be provided to help prepare and implement a possible GEF financed project on integrated coastal resources management.

CPF Results Priority Matrix Kiribati

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Food and nutrition security resilient to the impacts of disasters and climate change	KDP 2012-20 Key Priority Area 4: Environment –To facilitate sustainable development by mitigating the effects of climate change through approaches that protect biodiversity and support the reduction of environmental degradation by the year 2015;KPA4 Core Issue 4.3 Food Security, Output 4.3.1: Increased number of high yield and productive food crops and livestock production	Strengthening food and nutrition security; Coping with impact of climate change on agriculture and food and nutrition security	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens .Kiribati UNDAF Results Matrix Output 3.1.4 – Strengthened national capacity for evidence-based policies and strategies to reduce poverty and disparities and improve social safety net; Output 3.1.5 - Improved food security including increased local food cultivation and supply.	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific Hyogo Framework for Action 2005-2015 MDG 1 MDG7

CPF Results Matrix Kiribati

Priority Area A: Food and nutrition security resilient to impacts of disasters and climate change

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Strengthened national capacity for evidence-based policies and strategies to enhance food and nutrition security	Reliable data available on food supply and utilization available by 2015 Study recommendations for post harvest handling and marketing of safe local food available by end 2015	Credible Food Balance Sheet published Basic statistics available on local food production (crops, livestock and fisheries) MELAD, MFMR and Statistics Office reports	Full participation of key ministries and stakeholders Good collaboration with SPC support programs	**345,000**
Output 1.1 Strengthened capacity to collect and analyze data (disaggregated by gender, age and geography) on status of food and nutrition security.	Food Balance Sheet(FBS) prepared based on credible data by end 2014 Baseline data available on local food production and marketing by end 2013 Current available agriculture data collated, systematized and analysed by end 2013	Updated Food Balance Sheet (FBS) available by end 2014	Close partnership with SPC programs	100,000
Output 1.2: Strengthened capacity to review and develop an integrated cross-sectoral food security policy framework	Evidence-based food security policy developed and adopted by end 2015	Gazetted policy framework available	High level political support and full participation of key stakeholders	65,000
Output 1.3: Technical assistance to review, design and implement appropriate systems for safe food post-harvest handling, processing and marketing	Study recommendations for post harvest handling and marketing of safe local food available by end 2015	Study Reports		50,000
Output 1.4: Strengthened capacity to implement effective safe food control systems	Number of trainings in Codex based food standards and risk-based food inspection procedures completed	Training reports		60,000
Output 1.5: Efficient agriculture water-use strategy developed reflecting varying weather conditions and climate change impacts	Agriculture water-use strategy available by end 2015	Published Strategy	Full participation of relevant stakeholders	50,000
Output 1.6:Strengthened capacity to design and prepare project/program proposals for food and nutrition security and resilience to climate change	Three good quality project proposals prepared and submitted for funding by 2016	Project Documents		20,000

Outcome 2: Increased availability, access and utilization of local food	Food % of total imports. Target: 25% by 2017 Baseline: Food & live animals as % of total imports at 30.1% (2005) Food supply and utilization (kcal/cap/day energy, g/cap/day protein and g/cap/day fat. Improvement in relevant health statistics and reduced prevalence of Nutritional disorders % Food Poverty reduced. Baseline: 5.3%	Customs and NSO reports Updated FBS Health Department Statistics HIES/Poverty Analysis report	Good farmer participation Population make nutritious food choices	**1,200,000**
Output 2.1. Strengthened capacity of vulnerable groups in outer islands for local food production (crops including coconut and livestock)	Number of women and vulnerable groups in target areas with increased and diversified local food production activities Number of trainings provided Number of farmers provided with planting materials Expansion of new coconut plantings Targets: TBD at project inception	Community Survey Reports Population Census Report HIES Report MELAD Agriculture Reports	Good community stakeholder participation	400,000
Output 2.2; Soil management and aquaponic technologies appropriate for atoll conditions developed and promoted	Appropriate organic soil management technologies designed and described. Number of trainings on soil management conducted Number of new technologies adopted by farmers Targets: TBD	MELAD Agriculture Reports/publications Atoll Centre of Excellence report	Continued viability of the '*Atoll Centre of Excellence'*	200,000
Output 2.3: Improved sustainable practices for livestock production and waste management systems developed and promoted	Dry litter pig systems integrated with compost making tested by end 2017 Local feed mixes developed, tested, available and used by end 2016	MELAD Livestock Division Reports	Farmers adopting improved technologies Government and development partners commitment	300,000
Output 2.4: Strengthened capacity for community-based mariculture and management of inshore fisheries	Production levels of cultured foodfish improved 10% by end 2015. Inshore fisheries management plans in place by end 2016	MFMR Reports		300,000
Outcome 3: Strengthened capacity for environmental management and resilience (including disaster preparedness, emergency response and climate change)	To be reviewed and TBD by end 2013			**2,000,000**
Output 3.1: Strengthened capacity for sustainable integrated coastal fisheries management	Improved management of marine protected areas and 5 new MPAs established Legislation and regulations developed to support MPA management by end 2017 Government agencies across sectors working in an integrated way for SLM and coastal fisheries management by 2017	MPAs established Legislation and regulations in place Coastal Fisheries Management Plan	GEF funding requested and agreed Effective implementation of management plan	2,000,000

CPF Action Plan

Action Plan: Kiribati	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Food and nutrition security resilient to impacts of disasters and climate change																
Outcome 1: Strengthened national capacity for evidence-based policies and strategies to enhance food and nutrition security																
Output 1.1: collect and analyze data on status of food and nutrition security											RAP SO/ SAP FNO	MELAD KSO SPC	100	100		
Output 1.2: develop food security policy											SAP PO/ SAP FNO	MELAD MoH/ SPC	65	65		
Output 1.3: Review systems for safe food handling											SAP FNO	MELAD MoH/ WHO	50	50		
Output 1.4: training for food control systems											SAP FNO	MoH WHO	60			60
Output 1.5:Water-Use Strategy Developed											SAP PO/ SAP PPO	MELAD SPC /SOPAC	50	50		
Output 1.6: project design support											SAP PO	MELAD	20	20		
Output 2.1: capacity for production of safe local food in outer islands											SAP For O SAP PPO SAP FNO	MELAD	400	400		
Output 2.2: soil management and aquaponics technologies developed											SAP PPO	MELAD PTI SPC ACIAR	200	200		
Output 2.3:improved livestock and waste management practices											RAP LO/ SAP PPO	MELAD SPC	300	300		
Output 2.4:capacity for mariculture& inshore fisheries management											SAP FO	Ministry Fisheries & Mar. Res.	300	300		
Output 3.1: capacity for integrated coastal fisheries management											SAP FO	Min Fisher & Mar. Res. GEF Focal	2000			GEF 2000
Resource Mobilization		405	455	330	2,005		350						**3,545**	**1,485**		**2,060**

Marshall Islands

I. Country Summary

Land Area (km^2) 181	Sea Area/EEZ (million km^2) 2.1
Population (No.) 53,158 (2010 Census)	Annual Growth (%):0.7% (2004-2010)
Average Density (inhabitants/$mile^2$) 727 But varies up to 82,000 for some islets Rita = 38,000 & Delap = 16,000	Rural Population (% of total population): 28.2% (2010)
GDP (US$ million): 162.9 (2010)	GDP per caput (US$): 2,990 (2010)
GDP Real Growth (ave.2000-2009): 2 % per annum	Primary Sector GDP (% of total GDP) 2.5% Fisheries 1% Agriculture 1.5%, But some estimates put fisheries contribution much higher
Trade Balance –US$58,000,000 (Exports as % of imports) 27% (2009)	Food & live Animals as a % of total imports 23.6% (2009)
Budget Expenditure Resources & Development Ministry (2004/05) US$ 2.41 m % of Total Budget Expenditure 2.2%	Human Development Index N/A

Sources: ADB Key Indicators for Asia and the Pacific 2011; MI Economic Policy-Planning and Statistics Office (EPPSO).World Bank Marshall Islands at a glance

II. Agriculture Sector Overview

2.1 The Republic of Marshall Islands (RMI) is composed of 29 coral atolls and low-laying islands located in the central North Pacific Ocean. The land area is 181 square kilometers spread over a sea area of 1.94 million square kilometers. The two urban centers are located in Majuro, on Majuro Atoll and in Ebeye, on Kwajelein Atoll. All other atolls and low-laying islands are classified as rural, outer-islands. The dispersed nature of the islands means that shipping plays a very important part in the economy. The economy remains heavily dependent on development transfers through the Compact of Free Association with the US. A high dependency on development assistance and food imports, combined with limited economic activities in fisheries and agriculture, pose a significant policy challenge.

2.2 Urbanization is increasing and population movement to the main urban centers of Majuro (and Ebeye) has resulted in intense population densities and overcrowding. The Marshall Islands is now one of the most urbanized countries in the Pacific with over 70% of the population living either on Majuro or Ebeye and population density figures from the 1999 census reveal some of the highest densities in the world. Ebeye alone has an estimated population density of 82,000 per square mile, with the two Majuro communities of Rita and Delap having densities of 38,000 and 16,000 respectively. Such high population densities limit any opportunity for local food production and put increasing pressure on food supply systems.

2.3 Agricultural production is relatively small but important to the livelihood of people and the economy of the Marshall Islands. It comprises food crops, small livestock and one cash crop, copra. There is some underutilized land offering potential for increased output of agricultural food

crops, but this is limited and soil growing conditions are generally poor. Copra constitutes the only exported crop commodity, but fish constitutes the main commodity export. There are no other agricultural crops marketed at any significant scale. Most products are for subsistence only. Breadfruit is the most widely available local starch food and consumed when in season from January to March and June to July. The 2006 Community Survey indicates that particularly breadfruit and pandanus are widely grown by rural households. Even in urban Majuro more than 40 percent of households grow some breadfruit and pandanus. But Traditional local food crops are now only occasional ingredients in the local diet, even in rural areas on the outer islands. Crops such as taro and arrowroot have almost completely disappeared from meals and from production. Except for limited vegetable production supported through the 'Technical Mission of Taiwan Province of China' in cooperation with R&D there is basically no vegetable or fruit production outside Majuro Atoll.

2.4 Food consumption has shifted away from traditional staples with rice being introduced by the Japanese a century ago. The trend was accelerated after World War II with canned food introduced by the Americans. The dietary habits, i.e. the strong preference for rice, wheat flour, canned fish and meat, have contributed to a significant increase in nutrition-related diseases and to an escalating food import bill. A rough estimation suggests that about 90 percent of the consumed food is imported. Given the existing production patterns and the availability of local food sources to supplement or even substitute for imported food items, rural areas have a potentially lower exposure to food security vulnerability. The factor limiting this potential is the seasonality of most of the supplies and the lack of preservation techniques and skills. Further research into possibilities to raise supplies and post harvest storage and processing are necessary (FAO, 2009).

2.5 Some families are spending up to 50 percent of their household income on food, and coupled with high prices of imported food, in particular rice and wheat flour, this is causing further economic hardship. At the prices prevailing through most of 2008 and into the first quarter of 2009, many households faced difficulties to meet their food needs through purchases of rice and wheat flour, the products most affected by soaring prices. Despite this, there seems to be very little shift 'back' to traditional food crops. People have not only lost their taste for local products, which are now considered inferior, also the knowledge of preparation and conservation is widely lost, especially amongst the younger generations. The government and NGOs such as Women United Together (WUTMI) are trying to address this problem by awareness raising campaigns, both regarding the nutritional and health effects of current diets and the opportunities to diversify diets using locally available staples and newly introduced vegetables. The prospects of reintroducing local food crops into regular consumption will probably be a more promising and sustainable solution rather than promoting new vegetable varieties that find a market almost exclusively in urban areas among restaurants, shops and expatriates. Nevertheless, the long-established food patterns are hard to change and so further and increased efforts need to be made.

2.6 Livestock production in the country is visible mainly in the outer islands, at subsistence level. Most households keep a few pigs and a number of local chickens. Opportunities for import substitution are stipulated well in the Ministry of R&D Strategic Plan. Of particular importance is meat production, since the demand for pork, chicken and eggs is now almost 100% met by imports. A decisive factor determining increased livestock production is the cost of animal feed since such feed has to be imported. Therefore, further experimentation with local feed materials and appropriate animal breeds is warranted.

2.7 Marine resources have a significant economic importance, partly through the income derived from fishing licenses, and partly through the employment and income generation from the tuna loining plant in Majuro. But local fishing and fresh fish consumption have decreased in urban and even rural atoll areas. Nevertheless, the importance of marine resources to the Marshall Islands economy cannot be overestimated. It is the sector with the greatest potential for providing income earning opportunities to people in the outer islands and enhancing the development of the

fisheries sector is therefore given high priority. Marine resources are also vital for food security and livelihoods and the RMI Government therefore puts strong emphasis on sustainable management. Developing resource management plans based on fish stock assessments and scientific evidence and establishment of marine conservation areas are important activities being undertaken. According to the Marshall Islands Mariculture Development Plan a number of outer island communities are now working actively to develop community-based fisheries management plans and establish Marine Protected Areas to protect their marine resources, fish stocks and fish habitats. Key components of these efforts are new initiatives to develop alternative sources of fish protein and income.

2.8 But efforts to develop responsible income-generating fisheries activities in the outer islands in association with island councils and local governments pose a demanding challenge. It calls for a culturally sensitive approach that can embrace traditional resource management practices while also introducing new ideas and methods. Communities have to be trained in proper product handling, quality control processing and storage, as well as gain the basic business skills needed to not only ensure income-generating activities are environmentally but also financially sustainable. Some areas of opportunity and development include expanding the marine aquarium fishery, greater use of fish aggregating devices to promote offshore fishing by small-scale fishers and greater use of management partnerships (community, government, NGO) in the management of coastal fisheries (FAO,2011). Marine aquaculture is also seen as an important area for further development to enhance employment and income opportunities.

2.9 Most aquaculture efforts have focused on marine invertebrates such as black-lip pearl oysters, giant clams, trochus, and corals. With the exception of trochus, these are being grown commercially in the RMI. The emphasis on invertebrates is primarily due to their high value and low technology rearing methods, and because these particular species do not require formulated feeds as adults. Hatchery production of these species is also simpler than marine fishes. The absence of wetlands (other than coral reefs and some mangroves) rules out fresh or brackish water aquaculture. Nevertheless, the long term objective is to supplement an already decreasing near shore fishery as the population in the major islands such as Majuro and Ebeye are increasing . The growing demand for fish and the increasing price of fish present an incentive for mariculture investments. Attempts to develop finfish for culture are recent and restricted to grouper and rabbitfish with as yet limited results. Nonetheless, the biological and economic feasibility of large-scale, commercial mariculture has been demonstrated by the long-term and profitable existence of two companies based in Majuro, which are producing black pearls, giant clams, and soft and hard corals. Despite the small number of commercial mariculture businesses in operation, they play a major role in guiding the development of the industry. More formal coordination and planning mechanisms among the private sector (such as an industry association) may be beneficial, for example in providing leadership on a vision for mariculture growth, promoting voluntary best management practices, and providing a single business voice to lobby for sustainable mariculture development both in RMI and externally (FAO, 2010).

2.10 Currently all mariculture in the RMI relies heavily on wild stock at some point in the life cycle and is conducted in sensitive habitats. There is a strong environmental concern to ensure that investment activities do not damage the fragile coastal ecosystem, owing to the unique and fragile nature of the country's terrestrial and marine environments. Restocking of threatened and depleted species (e.g. *T. gigas* species) in parallel with Marine Protected Areas in community-based fisheries management planning is an area deemed as urgent. The identified need is a pilot program to test the effectiveness of restocking efforts. It would provide links to ecosystem management, community based fisheries, and preservation of biodiversity.

2.11 RMI faces additional challenges to sustainable agriculture and fisheries development stemming from the potential impact of climate changes on natural resources. Rising sea levels, changing weather patterns and changing migration routes of commercially exploitable fish require adaptation in socio-economic planning and preparedness. In general, the situation appears more

serious in the northern atolls, due to their even lower agriculture potential, and the most remote atolls, due to their weak linkage (transport) to Majuro or Ebeye. Protecting the natural resource base is paramount and requires continuing efforts to mainstream environmental issues (including Climate Change) into national policy.

III. Key issues shaping priorities for FAO assistance

- Weak capacity and human resources for sector planning and program development.
- High and volatile food and oil prices and a deep trade balance deficit threatening food security.
- Limited capacity for food crop production.
- Rapidly increasing levels of food and nutrition related non communicable diseases, which impact negatively on health system, families and national economy.
- Lack of food quality and safety standards and capacity to implement regulations impacting negatively on health and productivity of the labor force.
- Limited livelihood options particularly for outer islands.
- Need to sustainably develop and diversify fisheries and aquaculture commodities for domestic and international markets.
- Vulnerability to adverse impacts of Climate Change and Sea level Rise

IV. Country Program Context

4.1 The RMI economy has registered many years of low growth and per capita income has stagnated over the last 10 years. The longer-term trend in economic development and growth since the Marshall Islands' independence in 1986 presents a challenging scenario. Much of the recent growth directly reflects the increased payments of the US Government under the current Compact of Free Association agreed in December 2003. During the 20-year period of the amended Compact, annual grant assistance to the Marshall Islands is to gradually decline. The reductions will be matched by contributions to the Compact Trust Fund that was established with technical and financial assistance from ADB. The trust fund is intended to generate sufficient revenue to eventually substitute for the grant component of US assistance by the end of the amended Compact in 2023. The government recognises that future growth depends on a thriving private sector and on promoting private sector friendly policies within a sustainable development framework. Past policies, in which the State plays a prominent role and dominates the economy, have hampered economic development. Large inflows of aid appear to have had, at best, a marginal impact and poverty remains commonplace.

4.2 In 2001 the Government charted the Vision 2018 as the Strategic Development Plan which incorporates the broad Vision of the Nation as to where the people would like to be in the year 2018 in terms of sustainable development. To attain food security for all people at all times and to substitute imports to the best extent possible and develop exports are priority objectives to achieve the goal of *Enhanced socio-economic self-reliance* (goal 2). The 'Vision 2018', defines the objectives of RMI policies which are supposed to be further elaborated and operationalized in sectoral and ministerial strategy documents. The Strategic Plan of the Ministry of Resources and Development (MR&D) under agricultural development advocates the increase in the output of local food and agricultural exports. Encouraging demand for local food through the establishment of Farmer's Markets in urban centers is seen as a necessary incentive to motivate communities to produce more. Encouraging small-scale agri-business for processing and value adding of local products is also highlighted. Whilst the MR&D and other institutions do have policy and/or strategy documents in different forms and quality, these documents do not always provide a completely realistic view and a basis for coordinated and focused planning for food security. Therefore a review and formulation of food security and nutrition policy based on a realistic assessment of individual ministries and sectors potential contributions is deemed a priority.

4.3 The US provides an estimated 82% of ODA through the amended Compact of Free Association disbursements and various Federal Grants. Compact assistance targets six sectors: education, health care, private sector development, environment, public sector capacity building and public infrastructure. Direct U.S. aid accounted for 62.2% of the Marshall Islands' $132.2 million budget for FY 2011. Taiwan Province of China also provides direct budget support and contribution to RMI's trust fund as well support for a technical mission. The Technical Mission is the main donor initiative to promote horticulture production in the RMI. It provides production support to farmers and families in Majuro and also advice on processing and preservation, including cooking classes. The regional organizations SPC, SPREP and FFA also provide assistance in areas of their mandate. Japan has been a significant donor for infrastructure in development of the marine resources sector. The College of Micronesia Land Grant Programs (COM-LGP) provide integrated research and extension programs and training support in the areas of food security, nutrition, health, food safety, aquaculture and climate change. Emphasis is on capacity building to produce, process and market local nutritious and safe foods (crops and livestock, including aquaculture) grown in sustainable and resilient farming systems. UNDP support has focused on building capacity to monitor and report on MDG progress and prepare a National Communication on Climate Change for RMI to meet its reporting obligations to the UNFCCC. Several NGOs such as Youth-to-Youth in Health and Women United Together (WUT) are active in supporting food security and sustainable livelihoods programs at grassroots level. FAO support should be well coordinated with these ongoing activities.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.4 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) increased production, productivity and resilience of crop and livestock systems; (ii) a strengthened and diversified copra industry; (iii) improved income and employment opportunities through sustainable development of aquaculture and inshore fisheries; and (iv) strengthened institutional and human resource capacity for food safety and standards. FAO has provided support for food security and sustainable livelihood consultations and planning which included technical assistance to undertake a national food security vulnerability assessment. In the wake of the 2008 soaring food price crisis farming inputs to increase local food production were provided. TCP support is also being provided to enhance sustainable management of coastal resources in order to improve food security and sustainable livelihoods of farmers, fishermen and aqua-farmers, and the people of the RMI in general by identifying and protecting areas that are most vulnerable to soil erosion and inundation, and implementing new re-plantings of suitable species to mitigate negative impacts on food patches, to increase/protect inshore fisheries resources and aquaculture production to counter balance pressure of overfishing, and to provide a sustainable alternate livelihood and increase locally-produced food. This area of support remains a priority under the CPF 2013-2017.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus area for the CPF 2013-2017 will be on food and nutrition security resilient to impacts of disasters and climate change. Support will be delivered under the following three priority outcomes:

1) Strengthened policy, legislative, regulatory and strategic planning frameworks for food and nutrition security.
2) Increased availability, access and utilization of local food.
3) Strengthened capacity for environmental management and resilience (including disaster preparedness, emergency response and climate change).

Strengthened policy, legislative, regulatory and strategic planning frameworks for food and nutritional security.

5.2. National consultations on food security and sustainable livelihoods noted that there is no national food security strategic framework or policy and that there is need to support food security planning and policy processes with sound gender and age disaggregated data and analysis. Furthermore gender sensitive nutrition goals must be mainstreamed into development policies and programs. FAO will provide support for strengthening capacity for evidence-based policy analysis and formulation and strategic planning. This may include specific technical assistance to review current policy settings and regulatory frameworks and to strengthen food control systems. Government intuitions and NGOs have also expressed the need for training in project planning and program design to enhance resource mobilisation particularly in the areas of food security and nutrition and resilience to climate change.

Increased availability, access and utilization of local food.

5.3.The need to improve household food and nutrition security and promote appropriate diets and healthy lifestyles while retaining the traditional value of "local food", has been identified as a priority in RMI and the important role of women in ensuring that their families are fed well balanced meals is recognized. FAO will provide holistic support to enhance safe local food production, marketing and utilization in healthy sustainable diets. Additionally aquaculture has been identified by local stakeholders as having a potential to provide a substantial portion of the protein food security needs of the population, and can thus lift pressure off the inshore fisheries of the RMI. Through aquaculture methods, sustainable practices of re-stocking can be introduced and enhanced to minimize the issues of overfishing and overharvesting. FAO will continue to provide technical assistance to build capacity for sustainable aquaculture development.

Strengthened capacity for environmental management and resilience (including disaster preparedness, emergency response and climate change).

5.4 To ensure that the natural resource base and environment continue to play a critical role in sustainable economic development, livelihoods and food security, increased efforts need to be directed towards sustainable management and conservation. Environmental concerns (including climate change) need to be mainstreamed into sustainable development policy. FAO support could be provided to strengthen capacity in sustainable land-use planning, sustainable forest and fisheries management and to strengthen data collection for resource assessment and monitoring. Support may also be provided to assist with adaptation to impacts of climate change and natural disasters which recognize the differential vulnerabilities to climate change and include strategies which may vary to ensure resilience building for livelihood security for both women and men through the promotion of "climate smart" agriculture practices.

CPF Priority Matrix Marshall Islands

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Food and nutrition security resilient to the impacts of disasters and climate change	Vision 2018 the Strategic Development Plan -. To attain food security for all people at all times and to substitute imports to the best extent possible and develop exports; Strengthen the relevant institutions to obtain optimum support in minimizing the adverse impacts of climate changes	Strengthening food and nutrition security; Coping with impact of climate change on agriculture and food and nutrition security	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens . RMI UNDAF Results Matrix – Enhance socioeconomic self-reliance for inclusive development through a state of productive and effective partnership among all important decision makers at all levels of society, and by attaining food and water security for all people at all times, and to substitute imports to the best extent possible and develop exports UNDAF Outcome Area 1: Environmental management, climate change and disaster risk management. RMI UNDAF Results Matrix –Functional regulatory systems that can be enforced with high degree of compliance at all levels in order to achieve the sustainable development of our natural resources, while protecting our environment from any adverse impacts of climate change.	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific Hyogo Framework for Action 2005-2015 MDG 1 MDG 7

CPF Results Matrix Marshall Islands

Priority Area A: Food and nutrition security resilient to impacts of disasters and climate change

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Strengthened Policy Framework for Food and Nutrition security	Coherent gender sensitive policy, legal and regulatory framework in place by 2016		Good gender balanced stakeholder participation Good collaboration with SPC programs	**275,000**
Output 1.1 Strengthened capacity to review and revise food security policy framework	Evidence-based food security policy developed and adopted by end 2014	Gazetted Food Security Policy available and being implemented	Government commitment and good stakeholder participation	100,000
Output 1.2: Technical assistance to review pricing policy (taxes and subsidies) to promote equitable, sustainable production, transportation and marketing of local farm products and to deter environmentally degrading and polluting activities	Review report available by end 2013	Review Report		50,000
Output 1.3: Strengthened capacity to review, revise and implement effective safe food control systems	Review implemented Training for food inspectors conducted Target: TBD	Review report available Training report		100,000
Output 1.4:Strengthened capacity to design and prepare project/program proposals for food and nutrition security and resilience to climate change	Number of good quality project proposals prepared and submitted for funding by 2016 Target: 4	4 proposals (including 1 on fisheries) submitted and accepted		25,000
Outcome 2: Increased availability, access and utilization of local food	Food production Index Reduction in prevalence of nutrition related and food borne diseases		Population food choices are for nutritious local food	**700,000**
Output 2.1. Strengthened capacity of women and vulnerable groups for local food production (crops and livestock)	Number of women and vulnerable groups with increased local food production activities Target: TBD	Community Survey Reports MRD Report	Commitment and participation of stakeholders involved and collaboration with WUT and Youth-to-Youth CBOs Gov't support	250,000
Output 2.2: Strengthened capacity of private sector, households and communities to process and prepare and market nutritious and safe local food products (including fisheries products)	Increased utilization of local food in diets and availability in retail market outlets 20% increase on Baseline Baseline: TBD	Nutrition and Community Survey Reports		100,000
Output 2.3: Strengthened capacity for Good Agriculture Practices (GAP) for a safe food	Percentage (100%) of target farmers aware of GAP principles	Extension officers reports	Commitment of Farmers to adopt GAPs	50,000

Priority Area A: Food and nutrition security resilient to impacts of disasters and climate change

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
environment	Percentage (70%) of target farmers applying GAP on farm		MRD extension support Gov't commitment	
Output 2.4: Strengthened capacity for aquaculture production	Number(#) of training on aquaculture activities Expansion of aquaculture activities to outer islands Target: TBD	-Trained locals on relevant/applicable aquaculture activities -New atolls engaged in aquaculture activities		300,000
Outcome 3: Strengthened capacity for environmental management and resilience (including disaster preparedness, emergency response and climate change)	Enhanced management of MPAs and coastal areas by end 2015 Reduced frequency, occurrence and coverage of invasive species Expansion in area of coastal tree species Targets: TBD Baseline: TBD	Participatory evaluation report		**300,000**
Output 3.1: Strengthened capacity for sustainable coastal fisheries management	# of trainings conducted on resource management planning # of demonstration activities done at community and school levels #of trainings enforcement and monitoring of MPAs # of demonstrations conducted for invasive species eradication	MIMRA quarterly reports CMI Land-grant reports MRD reports MICS reports EPA report Local Gov't reports	Effective management of coastal resources is practiced by communities	150,000
Output 3.2: Enhanced sustainable land management and coastal protection through expanded agro-forestry planting	# of gender balanced workshops conducted for climate change adaptation Areas affected by coastal erosion reduced -areas affected by invasive species reduced -# and area of coastal tree species planted -% of invasive species controlled/eradicated	MRD reports MICS reports CMI Land-grant reports EPA reports Local Gov't reports	Strong Community support Gov't and donor support and commitment	150,000

CPF Action Plan

Action Plan: Marshall Islands	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Core Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Food and nutrition security resilient to impacts of disasters and climate change																
Outcome 1: Strengthened policy framework for food and nutrition security																
Output 1.1: capacity to review and revise food security policy framework											SAP FNO/ SAP PO	MR&D MoH SPC	100	100		
Output 1.2: review pricing policies											SAP PO/ RAP PO	R&D Internal Affairs	50	50		
Output 1.3: Review & implement safe food control											SAP FNO	MR&D MoH/ WHO	100	100		
Output 1.6: project design support											SAP PO	R&D	25	25		
Outcome 2: Increased availability, access and utilization of local food																
Output 2.1: capacity for women & vulnerable groups for local food production											SAP PPO/ SAP FNO	MMR&D WUTMI	400	400		
Output 2.2: capacity for processing and marketing safe local food																
Output 2.3: Strengthened capacity for GAP																
Output 2.4: strengthened capacity for aquaculture											SAP FO	MIMRA CMI	300	300		
Outcome 3: Strengthened capacity for environmental management and resilience (including disaster preparedness, emergency response and climate change)																
Output 3.1: Strengthened capacity for sustainable coastal fisheries management											SAP FO SAP ForO	MIMRA CMI MR&D CMI WUTMI	300	300		
3.2:Enhanced sustainable land management and coastal protection through expanded agroforestry																
Resource Mobilization	405	405	155	5	5	300							**1,275**	**1,275**		

Nauru

I. Country Summary

Land Area (km^2): 21	Sea Area/EEZ (km^2): 320,000
Population (No.): 10,185 (SPC estimate 2011)	Annual Growth (%): 2.1
Density (inhabitants/km2): 486 (2009)	Rural Population (% of total population): 0
GDP (US$ million): 51.8 (2009)	GDP per capita (US$): 5,462 (2009 est.)
GDP Real Growth : N/A	Primary Sector : 10.6 % (2006)
Trade Balance – A$ 28,720,000 (exports as % of imports): 14.7 % (2005)	Food & Live Animals as % of total imports: 13.5% (2005)
Budget allocation agriculture : % of Total Budget N/A	Human Development Index : N/A

Source: Nauru Bureau of Statistics; ADB Key Indicators for the Pacific 2011; UN Data 2011

II. Situation Analysis and Agriculture Sector Overview

2.1 Nauru is a single island measuring 21 square kilometers with a central plateau rising to 40-60 meters above sea level that is surrounded by a strip of coastal land 150-300 meters wide. The population in 2011 was estimated to be around 10,000 people. Phosphate mining has been the main economic activity in Nauru for decades and returns from royalties afforded a high standard of living for the people. Over the years, the decline in phosphate mining and poor financial management has lead to the steady downfall of the economy, eroding the once high standard of living and plunging the country into financial difficulties. Food security remains a major concern especially with the high cost of imported food products, limited capacity for local food production, constrained fiscal situation and high levels of foreign and domestic debt.

2.2 Since the boom of phosphate mining ended, agriculture and fisheries have been identified as priority sectors for development. Following years of mining, the only fertile areas suitable for agriculture are in the narrow coastal belt and the land surrounding the Buada lagoon. Furthermore, the will to till the soil, plant crops and raise livestock has largely disappeared from the general population. Water availability has also become a critical limiting factor with inadequate bore water and frequent droughts making agriculture production more challenging. Limited arable land (estimated at about 4 Km^2), much of which has already been claimed for residential housing, complicated land-tenure and water rights issues further constrain expansion of agriculture production. Consequently there is currently no formal commercial agriculture in Nauru and very few food crops are grown. There are limited varieties of fruit trees and vegetables grown on a small scale for home consumption, but most of the country's food items are imported.

2.3 Soils in Nauru are generally poor with poor water holding capacity that limits available water. Soils also suffer from major deficiencies of key elements particularly nitrogen and potassium. This situation is also exacerbated by the limited use of fertilizer and composting, which is largely driven by the high cost of fertilizers and the lack of farmer skills in composting. Support to

promote the growing of suitable crops in medium largely made of compost has been piloted by the Department of Agriculture with assistance from donors. In its 2012 work program, the Department of Agriculture is planning to implement the 'Grow and Green' program aimed at planting fruit trees to improve food production by providing planting materials, tools and advise on improving soil conditions for home gardening. Coordination efforts to provide an area to establish a national nursery for domestic food trials and production are underway.

2.4 Fisheries remain vital to food security and to the economic development of Nauru. In the marine subsector, coastal and inshore fisheries still provides an important part of the local diet, although it's constrained by limited reef area and the deep ocean immediately surrounding the island. Access is open and easy for fishing activities launched from the shore or by boat and this is putting pressure on the resources, hence the need for improved coastal fisheries management to control unsustainable harvesting. FADs (Fish Aggregating Devices) have gained prominence by fishers with canoes in accessing nearby fishing grounds. Six FADs have been strategically deployed around the island for easy access by fishers.

2.5 The offshore fishery is an important income earner for the country. It is estimated that access fees represented 21 percent of government revenue in 2006/07 and 17.2 percent in 2007/08. All of the access fees are collected from distant water fishing nations operating in Nauru's EEZ. The annual catch in recent years is estimated to be around 20,000-67,000 metric tonnes with over 90 percent of the catch being tuna (FAO, 2011). In the recreational subsector, game fishing has largely been stagnant with the downturn in the economy, although ad hoc competitions organized privately are still being held. In the same situation, the aquaculture subsector has also been static over the years. While milkfish has been successfully farmed at the Buada lagoon and to a lesser extent, the Anabar pond, other areas of aquaculture have largely been underdeveloped. The Nauru Fisheries and Marine Resource Authority (NFMRA) have identified the need to develop and strengthen aquaculture, especially the revival of milkfish framing, for food security as a high priority.

2.6 Nauru imports over 90 percent of its food and the cost of food on the domestic market is relatively high. Nutritious food including fruits and vegetables are expensive and are largely unaffordable for most Nauruan. Cheap and highly processed food products constitute the local diet and this has contributed to the rise of Non Communicable Diseases (NCDs) as result of poor nutrition. A report by the World Health Organization (WHO)[20] indicated that Nauru has the most obese people in the world with 40 percent of the population affected by type-2 diabetes and other health problems such as kidney and heart disease. NCD's are a major health issue and the government has prioritized agriculture and the need to improve local food production as one of the pathways to improve health, food security and sustainable livelihoods for its people.

III. Key issues shaping priorities for FAO assistance

- Total reliance on food imports as agricultural and livestock production levels are very low.
- High and increasing levels of food and nutrition related non communicable diseases, which impact negatively on the health system, families and national economy
- High and volatile food prices and a deep trade balance deficit.
- Weak agriculture and extension capacity and human resources for sector development.
- Lack of sound advice on crop production and livestock production and health.
- Low level of skills on basic crop and livestock husbandry
- Lack of know-how on preparation and utilization of local foods
- Low agricultural production potential on poor soils
- Limited water supply for competing demands between domestic and agricultural uses.
- Lack of and inconsistence in supply and high costs of agriculture and livestock inputs.

[20] 2007, Nauru NCD Risk Factors STEPS Report, WHO

- Lack of improved breeds of livestock – especially pigs and chickens
- Lack of capacity for Aquaculture production.

IV. Country Program Context

4.1 The National Sustainable Development Strategy (NSDS) 2005-2025 is the main document outlining the government's development agenda. A key approach to implementing the agenda is the need to develop sector plans to guide sectoral activities. In 2007, FAO provided support for the development of the Strategic Plan for the Sustainable Development of Agriculture (SPSD Ag). The Plan supports the goals and priorities of the NSDS and is in-line with the overall efforts to strengthen national development planning. The Strategic Plan is the first step in strengthening agriculture development and promoting self-sufficiency and food security for the people of Nauru. It also provides a framework and a range of actions requiring commitments and coordinated joint efforts from Government, development partners, the private sector, civil society and the people of Nauru.

4.2 The SPSDAg identifies seven policy goals and strategies for agricultural development. These include (1) Greater Food Security through significant increase of locally grown agricultural produce; (2) Improved consumption of more nutritious foods through significant increase of locally produced foods; (3) Strong partnerships established between Farmers, the Division of Agriculture and Donors; (4) Capacity development, strengthened and maintained through targeted trainings; (4) Improved water storage facilities and promotion of appropriate water conservation techniques for irrigation; (5) Strengthened policy and regulatory frameworks for the agricultural industry; and (6) Improved governance frameworks for the agricultural sector.

4.3 The government, in collaboration with a number of donors is implementing a range of initiatives in developing the agriculture sector as well as assisting overall economic recovery. The aim is to improve domestic food production and the overall performance of the agriculture sector. The main development partners include Australia, Taiwan province of China, the Secretariat of the Pacific Community (SPC) and FAO. The Australian government continues to provide technical assistance and filling up key line positions within the Ministry of Finance and Planning in order to put in place appropriate fiscal and financial policies and management regimes to facilitate the recovery of the economy. Australia is also funding a fisheries adviser to help maximize revenue from the marine assets. Taiwan is providing support for vegetable gardening, livestock production (pigs and poultry) and aquaculture (milkfish facility development). The World Health Organization provided technical assistance for drafting of food safety legislation and provision of supplies to enable more effective enforcement. Japan's Overseas Fishery Cooperation Foundation (OFCF) has been providing on-going assistance to Nauru's Fisheries and Marine Resources Authority (NFMRA). This assistance includes training, fisheries equipment including fishing boats and vehicles and technical assistance in outboard motoring. New Zealand will also provide funding for the fisheries sector and has agreed to fund training in the fishing sector and milkfish project support.

4.4 Nauru also benefits from GEF program financing. GEF will provide an allocation of $3 million over its five year funding cycle to projects for Integrated Water Resource (IWRM) and Pacific Adaptation to Climate Change which will focus on problems associate with alternative sources of water, and Sustainable Land Management to ensure that it is mainstreamed into all levels of decision making. Furthermore, GEF Small Grant Project (SGP) will encourage community orientated projects that relate to national environmental issues. Under the GEF 4 framework, 3 projects will commence in 2010-11, namely Integrated Biodiversity Conservation, Persistent Organic Pollutants and the Acceleration Use of Renewable Energies.

Overview of FAO on-going and recent assistance under NMTPF 2009-2012

4.5 Over the last four years, FAO has provided on-going support in capacity building and technical assistance. These activities include a joint collaboration with WHO, SPC, UNICEF and JICA in delivering trainings on nutrition, diet and lifestyle as part of scaling up action in the Pacific to combat the prevalence of non-communicable diseases. This also included training on Codex to raise awareness and strengthen capacity in food safety standards. Other capacity building activities include support related to multilateral environmental agreements in ACP countries to clean up obsolete pesticides, pesticide management and sustainable pest management. Technical support was also provided in conducting an environment impact assessment for milkfish farming.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus area for the CPF 2013-2017 will be on resilient food production systems and nutritional security. Support will be delivered under the following two priority outcomes:

1) Enhanced agriculture (including livestock) and fisheries production for food and nutritional security.
2) Improved food quality and safety.

Enhanced agriculture (including livestock) and fisheries production for household food security

5.3 The priority areas identified by the Department of Agriculture and relevant stakeholders in support of this outcome include the development of sustainable small-scale poultry production, agroforestry , and the development of aquaculture. The Taiwan Technical Mission is already active in supporting projects which includes vegetable home gardening, and pig and poultry production. Support for these projects will gradually be phased out over the next two years, thus creating the need for support to build on work already established. FAO's assistance will focus on expanding sustainable small-scale poultry units for household, both for meat and egg production. Agroforestry based farming system to grow a mixture of selected fruit trees, root crops, vegetables and forest trees will also be a focus of support. Aquaculture development in milkfish faming has also been identified as a priority area. FAO has previously provided support in this area and will need to build on the work that has been done, and compliment support other donors are providing in this area. The focus on building resilient food production systems relies on enhancing production and productivity of basic crops and livestock, and fisheries development opportunities. Currently, the Department of Agriculture does not have much capability and resources to deliver the necessary support services to increase agriculture production and meet Nauru's food security goals. FAO support will therefore focus on intuitional strengthening and capacity building for the Department of Agriculture to improve technical capabilities in planning, research and advisory services.

Improved food quality and safety

5.4 The rise in non-communicable diseases i.e. diabetes, obesity, cancer, cardiovascular diseases with changing lifestyles and dietary habits is a huge challenge that is putting pressure on the health system in Nauru. The high cost and limited supply of nutritious foods such as fruit and vegetables is further adding weight to the problem with poor diets driven by declining household incomes and cheap imported processed food products. Supporting awareness and educational programs on nutritious and safe local food products has been identified as a priority area. This would also be complimentary to efforts to enhance agriculture production through agroforestry farming systems as well as the promotion of nutritious and locally produced foods in home gardens. A final area for support is building capacity of the lead agencies in the implementation of the 2005 Food Safety Act. Collaboration with the National Health Service, Codex Alimentarius, WHO and SPC to co-share possible training programs in this area could be envisaged.

CPF Priority Matrix Nauru

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Resilient food production systems and nutritional security	SPSD Ag 2007-2017 (1) Greater Food Security through significant increase of locally grown agricultural produce; (2) Improved consumption of more nutritious foods through significant increase of locally produced foods; (5) Strengthened policy and regulatory frameworks for the agricultural industry	Strengthening food and nutrition security; Coping with impact of climate change on agriculture and food and nutrition security. Fostering agricultural production and rural development.	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens.	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific MDG 1

CPF Results Matrix Nauru

Priority Area A: Resilient food production systems and nutritional security

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: Enhanced agriculture (including livestock) and fisheries production for food and nutritional security	National food production increased Baseline & Target TBD		Data on food production available. Collaboration with SPC programs	**700,000**
Output 1.1: Strengthened capacity to develop and extend agroforestry-based food production systems	Plant nursery facilities upgraded and improved Number of agroforestry training workshops delivered Improved household awareness/knowledge on agroforestry food production systems Targets: TBDc	DOA farm/household surveys DOA annual report Training reports	Stakeholder interest and participation in programs	300,000
Output 2.1: Development of small-scale poultry production for household food security	Number of small scale poultry production units established and operating; Number of training workshops conducted Improved household awareness/knowledge of small scale poultry production Targets: TBD	DOA farm/household surveys DOA annual report Training reports Community survey	Stakeholder interest and participation in programs	150,000
Output 2. 3: Strengthened capacity for aquaculture for food security	Establishment of the Nauru Aquaculture Holding Facility to support fry, fingerling and broodstock(s) to cater for farmers and to also act as a biosecurity measure for imported aquatic animals. Number of milkfish, and other commodities (e.g. tilapia, mullet. and land crab). farms established; Volume of cultured fish harvested; Number of households involved in fish farming; Number of training workshops on fish farming conducted	NFMRA annual reports, Training reports		250,000

Priority Area A: Resilient food production systems and nutritional security

Outcome 2:Improved food quality and safety	Prevalence of nutrition related diseases Prevalence of food borne disease incidents Baseline & Target TBD	National medical records	Population make nutritious food choices	**120,000**
Output 2.1: Strengthen capacity to develop and deliver awareness and education programs on nutritious and safe local food products (including fisheries products)	Awareness campaign on preparation and utilization of local foods delivered Number of training workshops on food quality and safety conducted Target: TBD	Promotional materials available Training reports; DOA annual reports		60,000
Output 2.2: Strengthened capacity for implementation of 2005 Food Safety Act and Regulations	Number of inspectors trained and implementing legislation Target: TBD	Training report Inspection records		60,000

CPF Action Plan

Action Plan: Nauru	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Core Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Resilient food production systems and nutritional security																
Output 1.1: Strengthened capacity to develop/extend agroforestry-based food production systems											SAP PPO SAP For O	DoA	300	300		
Output 1.1: Development of small-scale poultry production											SAP PPO/	DoA	150	150		
Output 1.4: Strengthened capacity for aquaculture production											SAP FO	NFMRA	250	250		
Outcome2:Improved food quality and safety)																
Output2.1: Strengthened capacity to develop and deliver awareness and education programs on nutritious and safe local food products											SAP FNO		120	120		
2.2: Strengthened capacity for implementation of the 2005 Food Safety Act												DoH WHO				
Resource Mobilization		300	120		250		150						**820**	**820**		

Niue

I. Country Summary

Land Area (km^2): 260	Sea Area/EEZ (km^2): 293,988
Population (No.): 1,611 (2011)	Annual Growth (%): negative 2 percent due to migration.
Density (inhabitants/km2): 6	Rural Population (% of total population): 60
GDP (NZ$ million): 25.5 (2009) Approx US$ 18 million	GDP per caput (NZ$): 16,575 (2009) Approx US$11,800
GDP Real Growth (ave.2003-2009): 1%	Primary Sector GDP (% of total GDP): 22.3 % (2009)
Trade Balance – NZ$15.5M (exports as % of imports): 8% (2011)	Food & Live Animals as % of total imports: 16.5% (2011)
Budget allocation agriculture (2012/13): % of Total Budget 3.4%	Human Development Index: N/A

Sources: Niue Statistics Office

II. Situation Analysis and Sector Overview

2.1 Nuie is a raised atoll lying 200 miles east of Tonga, 300 miles south of the Samoa and 600 miles west of the Cook Islands. The total land area is 64,900 acres surrounded by 50 miles of coastline. Soils are characteristically thin with poor water holding capacity and are generally fertile. Niue has a total population of around 1,611 people and is a self-governed country in free association with New Zealand since 1974. Niueans are New Zealand citizens and they made up 8 percent of New Zealand's Pacific population in 2006[21]

2.2 Niue's economy is very small and is constrained by limited access to regular air services, shortages of skilled professionals and entrepreneurial expertise, and limited land. The government's long term policy for economic development and financial stability is to encourage national self-reliance. The public sector remains the largest employer with around 400 employees. In recent years, the Government has emphasized private sector development and the sector is slowly generating employment opportunities. Priority areas for economic development for Niue include tourism, fisheries and horticulture. Emigration with easy access to New Zealand has been a longstanding issue. The population decline over the years, especially the exodus of young professionals, has been a problem for the government in providing basic services to its citizens, thus retaining the resident population and attracting Niueans back to the island by creating economic opportunities such as investment and employment in the tourism sector is a government priority.

2.3 Agriculture in Niue is predominantly subsistence, based on shifting cultivation. Reduced fallow periods coupled with the fragile physical and chemical nature of the island's soils has resulted in a decline in soil fertility and crop yield in some areas. Consequently government has increased attention towards sustainable agricultural practices and land management to safeguard the islands limited natural resources through the strengthening of management and policy frameworks. Traditionally, women's role in the household excludes agriculture, although they are now becoming increasingly involved in planting, harvesting and marketing of agricultural

[21] 2006, Statistics New Zealand

produce. Vanilla production is a prime example where the majority of growers are women and their role in agriculture continues to evolve.

2.4 Niue's main export commodities are taro, honey, noni with small quantities of vanilla and coconuts. The country also used to export fish to the U.S from 2005 to 2007 until the fish processing operation ceased in 2008. The annual value of exports is estimated to be around NZ$200,000 to $350,000 and New Zealand is the main market destination. Geographical isolation from global markets coupled with poor sea and air transport links, compounded by rising energy costs continues to constrain commercial agricultural development and trade.

2.5 The forestry sector is small with the forest relatively underexploited as a result of conservation measures implemented in the early 1990s. The current area of native forest is estimated to be around 19,000 hectares, covering about 70 percent of the island's land area. About 5,566 hectares (30%) of the forest is classified as 'mature dense forest' with a height of 18-35 metres[22]. One of the priority areas outlined in the Niue Integrated Strategic Plan 2009-2013 (NISP) is the sustainable utilization of the forest for economic development. Mature hardwood used for high value furniture and handicraft manufacturing offers potential. To help realize these aspirations, the government has put in place a forestry management plan, a forestry utilization plan, and a forestry legislation that needs to be completed to ensure the sustainable harvest and management of the forest resources.

2.6 The fisheries sector remains an important food source for communities and potential resource for economic development. The sector is made up of offshore and coastal fisheries and is primarily subsistence focused with some sporadic small-scale locally based commercial operations. Several key factors characterize the sector. High fuel and supply costs making Niue a high cost location to operate longline vessels, scarce and expensive labour, infrequent and costly air cargo constrains export opportunities, and limited wharf infrastructure (FAO 2011). The demise of the Niue Fish Processors Ltd that closed down in 2008 highlights how challenging it is to develop a commercially viable operation in Niue. Given the constraints on local fishing operations, the government has made efforts to attract foreign vessels to fish in Niue's EEZ to maximize returns from fishing licenses. Other economic opportunities include enhancement of recreational fishing (sport fishing) as government continues to promote and develop the tourism industry.

2.7 Sustainable environmental management is a national priority in NISP. As a signatory to Multi-lateral Environmental Agreements and Conventions both within the UN and the Pacific Region, Niue has put emphasis on developing sustainable agriculture and forestry production systems to prevent the destruction of virgin forests, pollution of the water table and coastal areas by animal wastes, pesticides and fertilizers. Environmental degradation threatens Niue's biodiversity and puts at risk the survival of endangered endemic species such as peka, lupe, hega, coconut crab and pekapeka. The Global Environment Facility (GEF)/FAO-Forestry and Protected Area Management (FPAM) project is currently supporting efforts through the extension and consolidation of Protected Area Network that allow for innovative, community-based management of PAs and empower local people to participate and benefit from PA management. This area of activity will remain a priority in the current CPF

Key issues shaping priorities for FAO assistance

- Limited capacity within DAFF to support program development and implementation
- Lack of interest by the youth in farming as a career
- Limited data collection systems that can monitor sector performance and guide planning in sustainable resource management

[22] 2012 DAFF, Niue Food Security Report

- Absence of an Integrated Agriculture Sector Plan/Policy
- Fragile soils leading to low productivity
- Loss in agricultural production due to destruction by feral pigs.
- Ease of access to water supply for farming communities.
- Inconsistent supply and high costs of agriculture and livestock inputs (including livestock feeds).
- Lack of improved breeds of livestock including small ruminants (i.e. Fiji fantastic sheep).
- Lack of capacity in off-shore pelagic fisheries and in-shore fisheries management.
- Limited capacity and participation of fisheries & agriculture NGOs in resource management and development.
- High reliance on food imports especially meat.
- Lack of information and capacity in food and nutrition resulting in increasing cases of non-communicable diseases
- Marketing and agribusiness challenges: including business training/mentoring, information, meeting technical requirements for market access and transport issues.
- Lack of consistent local production of fresh vegetables and fruits
- Limited marketing and branding for organic and fair trade.
- Lack of capacity to produce value-added products.
- Limited national capacity in pest & disease monitoring, surveillance and control (biosecurity)
- Potential loss of valuable biodiversity because of a lack of community managed Protected Areas (marine and land areas)

III. Country Program Context

3.1 Niue's development priorities are outlined in the Niue Integrated Strategic Plan 2009-2013 (NISP) with five key strategic objectives which include financial stability; governance; economic development; social and the environment. Since inception, the plan has been used to guide resource allocation by the Government and its development partners. With an overall focus on rebuilding the population, reducing aid dependency and building a strong private sector, the NISP has identified and targeted tourism, vanilla and fisheries as key initiatives with comparative advantage to drive Niue's economic development. The objective is to maximize benefits from Niue's resources in a sustainable manner. Given the strategic focus, agricultural development has taken the approach to develop agricultural products with commercial merits such as vanilla and supported by research and market development. Similarly, fisheries development seeks to increase returns from fisheries resources harvested in a sustainable and responsible manner. The plan also recognizes the importance of the strengthening the private sector to support these key initiatives in the agriculture and fisheries sectors.

3.3 New Zealand remains Niue's principal development partner with direct budget support that makes up almost half of the country's total annual budget. A program to strengthen cooperation between the two countries has seen Niue embarking on public sector reform to strengthen public sector capacity and service delivery. Assistance has also been directed to improving infrastructure, support to the tourism industry and private sector development. Other donors include Australia, China, France and various multilateral organisations. The total bilateral New Zealand Official Development Assistance to Niue for 2010/11 is NZD$18.72 million. The main focus of the programme is economic sustainability, principally through development of the tourism sector. Australia provides technical support to Niue in health (sanitation), energy and finance. In 2006 the governments of New Zealand, Australia and Niue established the Niue International Trust Fund. New Zealand is the main contributor to the fund, which now contains approximately NZD$41 million. The purpose of the fund is to lessen Niue's dependence on external assistance to meet the demands of its core budget. It is not expected that revenue from the fund will be drawn down until 2014. Until then contributions will be made from time to time by New Zealand, Australia and other parties to continue building the fund's resources.

3.4 Other key development agencies active in the agriculture, fisheries and related sectors such as the environment, health and community development include the UNDP, WHO, SPC, SPREP and FFA. Main areas of support consist of capacity building in management, policy and planning, and legislation frameworks.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

3.5 Five priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthened policy, legal and regulatory frameworks for sustainable agriculture, forestry and fisheries; (ii) increased agricultural production for local consumption and to meet international and domestic market demands; (iii) increased income and employment opportunities through development of commercial fisheries; (iv) improved marketing systems and market access for high value specialty commodities; and (vi) Sustainably managed terrestrial, freshwater and marine resources. To date, only outcome 1 and 2 have received priority focus whilst some of the assistance provided partially contributes to the other priority outcomes.

3.6 Under priority outcome one, assistance provided has strengthened the Department of Agriculture, Forestry and Fisheries' (DAFF) capacity in data collection and management. This included the design and processing of the 2009 Agricultural Census to provide baseline data for evidence based policy development and planning. This support highlighted the need to maintain and manage data collection systems but more so the value of credible data for improved decision making. Similarly, ongoing support was provided to better understand the extent and causes of global incidents of high food prices and to build capacity to develop relevant policy and programmatic actions in response. Technical support has also been provided to review and draft forestry legislation which needs to be completed during this CPF period. Support for the development of an agricultural sector plan also remains a priority for the CPF 2013-2017.

3.7 Support for outcome two over the last four years has focused on strengthening capacity in agro-processing and value addition of agricultural products. This also included a promotional and awareness campaign on health and nutritional benefits of local products and a model kitchen to demonstrate safe food preparation and utilization. Since the episodes of soaring food prices in 2007/2008 and 2010, a series of small projects focused on crops, livestock and fisheries under the Telefood program have helped strengthen household food production. This support is also helping communities improve livelihoods with income generation opportunities. Assistance to scope priority areas to strengthen agriculture curriculum and vocational opportunities was provided which led to the development of a project for implementation. Assistance has also been provided for scoping to develop areas of support for artisanal and traditional fisheries development an area which remains a priority for the CPF 2013-2017.

IV. Proposed Country Program Framework

4.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus areas for the CPF 2013-2017 will be on:

1) Food and nutrition security;
2) Sustainable natural resource management and resilience.

Food and nutrition security

4.2 Given Niue's development objectives, the need to focus and direct programs for food security and agricultural development is fundamental. DAFF has identified two priority activities to strengthen its policy and planning capacity. The formulation of a food and nutrition security policy to guide food safety, quality and nutrition programs, and the development of an agriculture sector plan to focus support to priority areas in agriculture. FAO technical assistance could help build capacity to review and develop these policy frameworks. DAFF would play a leading role in stakeholder consultations, information gathering and analyses.

4.3 Enhanced sustainable agricultural (including livestock) and fisheries production for food security and income generation remains a key priority for Niue. Increasing food production and productivity particularly developing small ruminant production and improving artisanal and traditional fisheries have been prioritized. Support for ruminant production is expected to include improved breeds and feeds, improved technology and husbandry practices supported by appropriate research and extension programs. For fisheries development, assistance to implement and maintain an active FAD program as well as infrastructure such as ice making machine and a simple market construction for selling fresh fish together with appropriate capacity building are areas for possible support.

4.4 Promoting healthy lifestyles is a priority for Niue given the prevalence of non communicable diseases. DAFF and the Ministry of Health have collaborated to promote nutrition through home food gardens and cooking demonstration using local foods with support from SPC. Further support in promoting nutrition awareness was provided by FAO through the processing and value adding program. There is an on-going need to raise public awareness and deliver education programs for nutrition, food safety and quality of local food products.

Sustainable natural resource management and resilience

4.5 Niue recognizes the importance of protecting its unique and valuable biodiversity. It also acknowledges the vital role the community plays in resource conservation and management. Safeguarding biodiversity is a priority for Niue for it underpins food production, is a source of raw material, provides recreational opportunities and is central to cultural values. Strengthen soil management planning and sustainable forestry management therefore remain priority areas for FAO technical assistance.

4.6 Forestry has received support in strengthening its management framework. A national forestry policy is in place and to date a management plan, forestry inventory and a forestry utilization plan have been completed with assistance from the Secretariat of the Pacific Community (SPC) and the Germany Agency for International Cooperation (GIZ). Forestry legislation has been formulated with FAO support and this needs to be enacted and regulations prepared. This remains a priority and it is an important aspect of the management framework in order to enforce both the policy and management plan. FAO technical assistance could support completion of the forestry legislative framework as well as help strengthen capacity to implement the forestry utilization plan.

4.8 Niue is one of the four countries in the GEF-FPAM project implemented by FAO. The project promotes biodiversity conservation by expanding and consolidating networks of protected areas. It also builds capacity for conservation management and sustainable use of biodiversity and reducing forest and land degradation.

CPF Priority Matrix Niue

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Food and Nutrition Security	Niue integrated Strategic Plan 2009-2013: Maximise benefits from Niue's resources in a sustainable manner focusing on private sector development, targeting tourism, agriculture and fisheries supported by safe, reliable, affordable healthy infrastructure, Enjoy a harmonious and healthy lifestyle in a thriving, educated and safe community that has access to a wide range of quality social services and healthy development opportunities	Strengthening food and nutrition security; Fostering agricultural production and rural development.	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens.	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific MDG 1
CPF Priority Area B: Sustainable natural resource management and resilience	Niue Integrated Strategic Plan 2009-2013: Sustainable use and management of the environment and Niue's natural resources for present and future generations	Enhancing equitable, productive and sustainable natural resource management and utilization; Coping with the impact of climate change on food and agriculture	UNDAF Outcome 1.1: Improved resilience of PICTs with particular focus on communities through integrated implementation of sustainable environmental management, climate change adaptation/mitigation and disaster risk management	Hyogo Framework for Action 2005-2017 MDG 7

2013-2017 CPF Results Matrix Niue

Priority Area A: Food and nutrition security

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: Strengthen policy and planning frameworks for sustainable agriculture and food security	Gender Sensitive Policy and Planning framework in place and being implemented by 2015	Gazetted Policies and plans available	Leads to implementation of recommended strategies	**50,000**
Output 1.1: Technical assistance to formulate a Food and Nutrition Security Policy	Food and nutrition security policy drafted and in place by end 2014; Baseline - no food security policy in place	Food and nutrition security policy gazetted, published and available	Cabinet adopts draft policy; Good collaboration between DAFF and gender balanced sector stakeholders	25,000
Output 1.2: Technical assistance to formulate an Agriculture Sector Plan	Agriculture sector plan drafted and in place by end 2014; Baseline - no agriculture sector plan in place	Agriculture sector plan endorsed by stakeholders Agriculture sector plan published and available	Good collaboration between DAFF and gender balanced sector stakeholders; Good collaboration with SPC support programs	25,000
Outcome 2: Enhanced agriculture (including livestock) and fisheries production and productivity	Agriculture production Index Food Production Index	DAFF Agriculture Surveys		**330,000**
Output 2.1: Development of small ruminant production for food security and income generation	Number of successful small ruminant enterprises operating; Increase availability of locally produced meat; Baseline and Target TBD	DAFF farm surveys DAFF annual report	Farmers willing to try and adopt improved production practices and livestock breeds;	80,000
Output 2. 2: Enhancement of artisanal and traditional fisheries for food security and income generation	Number of new FADs deployed by 2016 Target TBD Increase in catch volume of artisanal fisheries by 2017 Baseline; and Target TBD	DAFF fisheries catch data DAFF annual reports		250,000
Outcome 3: Enhanced utilization of nutritious local foods	Composition of local diets	Nutrition survey Participatory evaluation	Population make nutritious food choices	**60,000**
Output 1.1: Improved awareness of nutritious and safe local food products (including fisheries product)	Awareness campaign on preparation and utilization of local foods; Number of training workshops on food quality and safety conducted Targets; tbc	Promotional materials; Training reports; DAFF annual reports	Population makes nutritious food choices	60,000

Priority Area B: Sustainable natural resource management and resilience

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: Enhanced enabling environment for soil and forestry resource management and utilization	Policy, legislation and strategic planning frameworks in place and being implemented by 2016		Government adopts and has capacity to implement	**40,000**
Output 1.1: Technical assistance to develop a Soil Management Plan	Soil management plan completed and in place by end 2014; Baseline - no soil management plan	Soil management plan endorsed by DAFF; Soil management plan published and available	Full participation of appropriate DAFF staff and sector stakeholders	Covered under output 2.6
Output 1.2: Technical assistance to review and complete forest legislation	Updated forest legislation drafted by end 2013; Revised Forest Act in place by end 2014; Baseline - incomplete forest legislation	draft forest legislation available	Parliament adopts revised legislation; Full participation sector stakeholders	Covered under output 2.1
Output 1.3: Strengthened capacity to implement forestry utilization plan	Appropriate legislation and policies in place to facilitate forestry management plan; Specialized forestry products identified for local use and export to niche markets by 2017	Legislation and policies in place and enacted; DAFF annual report	Cabinet approves legislation and policies; Available niche markets	40,000
Outcome 2: Sustainable management and conservation of Niue's biodiversity				**0,000**
Output 2.1: Improved policy and legal frameworks to underpin Protected Areas (PA) networks developed	Wildlife Ordinance Domestic Fisheries Regulation (Uga)	Legislation in place, enacted and disseminated	Political commitment to conservation remains high	64,000
Output 2.2: Sustainable financing of PA in place	Protected Area financing strategy available by 2016 New source of PA funding secured by 2017	GEF PAS project reports	Potential sources of funding are available and adequate in the country	52,000
Output 2.3: Established and/or strengthen effective biodiversity conservation areas	Three protected areas established and conserved Five local agreements for management of Tapu Areas in place	GEF-PAS project reports Department of Environment annual report	Local community leaders enforce (and /or community members respect) the agreements made in protected area management plans	112,000
Output 2.4: Awareness raising and education programs delivered and capacity strengthened for biodiversity management	Awareness campaign delivered Number of training programs delivered Targets TBD	Promotional materials produced Training reports Interpretation material installed	Stakeholders are interested in participating and/or remain in the position where they can put their training at use	227,000
Output 2.5: Marketing of biodiversity goods and services result in improved livelihoods of local communities	Assessment of potential for eco-cultural tourism and non-wood forest products No of local community members trained to operate three eco-cultural tourism ventures, user fees for eco-cultural tourism ventures implemented	Assessment reports Training evaluation Financial reports	Project beneficiaries are interested and willing to participate in training and income generating activities Adequate markets exist for non-wood products and eco-cultural tourism	119,000
Output 2.6: Sustainable land management in forest margins	Best practice guidelines for SLM published and disseminated to local farmers operating in/around PAs.. SLM techniques adopted. Target TBD	Guidelines available Participatory evaluation report	Stakeholders are interested in participating and benefitting on medium and long term	76.000

CPF Action Plan

Action Plan: Niue	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Food and nutrition security																
Outcome 1: Strengthened policy and planning frameworks for sustainable agriculture and food security																
Output 1.1: TA to formulate Food and Nutrition Security Policy											SAP PO/ SAP FNO	DAFF	50	50		
Output 1.2: TA to formulate Agriculture Plan																
Outcome 2: Enhanced agriculture (including livestock) and fisheries production and productivity																
Output 2.1: Development of small ruminant production											SAP PPO	DAFF	80	80		
Output 2.2:Enhancement of artisanal and traditional fisheries through FAD program											SAP FO	DAFF	250	250		
Outcome 3: Enhanced utilization of nutritious local foods																
Output 3.1: Improved awareness of nutritious and safe local food											SAP FNO	DAFF	60			60

Year	2013		2014		2015		2016		2017							
Priority Area B: Sustainable natural resource management and resilience																
Outcome 1: Enhanced enabling environment for soil and forestry resource management and utilization																
Output 1.1: TA to develop a Soil Management Plan											SAP ForO	DAFF				
Output 1.2: TA to review and complete forest legislation											SAP ForO	DAFF				
Output 1.3: Strengthened capacity to implement forest utilization plan											SAP For O		40	40		
Outcome 2: Sustainable management and conservation of Niue's biodiversity																
Output 2.1: policy and legal frameworks for PA networks											CTA GEFPAS/ SAP ForO	Niue Gov Dep Env DAFF	64		GEF 650	
Output 2.2: establish biodiversity conservation areas													112			
Output 2.3: Awareness and education programs delivered and capacity strengthened for biodiversity management													227			
Output 2.4: sustainable financing of PA in place													52			
Output :2.5: Marketing of biodiversity goods and services result in improved livelihoods of local communities													119			
Output 2.6: SLM in forest margins													76			
Resource Mobilization	650	90	60	20	20	20	270						**1130**	**420**	**650**	**60**

Palau

I. Country Summary

Land Area (km^2): 444	Sea Area/EEZ (km^2): 600,900
Population (No.): 19,907 (2005 Census)	Annual Growth (%): 0.6%
Average Density (inhabitants/km^2): 41 Koror Density:700	Rural Population (% of total population): 23%
GDP (US$ million):171,345 (2010)	GDP per caput (US$):8,370 (2010)
GDP Real Growth (ave.2000-2008): 1.4 % per annum	Agriculture Sector GDP (% of total GDP): 3.2 % (2009)
Trade Balance (2005) –US$91,765,000 (Exports as % of imports): 12.75%	Food & live Animals as a % of total imports: 20 % (2006)
Budget Expenditure Agriculture and Fisheries US$925,072 (2008) 0.7% of 2008 budget appropriations go for BOA & 0.9% go to BMR	Human Development Index : N/A

Sources: ADB Key Indicators for Asia and the Pacific 2011; Palau Office of Planning and Statistics, WB

II. Situation Analysis and Agriculture Sector Overview

2.1 At the time of the last Census in 2005, 74% of the population of Palau lived in and around the civil and commercial centre of Koror making it more of an urbanized than rural-based country. Whilst the overall density of the resident population was a relatively low (41 persons/km2), the density in Koror was around 700 persons/ km2. These demographic factors have important implications for the prospects and nature of agricultural development. The key productive sector in Palau is tourism which accounts for about 75% of total value added, whereas agriculture (including fishing) accounts for only around 3%. Visitor arrivals in 2011 exceeded 100,000 and visitor numbers are projected to sustain strong growth in the coming years. The introduction of a regular Taipei, China–Palau airline route in May 2012 further enhances tourism prospects. Tourism will therefore remain the key source of economic growth for the foreseeable future (ADB, 2012). However currently, the multiplier impact of tourism is likely to be quite low, with most visitors coming on package tours paid for in Taiwan, Korea and Japan and most hospitality food being imported. Tourism can continue to be a very valuable industry for Palau, but it is important to ensure an increasing portion of each tourist dollar spent stays inside the country and in turn generates additional income generating opportunities. Thus the economic impact of tourism could be increased if stronger linkages to agriculture could be achieved. The hospitality sector represents a significant potential market for fresh produce, fish and some specialty processed products. However to service this market with local produce will require enhanced production, higher quality (including food safety), and for processed products better packaging and labeling. It would also be necessary to improve coordination between supply and specific market demands and to create a greater demand from the hospitality sector for local produce.

2.2 Palau suffers from a chronic shortage of data and up to date statistics to form the basis for planning; this is particularly true for the agriculture sector. Therefore there is no clear strategy based on detailed assessment of opportunities for import substitution which identifies priority products, production opportunities and constraints, market demands (calendar monthly requirements in volumes and prices) and detailed food import analysis, specific supply chain issues and economic viability of selected supply and value chains. In the absence of a more strategic evidence-based approach to sector development the chances of turning potential agricultural opportunities into viable sustainable business operations remains problematic.

2.3 Increasing production and productivity of farming systems faces several constraints and threats including poor soil environments for crop production[23], prevalent pest issues, in particular widespread endemic infestation of oriental fruit fly, and a vulnerable biosecurity system. Furthermore impacts of climate change require adaptation and enhanced resilience of cropping systems. Progress in addressing these issues is hampered by weak technical capacity in agriculture support institutions and the farming community. Farm development also suffers from lack of market information, poor linkage to potential markets, and absence of well located fresh produce market infrastructure. Improvement in supply coordination with market demands, including appropriate quality and food safety standards, is also required. The nascent Palau Farmers' Association, with some 40 members, aspires to address these issues, but requires considerable support and capacity building to achieve its goals. Meeting the Governments policy for agriculture ("to expand production to meet (some) domestic consumption") will require continuing growth and productivity of the agriculture sector.

2.4 Subsistence crop production remains the predominant agricultural activity in Palau, with the main crops being taro, cassava, sweet potato, banana and coconut. Backyard' chickens and pigs are also raised for household food and ceremonial occasions. Betel nut and betel pepper leaf are also commodities of considerable importance particularly in domestic trade. 'Rural women and many urban women are the main growers producing some of their household's food needs. Typically, women will have one or more taro gardens each and at least one dry land garden for cassava. The taro gardens resemble the traditional agro-forestry system although contemporary gardens are less intensively cultivated than those of the past. Traditional methods of composting and mulching are still used, but imported agricultural chemicals are also in use. Most crops produced in this informal economy are used for family food and customary exchange and only small volumes reach the market. Currently only a small commercial sub-sector exists which is producing vegetable crops for the local market. Commercial farms mostly specialize in high value crops such as cucumber, green onion, Chinese cabbage, green peppers, beans, kankum and egg plant. The commercial sub-sector is predominately driven by foreigners, either as laborers from the Philippines, or entrepreneurs from China.

2.5 The marine fisheries have two very distinct components, offshore and coastal. Offshore fisheries are undertaken on an industrial scale largely by locally-based foreign longline vessels. Coastal fishing is primarily carried out for subsistence purposes and for sales for local markets. In addition, there are some coastal fisheries that are export oriented (e.g. trochus and the aquarium trade).The marine sector is vitally important as a major food source, and to the economy for its export earnings, employment opportunities and for tourism development. The high number of tourist visitors means that there is also a strong domestic market for fish and other seafood products. However, the marine resource is also vital for national food security and is an important amenity attraction for the tourism industry. Sustainable management of the resource is therefore a high priority. Potential for overfishing the inshore resource implies a need for alternative production of high demand marine products through

[23] Only approximately 14% of Palau's land (6,700 ha) is regarded as arable by virtue of soil type and slope (USDA, Soil Conservation Service).

marine aquaculture. However, despite a large investment in aquaculture development activities over the last 37 years results have been disappointing. Whilst there has been considerable work on technical and biological aspects of aquaculture significant aquaculture production in Palau is presently confined to giant clams and milkfish. However, the demand for local fresh milkfish is high and production has grown significantly with local production now nearly replacing frozen imports. There is also an increasing demand for milkfish bait from the local tuna industry.The aquaculture sector is still in the early stage of making a sustainable and significant economic contribution to the nation, but it is currently showing some positive development (FAO, 2011).

2.6 A key challenge is to achieve greater returns on a sustainable basis from Palau's offshore and inshore marine resources, and also increase local involvement, while maintaining both adequate extraction levels for subsistence, and the protection of the natural marine environment for tourism and cultural purposes. The most important resources are reef finfish, pelagic fish, mangrove crab, lobster, trochus (for both shells and meat), giant clam, milkfish, beche-de-mer, and other invertebrates. The annual per capita consumption of fish has been estimated in the range of 85 to 135 kilograms which is well above the regional average of 46 kilograms. Aquaculture presents a viable alternative to the use of natural marine resources to support the tourism industry and meet local consumption demands. Aquaculture can also be an important new income-generating industry with the added benefit of reducing pressure on existing marine resources as a result of over harvesting and other unsound practices, but sustainable aquaculture development will depend on viable business models and technical support and capacity building for the private sector. Key fisheries priorities include realignment, restructuring and strengthening national fisheries laws, policies, institutions and programs. Improving the quality of coastal fishery products through improved handling/marketing and diverting fishing effort from coastal areas to the less exploited offshore tuna and bottom fish resources are also priorities (FAO, 2010). As aquaculture is given more support and attracts private sector investment, it is important to institute better management practices for the culture of key species (e.g. milkfish, crab, rabbit fish and grouper). FAO have provided support for developing a draft national aquaculture strategy. With imports of live fish, it is also crucial to strengthen the quarantine regulations with a risk analysis protocol.

2.7 The foreign sector of the economy is characterized by a large trade deficit offset by services income, remittances, Compact payments, and other official transfers, with the overall balance of payments registering surpluses in most years. Virtually all manufactured goods are imported, and the value of imports is close to Palau's GDP. The minimal merchandise exports consist primarily of fish some garments and a small quantity of betel nut. Palau has a liberal trade regime: there are five tariff bands and most imports attract a duty of only 3%. Many food items enter duty-free and food imports have grown by 133 percent in the last decade, while the population has increased by less than 20 percent. Licensing is required only for agricultural and health reasons. Nevertheless, inefficient regulation is hampering the operation of the trade regime. Quarantine rules require that fresh agricultural products and other goods requiring health clearance are imported only from the United States, which substantially raises the cost of some imported items. Various quarantine issues also constrain agricultural exports (including endemic pests such as oriental fruit fly), even though Palau's climate is well suited for year round production of high value-added fruits and vegetables. The Department of Environmental Health has a food analysis laboratory that has relevance to assuring quality control standards for local farm produce. Palau has interest to become a member of Codex Alimentarius.

III. Key issues shaping priorities for FAO assistance.

- Increased reliance on food imports as domestic agricultural and livestock production levels remain low and tourist visitor numbers increase.
- Lack of an evidence-based strategic approach to address potential import substitution opportunities.
- Unexploited potential for increased local agricultural production to improve food security, incomes and resilience to natural disasters and external shocks.
- Knowledge and skills of most farmers need to be strengthened to ensure their activities are sustainable, including adoption of appropriate conservation practices and soil management practices.
- Meeting food quality and safety standards for domestic and overseas marketing.
- Increased risk of introduction and establishment of foreign plant and animal (including marine) pests and diseases.
- Limited capacity of quarantine bio-security services (with implicit threat to biodiversity).
- Inshore fisheries are being harvested at unsustainable levels.
- Need to sustainably develop and diversify fisheries and aquaculture commodities for domestic and international markets.
- Vulnerability of agriculture and food security to adverse impacts of Natural Disasters and Climate Change.

IV. Country Program Context

4.1 The National Master Development Plan (NMDP) 2020 established the long-term strategies for economic development of Palau. These include: a substantial shift in economic activity from the public to the private sector for efficient resource use and improved operations and management of infrastructure; strengthening of government institutions and reducing the relative size of government through rationalization of government activities; and identification of financing strategies including appropriate taxation arrangements and cost recovery measures. The Medium Term Development Strategy (MTDS) 2009-2014 – described as ―Actions for Palau‘s Future– sets out in a more focused and streamlined way the key strategies and actions to help achieve economic, social, environmental and cultural goals over the 5 year period 2009 to 2014. The MTDS establishes meaningful priorities and recommends credible policies and practical actions to address those priorities. Whilst the MTDS is extensive, a comprehensive prioritisation process has been undertaken in each sector that establishes the main priorities and timing for policy actions over the next five years. For agriculture and fisheries the high level priority is to foster sustainable income opportunities. This policy priority will be implemented through implementation of sector comprehensive action plans.

4.2 Palau’s key bilateral development partners include USA, Taiwan Province of China, Japan, and the European Union. Other development partners include the Asian Development Bank, the International Monetary Fund and the World Bank. Palau's Compact of Free Association with the United States runs for 50 years, from 1994 to 2044. Under the compact arrangements, the United States government agreed to provide US$410 million in assistance over the compact's first 15 years (1994 to 2009). Palau has recently signed a new compact with the United States for US$250 million from 2010-2024. The US provides ODA through the Compact of Free Association disbursements and various Federal Grants. Compact assistance targets six sectors: education, health care, private sector development, environment, public sector capacity building and public infrastructure. USDA Forest Service funds forestry staff posts in invasive weeds, urban and community forestry and forest resources, but no additional operational funds are provided.

4.3 Taiwan Province of China is the second largest development partner after the USA. They maintain a technical mission which runs a research station at Aimeliik on 14ha of poor, acid soils. Their objectives are to develop and transfer new agriculture technologies to improve livelihoods and to promote agriculture for self-sufficiency. They are focusing on extending technologies for fruit and vegetable growing both for new and traditional crops. They are also supporting aquaculture (promotion of giant clam farming), and teakwood and other tree planting. The Government of Japan continues to support Palau in its energy sector through JICA implemented initiatives and other technical assistance. The Japanese development assistance program has a significant volunteer program providing capacity building across Palau's public sector and non-government organizations. Australia's ongoing development program delivers specialist technical assistance, scholarships, small-scale procurement, small grants and volunteers targeted to three partnership priority outcomes: education; health; and budget planning and management. The Government of Palau also engages with a range of multilateral and regional development agencies which include a broad range of United Nations agencies, such as the United Nations Children's Fund (UNICEF), United Nations Development Program (UNDP) and United Nations Population Fund (UNFPA); CROP agencies, including Secretariat of the Pacific Regional Environment Program (SPREP), Secretariat of the Pacific Community (SPC) and the Forum Fisheries Agency (FFA); and the Western and Central Pacific Fisheries Commission.

4.4 The Government has created the Office of Budget and Grant Oversight with the goal of providing a roadmap for development partners by setting national priorities and to improve coordination on all grants and technical assistance in Palau. However, counterparts for development partners are still fragmented between Office of the President, Ministry of State, and Ministry of Finance and the Government has not established a formal mechanism for coordination of development partners. The MTDS is being utilized in some areas but still has yet to realize its full potential as an aid coordination tool.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.3 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthened policy, legal and regulatory frameworks for sustainable agriculture, fisheries (including aquaculture) and forestry development; (ii) increased production, productivity and resilience of crop and livestock systems; (iii) improved income and employment opportunities through sustainable development of aquaculture and inshore fisheries; and (iv) strengthened institutional and human resource capacity for food safety and standards. Support to outcome 1 has focused on strengthening fisheries legislation. Support to outcome 3 has been provided through a study on the milkfish industry and a national consultation on the establishment of a sub-regional aquaculture network in Micronesia. Under outcome 2 a proposal for strengthening capacity for sustainable organic crop production is being finalized and this will remain a priority under this CPF.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus area for the CPF 2013-2017 will be on import substitution and strengthened linkage with the growing tourism market. Support will be delivered under the following three priority outcomes:

1) Strengthened policy, legislative, regulatory and strategic planning frameworks.
2) Increased production and productivity of farming systems (including aquaculture).
3) Improved supply chain coordination and market access.

Strengthened Policy, Legislative, Regulatory and Strategic Planning Frameworks

5.2 Palau is highly dependent on food imports despite considerable potential that exists for local food production. To meet national development objectives, particularly for increasing domestic agriculture production and reducing the level of food imports there is a need to strengthen capacity in the Bureau of Agriculture for strategic planning. Currently there is lack of a clear strategy based on up to date detailed assessment of opportunities for import substitution which identifies priority products, production opportunities and constraints, market demands (calendar monthly requirements in volumes and prices) and detailed food import analysis, specific supply chain issues and economic viability of selected supply and value chains. FAO will provide technical assistance to support strategic planning and economic analysis to establish potential viability of selected product supply chains. Capacity building support will also be provided to improve sector data collection and management systems. Policy work and strategic planning will also be a focus area for the marine (including oceanic) resources sector. To strengthen environmental sustainability support could also be provided for a review of the quarantine services and development of a nationwide biosecurity strategy to include regulations and a risk analysis protocol for aquaculture.

Increased Production and Productivity of Farming Systems (including aquaculture)

5.3 Enhanced agricultural production for import substitution, food security and rural livelihoods is a key priority for Palau. There are potential opportunities for Palau farmers to gain from import substitution**,** which could lead to increased farmer returns, a reduction in the import expenditure of the country and also to the overall development of the agriculture sector. There is a need for improved supply of inputs – planting materials (including fruit trees), soil fertility management (including organic approaches), Integrated Pest Management (particularly for control of Oriental Fruit Fly) and generally for better technology and husbandry practices. As women play a predominant role in farming care will be taken to ensure that support is gender targeted accordingly. Support for sustainable private sector involvement in aquaculture food production will also be considered. Strengthening sustainable agriculture (including aquaculture) production practices will enhance food security and build resilience in the face of natural disasters and climate change.

Improved Supply Chain Coordination and Market Access

5.4 Lack of coordination and integration in agricultural supply chains reduces efficiency, raises costs and increases risks. Added challenges are faced integrating small rural producers with domestic markets and strengthening linkages with the tourism and the hospitality sector. FAO will provide technical assistance and training to facilitate value chain analysis, coordination, promotion and upgrading of selected value chains. Palau farmers' associations will be key partners and target for capacity building and training. Agriculture is not widely seen as an attractive business opportunity and business enterprise capacity in the sector is not high especially amongst youth. Further business enterprise and entrepreneurship skills need to be fostered. Support to enhance enterprise and business skills in order to grow agriculture as a business will therefore be required. Food safety/certification and good agricultural practices/traceability are increasingly being demanded in both domestic and overseas markets for food products (fresh and processed) and accessing tourist food product supply chains will also require improved food quality/safety standards. FAO will provide training and technical support to build capacity to meet internationally recognized food quality and safety standards and for good agricultural practices.

CPF Priority Matrix Palau

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Import substitution and strengthened linkage with the growing tourism market	MTDS 2009-2014 – Foster sustainable agricultural and fisheries income opportunities and have less reliance on imported food	Fostering agricultural production and rural development.	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens.	Pacific Plan Goals Economic Growth and Sustainable Development MDG 1

CPF Results Matrix Palau

Priority Area A: Import substitution and strengthened linkage with the growing tourism market

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Strengthened policy, legislative, regulatory and strategic planning frameworks	Consistent and coherent gender sensitive policy, legislative, regulatory and strategic planning framework in place by 2016	Gazetted Policy, Legislation and Regulations	Government continues to prioritize agriculture sector development. Good stakeholder participation	**170,000**
Output 1.1: Strengthened capacity to develop strategic action plans for import substitution and linkages to the tourism market	Opportunity study and strategic action plan for import substitution and linkage to the tourism market available by end 2014	Study report available in Bureau of Agriculture		50,000
Output 1.2: Capacity building for policy, legislation and strategic planning reviews and implementation of marine resources policy and regulations	TBD in 2013/14			60,000
Output 1.3: Development of a nation-wide biosecurity strategy to include regulations and a risk analysis protocol for aquaculture	Draft biosecurity strategy available by end 2015	Biosecurity strategy document available in Bureau of Agriculture		60,000
Outcome 2: Increased production and productivity of farming systems (including aquaculture)	Increased production volumes, yields and reduced prices of selected crops and fish	Farm Survey Market Survey		**800,000**
Output 2.1 Strengthened capacity of farming community (particularly of women) for soil fertility management.	Number of farmers (disaggregated by gender) practicing good soil management practices Baseline and Target TBD	Bureau of Agriculture Survey and Records	Farmers adopt new production practices and technology	250,000
Output 2.2: Strengthened capacity of farming community for Integrated Pest Management (IPM)	Number of farmers (disaggregated by gender) familiar with and practicing IPM Baseline and Target TBD	Bureau of Agriculture Survey and Records	Farmers adopt new production practices and technology	100,000
Output 2.3: Enhanced capability in farming community for tropical fruit production	Increased diversity of fruit grown and marketed Baseline and Target TBD	Bureau of Agriculture Survey and Records	Farmers adopt and grow new fruit varieties and Oriental Fruit Fly control program is effective	200,000
Output 2.4: Enhanced capacity of government on aquaculture and biosecurity governance and the private sector for **responsible and sustainable** aquaculture production	Increased number of successful private sector aquaculture farmers Baseline and Target TBD	Bureau of Marine Resources' Records		250,000

Priority Area A: Import substitution and strengthened linkage with the growing tourism market

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 3: Improved supply chain coordination and market access	Well coordinated and integrated supply chains for 2 key selected products operating by 2017	Project reports Market survey report in Bureau of Agriculture	Priority value chains selected	**250,000**
Output 3.1: Enhanced capacity of Farmers' Associations for value chain analysis and facilitation	Two Selected key value chains elaborated and promoted	Value Chain reports in Bureau of Agriculture	Good farmer and other stakeholder participation	100,000
Output 3.2: Enhanced knowledge and skills in farming enterprise, marketing and business	Number of farmers (disaggregated by gender) with enhanced marketing and business enterprise skills Target TBD	Training reports Participatory evaluation Dept/Agric	Good farmer and other stakeholder participation	100,000
Output 3.3: Strengthened capacity in Good Agricultural Practices and food quality and safety (including for fish)	Percentage (100%) of target farmers aware of GAP principles by 2017 Percentage (70%) of target farmers applying GAP on farm by 2017	Extension officers reports Bureau of Agriculture	Good farmer and other stakeholder participation	50,000

CPF Action Plan

Action Plan: Palau	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Core Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Import substitution and strengthened linkage with the growing tourism market																
Outcome 1: Strengthened policy, legislative, regulatory and strategic planning frameworks																
Output 1.1: capacity to develop strategic action plans											SAP PO	Palau Gov Director B. Agric.	50	50		
Output 1.2: Capacity for policy, legislation reviews of marine resources policy											SAP FO	B Oceanic Fisheries Management FFA	60	60		
Output 1.3: Development biosecurity strategy											SAP PPO	Min R&D Bureau Agric Bur Mar Res	60	60		
Output 2.1: Capacity for soil fertility management											SAP PPO	Bureau Agric PFA	250	250		
Output 2.2: Capacity for IPM											SAP PPO	Bureau Agric PFA	300	300		
Output 2.3: Capacity for tropical fruit production												Bureau Agric PFA				
Output 2.4: Capacity for aquaculture governance and for sustainable production											SAP FO	Bureau Marine Resources	250	250		
Outcome 3: Improved supply chain coordination and market access																
Output 3.1: capacity for Value chain analysis/facilitation											RAP/AGS MO	Bureau Agric PFA	250	250		
Output 3.2 skills in farming business											RAP/AGS MO					
Output 3.3: capacity in GAP practices											SAP FNO					
Resource Mobilization	250	100	300		260		310						**1,220**	**1,220**		

Samoa

I. Country Summary

Land Area (km^2): 2,820	Sea Area/EEZ (km^2): 120,000 (smallest in the Pacific)
Population No.(2011 Census): 187,820 20% in Apia urban area	Population Annual Growth (2006-2011): 0.8%
Density inhabitants/km^2(2011 estimate): 66	Rural Population (% of total population): 78
GDP (2010):US$ 616.0 million	GDP per caput (2010): US$3,311
GDP Real Growth (ave.2001-2010): 3.0 % per annum	Primary Sector GDP (% of total GDP in 2010): 9.4% Agriculture 5.1% and Fisheries 4.3 %
Trade Balance 2010:US$-276 million exports as % of imports: 4.7 % imports as a % of GDP: 45%	Food & Live Animals as % of total imports (2010): 22%
Budget allocation agriculture (2010/11): SAT12.4 million (US$ 5.4 m) % of Total Budget for Ministries & Departments 2.3 %	Human Development Index (2009):0.771 position 94 out of 182 countries

Sources: Samoa Bureau of Statistics; Central Bank of Samoa Bulletin, September 2010; Samoa MDG Report, 2010.

II. Situation Analysis and Agriculture Sector Overview

2.1 Agriculture's current main roles in Samoa are subsistence food security and helping support the basic livelihoods for around 70% of the population living in rural areas. The 2009 Agriculture Census surveyed 23,164 households and recorded 15,786 which were agriculturally active. However, only 50% of the agriculturally active households derived some income from agriculture the remainder producing purely for home consumption. Despite the stable political environment and many structural reforms undertaken by the government to improve the business environment over the last 15 years commercial agricultural output recorded in the National Accounts has continued to decline. Agriculture's recorded share of GDP has fallen from 22% in 2000 to less than 10% in 2010. However, a considerable amount of agriculture activity in the subsistence/informal sector is poorly recorded in the National Accounts implying that current GDP figures understate the importance of the sector.

2.2 Agriculture export performance has also been disappointing with total exports (fisheries and crops) amounting to only ST$22.5 million (approx US$9.8 million) in 2010 [Central Bank of Samoa (CBS) data]. Nevertheless, apart from (re)exports of automobile electrical wire harnesses assembled in Samoa, agricultural products (principally fish) still constitute the

bulk of merchandised exports. Other smaller components are beer, bottled spring water and cigarettes.

2.3 Economic growth during the period 2001-2010 has been variable, but generally positive averaging around 3.0 percent per annum. In contrast, agriculture growth has been negative averaging about -3.2 percent over the same period with only 3 years in 10 when the sector posted positive growth [Asian Development Bank (ADB) data]. Samoa's small open economy demonstrated its continued vulnerability to exogenous shocks falling into recession in 2008 and 2009 reflecting the negative impacts of the global economic slowdown and a destructive tsunami in September 2009.The mainstays of the economy and principal sources of foreign reserves are tourism, remittances from diaspora in New Zealand, Australia and the US, and official development assistance (ODA). Tourism receipts are estimated to have been ST$308 million in FY2010/11, whilst remittances reached ST$346 million and ODA was valued at ST$145 million (CBS). Total merchandised exports (excluding wire harnesses) contributed only ST$28.1 million. Tourism, as the fastest growing sector, has helped to create opportunities in other areas of economic activity such as agriculture, fisheries, manufacturing and communications. But in the case of the agriculture and manufacturing sectors these potential linkage opportunities have not as yet been well exploited.

2.4 Whilst prospects for medium-term growth are considered generally positive based on tourism, commerce and financial services sectors, analysis of the 2008 Household Income and Expenditure Survey (HIES) shows that poverty and income disparities have been increasing [Samoa Bureau of Statistics (SBS), 2010]. The increase in basic needs poverty is concentrated in the rural areas and with over two thirds of the population depending on subsistence village agriculture for food security and livelihood there is a strong correlation between the performance of the sector and the level of poverty. Only around 12% of Samoa's total population is engaged in formal paid employment. This implies a need for a greater focus on strengthening the backward linkages from economic activities, such as tourism and manufacturing, to the rural communities where lack of employment opportunities and hardship is greatest. Plus ensuring that sufficient attention is directed to those predominantly subsistence farm households that have limited linkage to markets, but where agriculture (including fishing) continues to be vital for food and nutrition security and provides an important social safety net. For this group it will be important to not only facilitate and support the transition of smallholders towards commercially viable enterprises, but also to ensure good production and productivity of nutritious crops to safeguard food security.

2.5 Over the last decade whilst agricultural exports have been falling food imports have been steadily rising. Food and live animal imports amounted to almost ST$193 million in 2011, representing about 24 percent of total imports (SBS data) and are now approaching a level nine times the value of agriculture exports. The increasing reliance on imported food coupled with high food and oil prices puts a burden on foreign reserves and poses a risk to the stability of food supplies. Despite having a large subsistence agriculture sector, households remain very vulnerable to increases in food and fuel prices, particularly when faced with the loss of cash income due to a reduction in remittances or loss of employment. Households in the lowest expenditure quintile spend about 55 percent of their total expenditures on food (HIES, 2008). These households are hardest hit when the cost of the food basket increases, such as it did in 2008. Rising food prices coupled with rapidly increasing levels of food and nutrition related non communicable diseases, make it imperative that increased emphasis is placed on the production and consumption of nutritious local foods. This is reflected in the Fruit and Vegetable Sector Strategy (FVSS) 2009-2015 prepared with the International Trade Centre (ITC) and FAO technical assistance.

2.6 Farming in Samoa is generally small-scale (average farm size of 6 acres), dependent on family labour and predominantly focused on subsistence staples such as taro, banana, ta'amu, breadfruit and coconut with surpluses to farm household needs being sold in local markets. Farms often also include a mixed variety of vegetables, fruit trees and small livestock such as chicken and pigs. After coconut, cocoa is the most prevalent tree crop grown both for home consumption and for market sales. Nonu (*Morinda citrifolia*), which grow semi wild, continues to be an important crop for processing for nonu juice and fruit exports. A few of the more commercially oriented farms focus on marketable vegetables such as tomatoes, head cabbage, bok choy, lettuce, cucumber, pumpkin, long bean, eggplant and capsicum. Popular fruits that are marketed when in season are pineapple, papaya, mango, Samoan orange, lime, avocado, vi-apple, passionfruit and rambutan. Dessert bananas including Cavendish variety and lady's finger variety are available pretty much year-round. Extending fruit tree cultivation to improve community nutrition is currently a government priority with focus on school gardens as well as on regulation of food products sold in school canteens.. This could also be expanded to building technical capacity within communities for fruit tree propagation and cultivation particularly for vulnerable groups.

2.7 The tropical climate of Samoa offers year-round growing conditions for most traditional crops, but unless protected, heavy rainfall from December through March depresses the growth of vegetables such as lettuce, tomato and cabbage. Due to poor water retention in the volcanic soils drought conditions can also be experienced particularly in western regions during winter months from July to September. Despite the generally fertile nature of the soils cultivation is hampered by the prevalence of volcanic rocks and the uneven terrain. Low labour productivity, lack of technical skills, poor availability of appropriate inputs, limited access to credit, prevalent pests and diseases and farm larceny have also been noted as constraints to commercial farming. Developing the capacity to consistently produce commercial quantities of quality products to meet local processing, export market and tourist market needs continues to be a significant challenge. Domestic markets are small and fragmented and smallholder farmers' linkages to these markets remain weak. Facilitation of supply chains through middlemen traders is limited. A significant challenge therefore is how to encourage the large proportion of principally subsistence farmers to move into commercial production. Furthermore, coordination and vertical integration in supply chains has not been well developed. Thus overall economic efficiency in value chains (including processing) is generally low and combined with the island's remoteness and distance to major export markets means that agriculture products struggle to be competitive in international trade. Therefore the best opportunities currently lie in building and strengthening local enterprises and farm level capacities to continue to pursue the requirements to satisfy food demand in the domestic market for national food security and to increase substitution of the fresh produce food import bill required for the growing tourism sector.

2.8 The 2009 Agriculture Census records a total of 38,954 cattle, 152,145 pigs and 307,060 chickens and also a few hundred goats, sheep and ducks amongst the edible livestock. Imports of meat products have been increasing consistently over the years due to the inadequacy of quantity and quality of local supply. Poultry is currently by far the largest meat product import valued at around US$11 million (approx ST$25 million) in 2009 (SPC Pacific Trade Statistics database) Various attempts in the past years to establish commercial egg production have not been very successful due mainly to poor management, high feed price and cheap low quality imports competing with local products and reducing producer margins. However, introduction of an egg standard and regulations in 2010 have seen resurgence in local production. The recent establishment of an integrated commercial feed mill and pig farm has also shown that there is a potential for commercial pig farming and related

processing of pork if there is a reliable and cost effective source of feed and availability of markets [Agriculture Sector Plan (ASP), 2010]. However there is still a need for building private sector technical capacity in local feed formulation and production for pigs, poultry and fish farming.

2.9 Twenty five percent of households in Samoa engaged in fishing in 2009, down from 1999 when around a third of households surveyed engaged in fishing. The vast majority fish mainly or entirely for home consumption and only small percentage fish primarily for commercial reasons. In 2009 there were around 30 licensed active long-line fishing vessels compared to 60 in 2007. Fisheries production expanded at rapid rates in 1998 and peaked in 2001, when fisheries accounted for 8.2% of GDP. The expansion reflected the private sector development of long-line fishing for (mostly albacore) tuna, which was blast-frozen and sent in containers to fish canneries in nearby American Samoa. Since 2002 fish production and exports declined overall as a result of the adverse impact of changing climatic conditions on tuna stocks, rising fuel costs, and a declining US dollar. In recent years catches (tuna plus by-catch) by the Samoa-based offshore fleet have ranged from about 1,700 to 3,700 tonnes (FAO, 2011). However, fish remains the largest commodity export, accounting for over half of total commodity export earnings. The main objectives of Samoa's commercial fisheries management are: maximization of catch rates, profit and foreign exchange earnings; extensive local participation; and increased safety at sea. The main management tool for the offshore resource is a limitation placed on fishing vessel licences.

2.10 The inshore coastal fishery continues to play a vital role in the livelihood of village economies; however, there has been a noticeable decline in inshore resources which has been linked to the use of destructive fishing methods, loss of habitat and increased commercial harvesting of seafood products. Land reclamation and road construction have also been known to destroy fish nursery areas and poor land management has led to erosion and consequent siltation of lagoons. The emphasis therefore for the fisheries subsector is conservation and sustainable management (ASP, 2010); the overall objective being to consolidate current benefits and add value to existing catches, rather than seeking development through increased catches.

2.11 The Fishery Division-led establishment of marine reserve and protected areas has had both positive environmental impact and improved amenity benefits for the tourism industry. Established reserve areas range in size from 15,000 to 175,000 square metres and many include ecologically important mangrove and sea grass environments, and hence important breeding grounds for fish stocks. Although individual reserves are relatively small it is believed that together they constitute a vital network of safe havens around the Samoan islands. The reserves are also helping replenish adjacent fishing areas through reproduction and migration. Increase in fish and other marine resources benefit both subsistence fishers and tourism. However there is a need to develop alternative sources of food fish and income earning opportunities in coastal areas where inshore conservation is being practiced and aquaculture may offer some opportunities.

2.12 Currently aquaculture development in Samoa remains very small, but offers an area of potential as imports of crustaceans and mollusks has more than doubled since 2002 with a growing demand from the hospitality sector. While past research, pilot project and attempts at commercial farming have included at least 10 species (tilapia, mullet, milkfish, *Eucheuma* seaweed, green mussel, giant clam, edible oysters, pearl oysters, molly, and trochus) only tilapia remains as an aquaculture species with around 20 active farmers (FAO, 2011).Currently pond production of Nile tilapia is the principal activity focused largely for

household consumption and food security. Priorities for Samoa are to establish economic feasibility for viable aquaculture commodities, to enhance private sector capacity to produce and market these in successful business operations, and to further promote integrated fish farming systems to strengthen community food security.

2.13 The sustainability of natural resources is particularly relevant for agriculture, forestry and fisheries. The forest sector has developed a new logging code of practice, reviewed timber prices, undertaken resource inventory mapping, and has reviewed legislation, as part of its new forestry sector plan. The aim is to develop new ways of protecting the remaining indigenous forest resources and accelerating reforestation so that a viable forest sector and stakeholder communities are sustained. Farm agroforestry is seen as a viable option. The decline in native forest resources means that integrating timber species within the faming system is of increasing interest to many farmers, both for subsistence and commercial purposes, and the interest is expected to increase when the full commercial value of timber is realized. Efforts to improve land conservation and management are being focused on sustainable managing forest areas.

2.14 Continued assessment of the state of forest protected areas in the country needs to be undertaken and also exploring carbon sink initiatives. Samoa has globally significant biodiversity, but biodiversity conservation - whether in formally protected areas (PAs) or the wider production landscape – needs strengthening. The establishment of PAs and other conservation measures are complicated by customary land ownership arrangements, which require that local communities are consulted and agree to any such changes. Furthermore, because agriculture and natural resource extraction is a crucial part of local livelihoods, communities need incentives to agree to restrictions on their activities in PAs and to change their forest and land management practices to ones that enhance biodiversity protection and are generally more sustainable. They also need new opportunities for livelihood activities in and around PAs. Promoting organic farming is one option being explored to enhance sustainable land management and also to produce value added niche products for specialty markets.

III. Key issues shaping priorities for FAO assistance

- Weak data for monitoring food and nutrition security
- Weak institutional capacity in sector policy and planning particularly in the area of feasibility, cost benefit and other economic analysis.
- Outdated legal and regulatory framework for agriculture.
- Low productivity and value chain efficiency in commercial agriculture and fisheries.
- Lack of competitiveness of agricultural products.
- Difficulties in meeting technical requirements for market access, especially for fresh agricultural produce.
- Meeting food quality and safety standards for domestic and overseas marketing.
- Declining inshore marine resources to provided for local food security and livelihood opportunities.
- Generally slow development of aquaculture due to weak capacity in government institutions, private sector and the rural community.
- Potential loss of valuable biodiversity because of a lack of community managed Protected Areas.

IV. Country Program Context

4.1 The key theme of the Government of Samoa's 2012-2016 Strategy for the Development of Samoa (SDS) is on boosting productivity for sustainable development. The Government is committed to encouraging private sector investment and to encourage inclusive growth. Re-invigorating agriculture and revitalizing exports are given high priority. Dedicated interventions will be directed toward the agricultural sector to encourage broad-based participation in growth, raise domestic production to meet food security needs, and boost export capacity. Opportunities to transform viable agricultural products to higher value added processing for the export market will be given attention. The SDS recognizes the need for capacity building at all levels within the sector and to strengthen policy, strategic planning and management capability to support sustainable agriculture development. Investment will also continue in support of the social sectors in order to achieve a healthy Samoa and improved access to quality education and training. Infrastructure in terms of water, energy, transport, and telecommunications will continue to be supported to provide the enabling environment for businesses and improved service to the public. In recognition of the importance of sustainable development and improved resilience, environmental sustainability and climate and disaster resilience have been given an equally high priority focus along with economic and social sustainability. National and all sectoral development plans are required to reflect an integrated approach to addressing climate-related risks and have implemented programs and projects to reduce vulnerability and enhance resilience to climate change, including climate-related disasters. Agriculture and food security/sustainability is identified as one of the priority profiles under the National Adaptation Program of Action (NAPA) 2005.

4.2 The Ministry of Agriculture and Fisheries (MAF) has recently prepared an Agriculture Sector Plan (ASP) 2011–2015 with a vision of agriculture for food and income security. The primary objectives of the ASP are: to strengthen policy, legal and regulatory frameworks for sustainable agriculture development; to improve national self reliance in food production and nutritional security; to enhance private sector capacity in improving agricultural productivity, value adding and marketing; and to ensure sustainable adaptation and management of agricultural resources. The government's policy objectives have a strong focus on commercialization through increased private sector participation and improved facilitation by the Ministry of Agriculture. The implementation of the ASP is ongoing supported by the US$13 million World Bank funded Samoa Agriculture Competitiveness Enhancement Program SACEP).

4.3 Development assistance to Samoa makes up about 12% of GDP. Bilateral partners to the agriculture sector are Australia, New Zealand and China mainly through technical assistance, while multilateral partners include the World Bank, the European Union, and the UN System. Samoa also benefits from the regional programs implemented by SPC, SPREP and the Australian Centre for International Agricultural Research (ACIAR). Reflecting the particular difficulties food price spikes caused small islands such as Samoa and the importance of agricultural reform to encourage broad based growth, a priority focus for WB assistance is to strengthen food security and agricultural productivity. The SACEP financed by a combination of IDA credits and grant resources from the Global Food Crisis Response Program (GFRP) aims to improve food security and import substitution by supporting greater livestock and fruit and vegetable production by subsistence and semi-commercial farmers. The investment will also assist small farmers to take greater advantage of market opportunities, particularly by accessing supply chains for tourism operators in Samoa, and harness opportunities for import substitution.

4.4 Australia's support for 'Private Sector Growth & Employment' aims to increase the contribution of agriculture and fisheries to GDP by supporting private sector development, promoting regional economic development and trade liberalization, improving economic infrastructure and lowering the costs of doing business. Australia has provided assistance for the formulation of the new Agriculture Sector Plan and is also supporting institutional strengthening of the Samoa Bureau of Statistics as a basis for improving evidence-based policy making. Assistance is also being provided to a pilot community agroforestry program. Australia more recently, together with New Zealand and UNDP provide funding for a "Private Sector Support Facility" which is available for private sector development initiatives in the sector through linkages with other sectors such as tourism and manufacturing.

4.5 There is considerable development support on adaptation to climate change with most assistance to date focusing on technical assistance to strengthen capacity, enhance policies and strategies, and to demonstrate climate resilient techniques. The Community Based Adaptation Project (CBA), which is supported by the GEF (SPA) and AusAid, aims to increase resilience of natural resources and livelihoods sensitive to climate change. The recently approved Adaptation in the Forestry Sector Project, supported by GEF (LDCF), AusAid and Japan, will integrate climate risks and resilience into lowland agro-forestry and upland forestry policies and strategies and demonstrate techniques for climate resilience. The Agriculture and Health Project (GEF-LDCF) coordinated by UNDP is improving the organization and technical capacity in the Samoa Meteorological Division to monitor climate change trends and provide timely climate risk and early warning information for extension workers and public health staff, as well as strengthen their capacity. The Samoa Pilot Program for Climate Resilience (SPPCR) supported by the Climate Investment Fund (USD 30 million) will adopt a strategic focus on the coastal zone where 70% of the population resides and where, the main economic corridor is located and climate risks will be addressed in an integrated manner. Additional support has also been secured through the Adaptation Fund (US$8m) for ensuring a full coverage of all coastal areas in the implementation of adaptation plans with plans to work with UNDP in securing a further US$14 million for mitigation measures.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.6 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthening policy, legal, regulatory and strategic frameworks; (ii) increased production, productivity and resilience of crop, food and livestock systems; (iii) improved marketing systems and market access for traditional food crops and high value specialty commodities; and (iv) sustainably managed terrestrial, freshwater and marine resources. Under priority outcome 1 assistance has been provided which strengthened capacity to analyze market data to provide evidence-based policy advice to government. This work helped demonstrate the importance of developing and maintaining systems of domestic market data collection and use, and also the value of good data for improved decision making. Further support for strengthening evidence-based policy and strategic planning were through participation in a sub-regional agriculture for growth study, a scoping study on agriculture tourism linkages, and work on aligning policies to the ASP. Technical input also contributed to drafting new food safety legislation and to review the existing Export Control Bill and to consider whether it should be merged with the Quarantine (Biosecurity) Act 2005.

4.7 Under outcome 2, linking emergency assistance to development, support was provided for agriculture and fisheries rehabilitation following the 2009 tsunami and also through small farm projects under the Telefood Development program (TFD). Whilst technical assistance is

ongoing for designing an Alia fishing vessel with a sailing rig with the object of improving fuel efficiency and sea safety. Sea safety training for fishermen is also being planned. A study in aquaculture focused on the development of hatchery facilities which will be further supported by Japan. Industry training in HACCP and assistance in quality management accreditation for the Scientific Research Organisation of Samoa (SROS), has helped gain New Zealand accreditation, and has thus contributed to outcome 3. Capacity building in organic farming and processing of organically certified and Fair Trade labeled agricultural produce for local and export markets, which included building capacity for fruit drying has also contributed to outcomes 2 and 3. Under outcome 4 the GEFPAS-FPAM – Forestry and Protected Area Management project is being implemented by FAO and activities will continue as a priority under the CPF 2013-2017. The project development objective is to enhance the sustainable livelihoods of local communities living in and around protected areas.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, increasing food and income security through actions in the following three priority areas have been identified for the CPF 2013-17:

1) Policy, Legislation and Strategic Planning.
2) Value Chain Facilitation and Promotion.
3) Environmental Management and Resilience

Policy, Legislation and Strategic Planning

5.2 To meet its development objectives, there is need to strengthened capacity in policy analysis, legislation review and strategic planning. For policy formation and planning purposes, collection and publication of agricultural data, particularly in relation to developing food supply and utilization accounts and an up to date food balance sheet. In the past policies have been adopted without being subjected to detailed economic analysis and without a good understanding of what can be expected from the farming sector. Improved performance by the ministry and by the sector as a whole will only result from a strengthened policy, legislative and strategic framework. FAO will provide technical assistance to support policy formulation, legislation and regulation reviews and strategic planning to support implementation of the ASP. Capacity building support will also be provided to improve sector data collection and management systems, policy analysis and economic analysis. Policy work and strategic planning will also be a focus area for the fisheries and forestry sub-sectors, though the latter is under the jurisdiction of the Ministry of Natural Resources and Environment..

Value Chain Facilitation and Promotion

5.3 Enhanced agricultural production for export, food security and rural livelihoods is a key priority for Samoa. Restoring taro as a major agricultural export is a key goal. Increasing agricultural production and productivity is the highest overarching priority for MAF to meet domestic demand and supply potential export markets. Extending planting of nutritious local foods including fruit trees is also important to address food and nutrition security issues, as well as to increase opportunities for cash income earning. Technical support to build capacity within farming communities (with particular focus on women and youth) for fruit tree propagation and cultivation and strengthening marketing roles may be provided.

5.5 Food safety/certification and good agricultural practices/traceability are increasingly being demanded in overseas markets for food products (fresh and processed). Tourism is identified as a growth area for the economy, but accessing tourist food product supply chains will also require improved food quality/safety standards. Agriculture (crops/livestock and fisheries) production and processing industry currently has limited capacity in these areas and FAO will provide training and technical support to build capacity to meet internationally recognized food quality and safety standards.

5.6 Lack of coordination and integration in agricultural supply chains reduces efficiency, raises costs and increases risks. Added challenges are faced integrating many small rural producers with new domestic markets (e.g. for tourism and processing operations) and for potential export markets. Strengthening small farmer to market linkages is an ongoing priority. Contract farming is not currently widely practiced and experience and understanding of appropriate models and potential benefits is not well understood. In collaboration with other development partners working in this area such as ADB and UNDP under the Enhanced Integrated Framework for Trade, FAO will provide technical assistance and training to facilitate value chain analysis, coordination, promotion and upgrading of selected value chains in order to better integrate small farmers into commercial marketing systems.

Environmental Management and Resilience (including disaster preparedness, emergency response and climate change)

5.7 Samoa fully recognizes the need to protect its valuable and unique biodiversity and the importance of community involvement in this process. Biodiversity promotes ecosystem services important amongst which are: food production, provision of raw materials, recreational opportunities and cultural values. Through GEF-PAS funding, FAO will support the government of Samoa implement a project for conserving biodiversity via an integrated system of protected areas (PAs). The main output areas will be: improved policy and legal frameworks to underpin PA networks; strengthened capacity for community-based conservation management; establishment of new protected areas; and mechanisms developed for sustainable financing for the PAs. An important strategy for successful conservation is to provide, on a sustainable basis, alternative access to resources required by the community. Development of agroforestry and organic farming has been identified to have a strong role both for improving rural livelihoods and strengthening conservation efforts.

5.8 Marine inshore resources require implementation of conservation measures which may initially reduce the supply of food fish and livelihood resources for coastal villages. Pressure on the marine resource can be alleviated if alternate sources of fish can be provided through aquaculture. FAO will provide technical assistance, training and support to build capacity and facilitate development of sustainable and viable aquaculture activities as well as collaborate with government on south-south cooperation programs that already promote exchange programs in aquaculture development particularly in Asia.

CPF Priority Matrix Samoa

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Policy, legislation and strategic planning	SDS 2012-2016 Key Outcome 2; Re-invigorate Agriculture; ASP 2011-2015 Objective 1 –Strengthen policy, legal, regulatory and strategic planning framework for sustainable agriculture	Strengthening food and nutrition security;	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens. .Output 3.1.5: Strengthen the policy strategic planning and management capability to support sustainable agriculture development	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific MDG 1
CPF Priority Area B: Value chain facilitation and promotion	SDS 2012-2016 Key Outcome 2; Re-invigorate Agriculture; ASP 2011-2015 Objective 3- To enhance private sector capacity in improving productivity, value adding and marketing	Fostering agricultural production and rural development Fostering agricultural production and rural development	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens.	Pacific Plan Goal: Economic Growth MDG 1
CPF Priority Area C: Environmental management and resilience	SDS 2012-2016 Key Outcome 13;Environmental Sustainability; ASP 2011-2015 Objective 4 – To ensure sustainable adaptation and management of agriculture resources.	Enhancing equitable, productive and sustainable natural resource management and utilization	UNDAF Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management	Pacific Plan Goal: Sustainable Development Convention on Biological Diversity Hyogo Framework for Action 2005-2015 MDG 7

CPF Results Matrix Samoa

Priority Area A: Policy, Legislation and Strategic Planning

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Enhanced policy, planning and monitoring capacity of MAF including delivery of market oriented extension services	MAF providing efficient and effective services to clients. Program monitoring frameworks in place and being utilized for tracking progress and planning and managing for results	Client Satisfaction Survey Results based monitoring framework populated with appropriate data	Qualified human resources available in MAF Policy and Planning Division Collaboration with World Bank and SPC support programs	**350,000**
Output 1.1: Strengthened capacity to collect and analyse data (disaggregated by gender, age and geography) on status of food and nutrition security.	Subsistence food production assessed, quantified and valued. Food Balance Sheet(FBS) prepared based on credible data by end 2014 Baseline- FBS prepared in ?, but with weak data sources	Credible FBS available	Good collaboration between MAF, SBS, MOH and MOF. Full participation of appropriate ministry staff	100,000
Output 1.2: Strengthened capacity in MAF for policy analysis and economic analysis of farming systems and value chains.	MAF policy reports/studies/ publications integrating economic analysis increased	Portfolio of MAF Policy Division reports	.	200,000
Output 1.3: Increased capacity to review and revise legislation	Agriculture ordinances reviewed and revised.	Review reports and draft legislation Up-dated legal and regulatory framework in place by 2016	Good collaboration with AGs Office	50,000

Priority Area B: Value Chain Facilitation and Promotion

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: Improved market opportunities and returns for small farmers through enhanced supply chain coordination and stronger market linkages	Increased level of subsistence agriculture moving towards semi-commercial status Well coordinated and integrated supply chains for 2 key selected products operating by 2016			**1,000,000**
Output 1.1: Increased capacity for value chain analysis and facilitation	Two Selected key value chains elaborated and promoted	Value Chain Reports	Collaboration with ADB and EIF and GoS through MAF and MCIL. Participation in sector steering committee	200,000
Output 1.2: Models for contract faming developed and promoted	Number of new supply contracts in place by 2016 Target TBD	MAF Reports & Model Contracts	Producers and buyers who willing to enter into contracts	100,000
Output 1.3 Enhanced capacity of small farmers to produce consistent quality supply to meet market demand	Number of farmers consistently marketing quality products to nominated supply chains by end 2016 Target: TBD	Extension officers reports Participatory evaluation		400,000
Output 1.4: Strengthened capacity of private sector in HACCP and ISO standards	Number of Agribusinesses with HACCP/ ISO certification Baseline and Target TBD	Phone survey of industry	Business stakeholders participate in programs	50,000
Output 1.5: Strengthened capacity in Good Agricultural Practices	Percentage (100%) of target farmers aware of GAP principles by 2015 Percentage (70%) of farmers applying GAP on farm by 2016	Verification by extension officers Participatory evaluation	Good stakeholder participation	50,000
Output 1.6: Strengthened technical capacity in farming communities (with particular focus on women and youth) for fruit tree propagation and cultivation	Number of women and youth in target communities successfully propagating and cultivating additional fruit trees Baseline and Target TBD at project inception	MWCSD village data collection systems		200,000

Priority Area C: Environmental Management and Resilience

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: **Enhanced biodiversity conservation via an integrated system of protected areas.**	Increased number of terrestrial and marine areas and critical ecosystems and species protected Number of species threatened with extinction decreased		Ensure participation of and collaboration with MNRE through sector steering committee	**1,260,000**
Output 1.1: Strengthened policy, legal and institutional arrangements for biodiversity conservation and , monitoring and evaluation; framework established for PA network expansion	1. Three new/revised laws: Biodiversity Conservation Act; Sustainable Forest Management Act; and revised National Park and Reserve Act. 2. 100 government staff and other stakeholders trained in implementation of the new laws. 3. Revised National Biodiversity Strategy and Action Plan. 4. Civil servants (outside MNRE) aware of BD cons. and SLM issues/linkages in their work. 5. MNRE staff consulted and participate in extra-sectoral development work.	1. Evaluation report (including lessons learned). 2. Draft legislation, policy statements, model agreements/contracts etc. (as required). 3. Replicated sites selected.	Adequate support and implementation capacity from Government	121.000
Output 1.2 Extending and consolidating the Protected Area Network	1. Three CCA agreements signed 2. Villager commitment maintained through regular contact, monitoring and reviews of activities. 3. Village rules and local protocols reviewed and revised (as appropriate). 4. Assessment of biodiversity in lowland landscapes. 5. Biodiversity protection and restoration measures identified and agreed. 6. SLM options evaluated, discussed and agreed. 7. Village land-use plans prepared, agreed and integrated into village development plans. 8. Ecological survey conducted and data collected analysed, interpreted and disseminated. 9. Effective management plan developed in consultation with communities 10. Necessary infrastructure identified and upgraded. 11. Degraded natural forest areas rehabilitated (initial target: 60ha across all CCAs)	Agreements for CCA, village rules, assessment and evaluation reports, village land-use plans, protected area management plans, rehab report of degraded forests	Adequate support from Government, landowners, communities	197.000
Output 1. 3 Capacity building in biodiversity conservation and	1. Regular surveys of biodiversity in PAs implemented, recorded and reported on	Survey reports on MNRE website, training reports and evaluation,	Adequate support from Government and public.	484.000

sustainable land management	MNRE website. 2. 20 MNRE and local NGO staff trained in biodiversity assessment and threat identification. 3. Information on threatened and endangered species updated. 4. Information about Samoa's PAs collected and reported systematically. 5. Updated and accurate information on protected area management, biodiversity, land use and sustainable land management practices reported on MNRE website and annual "State of the Environment" report for Samoa. 6. Educational and public awareness materials about threatened and endangered species and Samoa's protected areas. 7. "National Flora of Samoa" book. 8. Information on biodiversity conservation integrated into school curriculum. 9. Interpretative and demonstration facilities installed and maintained.	report about endangered and threatened species, educational and public awareness material, national Samoa flora book, school curriculum, interpretative facilities		
Output 1.4 Mechanisms for sustainable PA financing developed	1. Strategic plan for financing long-term PA management activities. 2. Protected Area funding obtained from at least one new source in final year of project.	Financial needs assessment for Pas, strategic plan	Adequate markets and sources for PA funding	59.000
Output 1.5: Sustainable use of biodiversity	1. 90 farmers trained and adopting organic production techniques in the three CCAs. 2. Overseas organic markets identified and assessed and export volumes of at least three crops expanded. 3. "Co-ordinate Pacific Certification Option" in place and used by organic farmers.	Training reports, market study	Willingness of farmers to cooperate, adequate markets for organic products	236.000
Output 1.6: Sustainable land management in forest margins	1. Village development plans produced and activities initiated by end of project. 2. Increased production/productivity of at least three products in each CCA (c. 120 farmers participating in local farmer/forest-user groups). 3. Annual income of participants increased by end of project 4. Development activities reviewed every year with villagers and evaluated (in terms of their sustainability, productivity and income generation) .	Best practice guidelines, training report and evaluations, socio-economic reports,	Adequate support of farmers	163.000

Outcome 2: Development and expansion of sustainable aquaculture and small scale fisheries enterprises.	Number of active aquaculture farms and level of fish production Target TBD in 2013 Baseline: 2010 estimated 22 farms and total production of 10 tonnes of Tilapia	Department of Fisheries Annual Reports	Stakeholder interest in expanding aquaculture production Finance available to develop production capacity	**300,000**
Output 2.1: Strengthened capacity of communities and private sector for viable enterprise in aquaculture food fish production	Number of farmers benefiting from training in aquaculture techniques and farm business management Target TBD at project inception	Training Reports Department of Fisheries Annual Report	Stakeholder interest in training being provided	300,000

CPF Action Plan

Action Plan: Samoa	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec		Partners				
Priority Area A: Policy, legislation and strategic planning																
Outcome 1: Enhanced policy, planning and monitoring capacity of MAF including delivery of market oriented extension services																
Output 1.1: capacity to collect data on status of food and nutrition security											SAP PO SAP FNO	MAF SBS MOH	100	100		
Output 1.2: capacity for policy analysis/ economic analysis of farming systems											SAP PO FAO EST SAP PPO	MAF	200	200		
Output 1.3: TA for legislation review											SAP PO AFAOR	MAF AGO	50	50		
Priority Area B: Value Chain Facilitation and Promotion																
Output 1.1: Increased capacity for value chain analysis/facilitation											RAP MO AGS MO	MAF SFA SMA SACEP ADB	800	400		400
Output 1.2:models for contract farming developed & promoted											SAP PO					
Output 1.3: capacity of small farmers to produce consistent supply to market demand											SAP PPO					
Output 1.4: capacity for HACCP/ISO											SAP FNO					
Output 1.5: capacity for GAP																
Output 1.6: capacity of women/youth for fruit tree propagation											SAP PPO AFAOR	MWCSD MAF	200	200		

Year	2013		2014		2015		2016		2017							
Priority Area C: Environmental management and resilience																
Outcome 1: Enhanced biodiversity conservation via an integrated system of protected areas																
Output 1.1: strengthened policy, legal and institutions and M&E											CTA GEFPAS/ SAP ForO	MNRE	121		GEF 1260	
Output 1.2: Extend and consolidate PAs													197			
Output 1.3: capacity in biodiversity conservation and SLMs													484			
Output 1.4: mechanisms for sustainable PA financing													59			
Output 1.5: sustainable use of biodiversity to support income generation													236			
Output 1.6: SLM in forest margins and													163			
Outcome 2: Development and expansion of sustainable aquaculture and small scale fisheries enterprises																
Output 2.1: viable aquaculture food fish production											SAP FO	MAF	300	300		
Resource Mobilization	1,260	100	1350				200						**2,910**	**1,250**	**1,260**	**40**

Solomon Islands

I. Country Summary

Land Area (km^2): 28,370	Sea Area/EEZ (million km^2): 1.34
Population (No.): 515,870 (2009 Census)	Annual Growth (%): 2.7
Density (inhabitants/km2): 19	Rural Population (% of total population): 80
GDP (US$ million):670.8 m (2010)	GDP per caput (US$): 1,270 (2010
GDP Real Growth (ave.2005-2010): 5.8 % per annum	Primary Sector GDP (% of total GDP): 53% (2010)
Trade Balance (2010) – US$179 m (exports as % of imports): 56 % (Imports as a % of GDP) -53.7%	Food & Live Animals as % of total imports: 17 %
Budget allocation agriculture: % of Total Budget <2 %	Human Development Index: (2011) 0.510—in the low human development category—positioning the country at 142 out of 187 countries and territories.

Sources: Asian Development Bank Key Indicators 2011; SPC Statistical Summary 2011.

II. Situation Analysis and Agriculture Sector Overview

2.1 SI is the third largest archipelago in the South Pacific consisting of six large and 986 small islands with a total land area of 28,370 km². The islands, mostly rugged mountains with some low coral atolls, are scattered leading to major challenges in the development of infrastructure, transportation, communications networks and rural development in general. The 2009 Population Census recorded the population at 515,870 with 80% of the population living in rural areas. Livelihoods are based mostly on a mixture of subsistence and cash crop farming, gathering of forest products, and fishing. The only major urban centre is the capital Honiara, located on the island of Guadalcanal, with an estimated population of 64,609 (2009 Census). Rapid population growth (2.7%) together with urbanization and monetization are causing ongoing issues of cultural change and dislocation. These challenges have been compounded by the impacts of a period of civil unrest (1998-2003), the global economic crises and a successive series of natural disasters. A key challenge for policy makers is to address these multiple issues in an integrated manner and at sufficient pace to meet public demand thus helping ensure a more stable government.

2.2 Since the end of the civil conflict in 2003 economic growth has been driven mainly by rapid expansion of forest logging and a substantial increase in international aid, but both these drivers are unsustainable. Current GDP projections for the Solomon Islands by the IMF are pessimistic and indicate a continued fall in per capita incomes over the medium term. This means that government

revenue and financing of essential public services will remain dependent on external assistance for some time to come, whilst most Solomon Islanders will continue to rely on the productivity of smallholder agriculture for incomes and food security. But food production is facing threats from pests and disease, whilst intensification of land use in several areas is leading to soil degradation which now challenges subsistence viability. However, the poorly understood and little quantified nature of this major sector means that policy measures to support or protect it remain unclear. Indeed, the general lack of data on agriculture production and particularly smallholder food production means that a definitive statement on food security is currently not possible. To strengthen policy, planning and decision making improving agriculture data collection and systematization is therefore a priority for Solomon Islands.

2.3 The commercial agricultural sector comprises smallholders and large corporate development projects. Smallholders cultivate extensive and dispersed plantings of coconut, cocoa and food crop gardens. Coconut is generally processed to copra and coconut oil and cocoa to dry bean. Food-crop gardens produce almost exclusively for the local market, although there have been occasional small exports of fresh produce to the Australian and New Zealand markets. Despite long standing policy indications about diversification, the vast majority of exports originating from the smallholder sector continues to be copra and cocoa; buoyed by high international commodity prices both products have enjoyed strong growth in volumes in recent years and are an important component of export earnings. Large palm oil plantation on Guadalcanal, currently exceeding 5000 Ha, constitutes the major large-scale corporate agriculture activity. However, logging and fishing still account for 80% of current economic output and the country remains mainly a primary producer, with little processing capability. The shortage of trained human resources is also a fundamental constraint.

2.4 To address the vagaries of price fluctuations and global competition for its principal export commodities (logs, copra, cocoa, palm oil and kernel) the country requires flexible coping mechanisms. There is a need to improve productivity and marketing efficiency to achieve comparative advantage in agriculture and ensure higher profitability and returns to labour. Also to increase value adding and upstream processing of export crops (e.g. virgin coconut oil, cream and bio-fuel, chocolate and confectioneries for cocoa, processed wood, fish and food products). The overarching principle should be to add more value to marine, forest and agriculture products and to retain more of that value within the country.

2.5 The livestock sub-sector consists of local inbred pigs and chickens which are an integral part of the traditional agricultural systems, as well as some commercial ventures involving cattle, chickens and pigs. Currently the livestock industry in the country is very limited and meat is imported largely from Australia, New Zealand and Vanuatu. Given the robust demand for both fresh and processed meat, potential for import substitution is an important issue for the sub-sector. Considerable potential exists for increasing productivity of subsistence pigs and chickens through better husbandry and feeding practices. But a common constraint throughout the Pacific Islands is accessing livestock feed at affordable prices. The government also aims to develop the national beef herd through cattle imports and improved breeds.

2.6 Whilst the traditional farming system still provides a relatively high level of food security in Solomon Islands, rapid urban population growth and an increasing reliance on imported cereals threatens food security and is having negative impacts on health and well-being. An estimated 41% of household income is spent on cereal and cereal products, 10% on bread and biscuits and 5% on confectionary compared to 10% on fruit and vegetables (HIES 2005/6). Surprisingly, the consumption pattern shows that the rural areas spent almost twice the amount spent by urban areas on cereals and cereal products. Solomon Islands is one of the highest per capita consumers of rice in the Pacific, and this was the main route for the international food price spikes to be visited on the

country. The shocks have prompted a redoubling of efforts at increasing domestic rice production, but have also renewed focus on improvement of the production of traditional crops. The nutritional composition of imported food in particular can have significantly negative impacts on health, and increasing cases of malnutrition in children are now being reported. The Solomon Island Demographic Health Survey (SIDHS) 2006/2007 indicated that 32.8 percent of children under five years of age are stunted with 8.5 percent being severely stunted; stunting levels being higher for rural children than for urban children. Furthermore, 4 percent of children are wasted and almost half (48.5 percent) suffer from anaemia. Overweight and obesity, a risk for developing non communicable diseases, is also evident in the country.

2.7 The soaring food (and fuel) prices in 2008 quickly followed by the Global Financial Crisis (2009) have highlighted both the vulnerability of the country's economy which depends on a narrow primary commodity export base and the importance of resilient local food production and marketing systems to ensure food security. The National Food Security, Food Safety and Nutrition Policy 2010-2015 signals a more integrated approach to addressing food security issues and aims for better coordination between key government Ministries of Health, Agriculture and Fisheries. Priority outcome areas that need to be addressed include: strengthened food security and nutritional surveillance and information; improved food quality and safety management systems; enhanced production, supply chain management and marketing for local foods; and improved health and nutritional status of vulnerable groups, especially low-income women and children. The potential impacts of natural disaster and climate change also need to be mainstreamed into food security policy and planning.

2.8 The Solomon Islands has a rich and varied marine sector that is vitally important to the people as a major food source and to the economy for its export earnings. Fish is a major component of the protein diet of the people of Solomon Islands with an estimated per capita consumption of around 33.6 kilograms per year (FAO 2007 Food Balance Sheet)). Whilst extensive reef fisheries exist, maintaining security of village marine food resources through sustainable management is a critically important issue. Although coastal fishery resources are crucially important for nutrition in the Solomon Islands, the rising population and stagnant levels of production from these resources suggest that the per capita consumption of fish will fall. The commercial fisheries sector is dominated by tuna fishing (both locally based and foreign-owned fishing operations). Sustainable tuna yield is estimated at 120,000 metric tons. There are many vessels licensed to fish in the EEZ, and this raises about 4-5 % of government revenue annually. 'Fisheries legislation has recently been reviewed with establishment of the Fisheries Management Act 2012. Central to the powers of the new Act is the importance of fisheries management plans, provincial fisheries ordinances and community based fisheries resource management. The new legislation now requires that regulations be reviewed and revised.

2.9 Trochus and beche-de-mer have been the largest, by far of the minor fishing industries in Solomon Islands. Beche-de-mer and shell have provided good incomes for rural populations in the past, but there has been over fishing and the beche-de-mer industry is presently subject to a moratorium. While the moratorium will enable stocks to recover, it has placed severe financial hardship on rural peoples in the outer islands with limited opportunities to earn cash income. Improving market access for rural fishers, growing livelihoods through sustainable aquaculture development, improving the health of fisheries and marine resources, growing the economy through sustainable fisheries investments, effective enforcement of fisheries laws and increasing the skills and knowledge of partners in fisheries development are the stated priorities of the Ministry of Fisheries and Marine Resources (MFNR draft Corporate Plan 2012-2014). With the projected future decline of the logging industry the fisheries sector has a heightened government policy attention and is the targeted focus of a range of government and donor initiatives, as well as part of the overall approach of several multi-sectoral programs such as the Coral Triangle Initiative. New Zealand Aid Program is

supporting a long-term institutional strengthening program with the MFNR which has also included the construction of a new headquarter office building for the Ministry.

2.10 Forestry currently accounts for about 17 percent of the economy and 65 percent of total export earnings. Close to 90% of the total land area are classified as forest and woodland (2.45 million hectares) but only 254,000 hectares are considered as commercially exploitable because of poor accessibility. Recent natural forest inventory preliminarily indicates the availability of 13 million cubic meters (m^3) of standing commercial timber. However logging of productive forests is taking place at an unsustainable rate, and logging operations have also expanded in to protected areas, resulting in increased loss of natural forest and biodiversity. The forestry sector comprises two subsectors - smallholders and larger industrialized operators. This distinction is very important for policy and programming for sustainable development since the impact and developmental effect of measures depends on the nature of the landholding in question. The Government Forest Policy provides strong support for the protection of the environment ecological sustainability, and is based on recognition of the fact that the long term sustainability of Solomon Islands society, and its standard of living, depend heavily on the protection of the Solomon Island environment against irreparable damage. Therefore improving logging practices and pursuing reforestation are critical policy issues.

2.11 The Ministry of Forestry and Research of the SIs Government is responsible for the overall management of the forest resources. The Forest Resources and Timber Utilization Act, which guides the Ministry, provides for the conservation of forests and the improved management of forest resources, control of timber harvesting, encouragement and facilitation of sustainable forestry activities, establishment of plantations, and domestic processing of timber. The Forest Act 1999 was passed in Parliament, but has not been gazetted, thus it cannot be enforced. A review of the Act was carried out and the Forests Bill 2004 was produced, but is yet to be presented in Parliament. Once the Forests Bill 2004 is enacted, it will repeal and replace both the Forest Resources and Timber Utilization Act and the Forest Act 1999. As governance issues continue to prevail in this sector implementation of a strengthened legal framework is sorely needed. A high priority is to protect the remaining natural forest and its rich biodiversity which provides valuable ecosystem services.

2.12 The environment and natural resources underpin economic development and food security in Solomon Islands. The predominately subsistence lifestyle of most Solomon Islanders continues to rely heavily on an intimate and vulnerable relationship between society and functioning ecosystems. Accordingly, maintaining the sustainability of the natural resource base is a high priority. Clear policy objectives for the environment are being integrated in a national sustainable development policy, but the institutions for managing and monitoring the environment need strengthening. Implementation of a strengthened regulatory framework is a high priority. Major environmental challenges faced by the country include: unsustainable logging practices resulting in adverse impacts on streams, rivers and marine reefs; inappropriate land-use practices which are accelerating land degradation; and unsustainable fishing practices that are depleting fragile coastal and marine resources. Solomon Islands is very vulnerable to natural disasters and from increased risks of extreme weather events due to climate change which pose threats to food security and livelihoods. Improved capacity for resource assessment and data collection is needed to improve land-use planning and environmental management generally.

2.13 Globally significant biological diversity exists throughout the country. Solomon Islands forests are recognized as “Globally Outstanding” and are included as an eco-region in the Global 200 listing, with high degree of endemism. Marine biodiversity is at similarly remarkable levels, with Solomon Islands forming part of the Coral Triangle of four countries with extreme levels of marine biodiversity. Biodiversity resources are foundational to the operation and resilience of the subsistence economy which sustains and protects the massive majority of the rural population. Subsistence food,

shelter and medicinal supplies for the majority of the population are directly derived from ecosystems which are functional because of high biodiversity. As such, biodiversity is a prominent contributor to human security and sustainable development in the country. Protection and utilization of biodiversity resources are being carried out through two major government initiatives which are closely coordinated with NGO partners. The overall-framework for biodiversity is one of these initiatives – the recently completed National Biodiversity Strategic Action Plan, and this is being complemented by the Program of Work on Protected Areas (POWPA). A protected areas bill is also under preparation to provide the legislative basis for the implantation of protected areas under this program of work. Emphasis will be placed on food production - relevant to the highest proportion of Solomon Islanders - to adopt sustainable farming practices an d increase partnerships between commercial agricultural enterprises and smallholders. Technologies promoted will include adoption of international food production standards to increase marketability including organic certification systems and value of food exports and import substitution. There remains wide ranging needs for improvements in information gathering and management. This is of central importance both for monitoring progress as well as for designing approaches and recognizing dynamics (Gov. SI 2010[24]).

III. Key issues shaping priorities for FAO assistance

- Lack of agriculture statistics and baseline data for the sector.
- Shortage of experienced and qualified staff for project planning and monitoring.
- Declines in traditional crop production and increased dependence on imported food.
- Significant levels of child malnutrition (stunting and wasting).
- Increasing levels of food and nutrition related non communicable diseases.
- Poor local food supply chain coordination and market linkages.
- Lack of capacity in post harvest handling and technology.
- Difficulty meeting food quality and safety standards for fresh and processed foods.
- Inappropriate land-use practices, which are accelerating land degradation.
- Overfishing which depletes fragile coastal and marine resources.
- Weak institutional framework to promote and effectively implement sustainable management of natural resources (forest & fisheries).
- Lack of capacity to monitor, evaluate and manage biodiversity, land-use change and sustainable forest management.
- Lack of capacity in monitoring, reporting and verifying forest carbon stocks
- Lack of agriculture disaster relief capacity to meet emergency and recovery.

IV. Country Program Context

4.1 Since restoration of stability in 2003, successive governments have stressed the need for equitable distribution of national financial resources, services and development for all people of the Solomon Islands. With more than 80% of the population living in rural areas and dependent on agriculture for their livelihoods, rural development has been given a very high priority. The National Economic Recovery, Reform and Development Plan (NERRDP) 2003-2006 identified revitalizing the productive sector and rebuilding supporting infrastructure as one of five priority strategic areas for development. The Grand Coalition Policy Document (May 2006) and the Policy Translation and Implementation Document (August 2006) stressed a focus on rural development through adopting a "bottom up" approach. This provided the context for developing an Agriculture Rural Development Strategy (ARDS) and a Rural Development Program (RDP) to implement the strategy. Preparation of

[24] Solomon Islands Country Report for the the 5-Year Review of the Mauritius Strategy for Further Implementation of the Barbados Program of Action for Sustainable Development of SIDS (MSI+5).

the ARDS and the RDP has been strongly supported by major development partners including World Bank, European Union, Australia and IFAD. The first phase of the RDP (2007-2012) is currently nearing completion and a review is underway to determine what further intervention may be appropriate. In this context, the WB supported by FAO technical assistance has developed a National Food Security Program framework. The Solomon Islands Medium Term Development Strategy (MTDS) 2008-2010 set a goal for agriculture to contribute towards increased food production, food security, food standards and economic development. The National Development Strategy (NDS) 2011-2020 sets out development priorities and eight strategic objectives over a ten-year period which reiterates the importance of the natural resource-based sector (agriculture, forestry and fisheries) for economic growth, poverty alleviation, rural livelihoods and food security. The NDS also recognizes the need to effectively respond to climate change and manage the environment and risks of natural disasters.

4.2 Official development assistance to the Solomon Islands is substantial and has a major impact on budget planning and development. Aid flows increased sharply following the period of civil unrest, but are likely to level off as the security situation improves. The volume of aid poses a challenge to government and partners alike in ensuring coordinated and productive use of these resources. The development budget is entirely composed of donor funds, which are nearly all in the form of grants. Coordination of development assistance has been largely donor driven over recent years, but the Ministry of Development Planning and Aid Coordination is striving to take a stronger lead in donor coordination. Several major donors have been supporting rural development and agriculture sector development. Significant donors to the sector include Australia, European Union, New Zealand, Japan, Taiwan Province of China and World Bank. UNDP has coordinated a Diagnostic Trade Integration Study (DTIS) to identify priority areas for support under the Integrated Framework for trade related assistance to Least Developed Countries. Development partners are trying to move towards a program-based approach for rural sector development, and FAO assistance under the CPF framework aims to coordinate with and compliment other partners support to the sector. One of the most difficult obstacles facing agricultural development in Solomon Islands is poor transportation infrastructure particularly from some of the more isolated islands, currently several major donors have prioritized improving rural infrastructure.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.3 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthened policy, legal and regulatory frameworks for sustainable agriculture, fisheries and forestry development; (ii) increased production, productivity and resilience of crop, livestock and fisheries systems; (iii) enhanced capacity in processing and value adding of agriculture, forestry and fisheries products, and (iv) sustainably managed terrestrial, freshwater and marine resources. Support to outcome 1 has focused on strengthening the policy framework with technical assistance for completion of an agriculture sector policy and a national plan of action for IUU fishing. Further support to evidence-based policy and strategic planning was through a national consultation on policy and program actions on high food prices, and participation in a sub-regional agriculture for growth study where a study of the Solomon Islands floriculture industry development elaborated lessons learned. Technical support (with EU FLEGT funding) is also ongoing to strengthen forest governance. Under outcome 2, TCP support work has recently commenced to enhance capacity for domestic rice production through a training program for rural field staff. Under outcome 4, with FLEGT funding, FAO is providing technical support to improve community-based forest management for sustainable livelihoods and a cleaner environment and together with UNDP as part of the UN-REDD program support for initial readiness by building capacity for carbon stock monitoring, reporting and verification (MRV).FAO has also provided technical assistance to Solomon Islands for preparation of a Project Identification Fiche (PIF) for GEF 5 Star allocation funding for implementation of integrated management of protective and productive forest landscapes for

sustainable community development and multiple environmental benefits. This area of work should remain a priority under this CPF.

4.4 As a component of the sub-region All ACP Agriculture Commodities Program (funded by the EU) FAO provided technical assistance and capacity building which focused on upgrading the Kastom Gaden Association (KGA) staff skills in the 'inclusive business model' and supported value chain analysis exercises for two promising crops Six rural farmer groups, totaling 160 farmers, participated and received trainings in basic book keeping and value chain trainings. The formation of the Kinitolo woman group to do group marketing can be directly linked to the training and advice received. Feedback from farmers and trainees was positive. Farmers indicated that they are increasingly conscious about their house-hold expenditures. Consequently support in this area of agribusiness, value chain promotion and supply chain coordination will be a priority focus under this CPF

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the two priority focus areas for the CPF 2013-2017 will be on food and nutrition security resilient to impacts of disasters and climate change and environmental management and resilience. Support will be provided towards achieving the following four priority outcomes:

1) Strengthened policy, legislative, regulatory and strategic planning frameworks for food and nutrition security.
2) Increased availability, access and utilization of safe nutritious food.
3) Successful implementation of integrated management of protected and productive forest landscapes for sustainable community development and multiple environmental benefits.
4) Improved legislative, regulatory and strategic frameworks for sustainable fisheries management and development.

Strengthened policy, legislative, regulatory and strategic planning frameworks for food and nutrition security

5.2 Accessing reliable data in Solomon Islands is a significant issue and poses a serious challenge to monitoring the agriculture sector performance and the effectiveness of policy and investments. Lack of data constrains efficient planning and budgeting for the sector. Without good sector data it is difficult to assess development outcomes and draw lessons. Subsistence activity is still considered to be very significant, but there is lack of data and poor understanding in this area. Without specific-information on amounts of food available and the potential to produce more a solid statement on food security and vulnerability is difficult. In the absence of an agriculture census basic structural information on the sector is not available to provide baseline data on the production and economic value and use of existing agricultural systems. FAO will therefore provide technical assistance and capacity building to strengthen capacity in agriculture data collection and analysis. Support may also be provided to review, revise and implement effective safe food control systems (including for fish).Currently the Agriculture related sector institutions lack sufficient in-house capacity for project planning, preparation of proposals for funding and monitoring of implementation, support may therefore be provided to build capacity in this area.

Increased availability, access and utilization of safe nutritious food.

5.3 To strengthen food and nutrition security vulnerable households in "agriculture food security hotspots" areas will be empowered to address their nutrition and food security needs through assistance in adoption of improved technology, organic pesticides and biological control agents to

reduce pest damage and increase yields, husbandry practices, planting materials, livestock breeds, livestock feeds supported by appropriate research and extension services. Use of 'Climate Smart' agricultural practices and systems will be promoted.

5.4 The local food crop sector is characterized by fragmented smallholders supply, a lack of coordinated commercialization and faces increasing competition from cheaper imported produce including rice. Formal market contracts and market facilitation done by farmers' organisations have been limited and there is considerable scope for improving supplies to domestic markets based on import substitution strategies and using a business model approach working through existing groups of organized farmers. Building on earlier assistance FAO could provide technical assistance and capacity building to improve market opportunities and returns for small farmers through enhanced food supply chain coordination and efficiency and stronger market linkages. Integral support could also be provided to strengthen capacity to process and prepare and market nutritious and safe food products and to build capacity for Good Agriculture Practices (GAP) and post harvest handling for a safe food environment.

Successful of implementation of integrated management of protected and productive forest landscapes for sustainable community development and multiple environmental benefits.

5.5 Natural resources in the Solomon Islands are currently being degraded by unplanned and uncoordinated development activities in forestry, agriculture and other sectors. Valuable biodiversity is being lost due to poor management or lack of formally protected areas. This problem is magnified by traditional land tenure arrangements in the country. FAO has assisted Solomon Islands to prepare a proposal for GEF financing and is ready to provide technical assistance for implementation of activities. Such support could assist the country to take more rational decisions about land-use change by building capacity to analyse the impacts of potential developments and take appropriate actions, whilst supporting at the national level policy, legal and institutional reforms. A further focus could include building capacity for carbon monitoring, reporting and verification (MRV) as a step towards policy and strategy development and also to identify areas where there is most potential for conservation and enhancement of carbon stocks. Such an approach could also be used to guide the Government's National Reforestation Programme. Strengthening the Protected Area network would also be included in this program of support.

Improved legislative, regulatory and strategic frameworks for sustainable fisheries management and development.

5.6 Bycatch is one of the most significant issues in the management and conservation of global fisheries and has been identified as one of the leading causes of shark population declines. Sharks are susceptible to high fishing mortality rates because of their life history characteristics, which include slow growth, late ages at maturity, and the production of a limited number of young over a lifetime. In addition, research has shown that several species of sharks have very high rates of mortality associated with the fishing process. A few countries have specific management plans for their shark catches and their plans include control of access, technical measures including strategies for reduction of shark bycatches. FAO could support Solomon Islands in the implementation of the IPOA-Sharks including technical assistance for the preparation of a bycatch management strategy (and Shark-plan).To ensure effective enforcement of fisheries laws FAO could also assist the Ministry of Fisheries and Marine Resources develop appropriate regulations under the new Fisheries Management Act of 2012

CPF Priority Matrix Solomon Islands

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Food and nutrition security resilient to the impacts of natural disasters and climate change	NDS 2011-2020 Objective 1. Alleviate Poverty and Improve the Lives of Solomon Islanders in a Peaceful and Stable Society; Develop and implement programs to alleviate poverty based on improved market access and a vibrant smallholder sector through sustainable natural resource use and commercial activities in rural and remote areas. Objective 2: To Support the Vulnerable; Provide food security, food safety, and nutrition to improve the livelihoods or both rural and urban communities in the Solomon Islands (National Food Security, Food Safety and Nutrition Policy	Strengthening food and nutrition security;	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens.	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific MDG 1
CPF Priority Area B: Environmental management and resilience	NDS 2011-2015 Objective 7: Effectively Respond to Climate Change and Manage the Environment and Risks of Natural Disasters	Enhancing equitable, productive and sustainable natural resource management and utilization	UNDAF Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management	Pacific Plan Goal Sustainable Development Convention on Biological Diversity Hyogo Framework for Action 2005-2015 MDG 7

CPF Results Matrix Solomon Islands

Priority Area A: Food and nutrition security resilient to impacts of disasters and climate change

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Strengthened policy, legislative, regulatory and strategic planning frameworks for food and nutrition security	Coherent and consistent gender sensitive Food Security Policy Framework in place by 2016	Relevant gender sensitive policies, legislation, regulations, strategies and fully costed action plans available	Government continues to prioritize food and nutrition security Good gender balanced stakeholder participation in policy development	**1,270,000**
Output 1.1 Strengthened capacity for agriculture data collection and analysis	Agriculture Survey/Census implemented by end 2015 Baseline; Last census/survey in 1980's, results not readily available Ad hoc market survey reports and some agric. data in 2009 Population Census	Appropriate Census/Survey reports available by end 2016	Government sources counterpart funding for data collection Full participation of MAL and Solomon Islands Statistics Office	200,000 + 800,000
Output 1.2 Strengthened capacity to collect and analyze data (disaggregated by gender, age and geography) on status of food and nutrition security.	Food Balance Sheet(FBS) prepared based on credible data by end 2016 Baseline data in target areas available on local food production and marketing by end 2013	Updated Food Balance Sheet (FBS) available by end 2016 Baseline data in target "agriculture food insecurity hotspots" available by mid-2014	Participation of relevant ministry staff and resources	100,000
Output 1.3: Strengthened capacity to review, revise and implement effective safe food control systems (including fish)	Number of inspectors trained and implementing legislation Reduction in the prevalence of food borne disease incidents	Training report Inspection records MHMS Records	Government commitment to enhance capacity of competent authority, food lab and inspectorate	150,000
Output 1.4: Strengthened capacity within MAL for project planning, preparation and monitoring.	At least four project proposals relevant to the CPF prepared and accepted for funding by end 2016	Signed and fully budgeted project implementation agreements in place between SI government and development partners	Government proactive in facilitating project preparation and resource mobilisation	20,000
Outcome 2: Increased availability, access and utilization of safe nutritious local food	Food supply and utilization (kcal/cap/day energy, g/cap/day protein and g/cap/day fat Improvement in relevant health statistics and reduced prevalence of nutritional disorders	FBS Child stunting & wasting statistics DHR Nutrition Survey		**1,900,000**
Output 2.1. Strengthened capacity of women and vulnerable groups for local food production (crops and livestock)	Number of women and vulnerable groups in target "agriculture food insecurity hotspots" with increased food production activities and better crop yields Target 15% increase over baseline	Community Survey Reports HIES	Natural disasters do not impact negatively on target areas	300,000 +1,000,000

Priority Area A: Food and nutrition security resilient to impacts of disasters and climate change

Output 2.2: Improved market opportunities and returns for small farmers through enhanced food supply chain coordination and efficiency and stronger market linkage	Increased numbers of small farmers marketing increased volumes of food crops on domestic market. Lower prices of local food crops	Domestic market survey reports HIES rural household income from food crop sales NSO weekly market price data for CPI		200,000 + 200,000
Output 2.3: Strengthened capacity of private sector, households and communities to process and prepare and market nutritious and safe local food products (including fisheries products)	Increased utilization of local food in diets and availability in retail market outlets Proportion of local foods in CPI food basket increased	Nutrition and Community Survey Reports HIES statistics on food expenditure CPI metadata	Strong participation of stakeholders	100,000
Output 2.4: Strengthened capacity for Good Agriculture Practices (GAP) and post harvest handling for a safe food environment	Percentage (100%) of target farmers aware of GAP principles Percentage (70%) of farmers applying GAP on farm	Verification by extension officers	Strong participation of target farmers	100,000

Priority Area B: Environmental Management and Resilience

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: Successful implementation of integrated management of protected and productive forest landscapes for sustainable community development and multiple environmental benefits.			GEF Finance approved	**5,650,650**
Output 1.1: Terrestrial protected area network expanded to improve ecosystem coverage.	At least four new terrestrial protected areas (100,000 ha) established and legally designated h the consent of local landowners.		Government, and stakeholders commitment to protect forest areas	
Output 1.2: Improved management effectiveness of new and existing terrestrial protected areas.	Protected area management effectiveness score as recorded by METT			
Output 1.3: Sustainability of protected area management improved through sustainable financing and local income generating activities.	Increased local incomes and funding for PA management - targets to be determined during PPG			
Output 1.4: Improved decision-making in management of production landscapes	Three major drivers of biodiversity loss and/or land degradation identified, measured and reduced			
Output 1.5: Ministry of Forests and Research staff have the tools and skills necessary to monitor and manage carbon stocks in natural forests and plantations	Carbon monitoring reports produced and peer-reviewed			
Output 1.6: Increased local capacity to monitor, evaluate and manage biodiversity, land-use change and sustainable forest management.	M+E system operational and producing regular reports for use in national projects, policies and plans as well as reporting to international organisations			
Output 1.7: Community-based forest management (including tree planting) strengthened.	Number of communities and area of forest put under more effective local control			
Output 1.8: Policymakers and the general public are better informed about biodiversity conservation, climate change, SLM and SFM	Training, awareness and educational materials produced and disseminated through National Biodiversity Information Centre at College of Higher Education.			
Outcome 2: Improved legislative, regulatory and strategic framework for sustainable fisheries management and development				**100,000**
Output 2.1: Strengthened capacity for regulatory framework review and development in line with Fisheries Management Act 2012	New regulatory framework in place by end 2013	MFMR Regulations		60,000
Output 2.2: Technical Assistance to develop a fisheries by-catch management strategy to protect resources and stocks, to maintain and enhance biodiversity	Fisheries By-catch Management Strategy in place by end 2014	MFMR Strategic Plans		40,000

CPF Action Plan

Action Plan: Solomon Islands	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Food and nutrition security resilient to the impacts of disasters and climate change																
Outcome 1: Strengthened policy, legislative, regulatory and strategic planning frameworks for food and nutrition security																
Output 1.1: capacity for agriculture data collection and analysis											RAP SO/ SAP PO	PS MAL NSO SPC	1,000	200		**800**
Output 1.2: capacity to collect and analyse data on status of food security											SAP PO SAP FNO	MAL MoH NSO SPC	100	100		
Output 1.3: capacity to review and revise food control systems											SAP FNO	MOH WHO	150	150		
Output 1.4: capacity within MAL for project planning and monitoring											SAP PO	MAL	20	20		
Output 2.1: capacity for women and vulnerable groups for local food production											SAP PPO	MAL VBM? UNwomen SGP	1,300	300		**1,000**
Output 2.2:improved market opportunities for small farmers											RAP MO AGS SAP FNO	KG MAL KG MAL SPC	500	300		200
Output 2.4; capacity in GAP																
Output 2.3: capacity to process and prepare safe local food											FNO		100	100		

Year	2013	2014	2015	2016	2017						
Priority Area B: Environmental management and resilience											
Outcome 1: Successful implementation of integrated management of protected and productive forest landscapes for sustainable community development and multiple environmental benefits											
Output 1.1: Terrestrial PA network expanded						SAP ForO	ME MFR MAL	5650		GEF 5,650	
Output 1.2: improved management of PAs											
Output 1.3: sustainable financing for PAs and income generation											
Output 1.4: improved management of productive landscapes											
Output 1.5: MFR skills to manage & monitor stocks											
Output 1.6: capacity to manage biodiversity, land-use change and SFM											
Output 1.7: Community-based forest management											
Output 1.8: awareness on biodiversity conservation, SLM & SFM											
Output 2.1: capacity for review of regulatory framework						SAP FO	MFMR FFA	60	60		
Output 2.2:TA to develop by-catch strategy						SAP FO	MFMR FFA	40	40		
Resource Mobilization		80	1,400	650		6,790		**8,920**	**1,270**	**5650**	

Tokelau

I. Country Summary

Land Area (km^2) 12	Sea Area/EEZ (km^2) 290,000
Population (No.) 1,411 (2011 Census)	Annual Growth (%):-0.75% (2006-2011)
Average Density (inhabitants/km^2): 117	Rural Population (% of total population): 100% (population dwelling in 4 villages dispersed on 3 atolls)
GDP (US$ million): N/A	GDP per capita (US$):N/A
GDP Real Growth: N/A	Primary Sector GDP (% of total GDP): N/A
Trade Balance –US$ (Exports as % of imports) N/A	Food & live Animals as a % of total imports N/A
Budget Expenditure Department EDNRE N/A	Human Development Index N/A

Sources: 2011 Tokelau Census of Population and Dwellings; Tokelau National Strategic Plan 2010-2015

II. Agriculture Sector Overview

2.1 Tokelau is a non-self governing territory of New Zealand with a very small population of 1,411 people dwelling on three small atolls with a total land area of 12km^2. The three atolls, Atafu, Nukunonu and Fakaofo, are separated by some 60-90 kilometers of open ocean. Except for Fakaofo (which has two villages), the population of each atoll is concentrated in a single village on the western shore, close to a small natural pass into the central lagoon. This allows canoes and smaller boats to transport passengers and cargo from larger ships docked in the deeper open sea. Tokelau connects with the wider world through a fortnightly shipping link to Samoa which lies approximately 500km to the south; there is currently no air transportation servicing Tokelau[25]. Isolation and lack of resources greatly restrain economic development and confine agriculture to the subsistence level. The country relies heavily on aid from New Zealand - about $4 million annually - to maintain public services, with annual aid being substantially greater than GDP. The principal sources of revenue come from fishing licenses, sales of copra, postage stamps, souvenir coins, and handicrafts. Money is also remitted to families from relatives in New Zealand. In future, Tokelau will access revenue from the Tokelau International Trust Fund, established with New Zealand in 2004.

2.2 The atolls comprise of calcium carbonate coral reefs, sands and rock. Low fertility of the coral-sand 'soil' means that only a few food crops such as breadfruit, coconut, pandanus, giant swamp taro and banana can be supported at subsistence level, while livestock is limited to poultry and a few pigs. However, there is opportunity to improve livestock breeds and management practices to increase productivity of small livestock. Traditional crops such as swamp taro and banana are infrequently cultivated now and efforts are being encouraged to reinvigorate cultivation with villages piloting new plantings to improve food security, but availability of

[25] Assessments for building an airstrip on Nukunonu atoll are underway as well as considering sea plane access

suitable land poses a significant challenge. There is also a need for a replanting program for coconuts.

2.3 With limited local food production consumer demand for less-traditional foods has increased the quantity of imported foods coming onto Tokelau shores over the last few years. Currently the decisions on what food items are imported are made by the village Co-operative Store personnel. The goods which are ordered by the Co-op Store determine to a large extent what individual households will include in their diet. To improve national nutrition trends and provide better food options for the communities the decision on what should be purchased and available at the Co-op Store should include groups who have the health, welfare and well-being of the nation in their interests. Additionally increased community awareness is needed about food and nutrition security issues and how risks can be mitigated and/or managed. This will require improved coordination between national departments, such as Health, Quarantine, Stores and Customs to provide information and implement regulations to promote food security and to improve the nutritional value and mix of imported foods purchased through the village Co-op Store [Tokelau National Strategic Plan (TNSP)].

2.4 Tokelau has a relatively species-poor ecosystem in comparison to other atolls in the Pacific. The atolls' terrestrial and marine ecosystems have been described as being generally low in plant, animal and marine biodiversity. Although this may be expected on such a remote and insular atoll environment, the further degradation and/or loss of the limited biodiversity is a real threat. Biodiversity is highly desirable though there has been no assessment in recent years of the status of endangered species (plant and animal) on the atolls. However, it is generally recognized that several species are in decline. Of particular concern are several timber species 'Kanava' (*Cordia sibcordata*); 'Puapua' (*Guetarda speciosa*); 'Puka' (*Pisconia grandis*); and 'Fala' (*Pandanua sp. Var.* 'Kiekie'). A significant reduction in some of these species has occurred due to the effects of recent cyclones as well as over harvesting and exploitation for local building and handicraft materials (TNSP).

2.5 Marine resources are Tokelau's largest economic resource and vital for food security, therefore sustainable management is a high priority. But livelihood-related activities such as aggressive fishing practices and natural threats such as the multiplication of alomea (giant starfish known as "crown of thorns") threaten the sustainability of inshore fish resources for future generations and are destroying the coral reef and the over-all ecosystem. While inshore coastal marine management plans have been in place for all three villages for some years now, there is still need for more effective bylaws and regulations to be implemented. The coastal areas also need to be better managed through replanting with species of plants and crops which can withstand the harsh soil and temperature conditions. Furthermore, management of Tokelau's offshore EEZ, particularly in regard to illegal commercial fishing, needs to be strengthened. Current challenges in the fisheries sector include lack of resources and capacity; need to strengthen sustainable management of the inshore resource, lack of regular and efficient transport to expedite delivery of fish to external markets; and limited means to manage the EEZ, especially in regard to illegal commercial fishing activities.

2.6 The Tokelau atolls are only three to five metres above sea level making the territory very vulnerable to the impacts of climate change and sea level rise. This is already evident with increased coastal erosion, storm surges and inundation. Furthermore, severe tropical storms have been more frequent in recent years with cyclones in 1987, 1990, 1991 and 2005 causing extensive damage to houses and general infrastructure. Climate change also poses significant risks to the supply of inshore marine resources as extreme weather conditions have affected the health of the coral in the lagoons as well as the life cycle of fish resulting in a gradual disappearance of some species. This is threatening the food supply for the villages as fish is the staple food. A potential climate change impact on migration of ocean fish also presents a risk to the fish resources available from the EEZ, which is the territories' only substantial economic development area. Tokelau is reviewing and redeveloping its Climate Change Policy in keeping with its stance on

promoting practices which minimise the emission of greenhouse gases, and establishing an adaptation program to enhance its resilience to the impacts of climate change. Some of the measures which have been identified include better management of coastal areas, coral gardening and lagoon restocking of clams, pearl oysters and trochus. Tokelau's size, fragility and remoteness mean that disaster risk reduction is also a critical area that needs urgent attention particularly as vulnerability to natural disasters may increase in the future due to the effects of climate change.

III. Key issues shaping priorities for FAO assistance

- Weak capacity and human resources for sector planning and program development.
- Limited capacity for food crop and livestock production.
- Need to strengthen biosecurity to prevent possible incursions of pests and diseases and invasive species.
- Need to sustainably manage marine and terrestrial resources.
- Vulnerability to adverse impacts of climate change, sea level rise and natural disasters.
- Need for strengthened food security policy and measures to ensure that the prime sources of staple foods can be sustained.
- Need to increase public awareness regarding food security issues including good nutrition

IV. Country Program Context

4.1 Tokelau is dependent on financial assistance from New Zealand for about 80 percent of its recurrent budget and also for the majority of its infrastructure developments. There is currently little opportunity for diversification in the economy. Local revenue is primarily from the EEZ fishing license fees, locally imposed duties and taxes, freight and boat fares and interest payments. With few natural resources available for economic development, Tokelau relies on assistance from New Zealand for the majority of its development initiatives. Village-based economic projects have been established in the past, such as a fish processing plant in Atafu, but they have proved to be too difficult to sustain given Tokelau's relative isolation from sizeable markets, limited infrastructure and transport constraints.

4.2 In 2010 the Government launched the Tokelau National Strategic Plan (TNSP) 2010-2015 which articulates the development vision for Tokelau and identifies medium-term national development goals and strategies to attain these. National Departments and individual nuku (villages) should align their Corporate Plans with the priorities of the TNSP. The TNSP identifies four priority policy outcome areas: Good Governance; Infrastructure Development; Human Development; and Sustainability. Under the priority area 'sustainability' development objectives and strategies are included for agriculture, fisheries, environment, climate change and disaster management. Whilst key strategies to deal with food security are included under the priority area 'infrastructure' and include:

- To develop and implement Food Security and Food Standard Control Policy;
- To review, improve and implement village in-shore management plans;
- To develop and enforce by-laws and policies to manage sea-pollution and marine resource over-fishing;
- To establish village committees to enforce by-laws and policies;
- To develop and enforce laws to manage food security at all borders of Tokelau;
- To implement ongoing training and education programs to increase knowledge and improve skills in areas relevant for food security at the village and national levels;
- To develop and implement village based programs on sustainable cultivation methods which suit local conditions;
- To establish sustainable programs that support community initiatives in organic farming and cultivating traditional crops;

- To establish a Co-op Store Food Purchasing Committee and TORs for members which will include representatives from the Fatupapepae, local health staff and the Taupulega Office;
- To develop and implement nutritional plan and policies to guide the purchase of imported food stuffs into villages.

Strategies for agriculture development include:

- To develop and implement sustainable crop, livestock and forestry management practices through an ongoing program of training;
- To strengthen the capacity to identify pests and diseases problems and develop methods to control these;
- To increase crop and animal diversity in a sustainable manner;
- To increase the use of traditional methods for production and food preparation and preservation;
- To promote growing local produce and replanting program to meet needs for resources for food supply and renewable energy project requirements;
- To develop and implement bio-security regulations (quarantine) which comply with international standards;
- To increase domestic marketing of agricultural products;
- To establish commodity pathway for at least one local product;
- To increase the number of trained and skilled community members who are able to lead further training and pass on skills and knowledge to others.

Strategies for fisheries development include:

- To develop, approve and implement a conservation and management plan to ensure sustainability of inshore marine resources;
- To develop and implement sustainable fishing regulations which entail the release of undersized fish and prevent excess catch;
- To establish a committee to enforce policies for sustainable fishing practices, including type and size of nets;
- To obtain technical assistance to design and implement alomea eradication program;
- To establish and implement fishing regulations for safety and well-being;
- To explore and establish an MOU or arrangement with neighbouring Pacific nations for EEZ surveillance;
- To implement training and education programs to improve knowledge and skills of village and department stakeholders working in this sector.

4.3 Whilst New Zealand continues to be the principal source of development support to Tokelau, the regional CROP organizations and the United Nations family also provide assistance in their areas of comparative advantage and mandate. Recognizing the very limited capacity of the Tokelau authorities to deal with a wide range of development agencies, the FAO CPF assistance will be targeted through the UNDAF results matrix and will be focused as much as possible through UN partnership programs.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.4 Tokelau acceded as an Associate Member of FAO in July 2011 and has thus become eligible for technical assistance and development support under the CPF 2013-2017.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account other partner's programs, the priority focus area for the CPF 2013-2017 will be on food and nutrition security resilient to impacts of disasters and climate change. Support will be delivered under the following two priority outcomes:

1) Environmental sustainability and adaptation to climate change mainstreamed into policy processes.
2) Increased environmental sustainability and resilience to climate change.

Environmental sustainability and adaptation to climate change mainstreamed into policy processes.

5.2 Inshore fisheries are critically important to food security in Tokelau as they provide a principal source of food, but sustainability of these resources are under threat from over-fishing and destructive waste management practices. Impacts of climate change including sea level rise and storm surges are also contributing to coastal erosion and degradation of the marine resource. There is a critical need to develop appropriate coastal land management plans which promote sustainable ecosystem practices. FAO will provide technical assistance in its areas of expertise to support the development and implementation of village land and coastal management plans. Support may also be provided to develop appropriate village bylaws and strengthen policies to manage sea pollution and marine resource overfishing. A further area of technical assistance and training could help improve quarantine and biosecurity measures to protect Tokelau's very vulnerable biodiversity from incursions of invasive pest and diseases.

Increased environmental sustainability and resilience to climate change.

5.3 The Government has recognized the need for better management of coastal areas through extending plantings of species of plants and crops which can withstand the harsh soil and temperature conditions and to replace species which have been over utilized or damaged by earlier storms and cyclones. Furthermore, to strengthen food security and resilience against natural disasters and climate change increased emphasis must be placed on reinvigorating village and household food gardening and small livestock production. FAO will provide technical and financial support for programs for local food crop and livestock production in organic and 'climate smart' systems. The FAO Telefood program resources would be particularly appropriate in this context.

CPF Priority Matrix Tokelau

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Food and nutrition security resilient to the impacts of natural disasters and climate change	Tokelau National Strategic Plan (2010-2015)-Goal 4: Improved economic, cultural, spiritual and environmental sustainability	Strengthening food and nutrition security;	Environmental management, climate change and disaster risk management	Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific Hyogo Framework for Action 2005-2015 MDG 1 MDG 7

CPF Results Matrix Tokelau

Priority Area 1: Food and nutrition security resilient to impacts of disasters and climate change

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Environmental sustainability and adaptation to climate change mainstreamed into policy processes	% national departments implementing adaptation and mitigation activities Baseline: ad hoc activity Target: 100% by end 2017	Department work plans	All partners provide support anticipated	**150,000**
Output 1.1 Inshore sustainable land management plans in place	Number of villages with land management plans in place Baseline 0 Monitoring systems developed and implemented Baseline: 0 monitoring conducted p.a. Target**:** 3 (1 per village) p.a. by end 2016	Availability of plans Monitoring plan Dept of EDNRE review	Department of DNRE has capacity to do monitoring	50,000
Output 1.2: Bylaws to enforce management and security of marine resource development endorsed	Number of bylaws developed and endorsed Are there any bylaws in place? If so how many – this will be the baseline! Target: 3 (1 per village) bylaws developed and endorsed by 2014	Bylaws Taupulega minutes	All 3 villages will develop appropriate bylaws and these will be reviewed and up-dated as required	50,000
Output 1.3: Enhanced capacity to review, strengthen and implement quarantine regulations	Biosecurity and quarantine regulations in place and being implemented by end 2015 Number of biosecurity infringements decreased	General Fono Meeting records	Partners provide support for development of regulations and build capacity to do so	50,000
Outcome 2: Increased environmental sustainability and resilience to climate change				**250,000**
Output 2.1. Coastal area replanting program in place	Number of ha replanted Baseline: no replanting program in place Target: 0.1 ha per village p.a.	Dept of EDNRE review	Follow up maintenance critical to survival of seedlings in early stages	100.000
Output 2.2: Capacit for community and family food gardens and small livestock production enhanced	Proportion of suitable arable land area planted in local crops Baseline: ? Target: 100% increase in suitable arable land area planted with local crops Number of improved chicken and piggery in place target ? % food imported Baseline:? Target: 10% reduction p.a.	Dept of Economic Dev review Shipping documents	Food production should focus on healthy eating alternatives	100,000
Output 2.3: Strengthened capacity to implement food security and nutritional awareness programs and to promote local food choices	Number of trainers with skills and knowledge providing nutritional awareness programs , promoting local food choices Policy on Quality of Food Imports developed, approved and implemented	Certifications given for trainers Village bylaws and General Fono records	Training of trainers provided National nutritional program established Cooperation between sectors – Health, Support Services and Villages	50,000

CPF Action Plan

Action Plan: Tokelau	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Food and nutrition security resilient to the impacts of disasters and climate change																
Outcome 1: Environmental sustainability and adaptation to climate change mainstreamed into policy processes																
Output 1.1: inshore SLM plans in place											SAP ForO SAP FO Ass FAOR	EDNRE Taupulega UNDP	100	100		
Output 1.2: Bylaws to enforce management of marine resource development																
Output 1.3: review, strengthen and implement quarantine regulations											SAP PPO	.	50	50		
Outcome 2: Enhanced environmental sustainability and resilience to climate change																
Output 2.1: coastal area replanting program in place											SAP ForO Ass FAOR	EDNRE Taupulega UNDP	100	100		
Output 2.2: capacity for community and family food gardens and small livestock											SAP PPO SAP FNO Ass FAOR		150	150		
Output 2.3: implement food security and nutritional awareness programs and promote local food																
Resource Mobilization		100	150		150								**400**	**400**		

Tonga

I. Country Summary

Land Area (km^2): 747	Sea Area/EEZ (km^2): 700,000
Population (No.): 103,036 (2011 Census)	Annual Growth (percent): 0.2% (2006-2011)
Density (inhabitants/km2): 130 (2010)	Rural Population (percent of total population): 57 % (2006)
GDP (US$ million): 348 million (2010)	GDP per caput (US$): 3,370 (2010)
GDP Real Growth (average 2001-2010) : 1.4% per annum	Primary Sector GDP (% of total GDP): 19.9 % (2010)
Trade Balance: -US$142,368,000 (exports as a % of imports: 5.3 % ; Imports as % GDP -31% (2010)	Food as percent of total imports: 14.7 % (2010)
Budget allocation agriculture/forest/fisheries : less than 2 % (2007)	Human Development Index: 0.704 position 90 out of 187 countries (2011)

Sources: Tonga Department of Statistics

II. Situation Analysis and Agriculture Sector Overview

2.1 The Kingdom of Tonga comprises 170 islands of volcanic and coral origin spread over a sea area of 360,000 sqaure km. There are four main islands groups: Tongatapu and 'Eua, Vava'u, Ha'apai and the remote Niuas. Tonga has a population of 103,036 persons (preliminary 2011 Population Census figure) living on 36 islands. Land resources are limited, and only 24% of the country's 747 km² is arable. Tonga is experiencing a number of socio-economic and environmental challenges. The growth in urbanization, being the result of rural migration from both the outer islands and Tongatapu itself, has put high pressure on the land, in particular around the capital Nuku'alofa where almost 40% of the country's total population is concentrated.

2.2 Tonga has a small, open economy with a narrow export base largely comprised of agricultural goods. The country runs a deep trade deficit which has been increasing in recent years. At present, the total value of merchandise imports is almost 16 times higher than the total exports; although the country retains a strong subsistence base it imports an increasing proportion of its food[26]. The country remains dependent on external aid and remittances from Tongan communities overseas to offset its significant trade deficit. Tourism is now the second-largest source of foreign currency earnings following remittances. Commercial production and exports are dominated by a few primary products (melon, squash, root crops, vanilla and fish), making the economy vulnerable to changes in export markets.

2.3 Over recent years the Tongan economy has been sluggish with growth averaging only 1.4% over the last decade. Key impediments to productivity and growth have been identified to include: inappropriate role of the State in economic activities; outdated and incomplete business laws;

[26] Total merchandise imports of animal, vegetable and processed food products amounted to about T$86 million in 2010 (Annual Foreign Trade Report for 2010, Tonga Statistics Department).

uncertainty for foreign investors in the tourism sector; a damaging and inefficient business licensing regime; and ineffective agriculture policy (ADB Update to the Private Sector Assessment, 2011). Aside from weakening agricultural exports the key external drivers of the Tongan economy in the most recent years have been the decline in remittances and tourism receipts. This trend is expected to slowly reverse as the international economy recovers particularly in those countries which are Tonga's major source of remittances and visitor arrivals. However, the agriculture sector remains the single most important sector in the Tongan economy (accounting for around 19% of GDP) and primary production provides livelihood for over 58% of the economically active population. The next two important sectors are the Government sector (12% of GDP) and the Commerce, Restaurants and Hotels sector (13%). The manufacturing sector contributes only about 3 percent and consists of handicrafts and a few small scale cottage industries.

2.4 The Tonga Strategic Development Framework (TSDF) 2011-2014 emphasizes community development and support of the private sector, especially the encouragement of investment. Health and education, particularly increased performance of Technical Vocational Education & Training (TVET), are also highlighted. Increasing agricultural production for domestic consumption and for export is accorded high priority by the government as is ensuring sustaianble development and management of off-shore and inshore marine resources. But weak policy and strategic planning framework for the agriculture sector severely limits realization of potential for sector growth. There is lack of an overarching policy and strategic framework for the broad agriculture sector (crops, livestock, forestry and fisheries). This makes it difficult to identify clear roles and responsibilities of government departments, civil society and private sector. The new Government effort and direction of aligned budget, annual management plans (AMP), corporate plans (CP) and performance management systems (PMS) which started implementation this financial year (FY 2012 – 13), is expected to improve linkage between planning, budget and results. This new development will facilitate coordination and alignment with development partners' assistance for the sector which can potentially improve the level of funding in agriculture.

2.5 The land is generally fertile, except in some of the low atolls of Ha'apai, and almost all Tongans have access to plantation areas for food crops resulting in Tonga having had one of the highest rates of subsistence production for own consumption in the Pacific region. But the agriculture, forestry and fisheries sector has shown zero growth over the past five years. With the demise of the squash industry agricultural exports have declined. Squash exports were valued at TOP5.6 million in 2006, but had fallen to TOP839,000 by 2010. Despite the poor performance, the sector is still the mainstay of the rural economy as it provides food security; employment and income for many households. For households in the rural areas of Tongatapu and the outer islands, home production accounts for approximately one third of all food consumed (TSDF).

2.6 Tonga has an estimated 42,000 hectare of arable land and at the time of the 2001 Agriculture Census around 42 percent was being farmed, but data needs now to be updated. Traditional agriculture is based on small holding of 3.3 ha and is largely rain-fed. Root and tuber crops (yam, taro, sweet potatoes, kape and cassava) dominate the cropping system and these crops occupy an estimated 28 percent of the farmed land (FAO, 2009). Root crops are principally for domestic consumption, but export is gaining importance in recent years, with an increasing volume of export. The leading exported root crop by volume is yam with an average of 1,014 tonnes each year (37% of all root crops), followed by cassava and tarua taro (31% and 15% of total root crops respectively). Irish potato which is cultivated during the cool months, has been shown to have a good potential to meet the growing local market demand and also possible export potential to Fiji and Samoa during the winter months of New Zealand (FAO, 2010).

2.7 Tonga produces a wide variety of vegetables and fruits. Although for the European-type of vegetables the growing conditions are not optimal from November to March, there is potential to supply the local markets for the major portion of the year which will contribute towards reducing the import dependency of these goods; and if properly managed, some potential as off-season crops in foreign markets. Currently, there are no commercial fruit orchards and domestic production of fruits is mostly for local consumption. However, due to rising domestic demand tropical fruits do have the potential to increase household earnings through domestic market sales including to the food hospitality industry. Coffee is currently cultivated on relatively small scale in Tonga, but it is a potential cash crop for local market as well as for export. The generally favorable agronomic conditions and diversity of tropical and sub-tropical horticultural (fruit and vegetable) crops being grown in Tonga provides a good basis for supplying a growing tourism industry. Improving consistency in quantity and quality through improved supply chain coordination, good agricultural practices (GAP) and extending off-season production are important imperatives.

2.8 Several processed agricultural products including various root crop chips, chutneys/pickles, jams, soaps, massage oils, vanilla beans, coffee, kava, nonu juice and various craft items (e.g. tapa, woven mats, fans, baskets and shell/pearl jewelry) are produced in Tonga. Over recent years there has been an overall increase in quality, packaging and presentation of these products, but there still remains a great deal of room to further improve in this area. There is a particular need for more rigorous food safety standards for food processing and building capacity for certification in HACCP and ISO standards.

2.9 Tonga has a large exclusive economic zone for exploitation of marine resources of around 700,000 km^2. The marine and coastal resources, which include complex and vulnerable ecosystems, continue to provide livelihoods for many Tongans. The reefs and lagoons are the prime sites for subsistence fishing, and provide a wide range of shellfish and other marine life for consumption or production of shell handicrafts for sale to tourists. As in other neighboring countries, the oceanic fisheries of Tonga has for some time been facing low outturns in the industry, attributed mainly to the low catch from tuna. However this is further compounded by private sector difficulties and frustration with government processes and escalating fuel and electricity prices. Currently there are very few local fishing boats active. In 2004, Tonga placed a moratorium on foreign fishing vessels; however, in an effort to revive its dying fishing industry in August 2011 Tonga reopened its tuna fishing to licensed foreign fishing vessels. Tonga currently has five licensed locally based foreign fishing vessels.

2.10 Whilst there are substantial pelagic sea resources that have scarcely been exploited, the coastal fishery resources, which have provided the bulk of protein sources for the population, are close to being fully exploited and there is a concern about their degradation from over fishing. Some traditionally important fish, especially mullet, have been reduced to a small fraction of their earlier abundance, and inshore invertebrates such as bêche-de-mer, lobsters and giant clams have undergone severe declines, some quite recently. These problems are found throughout Tonga, but are most acute close to population centres or in easily accessible fishing areas. Sustainable management in the fisheries sector and conservation are currently priorities for the Fisheries Department. The Fisheries Management Act 2002 allows for the provision of special management areas (SMAs) and empowers the Minister to grant a community management control of its inshore resources. The main objectives of a community management plan are to enforce the authority to exclude outsiders from entering a SMA, to establish marine parks, and implement restrictions on harvested resources, including, size limits and catch amounts. Currently seven SMA have been established where communities provide protection for valued species such as lobsters, clams and bech-de-mer. SMA are generally considered to have been very successful in terms of in-shore fisheries management and many more communities

have shown interest in becoming part of the SMA program. However, progress is slow due to lack of the Ministries resources and financial constraints.

2.11 In association with SMA management there is need for assistance for aquaculture production to restock lagoons with critical species. Furthermore restriction on fishing in the SMA requires alternative sources of food fish and livelihood. Deployment of additional FADs is required outside SMA to improve efficiency of catch and expansion in aquaculture production of food fish is desirable (e.g. milkfish and tilapia). National goals for aquaculture set out in the Aquaculture Management Development Plan are to provide food security and employment, earn foreign exchange, reduce pressure on inshore fisheries, and promote stock enhancement of over-harvested fisheries. A recent plan to raise the rent tax for extractive activities such as capture fisheries and collection of corals and live rocks (except the harvesting of sea cucumber) may encourage some of the fisheries business people to diversify into aquaculture.

2.12 Livestock production is an important element in income earning for rural households, and hence offers good development potential through improved husbandry and stock breeds. In the past attempts to introduce a commercial and intensified livestock sector has not met with much success, due largely to the high cost of production, reflecting the high price for imported feed. However, improving household and commercial livestock productivity remains a priority as four out of five households in Tonga keep livestock (cattle, pigs, horses, chickens, and ducks) for home consumption, gift giving, or sale. Previously FAO assisted Tonga with importation of a tropical sheep breed *Fiji Fantastic* and the domestic flock is expanding. But restricted genetic base will have adverse impact on future productivity. Tonga Livestock Division has identified a sheep breed from northern Australia which could have desirable traits to introduce into the local stock.

2.13 Tonga has limited forestry resources, with only about 8000 hectares of natural forests which are located chiefly on uninhabited islands and on slopes that are too steep for cultivation. Pine plantation forests have been established on approximately 700 hectares and there is a plan to expand these plantations by 80 hectares each year. There is considerable potential for agro-forestry development, with 48, 000 hectares of potential agro-forestry land which at present is mainly planted with coconuts. The forests and forest industries are estimated in the National Accounts to be making a small (<1 percent of GDP), but this is considered to be an underestimation of the important contribution to sustainable development that forestry is contributing to sustainable development, trees are a vitally important part of the agricultural and environment developmental nexus. Careful planning and management of the use of the forests is important to ensure that the values supplied by forests are not jeopardized by unsustainable development. A critical area is the protection of vulnerable water resources, soils and biodiversity. FAO has provided technical support to the formulation of the recently completed National Forest Policy and updating the forest legislation is now required.

2.14 Tonga's renewable natural resources have been under growing pressure from urbanization and intensive commercial cropping. Urbanization and deforestation affect many coastal and inland zones. The clearing of mangrove forests and the exploitation of beach sand for construction weakens the stabilization of the coastline and makes the islands more vulnerable for coastal erosion and the intrusion of sea-water The limited forest resource is fragmented and subject to incursions of invasive weeds and pests. Increasing damage is also being caused by bush clearing for root crops, firewood collection and roaming pigs and grazing livestock. More intensive agricultural use of land puts the country at risk of various aspects of land degradation. Expansion of commercial farming since the mid 1980s has increased the use of agrochemicals, fertilizers and pesticides in particular.

2.15 However, Tonga has yet to prepare a National Biodiversity Strategy and Action Plan in line with the requirements of Article 6 of the CBD. Only about a dozen endemic plant species and two endemic

bird species remain in country. There has also been a loss of inshore biodiversity due to open access by coastal populations, which has led to substantial overexploitation of inshore fisheries resources. The country is also vulnerable to natural disasters and potential impacts of climate change and sea level rise which could adversely affect agriculture, forestry and fisheries. Environmental conservation and management and disaster management are major policy challenges to be addressed and FAO is in the process of assisting Tonga prepare a project under the GEF-5 Star allocation. The overall objective is to assist and guide Tonga to develop a fully-fledged PIF addressing nationally recognized and identified issues impacting in the GEF Multi-focal areas of climate change, biodiversity conservation and land degradation using their GEF-5 STAR Allocation.

III. Key issues shaping priorities for FAO assistance

- Lack of an agriculture sector strategy/plan that provides a coherent policy framework for promoting agricultural (including fisheries and livestock) development.
- Weak policy analysis, formulation and coordination capacity.
- Weak agriculture data and statistics collection and management system – last agriculture census in 2001.
- Low productivity and returns in subsistence and commercial agriculture and fisheries.
- Supply side constraints in all sub-sectors (agriculture, livestock, forestry & fisheries) including weak supply chain coordination.
- Limited capacity to meet quality and safety standards for domestic and overseas marketing.
- Difficulty in sustainably developing and diversifying the aquaculture and fisheries commodities in Tonga for local and export markets.
- Many of the inshore fisheries resources, especially those close to the urban markets, are fully or over exploited.
- The open-access nature of Tonga's inshore fishery creates a negative incentive to conserve resources for the future and there is a need to expand the program of SMA.
- Declining forest resource, land degradation and loss of biodiversity.
- Need to establish an appropriate structure and legal framework for the effective management of forest resource.
- Need to review the Forestry Legislation to give Forestry the legal authority for the sustainable management of forest and trees resource.
- Vulnerability to adverse impacts of natural disasters and climate change.

IV. Country Program Context

4.1 The Tonga Strategic Development Framework (TSDF) 2011-2014 sets the framework for the social and economic development of Tonga. It builds on the consultations for the National Strategic Planning Framework published in 2010. The Framework identifies nine key outcome objectives and four enabling themes, with a series of strategies. The detailed actions to deliver these strategies should be articulated through sector plans, and Ministries' corporate plans and annual management plans to guide their budget allocations. The TSDF will thus:

- Guide the further formulation of the sector development plans, ministries' corporate and annual management plans and the annual budgets through which resources are allocated.
- Inform the private sector and civil society of the government's policy intentions, laying a basis for further private/public consultations.
- Provide the foundation on which the government can develop its external economic relations and development partners can construct their country strategies and assistance programs in a spirit of true partnership.
- Provide indicators by which the government's progress in policy/strategy implementation can be monitored and measured.

4.2 Improving the output of agriculture and fisheries sector is a key strategy under the outcome objective 2: "*Dynamic public and private sector partnership as the engine of growth, by promoting better collaboration between government and businesses, appropriate incentives, and streamlining of rules and regulations*". Integrating environmental sustainability, disaster risk management and climate change adaptation into all planning and implementation programs is highlighted under priority outcome objective 7.

4.3 The Ministry of Agriculture and Food, Forests and Fisheries (MAFFF) has developed its medium term development strategy of the agricultural sector around Goals 3 and 4. MAFF Corporate Plan 2007/08-2011/12 which sets out in detail the development priorities and initiatives for agricultural sector development. These include: strengthening policy and legal frameworks; improving agricultural production and productivity to facilitate expansion of exports and ensure food security; import substitution through introduction of new livestock breeds and production of cheaper alternative feeds, improve infrastructure and competitiveness of produce for export markets; develop high value and niche market crops; improve market intelligence, marketing and market access; facilitate agro-processing to create greater value added for import substitution and exports; and sustainable development, management, utilization and conservation of aquatic resources to improve livelihoods. The Corporate Plan is currently under review and at this time there is no agriculture sector strategy/plan that provides a coherent policy framework for promoting agricultural (including fisheries and livestock) development to which the Ministry's corporate plan and subsequent annual management plans can be aligned.

4.4 The Ministry of Foreign Affairs is the official contact point of Government while the Ministry of Finance and National Planning is mandated with the overall aid coordination and management of bilateral, multilateral and aid assistance from international financial institutions such as the Asia Development Bank (ADB), World Bank and International Monetary Fund (IMF). Tonga's main development partners are: Australia, European Union, Japan, New Zealand and China. Among the UN agencies, beside FAO, ICOA, IFAD, IMO, ITU, UNCTAD, UNESCO, UNIDO, UPU, WHO, WMO, WTO, UNEP, ITC, UNFPA, UNICEF and UNDP have various activities.

4.5 In the past Australia had supported a fisheries management project (2002-2008). The focus was on remote and disadvantaged communities to help them conserve fish stocks and increase incomes. It also provided strengthening for the Fisheries Department and the export fishing industry. Currently Australia's national program does not have a focus on agriculture, but support to the sector comes from regional programs and interventions. The Pacific Horticultural and Agricultural Market Access (PHAMA) Program supports the government and industry organizations to work collaboratively to gain, maintain, and improve access into key markets for selected high-value primary products. The Australia Centre for International Agriculture Research (ACIAR) also provides assistance in the agriculture, forestry and fisheries sector. Recent projects have included: improving culture of winged oyster pearl, integrated control of weed and disease and insect pests of squash, local feeds for pig and poultry production and expansion of fruit tree production.

4.6 The EU through STABEX resources (completed in 2010) supported projects to upgrade postharvest and quarantine infrastructure for local produce export facilitation such as fumigation of watermelon as well as agroprocessing of local produce and vegetables such as processing, blast freezing and cooling of root crops and lu for the export market. This project was complemented by FAO technical assistance in agroprocessing. China is providing assistance for agriculture development through a demonstration farm. Key areas being worked on are large scale mushroom cultivation, duck raising and sweet potato powder processing. Technical assistance is also being provided to build methane-generating pits with associated facilities. Japan has been the major donor

supporting aquaculture in Tonga. Through the Japan International Cooperation Agency (JICA), the Government of Japan funded the construction of the Tongan Mariculture Centre in 1978 and its refurbishment in 1991 after damage by a major cyclone in 1982. JICA has also provided aquaculture experts, training, materials and operating support to Tonga through in-kind technical assistance programmes. Support for the Fish Aggregating Device (FAD) program has also been supported by Japan.

4.7 The Strategic Program for Climate Resilience (SPCR) supported by the Climate Investment Fund (USD 15 million) will support transformational change by enabling implementation of Tonga's national strategy to integrate climate change adaptation (CCA) and related disaster risk management (DRM), making the country more resilient to climate change and climate-related disasters. Outcome 7 under the SPCR aims to see coastal fisheries more resilient to the impacts of climate change whilst Outcome 2 includes reducing vulnerability to climate change through active engagement in community early warning systems and community-based interventions to address food security concerns. The Asian Development Bank (ADB) is the lead implementing agency and other partners include Pacific Islands Forum Secretariat (PIFS), Secretariat of the Pacific Regional Environment Program (SPREP), Secretariat of the Pacific Community (SPC), Forum Fisheries Agency (FFA), Australia (Australian Agency for International Development [AusAID] and Department of Climate Change and Energy Efficiency), and the United Nations Development Program (UNDP). Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), working through the SPC, is funding a regional program, with Tonga as one of the pilots, which aims to strengthen Tonga's capacity to cope with the impacts of climate change, especially in such sectors as agriculture, forestry, fisheries, tourism, education, and energy.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.8 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthening policy, legal, regulatory and strategic frameworks; (ii) increased production, productivity and resilience of crop, food and livestock systems; (iii) improved marketing systems and market access for traditional food crops and high value specialty commodities; and (iv) sustainably managed terrestrial, freshwater and marine resources. To date outcomes 1, 2 & 4 have received priority focus. Under priority outcome 1 assistance has been provided which strengthened MAFFF's capacity to analyze market data to provide evidence-based policy advice to government. This work helped demonstrate the importance of developing and maintaining systems of domestic market data collection and use, and also the value of good data for improved decision making. Further support for strengthening evidence-based policy and strategic planning were through participation in a sub-regional agriculture for growth study, a scoping study on agriculture tourism linkages, a rapid assessment of migration and its impact on agriculture and rural development and technical assistance for feasibility study on maize production in Tonga. Support has also been ongoing to strengthen forest policy and legislation which included mainstreaming of climate change and an EIA and Environmental Management Plan for the forestry plantations in Eua. Planning for implementation of an Agriculture Census is in process and this will remain a priority in the CPF 2013-17.

4.9 An ongoing activity under outcome 2 is strengthening floriculture development through the import and use of disease-free planting material coupled with technical assistance to improve multiplication and production. This project is helping women improve livelihoods through enhanced income earning opportunities. A series of small projects under the Telefood program have strengthened household food production. Emergency assistance was provided to support the recovery of agriculture and fisheries livelihood systems following the tsunami in 2009 which affected families in Niuataputapu. Scoping to develop areas of support for aquaculture development is ongoing and sustainable aquaculture development continues as a priority in this CPF.

4.10 Under priority outcome 3 FAO provided technical assistance, which enabled the establishment and fitting out an agro-processing facility funded through EU STABEX resources. This was complemented by training courses on basic food hygiene and Codex Alimentarius that built capacity of private sector and government stakeholders to improve food hygiene. Assistance was also availed that supported Tonga's successful four year tenure from 2007-2011 as regional coordinator for the Codex region of North America and the South West Pacific.

4.11 Capacity building to promote adoption of techniques to reduce hazardous pesticide use in Pacific Agriculture is a regional intervention in partnership with SPC which will contribute to outcome 4 in Tonga. The program commenced mid-2012 and will be ongoing for two years. The outcome should be improved small farmer livelihoods and reduced environmental and food contamination by hazardous pesticides as a result of the adoption of IPM based and other reduced pesticide input technologies. Further support to sustainable agriculture has been through technical assistance for developing a national land use policy. The immediate objective of such a land use policy is to provide a reliable basis for (a) the increase of crop production so as to meet the country's food demands and reduce the import of goods that can be grown locally, (b) the protection of the limited land area against degradation and natural or man-made environmental hazards, and (c) the settlement of land conflicts between individuals and various sectors of the economy.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the following three priority areas have been identified for the CPF 2013-17:

1) Policy, Legislation and Strategic Planning.
2) Supply Chain Management and Efficiency.
3) Environmental Management and Resilience

Policy, Legislation and Strategic Planning

5.2 To meet its development objectives, there is need to strengthened capacity in policy formulation and planning. For policy formation and planning purposes, collection and publication of agricultural data, particularly output statistics need to be improved. In the past policies have been adopted without being subjected to detailed economic analysis and without a good understanding of what can be expected from the farming sector. Improved performance by the ministry and by the sector as a whole will only result from a strengthened policy, legislative and strategic framework. FAO will provide technical assistance to support policy formulation, legislation and regulation reviews and strategic planning. Capacity building support will also be provided to improve sector data collection and management systems. Policy work and strategic planning will also be a focus area for the fisheries and forestry sub-sectors.

Supply Chain Management and Efficiency

5.3 Enhanced agricultural production for export, food security and rural livelihoods is a key priority for Tonga. Increasing agricultural production and productivity is the highest overarching priority for MAFF to meet domestic demand and supply potential export markets. There is a need for improved supply of inputs – planting materials, fertilizer and livestock breeds and feeds; and for better technology and husbandry practices supported by appropriate research and information/extension services and enabling policy environment. There is anticipation that the new Food Act and Regulations will soon become part of legislation. This will bring with it a need for increased capacity to implement the Act. There will be new concepts and training needs in the areas of food control/labeling/inspection and potential technical assistance required.

5.4 Food safety/certification and good agricultural practices/traceability are increasingly being demanded in overseas markets for food products (fresh and processed). Tourism is identified as a growth area for the economy, but accessing tourist food product supply chains will also require improved food quality/safety standards. Agriculture (crops/livestock and fisheries) production and processing industry currently lacks capacity in these areas and FAO will provide training and technical support to build capacity to meet internationally recognized food quality and safety standards.

5.5 Lack of coordination and integration in agricultural supply chains reduces efficiency, raises costs and increases risks. Added challenges are faced integrating many small rural producers with new domestic markets (e.g. for tourism and processing operations) and for potential export markets. Contract farming is not currently widely practiced and experience and understanding of appropriate models and potential benefits is not well understood. FAO will provide technical assistance and training to facilitate value chain analysis, coordination, promotion and upgrading of selected value chains.

Environmental Management and Resilience (including disaster preparedness, emergency response and climate change)

5.6 Tonga fully recognizes the need to protect its valuable and unique biodiversity and the importance of community involvement in this process. Biodiversity promotes ecosystem services important amongst which are: food production, provision of raw materials, recreational opportunities and cultural values. Tonga has ratified the Convention on Biological Diversity (CBD) in 1998, and pledged their support to halt the continuing decline in global biodiversity. Environmental conservation and management and disaster management are major policy challenges to be addressed and FAO is in the process of assisting Tonga prepare a project under the GEF-5 STAR allocation. The overall objective is to assist and guide Tonga to develop a fully-fledged PIF addressing nationally recognized and identified issues impacting in the GEF Multi-focal areas of climate change, biodiversity conservation and land degradation using their GEF-5 STAR Allocation. The project will help rural communities conserve protected areas and support local communities with alternate sources of clean energy thus improving livelihoods of disadvantaged families through diversified sources of income. A key focus of the project will be to pen roaming pigs and use waste to generate biogas for cooking and lighting. The project also aims to strengthen the enabling policy and regulatory environment for sustainable land management (SLM) and reduce deforestation and use of firewood by providing an alternative source of renewable energy.

5.7 Tonga has developed a program of Special Management Areas (SMAs) for inshore fisheries. Seven communities have established SMAs under a pilot project and the success and impacts are already evident. There is now a need to move to the next phase and have a National SMA Development Program, which will involve two key activities: (i) amending the current legislation or draft new regulations on establishing and managing a SMA, (ii) implement the Three Year (2012/13 - 2014/15) National SMA Development Program establishing SMAs throughout the country. Currently up to 20 more communities have requested to establish SMA, but fisheries division does not have the resources to move this program forward at the desired pace. In association with SMA management there is need for assistance for aquaculture production to restock lagoons with critical species. Furthermore restriction on fishing in the SMA requires alternative sources of food fish and livelihood. Deployment of additional FADs is required outside SMA to improve efficiency of catch and expansion in aquaculture production of food fish is desirable (e.g. milkfish and tilapia). Economic feasibility studies may also be supported to ensure viable aquaculture enterprises can be identified and established.

CPF Priority Matrix Tonga

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Policy, legislation and strategic planning	TSDF 2011-2014 Outcome Objective 2: Dynamic public and private sector partnership as the engine of growth, by promoting better collaboration between government and business, appropriate incentives, and streamlining of rules and regulations - Strategy 6: Improving output of productive sectors.	Fostering agricultural production and rural development	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens. .Output 3.1.5: Strengthen the policy strategic planning and management capability to support sustainable agriculture development	MDG 1
CPF Priority Area B: Supply chain management and efficiency	TSDF 2011-2014 Outcome Objective 2: Dynamic public and private sector partnership as the engine of growth, by promoting better collaboration between government and business, appropriate incentives, and streamlining of rules and regulations - Strategy 6: Improving output of productive sectors.	Fostering agricultural production and rural development Fostering agricultural production and rural development	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens.	Pacific Plan Goal: Economic Growth MDG 1
CPF Priority Area C: Environmental management and resilience	: TSDF 2011-2014 Outcome Objective 7: Cultural awareness, environmental sustainability, disaster risk management and climate change adaptation, integrated into all planning and implementation of programs, by establishing and adhering to appropriate procedures and consultation mechanisms – Strategy 2.2: Ensuring sustainable use of the environment, and creating incentives for limiting the use of resources and production of waste.	Enhancing equitable, productive and sustainable natural resource management and utilization	UNDAF Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management	Pacific Plan Goal Sustainable Development Convention on Biological Diversity Hyogo Framework for Action 2005-2017 MDG 7

CPF Results Matrix Tonga

Priority Area A: Policy, Legislation and Strategic Planning

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Evidence-based and Gender Sensitive Agriculture Sector Policies/Strategic Plans developed and adopted	National Agriculture Policy/Strategic Plan in place by mid- 2014. Baseline – no policy	Gazetted Policy available	Government (Cabinet) adopts draft policy. Coordination with WB support Good gender balanced stakeholder participation	**850,000**
Output 1.1: Strengthened capacity to collect and analyze agriculture data.	Agriculture Census completed and analysis report available by end 2014 Baseline – last Census 2001	Agriculture Census Report available	Good collaboration between MAFFF, NSO, and sector stakeholders and collaboration with SPC program support. Counterpart funding available	200,000 + 400,000 from Govt.
Output 1.2: Strengthened capacity to implement a national forest inventory	Updated forest inventory in place by end 2013	Forest Inventory Report available		150,000
Output 1.3: Strengthened capacity to analyze and formulate agriculture policies and strategies.	Agriculture Sector Policy/Strategic Plan drafted by end 2013	Stakeholder endorsed Draft Policy Document available	Full participation of appropriate ministry staff and sector stakeholders	100,000
Outcome 2: Strengthened Legislative and Regulatory Framework	Revised Forest Act in place by mid 2014		Parliament adopts revised legislation	**35,000**
Output 2.1 Strengthened capacity to review and update forest legislation	Updated forest legislation drafted by end 2013	Draft forest legislation available		35,000

Priority Area B: Supply Chain Management and Efficiency

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: Enhanced sustainable crop and livestock production	Production volumes, yields and prices of selected crops and livestock	MAFFF Annual Report MAFFF Quarterly Domestic Market Reports	Farmers adopt new production techniques and livestock breeds	**900,000**
Output 1.1: New sheep and cattle breed stock introduced	Size and composition of domestic herds Baseline: Target:	MAFFF Annual Reports	Farmers adopt new livestock breeds	500,000
Output 1.2: Strengthened technical capacity (particularly of youth) for intensified and off-season crop production.	Production, yields and calendar yield patterns from selected farm enterprises	MAFFF Annual Reports	Farmers adopt new production practices and technology	300,000
Outcome 2: Enhanced supply chain coordination	Well coordinated and integrated supply chains for 2 key selected products operating by 2016		Priority value chains selected	**300,000**
Output 2.1: Increased capacity for value chain analysis and facilitation	Two Selected key value chains elaborated and promoted	Extension Officers reports	Good stakeholder participation	200,000
Output 2.2: Models for contract faming developed and promoted	Number of new supply contracts in place by 2016 Target: tbc			50,000
Output 2.3: Strengthened capacity in Good Agricultural Practices	Percentage (100%) of participating farmers aware of GAP principles by 2014 Percentage (70%) of farmers applying GAP on farm by 2016	Verification by extension officers		50,000
Outcome 3: Improved food quality and safety	Number of exports rejected due to food safety/quality non compliance; and Number of food safety related illnesses reported	Phone survey of export enterprises MoH/Hospital records		**200,000**
Output 3.1: Strengthened capacity for implementation of new Food Act and Regulations	Number of inspectors trained and implementing legislation Target: tbc	Training report Inspection records		100,000
Output 3.2: Strengthened capacity of private sector in HACCP and ISO standards	Number of Agribusinesses with HACCP/ ISO certification Target tbc	Phone survey of industry	Business stakeholder participation	100,000

Priority Area C: Environmental Management and Resilience (including disaster preparedness, emergency response and climate change).

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1:Sustainable inshore fisheries resource management	Number of SMA established Increase in fish stocks for critical species	Fisheries resource assessment reports	Good community participation	**200,000**
Output 1.1: Capacity of the Department of Fisheries to establish and monitor SMA increased.	Number of new SMA established by 2016 (baseline =7) Target = ?	Department of Fisheries reports	Partnership with SPCR programs	150,000
Output 1.2: Deployment of new FADs	Number of new FADs deployed by 2016 Target = ?	Department of Fisheries Reports		50,000
Outcome 2: Development and expansion of sustainable aquaculture enterprises.				**350,000**
Output 2.1: Strengthened capacity of communities and private sector for viable enterprise in aquaculture food fish production as well as government capacity for aquaculture and biosecurity governance	Number of new sustainable aquaculture food fish farm enterprises established by 2016 Target: ?		Partnership with SPCR programs	350,000
Outcome 3: Sustainable management and conservation of land resources and biological diversity	Reduced land degradation from roaming pigs Reduced damage to forest species (particularly mangroves) from firewood cutting		GAF Funds available Full participation of targeted communities	**2,000,000**
Output 3.1: Strengthened capacity to develop policy and regulatory framework for SLM	Strengthened policy and regulatory framework for SLM in place by 2017	Government Policy Portfolio	Authorities adopt and implement policies and regulations	
Output 3.2: Strengthened capacity for integrated food crop production with environmentally sound pig management practices and biogas production	Number of participating communities with penned pigs Baseline: 0; Target: ? Volume of biogas produced Baseline : 0 Target: ?	Project survey and reports	Full participation of targeted communities Biogas equipment and servicing provided by private sector supplier in country	

CPF Action Plan

Action Plan: Tonga	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Policy, legislation and strategic planning																
Outcome 1: Evidence-based and gender sensitive agriculture sector policies/strategic plans developed and adopted																
Output 1.1: capacity to collect and analyze agriculture data											RAP SO SAP PO	MAFFF TSO SPC	600	200		400
Output 1.2: capacity for forest inventory											SAP ForO	MAFFF	150	150		
Output 1.3: capacity to analyze formulate agriculture policy											SAP PO	MAFFF AGC WB	100			100
Outcome 2: Strengthened legislative and regulatory framework																
Output 2.1: capacity to review and update forest legislation											SAP ForO	MAFFF	35		EU FLEGT 35	
Priority Area B: Supply chain management and efficiency																
Output 1.1: sheep and cattle breed stock introduced											RAP LO SAP PPO	MAFFF	500	300		
Output 1.2:capacity for off season crop production											SAP PPO	MAFFF SPC PRC	300			
Output 2.1: capacity for value chain analysis/facilitation											RAP MO AGS SAP PO SAP FNO	MAFFF TGA TMA	300	300		
Output 2.2: models for contract farming developed/promoted																
Output 2.3: capacity for GAP																
Output 3.1: capacity to implement Food Act											SAP FNO	MAFFF	200	200		
Output 3.2: capacity for HACCP/ISO																

Year	2013		2014		2015		2016		2017							
Outcome 1: Sustainable inshore fisheries resource management																
Output 1.1: capacity to establish and monitor SMA											SAP FO	MAFFF Fisheries Dept MECC SPCR/ ADB	200	200		
Output 1.2 Deployment of FADs																
Output 2.1: capacity in aquaculture food fish production											SAP FO	MAFFF Fisheries	350	350		
Outcome 3: Sustainable management and conservation of land resources and biodiversity																
Output 3.1: capacity to develop policy and regulatory framework for SLM											SAP For O SAP PPO	ME MAFFF	2,000		GEF	2,000
Capacity for integrated food crop production and environmentally sound pig management																
Resource Mobilization		985	300	500	200		2,750						**4,735**	**1,700**	**35**	**3,000**

Tuvalu

I. Country Summary

Land Area (km^2): 26	Sea Area/EEZ (million km^2): 900,000
Population (No.): 11,100 (2010)	Annual Growth (%): 0.50 (2010)
Average Density (inhabitants/km^2): 378	Rural (outer island) Population (% of total population): 58
GDP (US$ m): 36 (2012)[a]	GDP per caput (US$): 3,240 (2010)
GDP Real Growth: 1.5 % per annum (average 2001-2008)[a]	Primary Sector GDP (% of total GDP): 16.6 % (2002)
Trade Balance –US$11 million (Exports as % of imports) 0.47 % (2005)	Food & live Animals as a % of total imports 30.2 % (2007)
Budget Expenditure Agriculture & Fisheries N/A	Human Development Index N/A UN categorized as a LDC

Sources: General Statistics Division, Government of Tuvalu; ADB Basic Statistics 2011, Australia DFAT 2012, IMF Statistics

II. Situation Analysis and Agriculture Sector Overview

2.1 Tuvalu is made up of nine coral and reef islands with a total land area of 26 square kilometers spread across more than 900,000 square kilometers of the Pacific Ocean. Land resources are few and poor quality with the highest point on land only a few meters above sea level. Funafuti, the main island is densely populated where around 50 percent of the population reside. This, in addition to the country's small size, isolation from markets, and harsh physical environment are significant constraints to its development. The low-lying atolls are vulnerable to cyclones and the prospect of marine inundation in the event of rising sea levels. Higher sea levels already threaten the country's underground water table and the future existence of Tuvalu. In 2010-2011, Tuvalu experienced a severe drought for which the government declared a state of emergence. Water was transported from Fiji with New Zealand, Australia, EU, United States and others providing assistance with the transport of water, setup of desalination plants and the provision of water tanks. The country has since recovered from the drought, but the experience has further highlighted the country's vulnerability to the adverse effects of climate change and the need to improve planning and actions to better manage water resources and future droughts.

2.2 The Tuvalu economy is very open with imports of goods and services equivalent to roughly 75-80% of GDP. The country relies heavily on foreign exchange revenue from Trust Fund earnings, fishing license fees, lease of its ".tv" internet domain name, official transfers and remittances from overseas workers (mainly seafarers)[27]. The Trust Fund and fishing license fees each account on

[2727] In 2007 there were 335 seafarers actively engaged as seamen on overseas sea vessels It is estimated that in 2007, the total remittances from seafarers was AUD2.2 million dollars, about 6.3% of GDP

average for about 15-20% of GDP annually. The sum of foreign receipts, less current transfers to the rest of the world, doubles the amount that Tuvalu can produce locally from economic activities in the country (MDG Goals Progress Report 2010/11). Subsistence farming and fishing remain the main domestic productive economic activities. As a result GDP growth is highly variable from year to year largely dependent on external factors.

2.3 The hike in food and fuel prices in 2008 raised inflation to above 12% and put significant pressure on household budgets and as a result the Government responded by providing a subsidy for basic commodities. The issue is compounded because people rely more heavily on processed imported food than home produced food. In 1995, 27.3% value of all imports was food and this percentage increased to 30.2% in 2007. Figures from the 2004 HIES suggest that there is a high proportion of household expenditure going on four basic imported foods (rice, flour, biscuits and sugar). This situation is particularly acute on Funafuti where the population density is high and there is little opportunity for growing local food. The reliance on imported food has been linked to increase in obesity and NCDs. Micronutrient deficiency is also a concern, especially for iron. The Demographic Health Survey (DHS) 2007 reported 61.2% of Tuvalu children below five years of age were anaemic. Lack of vegetables and resulting poor diets is the main cause for lack of nutrients in mothers and their children (MDG report). Promoting healthy diets, increased production of local nutritious foods and expanding backyard gardening are government priorities.

2.4 Clearly agriculture and fisheries remain important for food security, sustainable livelihoods and for national economic growth. But Tuvalu faces many fundamental issues and challenges to increasing agriculture production and productivity, including: poor soils and growing conditions, small land areas, few comparative advantages, decline of outer island populations, increasing urbanization, declining interest in traditional agricultural practices, distance to export markets, and poor local market access for those who do wish to produce cash crops. Nevertheless, there is considerable scope for increasing production for local consumption and reversing recent production declines. Key challenges will be to revitalize and expand agriculture extension services, encourage people to once again turn to local rather than imported foods for better nutritional health, and improve transport and marketing of local produce [National Strategy for Sustainable Development (NSSD)].

2.5 At the village level, agriculture remains a way of life and generally involves the cultivation of trees and crops and raising a limited number of pigs and chickens. Crop production is primarily for subsistence use and comprises mainly coconut, swamp taro, taro, breadfruit, pandanus, banana, pumpkin, sweet potatoes and pawpaw. Home gardening is practiced although it's largely constrained by damage caused by roaming animals (pigs and chickens), lack of inputs and water availability. The traditional farming system of growing coconut trees intercropped with other trees and root crops is still practiced. A significant feature is the presence of family owned pits in which swamp taro and giant taro (pulaka) are cultivated. Growing taro in pits facilitate easy access by the plant to the thin water lens. However, this practice has been negatively impacted by seawater inundation, which was exacerbated during the 2010/2011 drought which resulted in prolonged exposure of taro crops to saline water and a decline in production. The adoption of more drought and saline tolerant taro varieties may offer some resilience to the negative impact of climate change.

2.6 The country's main export product has been copra, however due to the volatility in the world price for copra there is now only a minimum volume of exports, despite Government subsidy. Nevertheless coconut is still important as a food and is widely used as raw material for construction and handicraft making, production of toddy, and animal feed. Other value adding opportunities also could be explored. Livestock production is largely subsistence with pigs and free-range chicken being

the main livestock kept. Most outer island households keep pigs and a number of local chickens for own consumption and cultural obligations. Availability and cost of feed is the major constraint to more intensive livestock production. Issues of water supply and waste management would also need to be given due consideration.

2.7 Whilst Tuvalu's small land area limits the prospects for agriculture or other forms of terrestrially based development the country places much hope for future economic growth on the fishery resources contained within its large EEZ area which covers 900 000 sq km.. However domestic fishing in Tuvalu waters remains quite small compared to the activities of foreign fleets which have very large tuna catches and the money generated from access fees is a critically important source of government revenue. Despite the desirability for development of a domestic tuna industry, opportunity for this is severely limited by the difficulties and expense of operating such an industry from a high cost location such as Tuvalu. Consequently subsistence activities continue to dominate Tuvalu's domestic fisheries sector.

2.8 Fish is an extremely important element of food security in Tuvalu. The FAO Food Balance Sheet indicates that in 2007 fish contributed an average of 22.3 percent of all protein to the diet and 38 percent of animal protein. In the outer islands the contributions are much higher. Animal protein substitutes for fish consist mainly of various types of imported meat, much of which are extremely fatty and have negative health implications. Virtually all households participate in subsistence activities in the inshore fishery. In Funafuti, much of the resources, especially those close to the urban markets are under heavy fishing pressure and are fully or over-exploited. Attempts by the government to develop domestic fisheries beyond subsistence level have been unsuccessful. The development of Community Fishing Centres (CFCs) in the outer islands where fishery resources are abundant to supply the Funafuti market has had considerable economical difficulties. The centers managed by government served as marketing points where fishers can have their catch processed by salting and drying for the domestic market. However, this business model is not working and most of the CFCs are run down or have been abandoned with only a couple still operating.

2.9 Tuvalu's National Master Plan for Fisheries Development 2008-2011309 states that nearly all island communities stated that they would like help with assessment of fisheries resources and developing management measures. In many countries, this is the main function of the Fisheries Department, but in Tuvalu most of the effort and funding has been diverted to other "development" efforts, and the only real management initiative has been the setting up of marine protected areas on each island (FAO, 2011).

2.10 Important sector priorities and strategies are for Government to consider endorsing and implementing the Tuna Management and Development Plan 2011-2015 with a key focus to improve effective conservation and management of the fisheries resource through: (i) ensuring clear, transparent and robust management policies and guidelines for setting and allocation of management limits; and (ii) implementation of a robust licensing system that increases revenue. Whilst national fishing laws are fairly comprehensive there is still need to promulgate more regulations to conserve and manage the marine resource. Other priority areas for capacity building are in: negotiation of fishing license agreements; formulation of a coherent and integrated fishing sector development program, and monitoring and assessment of coastal fisheries resources (MDG Report, 2010).

2.11 The traditional structure of Tuvalu society and its subsistence economy have been built on the sustainable use of the nation's limited, but nevertheless valuable natural resources, and the conservation and careful exploitation of its fragile atoll ecosystems. But these are now under threat from a growing population (on Funafuti), changing life styles, and climate change. Tuvalu is ranked as one of the most environmentally vulnerable states in the region, largely because of its low relief

and small land area. The NSSD recognizes that national impacts associated with climate change and sea level rise include salt-water inundation of pulaka pits, coastal erosion and flooding. Developing appropriate policy and contingency/adaptation plans to mitigate the threats of climate change and sea level rise is of paramount importance for continued survival of the nation and its people. The Government in 2009 also introduced its National Biodiversity Strategy Action Plan (NBSAP) to combat the loss of both terrestrial and marine life.

III. Key issues shaping priorities for FAO assistance

- Lack of a coherent policy and strategic direction for agriculture sector development.
- Weak agricultural extension capacity and human resources for sector development.
- High and volatile food and oil prices and a deep trade balance deficit.
- Population eating less nutritious and mostly imported processed foods.
- High levels of food and nutrition related non communicable diseases, which impact negatively on health system, families and national economy.
- Limited land area, poor soils and growing conditions.
- Limited water supply for competing demands between domestic and agricultural uses.
- Insufficient production of local nutritious foods.
- Lack of food quality and safety standards and capacity to implement regulations.
- Vulnerable to cyclones and droughts.
- Vulnerable to adverse impacts of Climate Change and Sea level Rise

IV. Country Program Context

4.1 The Tuvalu National Strategy for Sustainable Development 2005-2015 (Te Kakeega II) was reviewed in October 2011 to gauge progress over the last 5 years. Overall, the strategy has had a mix performance with stakeholders voicing their concerns over targets that have not been achieved. At the same time, stakeholders also urged the government to ensure the strategy's targets are achieved by 2015. *Te Kakeega* 2005-2015 outlines Tuvalu's development agenda based on eight strategic areas, which includes (i) good governance; (ii) economic growth and stability; (iii) social development (health, welfare, youth, gender, housing, and poverty alleviation); (iv) outer island and *falekaupule* (local island council) development; (v) employment and private sector development; (vi) education and human resources; (vii) natural resources (agriculture, fisheries, tourism, and environmental management); and (viii) infrastructure and support services. The expected results from implementing the *Te Kakeega* include increased employment opportunities, higher economic growth, better health care and education, better basic infrastructure, and continued social stability.

4.2 The government continues to emphasize the need to develop agriculture by reversing the decline in subsistence agricultural production; facilitating the availability of land for agricultural production; increasing production and consumption of local produce; and mitigating climate change related agricultural impacts. Similar policy directions for fisheries development are outlined in the *Te Kakeega* where the need for improved management of fisheries resources, increased returns from fishing licenses, development and implementation of a fisheries sector development programme and the development of a framework for domestic fishery for export and for the local market are key priority areas.

4.3 Taiwan province of China and Japan remain the two main donors for capital investment projects in Tuvalu. The EU, AusAID, and New Zealand Aid Program are also major aid donors. Taiwan has been active in providing annual budgetary grants, infrastructure (including bridges, jetty, shipping warehouse etc.), private sector support, ICT, agriculture assistance, scholarships and training. In

agriculture, Taiwan's focus has been on improving and expanding extension services, training on vegetable production and aquaculture (milkfish farming on Vaitupu). The support for agriculture and aquaculture will be phased out gradually over the next couple years and the projects handed over to the government. Other regional agencies that are active in Tuvalu include the Forum Fisheries Agency (FFA), SOPAC, and the Secretariat of the Pacific Community (SPC) who are implementing various projects that promote greater economic returns from fisheries resources, water management, and climate change adaptation. In 2008, FFA assisted with the preparation of a fisheries development master plan and just recently, both AusAID and New Zealand Aid Program have been flagged as possible donors for the plan which include support for the institutional strengthening of the fisheries department.

4.4 Tuvalu has been a beneficiary of the National Adaptation Program of Action (NAPA) funded by GEF assistance. Both agriculture and coastal fisheries have been priority areas under the program for adaptation measures to mitigate the adverse impacts of climate change among the vulnerable communities in the outer islands of Tuvalu. The NAPA program is in its final phase and scoping for a NAPA II program is underway

Overview of FAO on-going and recent assistance

4.5 Over the last four years, FAO support has been through TCP and technical assistance focusing on developing community based aquaculture systems and management of inshore fisheries, training in market oriented agriculture extension, and supply of sigatoka disease resistant banana varieties for multiplication and distribution to farmers. Nurseries were also built through FAO support to raise and produce planting materials for farmers.

V. Proposed Country Program Framework

4.6 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus area for the CPF 2013-2017 will be on strengthening food and nutritional security resilient to impacts of natural disaster and climate change. Support will be delivered under the following three priority outcomes:

1) Strengthened policy, legal and regulatory frameworks for sustainable agriculture development.
2) Enhanced resilience of agriculture (including livestock) and fisheries production systems.
3) Strengthened food safety, quality and nutrition

Strengthened policy, legal and regulatory frameworks for sustainable agriculture development

4.7 Strengthening the national policy framework remains a priority for the Government. While agriculture and fisheries constitute the mainstay of everyday life in Tuvalu, the policy and planning work that is necessary to guide focused and coordinated agriculture development is weak. Sector stakeholders and the Department of Agriculture have identified the need to develop a National Agriculture Strategic Plan to provide this guidance. Additionally, the strengthening of the national policy framework will require improvements data collection, processing and management for effective planning and policy formulation. FAO technical assistance will support building national capacity in in gender and age disaggregated collection, policy analysis and strategic planning, and where appropriate strengthening legal and regulatory frameworks for sustainable agriculture and fisheries development which is resilient to the impacts of natural disasters and climate change.

Enhanced resilience of agriculture (including livestock) and fisheries production systems

4.8 Tuvalu's atoll environment does not lend itself to crop and livestock production and this makes agriculture more challenging. Poor soils, scarcity of the water resource, and vulnerability to environmental degradation and impacts of climate change limit options to increase production. At the same time, the rapid increase in population density in urban areas, high international food and fuel prices and deteriorating diets, make it imperative that the level of self-sufficiency in food production is improved. Furthermore, opportunities exist to improve livelihoods particularly on outer islands, through improved agriculture and fisheries productivity. Sector stakeholders and the Department of Agriculture have identified the need to develop an integrated coconut based agroforestry and livestock farming system to improve resilience in food production. This involves enhancing the traditional system of growing a mixture of root, fruit trees and other tree crops (i.e. pulaka, coconut, pandanus, noni) but more so the use of improved crop varieties that can withstand saline water and droughts. This is even more important given the recent drought in 2010/2011 where the country's food and water security was severely threatened. A relatively new technology of aquaponics[28] has also been flagged by stakeholders as an important cultivation system to improve vegetable and food fish production. FAO technical assistance could be provided to trial a prototype aquaponics system and explore viable business models. Support for further development of small-scale aquaculture systems in the outer islands will also remain a priority under this CPF

4.9 Home gardens continue to play a vital role in food and nutrition security. For an atoll island like Tuvalu home gardens are a safety net for vulnerable families and provide a source of nutritional food. Increased availability of vegetables from gardens in the country would reduce problems with regard to food security and malnutrition. FAO could provide gender sensitive support, particularly through the Telefood Program, for expanding availability of basic agricultural tools and equipment; developing home gardens and assisting private entrepreneurs to produce and market local food.

Strengthened food safety, quality and nutrition

4.10 One of the strategies for agriculture in the *Te Kakeega* 2005-2015 is to increase consumption of local food as a means to encourage entrepreneurs to produce and market local produce. Nutrition and food safety issues have been identified by stakeholders as priority to support local production but also to help greater community awareness given the prevalence of non-communicable diseases as a result of poor nutrition. There is a need for training and awareness building to strengthen capacity in the area of food safety and quality standards. This is expected to create a better understanding of safe preparation and utilization of local produce but also enhancing the opportunities for processed and value added products. Support in this area would aim to strengthen capacity of both the Department of Agriculture and the Ministry of Health in the implementation of the food safety legislation.

[28] **Aquaponics** is a combination of **Aqua**culture & Hydro**ponics**. This means that **fish and plants are grown in an integrated system**, creating a symbiotic relationship between the two. An Aquaponic system uses the water from the fish tank to circulate through a grow bed where the plants are grown. As aquaponics works in a closed system it conserves water and eliminates environmental waste issues.

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Food and nutrition security resilient to the impacts of disasters and climate change	NSSD 2005-2015: Natural Resources – improve the management and use of natural resources for the sustainable development of Tuvalu	Strengthening food and nutrition security; Fostering agricultural production and rural development; Coping with impact of climate change on agriculture and food and nutrition security	UNDAF Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens.	Pacific Plan Goals: Economic Growth and Sustainable development. Towards a Food Secure Pacific: Framework for Action on Food Security in the Pacific Hyogo Framework for Action 2005-2015 MDG 1 MDG7

CPF Results Matrix Tuvalu

Priority Area A: Strengthen food and nutritional security resilient to impacts of natural disaster and climate change

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative Resource Requirements (US$)
Outcome 1: Strengthened policy, legal and regulatory frameworks for sustainable agriculture development	Coherent gender sensitive Policy Framework in place and being implemented by 2015	Gazetted Policy/Strategy Documents	Good gender balanced stakeholder participation Good collaboration with SPC programs	**40,000**
Output 1.1: Strengthen capacity to formulate a gender sensitive National Agriculture Strategic Plan	National Agriculture Strategic Plan drafted and in place by end 2013 Baseline: no strategic plan available	National Agriculture Strategic Plan published and available	Full participation of gender balanced sector stakeholders	40,000
Outcome 2: Enhanced resilience of agriculture (including livestock) and fisheries production systems.	Policy and Implementation Plan on ' Climate Change Priority Adaptations for the Tuvalu Fisheries and Aquaculture Sector 2012' adopted and being implemented by 2015	DoF progress report	Strong partnership with SPC programs	**550,000**
Output 2.1: Strengthened capacity to adapt and extend resilient integrated coconut based agroforestry/livestock farming systems	Number of men and women farmers adopting improved farming system; Target:tbc Increase availability of locally produced meat; Increase in volume of marketed agricultural produce. Baseline: ?; Target: tbc	DoA farm surveys DoA annual report DoA farm surveys	Farmers willing to try and adopt improved farming systems	200,000
Output 2. 2: Increased capacity for vegetable and fish production through aquaponic systems	Aquaponic demonstration unit established by end 2014 Training on Aquaponic vegetable and fish production conducted Economic feasibility and business model developed by end 2015	Operational Aquaponic farm in place Training materials and records available Feasibility report available	Farmers adopt new production practices and technology	150,000
Output 2.3: Strengthened capacity of outer island communities (particularly women) for aquaculture food production	Increased number of small-scale aquaculture farms operating in outer islands. Baseline: ?; Target: tbc Increased levels of aquaculture food fish production Baseline: ?; Target: tbc	Fisheries Dept Annual Report Aquaculture farms in outer islands established	Active participation of island communities	200,000
Outcome 3: Strengthened food safety, quality and nutrition	Composition of diets Prevalence of NCDs including nutrition disorders Prevalence of food borne diseases	Nutrition surveys DHS Health Department Records	Population food choices are for nutritious foods	**100,000**
Output 3.1: Greater community awareness of nutritious and safe local food products (including fisheries product)	Awareness campaign implemented on preparation and utilization of local foods; Number of training workshops on food quality and safety conducted. Target: tbc	Promotional materials; Training reports; DoA annual reports	Availability of nutritious local foods	60,000
Output 3.2: Increased capacity to expand nutritious food supply through home gardens	Number (?) of new home gardens established Number (?) of gender balanced trainings conducted for home gardeners Improved garden yields	Training reports; DoA annual reports		40,000

CPF Action Plan

Action Plan: Tuvalu	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Strengthened food and nutritional security resilient to impacts of natural disasters and climate change																
Outcome 1: Strengthened policy, legal and regulatory frameworks for sustainable agriculture development																
Output 1.1: capacity to formulate agric. strategic plan											SAP PO	DoA	40	40		
Outcome 2: Enhanced resilience of agriculture (including livestock) and fisheries production systems																
Output 2.1: capacity to adapt and extend integrated agroforestry systems											SAP PPO	DoA	200	200		
Output 2.2: capacity for aquaponics development											SAP FO SAP PPO	DoA DoF PTI	150	150		
Output 2.3: capacity for OI communities in aquaculture food production											SAP FO	DoF	200	200		
Outcome 3: Strengthened food safety, quality and nutrition																
Output 3.1: awareness and training in nutritious safe local food products											SAP FNO	DoA	60	60		
Output 3.2: Capacity to expand nutritious food supply through home gardens											SAP PA	DoA	40	40		
Resource Mobilization		40	150		50	80	370						**690**	**690**		

Vanuatu

I. Country Summary

Land Area (km^2): 12,189	Sea Area/EEZ (km^2): 680,000
Population (No.): 234,023 (2009 Census)	Annual Growth (%): 2.3
Density (inhabitants/km2): 19 (2009 estimate)	Rural Population (% of total population): 75%
GDP (US$ million): 684 m (2010)	GDP per caput (US$): 2,856 (2010)
GDP Real Growth (ave.2002-2010): 4.6 % per annum	Primary Sector GDP (% of total GDP): 19.2% (2010)
Trade Balance –US$195 million (exports as % of imports): 16.4 % (2010)	Food & Live Animals as % of total imports: 20% (2011)
Budget allocation agriculture (2012): VT 434 million (approx US$4.7 m) % of Total Budget < 3%	Human Development Index 0.617 (2011): position 125 out of 187 countries

Sources: Vanuatu Statistics Office; Key Indicators for Asia and the Pacific, Asian Development Bank (ADB) 2011.

II. Situation Analysis and Agriculture Sector Overview

2.1 Vanuatu's overwhelmingly rural population is dispersed across more than 80 islands, which stretch longitudinally over 650km of ocean in the southwest Pacific. Vanuatu has a relatively small, open economy with many development and structural constraints. But the nation also possesses some important advantages including a strong traditional culture which promotes social stability and family welfare; and fertile land, natural resources and pristine environment. Livelihoods are based primarily on subsistence or small-scale agriculture, which provides a living for over 70% of the population.

2.2 Vanuatu's economic growth over the eight years since 2002 has been impressive averaging 4.6% per annum. Earlier this decade average income per capita was about the same as it was 25 years earlier, but despite the high population growth rate (average 2.3% between the 1999 and 2009 Population Census), this situation is being turned around by high and sustained growth[29]. By 2009 Vanuatu's Gross Domestic Product (GDP) per capita had reached VT269,204 (approximately US$ 2,523). Tourism has been a major driver of recent growth. Between 2006 and 2010 visitor arrivals have increased by 86% from 68,179 to 126,693 and day visitors on cruise ships have almost doubled from 85,700 in 2007 to 140,388 in 2010. Cruise ship stops are forecast to increase from 200 in 2011 to 300 in 2012 [Vanuatu National Statistics Office (VNSO)]. In 2009 (latest data available) the structure of the economy was dominated by the service sector (68%); followed by agriculture (22%) and a smaller industry sector (10%).

[29] The average GDP growth rate per person employed from 2005-2008 was 2.7% compared with -0.7% from 2000 - 2004 and 0.8% from 1995-1999 (MDG Report, 2010)

2.3 Despite Vanuatu's "economic success" it still runs a significant merchandise trade deficit with imports being some 6 times higher than exports. As a small open economy, where almost all manufactured goods and increasing amounts of food and fuel are imported, foreign exchange earnings are vital. While the goods trade deficit is large (29 per cent of GDP) the current account is balanced by tourism receipts and inflow of private and official transfers (Overseas Development Assistance). Agriculture products make up the bulk of merchandised exports presently dominated by five products coconut oil, copra, kava, beef and cocoa which made up 85% of total agricultural exports in 2011(VNSO data). But Vanuatu has also developed small volume exports of premium grade spices and coffee, sawn timber, and marine products. Relative to neighbouring Pacific countries of a similar size this constitutes a good level of diversification of the agriculture sector. What is needed now is to consolidate production and improve quality to increase export volumes and prices for these key products by increasing competitiveness in higher value markets. In Vanuatu domestic (intra-island) transport and port handling costs constitute a major share of FOB price and it will, therefore, be critically important to improve efficiencies in this area in order to raise export competitiveness. Strengthening export performance and forming stronger linkages with the growing tourism sector (to retain in country more of the tourist dollar) will be important to contain any pressures on the balance-of-payments and reduce dependence on external grants.

2.4 The two productive sectors of agriculture and tourism seem to offer the best opportunities for inclusive economic growth in Vanuatu and therefore the promotion of linkages between tourism and agriculture should help create economic opportunities, build resilience in rural communities and enhance sustainable development in both tourism and agriculture sectors. The most obvious area for strengthening linkage is in the supply chain for tourist consumption products – foods and beverages, crafts, cosmetics, flowers and ornamentals, essential oils, massage oils and spa products etc. – thus reducing dependence on imported goods to supply tourist market needs and the resultant leakage of foreign exchange. To service the tourist market local producers need to find profitable and competitive ways to meet tourism industry demand for volume, quality, regularity and safety requirements. The ability of local agri-food systems to meet these requirements will be dependent both on agriculture supply factors (natural resource base, farming systems in place, agro-processing and marketing capacity) and the kind of tourism development (mass tourism, high end niche, health and wellness, eco-tourism, cruise ship etc.). The exposure of tourists to specific local products could also help export market penetration when returning home such visitors help build a domestic demand.

2.5 Supplying food to the tourist market shares similarities with the export market in its requirements for quality (including food safety) and consistency in produce supply. Quality assurance and certification in terms of food safety regulatory requirements of importing countries, as well as in domestic markets, represents part of the adding value process for processed foods. Such certification is becoming essential for accessing high value markets (including the tourist market). Some industries (e.g. beef) have managed to develop robust quality assurance systems to meet export market requirements; whilst with some commodities progress has been minimal. At present monitoring of quality is problematic due to the absence of any operational food testing laboratory in Vanuatu and testing in overseas laboratories incurs an added cost. Finding ways to ameliorate these costs, defining appropriate SPS and Food Safety architecture and clarifying roles and responsibilities are policy priorities. Support is also needed to improve the capacity of producers to access niche market opportunities through improved quality control, product traceability and management skills.

2.6 Currently the legal and regulatory environment for food is fragmented: i.e. meat, fish and food are handled under separate legislation and enforcement structures, which have evolved driven by the needs and requirements of each industry. The current food legislative environment in Vanuatu includes: the Food Control Act no. 21 of 1993, which is the principal food safety legislation in

country; the Food Control regulation no. 37 of 2007, which provides specific standards of mostly hygiene, food handler requirements and some labelling requirements; and, the Food Penalty Notices No. 54 of 2010, which provides the authority under which fines may be issued for non-conformance to the Act/Regulations. But implementation of the regulations is difficult given the limited number of well trained inspectors to enforce them, the dispersed island geography of the country, and the lack of equipment and budget.

2.7 The domestic market for local food products (including a limited range of processed foods) is growing with urban centres of Port Vila and Luganville expanding. Products with a good demand on local markets include kava, beef, fish, roots and tubers, coconuts and a wide variety of fruits and vegetables, nuts, eggs and some small livestock (chicken and pigs). Tanna Coffee has also developed a substantial domestic market share. The main Port Vila fresh produce markets (Central, Marobe and Fresh Water) provide a sales outlet for producers around Efate and the near shore islands of Emau, Moso, Lelepa, Pele, and Nguna. They also provide a market outlet for major producers of food crops from as far as Sanma in the North and Tafea in the South. Following the completion of the upgraded Efate Ring Road an increased number of roadside markets have also been establish. The ring road markets are being established with the assistance of the Shefa Provincial Government, the UNIFEM, and New Zealand Aid Program[30]. Fresh produce markets are also important at Lakatoro in Malekula and Isangel in Tanna.

2.8 However, the government authorities currently do not implement any regular market surveys and there are few studies which are easily accessible for use by planners. This is a serious limitation for evidence-based policy making. It is also a limitation for private sector planning and investment. With growing demands on Port Vila fresh produce markets due principally to rapid urban population growth, but also to some extent from likely increased demands from the tourist sector on the one hand, and potential negative impacts of climate change, rising fuel costs and high global food prices negatively impacting food supply on the other hand; the need for good data for effective decision making has never been greater. A system for a quarterly market survey which is designed to collect quantity of produce (crops, fruits, vegetables, firewood, and livestock) brought to market, quantity sold and prices has been prepared. However, this has not to date been implemented because of insufficient resources. The Vanuatu National Statistics Office (VNSO) recognise that formal market information is generally lacking and consider that this is one area that has been neglected given its importance to farmers and for policy makers.

2.9 Vanuatu enjoys a fortunate animal health status, with very few significant animal diseases, and a benign climate well suited to extensive low input livestock farming systems. Beef cattle production has been widely conducted by ni-Vanuatu and expatriate farmers for over a century now and production systems are generally well understood. As a result, beef-cattle farming is an important part of the economy. However, rural farmers still face difficulties due to high transportation costs to reach markets, lack of credit and limited government extension programs. In order to improve opportunities for smallholder livestock farmers the government with assistance from FAO has established six rural butcheries as sustainable agribusiness ventures in isolated rural areas which could not access the domestic and export markets through the abattoirs in Port Vila and Luganville. The butcheries should improve food safety and food security for the local communities and help build a consistent market for local farmers to supply. The butcheries also assume a role in ongoing extension activities by providing a focal point for training local communities and farmers on food safety, livestock

[30] Mael, J (2011)**.** Vanuatu Domestic Market Study: The potential impact of increased tourist numbers on the domestic market for selected fresh vegetable produce, FAO.

development, animal disease identification and control. Expanding this program of rural butcheries is currently a priority for the Department of Livestock.

2.10 The Exclusive Economic Zone (EEZ) covers an estimated area of 680,000 km^2 and the country shares maritime borders with New Caledonia, the Solomon Islands, and Fiji. In contrast to neighboring Pacific Island countries which are endowed with large areas of fringing reefs, barrier reefs and lagoons, Vanuatu's inshore or shallow water areas are quite small. Inner reef areas are limited to narrow fringing reefs with the combined coral reef area covering an approximated 408 km^2. Other biologically important reef associated habitats, which include mangroves, estuaries and lagoons amount to 25 km^2 total area.[31]

2.11 Fisheries in Vanuatu can be divided into two main categories, offshore (≤ 12 nautical miles) and inshore fisheries (< 9 nm) which are fished at the subsistence, artisanal and commercial levels. The commercial fishery mainly targets offshore tuna resources. In Vanuatu, tuna resources generate an estimated VT100-200 million in access license fees annually. Since Vanuatu currently has limited capacity to exploit its tuna resources at a commercial level, the tuna industry is dominated by foreign vessels consisting mainly of long-liner fleets and a few purse-seine and pole and line boats. The Tuna Fishing Vanuatu Ltd. is the only tuna processor established in Vanuatu. The Fisheries Department is the responsible authority for management, development and conservation of the Vanuatu fisheries. It grants fishing licences and implements Fisheries law, regulations and conservation management measures. The Tuna Management Plan lays down limitation of the fishing licences to 100 per year, but numbers issued often exceed this. There are also fishing licences for local vessels fishing within the EEZ and landing all their catch in Vanuatu ports, but the numbers issued are very low; only 10 in 2011[32]. Vanuatu currently has very limited capacity to monitor its fishing waters and allowable catch. Greater financial benefits and closer supervision could be accomplished if more fish was landed/ transhipped in Vanuatu ports. A strategy to try and increase the amount of tuna landed and processed on shore in Vanuatu could be to require a stronger link between attribution of a fishing licence and the positive impact on the national economy. However, it will be important to reconcile the benefits of increasing fishing and processing with impacts on Vanuatu's important tourism industry.

2.12 Inshore fisheries, whilst important for food security in rural areas, have limited potential for increased production, with some export commodities already overfished (but up to date resource assessments need to be kept in place). Therefore, increasing fish supplies, to urban areas (particularly Port Vila), is likely to rely on increased landings of tuna and the development of aquaculture. The main focus of reef fisheries should be on consolidation and protection of current benefits. Attempt to get additional benefits should focus on tourism and other non-extractive uses. This implies that there will be a growing gap between coastal fisheries production and the demand for fish from coastal fisheries. With the amount of fishery products originating from coastal fisheries that are accessible to both urban and rural residents declining there will be an increased need for alternative fish sources including from aquaculture.

2.13 With a relatively pristine environment and a reasonable amount of suitable coastal habitat and abundant supplies of clean freshwater and seawater, the long-term potential for aquaculture is significant. The development of aquaculture in Vanuatu is a new and promising industry. Species include trochus, green snail, giant clam, sea cucumbers, corals, marine shrimp, native freshwater prawn and tilapia. But export of freshwater prawn is limited due to high cost of production. The principle focuses for sector development are to improve efficiency so that it can supply a larger

[31] W. and Aston, J. 2000. Status of coral reef fish resources of Vanuatu. The Regional Symposium on coral reef in the Pacific: Status and monitoring; Resource and Management; Noumea, New Caledonia. Cited by Jacob J Ranbani & Ragnar Arnason, 2006.

[32] European Commission 2012 Evaluation Mission to Vanuatu

proportion of protein needs of a rapidly growing population from local fish stocks, and to sustain limited fisheries resources. Government and the private sector have drafted an Aquaculture Development Plan (2008-2013), but there is still a high priority need to develop aquaculture policy and legislation to ensure that development is environmentally sustainable. Additional attention will also need to be paid to biosecurity issues, especially formulating and implementing procedures to reduce risks and safeguard biodiversity. Aquaculture industries in Vanuatu must be founded on appropriately located sustainable business ventures and be carried out in accordance with high standards of environmental and ecological protection.

2.14 Forests have important environmental, cultural and economic significance for people in Vanuatu. But what also increasingly is being recognised is the value of environmental services that forests provide. As the demand for food, fibre and fuel has increased, so has the demand for clean air and water, unspoilt landscapes and other environmental services provided by forests. Where forests are converted to other land uses, the services they supply are diminished. Maintaining such services poses challenges, especially where trade-offs between the production of goods and the provision of services must be addressed; thus the need for incentives for the provision of environmental services has become evident. Two main approaches are important in sustaining environmental services from forests, regulatory approaches and market approaches. The principal regulatory approach is through Protected Areas (PA) where the main objective is to restrict or prohibit activities that undermine the supply of environmental services.

2.15 Currently there are only a few areas officially designated as PAs under appropriate legislation, however, there is a very strong system of traditional taboos and customary closures for resource management and there are many areas which are protected by their custom-owners under these systems. Custom-owners and communities must therefore be consulted and agree to any suggested changes in land-use and designation of PAs. Furthermore, because agriculture and natural resource extraction is a crucial part of local livelihoods, communities need incentives to agree to restrictions on their activities in PAs and to change their forest, land and marine management practices to ones that enhance biodiversity protection and are generally more resilient and sustainable. Progress in this respect also requires training and capacity building within communities and broader programs of awareness raising and environmental education. Vanuatu, with support from FAO and the Global Environmental Facility (GEF) funds is working to establish PAs of forest conservation. The main areas to be addressed are improved policy and legal frameworks to underpin PA networks; strengthened capacity for community-based conservation management; establishment of new protected areas; and mechanisms developed for sustainable financing for the PAs. This work continues to be a priority in the CPF 2013-2017.

2.16 Vanuatu's new Forest Policy has moved towards a broadening of the dimensions of forests and forestry far beyond timber harvesting. The Policy also makes provisions to ensure that forest legislation and regulations that encompass forestry are in place. It will now be essential to strengthen the capacity for enforcement of these regulatory frameworks. If not, institutional weaknesses may continue to frustrate the policy goal of sustainable forest management.

III. Key issues shaping priorities for FAO assistance

- Limited livelihood options for rural areas.
- Limited financial and human resource capacity for sector development in the Department of Agriculture especially in Research, Extension and Information.
- Absence of regular market data systems which constrains evidence-based policy, private sector planning and sector monitoring.
- Poor supply chain coordination and limited capacity for value chain assessments.

- Inefficient delivery of technology and support services to the farming, forestry and fishery sectors.
- Meeting quality and safety standards for domestic (including tourist) and overseas marketing.
- Lack of competitiveness of agricultural products.
- Unexploited opportunities for agriculture products to access the growing tourist market.
- Natural forest stocks are declining due to commercial felling and clearing for agriculture and other purposes exceeding the rate of regeneration.
- Potential loss of valuable biodiversity because of a lack of community managed Protected Areas.
- Vulnerability to adverse impacts of natural disasters and climate change

IV. Country Program Context

4.1 The Priorities and Action Agenda (PAA) articulates the Governments high level development priorities and strategies to achieve the goal of creating "an educated, healthy and wealthy Vanuatu". The PAA integrates and prioritizes policies and initiatives outlined in the Comprehensive Reform Program (CRP), Business Forum outcomes and the Rural Economic Development Initiatives (REDI) Plans for the period 2006 - 2015. The document was approved by the Council of Ministers in June 2006. The PAA identified seven Strategic Priorities which were reviewed in 2011 and slightly amended to the following:

1. Private Sector Development and Employment Creation
2. Macro-economic Stability and Equitable Growth
3. Good Governance and Public Sector Reform
4. Primary sector development, environment, climate change, and disaster risk management
5. Provision of Better Health Services, especially in rural areas
6. Education and human resource development
7. Economic Infrastructure and Support Services

4.2 With a population growth rate of around 2.3% it is estimated that the number of young people entering the labour force averages around 3,500 each year. Private sector development and employment creation, including in tourism, agriculture and fisheries is therefore a top priority. This means creating an environment in which economic opportunities can be generated is at the core of the national development strategy. The current PAA has gone some way towards a macro-level approach, and has included a range of general performance targets. The PAA provides broad guidance for development programs, but specific time-bound strategic plans and medium-term expenditure frameworks are needed to better identify funding gaps to be addressed by cooperation partners. In this context the government has recently finalized an Overarching Productive Sector Policy (OPSP) framework which focuses on achieving PAA Strategic Priorities 1 and 4.

4.3 The OPSP establishes a coherent policy framework to guide strategic actions and investments over the next five to ten years. The policy proposes strategic thrusts in eight priority areas: sustained market access; improved product quality and safety; increased production and productivity; more processing and value adding; environmental services and resilience; infrastructure development; capacity building, training and entrepreneurship; and policy development, coordination and monitoring. The OPSP is intended to strengthen linkages between PAA policies, the Planning Long, Acting Short (PLAS 2009-2012) policies and sub-sector strategies and corporate plans, and budget programs and narratives. It should lead to better clarity on priority actions and outcomes for the line ministries: Agriculture, Livestock, Quarantine, Forestry and Fisheries (MALQFF), Trade, Commerce, Industry and Tourism (MTCIT).

4.4 The European Union is the principal donor to the agriculture sector through a Primary Sector Growth Support Program Phase 1 The program is designed to deliver results in three areas: (i) improved policy processes and strengthened institutional capacity; (ii) reinforced public policies in support of Private Sector in Vanuatu; and (iii) improved delivery of public goods that are critical to the sustainability of the primary sector in the short term. The four key activity areas under result area 3 are: effective performance of staff in MALQFF and MTCIT; effective bio-security and export quality services, effective research and extension systems, and exploring possibilities for contracting private sector/NGO service providers to deliver public goods. The EU is also providing funding for climate adaptation activities implemented by regional partners and the FLEGT support implemented by FAO. Australia is providing support through ACIAR to research oriented activities and the PHAMA project in areas of market access.

4.5 Several international organizations (including World Bank, GIZ and the UN), regional agencies (including SPC and SPREP) and NGOs (including World Vision) are active in the areas of disaster risk reduction and climate change adaptation. In order to improve coordination and coherence the government has recently merged the National Advisory Committee on Climate Change (NACCC) and the National Task Force for NAP Implementation (NTF) to form the National Advisory Board for Climate Change and Disaster Risk Reduction (NAB). The NAB holds the overarching mandate for steering and coordination of all relevant policy, mainstreaming and implementation of advice for all partners in Vanuatu working in DRR and CCA.

Overview of FAO on-going and recent assistance under the NMTPF 2009-2012

4.6 Four priority outcomes guided FAO support under the 2009-2012 program framework. These included: (i) strengthened policy, legal and regulatory frameworks for sustainable agriculture, fisheries and forestry development; (ii) increased production, productivity and resilience of crop and livestock systems; (iii) improved marketing systems and market access for livestock, traditional food crops and high value specialty commodities (iv) sustainably managed terrestrial, freshwater and marine resources. Support to outcome 1 has focused on strengthening data and capacity for policy analysis and planning. Earlier FAO assistance had helped Vanuatu prepare the Agriculture Census in 2007 and as a follow up assistance was provided for some thematic areas of analysis of the census data. Building on this, technical assistance was provided to strengthen capacity for formulation of the productive sector policy framework through supporting national policy consultations and development of a road map for policy completion. Based on this work the draft Overarching Productive Sector Policy was completed by the government in 2012 (with additional support from the EU). Assistance has also been provided to strengthen capacity to analyze market data. This work helped demonstrate the importance of developing and maintaining systems of domestic market data collection and use, and also the value of good data for improved decision making. Going forward, the constraint of the absence of regular market data collection systems in Vanuatu was thus identified as a priority. Further support to evidence-based policy and strategic planning was through a national consultation on policy and program actions on high food prices, and participation in a sub-regional agriculture for growth study where a study of the Vanuatu organic cocoa sector elaborated lessons learned. Technical support (with EU FLEGT funding) is also ongoing to develop the legal framework for plantation forestry.

4.7 Under outcome 2 TCP support work has recently commenced to enhance capacity for commercial vegetable production. As a component of the sub-region All ACP Agriculture Commodities Program (funded by the EU) FAO provided technical assistance and capacity building support to the Farmers Support Association (FSA) to help Vanuatu vegetable sector with improved farmer market linkages and improving the financial viability of FSA as a service provider which focused on outcome 3, market access and this area also remains a priority under the current CPF. Under outcome 4 the

GEFPAS-FPAM – Forestry and Protected Area Management project is being implemented by FAO and activities will continue as a priority under the CPF 2013-2017.

V. Proposed Country Program Framework

5.1 Based on the situation analysis and existing medium-term priorities of the Government and the UN System, and taking into account past and on-going FAO and other partner's programs, the priority focus areas for the CPF 2013-2017 will be on sustained access to markets and environmental management and resilience (including disaster preparedness, emergency response and climate change). Support will be delivered under the following six priority outcomes:

1) Strengthened capacity for evidence-based policy and planning.
2) Strengthened agriculture linkages and synergies with the tourist market.
3) Improved food quality and safety (including for processed products) with reference to food safety, plant health and animal health.
4) Enhanced biodiversity conservation via and integrated system of protected areas.
5) Enhanced community resilience and capacity for coping with climate change and natural disasters.
6) Integrated sustainable land and coastal management

Strengthened capacity for evidence-based policy and planning.

5.2. Absence of an institutionalized system of market data collection and analysis has been identified as an important constraint to evidence-based policy, planning and monitoring. Farm management decision making is also limited by the absence of good market data. Capacity building support and technical assistance will focus on improving domestic market data collection and management systems. Further support could also be provided to strengthen capacity and stakeholder awareness of the value chain analysis approach to improve coordination and efficiencies in local food supply chains and marketing. Policy work and strategic planning may also be a focus area for the fisheries and forestry sub-sectors.

Strengthened agriculture linkages and synergies with the tourist market.

5.3. Tourism has grown well in Vanuatu and constitutes an important market for local agricultural products. But currently it is estimated that a high proportion of the tourist demand is supplied by imported products. Furthermore, the rapidly growing number of cruise ship arrivals could provide a unique opportunity to market processed agricultural products to the short-term visitors and build both "suit-case' exports and overseas market penetration. A challenge for policy makers is both to ensure that tourism growth is sustainable and that the benefits that accrue from increased visitor numbers are maximized in country value added and that any increased wealth is equitable shared with poorer rural communities. Strengthening linkages and creating synergies between tourism and agriculture should help harness the tourist dollar to achieve the objectives of sustained and equitable growth. However, overcoming knowledge gaps in tourism-agriculture links will require primary data collection and research on tourism and agriculture linkages to help clarify the relationship between the two industries. FAO support could be provided for scoping studies to fully appreciate the opportunities to enhance positive linkages and technical assistance to better realize these opportunities and to overcome constraints that currently may inhibit positive linkages.

Improved food quality and safety (including for processed products) with reference to food safety, plant health and animal health.

5.4. Food safety/certification and good agricultural practices/traceability are increasingly being demanded in overseas markets for food products (fresh and processed). Tourism is identified as a growth area for the economy, but accessing tourist food product supply chains will also require improved food

quality/safety standards. Agriculture (crops/livestock and fisheries) production and processing industry currently lacks capacity in these areas and FAO will provide training and technical support to build capacity to meet internationally recognized food quality and safety standards. Support could also be provided to improve quality and safety of meat production and processing through the rural butcheries program. Maintaining vigilant surveillance and credible national status on animal health and welfare is vitally important to maintain quality and market acceptance of Vanuatu meat products. Assistance could be provided to strengthen capacity for disease surveillance.

Enhanced biodiversity conservation via an integrated system of forest protected areas.

5.5 Vanuatu fully recognizes the need to protect its valuable and unique biodiversity and the importance of community involvement in this process. Biodiversity promotes ecosystem services important amongst which are: food production, provision of raw materials, recreational opportunities and cultural values. Through GEF-PAS funds, FAO will continue to support the government of Vanuatu to implement a project for conserving Vanuatu's biodiversity via an integrated system of protected areas (PAs). The main output areas will be: improved policy and legal frameworks to underpin PA networks; strengthened capacity for community-based conservation management; establishment of new protected areas; and mechanisms developed for sustainable financing for the PAs.

Enhanced community resilience and capacity for coping with climate change and natural disasters

5.6 Vanuatu is extremely vulnerable to natural disasters and the impact of climate change. According to the Commonwealth Vulnerability Index – based on (a) the impact of external shocks over which an affected country has little or no control and (b) the resilience of a country to withstand and recover from such shocks – Vanuatu ranks as the world's most vulnerable country out of 111 developing countries assessed. FAO will continue providing technical assistance and building capacity to strengthen community resilience for food security in the face of natural disasters and climate change .The ongoing joint FAO/UNICEF/UNDP project funded by the United Nations Trust Fund for Human Security targets vulnerable households in 12 disaster prone communities across all 6 provinces in Vanuatu. The FAO component has four outputs, which are (i) Flood and landslide prone farm lands stabilized for food production; (ii) Increased food production and availability; (iii) Household heads, caregivers and other adults practice appropriate food processing, storage and preparation methods minimize crop, food and nutrient loses; and (iv) Women empowered and men cooperate for food production, processing, preparation and marketing. This area of work will continue as a priority under this CPF.

Integrated Sustainable Land and Coastal Management

5.7 Driven by land degradation concerns FAO has assisted Vanuatu to prepare a proposal for GEF 5 financing and is ready to provide technical assistance for implementation of activities. Such support could assist the country to undertake studies, surveys and assessments of existing and recent land use to better inform land use planning and build stronger policy, legal and regulatory frameworks. Support could also be provided to build capacity in institutions and communities for sustainable land use practices including an agroforestry approach that increases forest and tree cover in production landscapes, sustainable forest management and biodiversity conservation. A further focus could include building capacity for carbon monitoring, reporting and verification (MRV) as a step towards policy and strategy development and also to identify areas where there is most potential for conservation and enhancement of carbon stocks. Strengthening the Protected Area network would also be included in this program of support. Finally support for transfer of technology to generate renewable energy (e.g. solar powered driers) coupled with initiatives to provide communities with value-adding activities involving both marine and forest protected area systems.

CPF Priority Matrix Vanuatu

CPF Priorities	Relevant National Policies	FAO Regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks
CPF Priority Area A: Sustained Market Access	Overarching Productive Sector Policy Priority Thrust Market Access: Increased volumes of saleable agricultural products marketed by private sector into domestic and export markets; Strategy 1.2 VNSO to institutionalize a regular (weekly) domestic market Survey and monthly report; Strategy 1.3 Adopt a supply chain approach to facilitate and support the establishment of viable production and marketing chains from input supplies, through farm production to end markets; Strategy 1.12 Facilitate linkages and synergies with the growing tourist market. OPSP Priority Thrust Quality and Safety: Improved quality and safety of agriculture (including processed) products. Strategy 2.3 Strengthen the capacity to monitor the Food Control Act and Food regulations; Strategy 2.4 Recognize the importance of food safety and support the private sector to obtain HACCP (and ISO) certification.	Fostering agricultural production and rural development	Outcome 3.1: By 2017, inclusive economic growth enhanced, poverty is reduced, sustainable employment is improved and increased, livelihood opportunities and food security are expanded for women, youth and vulnerable groups and social safety nets are enhanced for all citizens. .	Pacific Plan Goal: Economic Growth MDG 1
CPF Priority Area B: Environmental management and resilience (including disaster preparedness, emergency response and climate change).	PAA PO 4.5: Ensure the protection and conservation of Vanuatu's natural resources and biodiversity, taking climate change issues inconsideration. PAA PO 4.6: Prepare the people of Vanuatu to face disasters; OPSP Priority Thrust Environment and Resilience: Enhanced environmental services and sector resilience to natural disasters and climate change; Strategy 5.6 Utilize further the already established options to recognize land and marine Protected Areas (PAs); Strategy 5.8 Strengthen capacity to collect appropriate natural resource data (land, freshwater and marine) to improve land use planning and fisheries management, and to monitor impacts and sustainability of activities in the productive sector.	Enhancing equitable, productive and sustainable natural resource management and utiliza Coping with the impact of climate change on food and agriculture	UNDAF Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management	Pacific Plan Goal Sustainable Development Convention on Biological Diversity Hyogo Framework for Action 2005-2017 MDG 7

CPF Results Matrix Vanuatu

Priority Area A: Sustained access to markets

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative resource requirements (US$)
Outcome 1:Strengthened capacity for evidence-based policy and planning	Domestic market data collection institutionalized in VNSO by end 2016 Baseline: no regular market data collection and analysis Target: weekly collection of domestic market data and monthly analysis report	VNSO Publications	Sustainable budget resources and human resources are available within VNSO. Good collaboration with SPC support programs	**300,000**
Output 1.1: Strengthened capacity to collect and analyse domestic agriculture market data.	Regular market data and analysis reports available Baseline: no regular market data reports available Target: weekly collection of domestic market data and monthly analysis report	VNSO Publications	Good collaboration between MAQFF, NSO, and sector stakeholders	300,000
Output 1.2: Strengthened capacity in/ stakeholder awareness of value chain analysis of local food supply chains and marketing	Participatory Value Chain Analysis reports available for at least two key local food supply chains by end 2015 Key DARD staff familiar with value chain analysis approach by end 2015	VCA Reports	DARD staff and other key stakeholders participate fully in VC analysis study and training. Coordination with other capacity building activities in this area	100,000
Outcome 2: Strengthened agriculture linkages and synergies with tourist market	Foreign exchange earnings per visitor from tourism increased by 10% by end 2016 Baseline:?	VNSO and Reserve Bank reports	Appropriate data collected. Tourism visitor numbers and cruise ship visits continue at a similar level or increase	**750,000**
Output 2.1 Review of opportunities for linkages and synergies with tourism sector and to provide baseline data on tourist spend on domestic agriculture products	Review/study reports available by end 2013 Baseline: One hospitality survey reports available? Target: Opportunity scoping study report and survey report on tourist spend available	Government/FAO reports		50,000
Output 2.2: Strengthened capacity to supply growing tourist market with fresh and processed agriculture products	Volume and value of tourist spend on domestic agriculture products and services increased by 25% by end 2016			300,000
Output 2.3: Enhanced capacity for commercial vegetable/fruit production to meet domestic market demand	Market volumes and year round availability of selected vegetables increased Baselines: to be collected in market surveys	VNSO market report	VNSO Institutionalize market survey and reports	400,000

Priority Area A: Sustained access to markets

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative resource requirements (US$)
Outcome 3: Improved food quality and safety (including processed products) with reference to food safety, plant health and animal health	Number of products rejected from markets due to food safety/quality non compliance; and Number of food safety related illnesses reported Baseline: ?	Phone survey of selected enterprises MoH/Hospital records	Appropriate SPS and Food Safety architecture, policy and regulations in place	**650,000**
Output 3.1: Strengthened capacity to monitor the Food Control Act	Number of inspectors trained and implementing legislation Target: ?	Training report Inspection records	Appropriate legislation and regulations in place Staff available for training	150,000
Output 3.2: Strengthened capacity of private sector stakeholders in GAP and food safety along the food chain from farm to fork.	Percentage (100%) of target farmers aware of GAP principles Percentage (70%) of target farmers applying GAP on farm Baseline: tbc Target: 100% of target farmers aware & 70% practicing GAP	Verification by extension officers	Availability of partner extension workers and interested farmers	100,000
Output 3.3: Strengthened capacity for disease surveillance				100,000
Output 3.4: Expanded program of rural butcheries for safe meat processing	Number of rural butcheries successfully established and operating. Baseline:/ Targer: tbc	Department of Livestock Reports		300,000

Priority Area B: Environmental management and resilience (including disaster preparedness, emergency response and climate change).

CPF results	Indicators	Means and sources of verification	Assumptions	Indicative resource requirements (US$)
Outcome 1: Enhanced biodiversity conservation via an integrated system of forest protected areas.	Increased number of terrestrial and marine areas and critical ecosystems and species protected Number of species threatened with extinction decreased		GEF resources and partners and community stakeholders actively involved	**670,000**
Output 1.1: Legal, institutional and policy reform	1. New National Forest Policy agreed, published and disseminated. 2. New Sustainable Land Development Policy agreed, published and disseminated.	Approved policies	Adequate Government and public support	124,000
Output 1.2: Effective and sustainable in situ biodiversity areas established, strengthened and financing strategy developed/implemented	At least 4 terrestrial PAs are formally established with baseline surveys, management plans and local by-laws ready for implementation and monitoring Formal protected area coverage increased from 3200 ha to 10200 ha Status and condition of habitat and biodiversity in the project's PA's equal to or better than the baseline measured at start of the project Local people are aware of PA management plans and participate in conservation activities Financing strategy for PAs developed and at least one new source of funding identified and secured	GEF Biodiversity Tracking Tools Formal registration documents	Local leaders enforce and community members respect agreements made in protected area management plans. Stakeholders' commitment to conservation remains high Landowners still agree to set aside area for conservation	154,000
Output 1.3: Stakeholders are aware and have capacity to plan, implement and monitor biodiversity conservation, sustainable land and forest management	Protected area managers and land owners trained in PA management, community based conservation approach and eco-tourism. Biodiversity friendly production techniques tested and promoted with demonstration plots and best practice guidelines and on website.	Survey of effectiveness of awareness raising Participants evaluations of training activities by the project Website statistics	Stakeholders are still interested in training and/or remain in the position where they can put their training to use	212,000
Output 1.4: Mechanisms for sustainable PA financing	1. Protected Area financing strategy produced and implemented through revised Vanuatu Biodiversity Conservation Trust Fund. 2. Protected Area funding obtained from at least one new source in final year of project.	Finance strategy, financial reports	Adequate government and private sector support	70,000
Output 1.5: Marketing of biodiversity goods and services result in improved livelihoods of local communities	Assessment of non-wood forest product development Evaluation of alternative income generating activities At least 80 households trained in alternative sustainable livelihood activities	Site surveys and assessments of local income generation and assets	Project beneficiaries are interested and willing to participate in income generating activities Adequate markets exist for biodiversity services that can be produced	110,000

Outcome 2: Enhanced community resilience and capacity for coping with climate change and natural disasters.			Other UN Trust Fund partners and community stakeholders actively involved	**444,000**
Output 2.1: Flood and landslide prone farm lands stabilized for food production	% of households with knowledge of appropriate land use patterns Baseline: TBD; Target: 75% in targeted communities by 2014	Baseline report End of project report		
Output 2.2: Increased food production and availability	% of households adopting diversified farming Baseline: TBD; Target; 75% of targeted communities by 2014	Monitoring reports		
Output 2.3: Household heads, caregivers and other adults practice appropriate food processing storage and preparation methods minimize crop, food and nutrient losses	% of households practicing methods minimizing food and nutrient loses Baseline; TBD; Target: 75% of targeted communities by 2014	Progress reports		
Output 2.4: Women empowered and men cooperate for food production, processing, preparation and marketing	% of households marketing surplus foods Beseline: TBD; Target 75% of targeted communities by 2014	Monitoring reports		
Outcome 3: Integrated Sustainable Land and Coastal Management			GEF 5 funding approved	**2,800,000**
Output 3.1: Development of the marine protected area network	At least six new MPAs established with the consent and support of relevant communities. New hatcheries developed enhancing existing capacity, and productive At least one FAD per new MPA strategically deployed			1,050,000
Output 3.2: Enhanced capacity for the management of forest carbon	Carbon monitoring, reporting and verification (MRV) systems reviewed and adapted to forests in Vanuatu. National forest carbon assessment produced Forest cover increased (20,000ha)through agroforestry, small-scale planting			1,150,000
Output 3.3: Development of renewable energy technologies for community value adding activities	Solar technology installed , demonstrated and applied that provide income options for local value adding of fruit, nuts, fish etc.			600,000

CPF Action Plan

Action Plan: Vanuatu	**2013**		**2014**		**2015**		**2016**		**2017**		**Responsible**		**Resource Cost (US$) '000**	**FAO Budget (US$) '000**	**Other Partner Budget (US$) '000**	**Resource Gap (US$) '000**
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Lead FAO Officer (s)	Partners				
Priority Area A: Sustained access to markets																
Outcome 1: Strengthened capacity for evidence-based policy and planning																
Output 1.1: capacity to collect and analyze domestic agriculture market data											RAP SO/ SAP PO	VNSO DARD SPC	300	300		
Output 1.2: capacity in value chain analysis of local food supply chains											SAP PO AGS	DARD	100	100		
Outcome 2: Strengthened agriculture linkages and synergies with tourist market																
Output 2.1: review of opportunities and linkages with tourism sector											SAP PO	MAQFF MTCIT	50	50		
Output 2.2:capacity to supply growing tourist market with fresh and processed products											SAP PPO SAPFNO AGS	MAQFF MTCIT	300	300		
Output 2.3: capacity for commercial veg/fruit production											PPO	DARD	400	400		
Outcome 3: Improved food quality and safety (including processed products) with reference to food safety, plant health and animal health																
Output 3.1: capacity to monitor Food Control Act											SAP FNO	MoH WHO	250	250		
Output 3.2: capacity in GAP											SAP FNO	DARD				
Capacity for livestock disease surveillance												DQL	100	100		
Expanded program for rural butcheries											RAP LO SAP PPO	DQL	300	300		

Year	2013	2014	2015	2016	2017						
Priority Area B: Environmental management and resilience (including disaster preparedness, emergency response and climate change)											
Outcome 1: Enhanced biodiversity conservation via an integrated system of forest protected areas											
Output 1.1: Legal institutional and policy reform									CTA GEFPAS SAP ForO	DoE MAQFF	670 124		GEF 124	
Output 1.2: in situ biodiversity areas established and financed											154		154	
Output 1.3: awareness & capacity to plan, implement, monitor biodiversity, SLM & SFM											212		212	
Output 1.4: mechanisms for sustainable PA financing											70		70	
Output 1.5: Marketing of biodiversity goods and services to improve livelihoods											110		110	
Outcome 2: Enhanced community resilience and capacity for coping with climate change and natural disasters														
Output 2.1: Flood and landslide prone farm lands stabilized for food production									SAP FNO	DLA MAQFF UNDP UNICEF	444		UN Trust Fund 444	
Output 2.2:Increased food production and availability														
Output 2.3: Appropriate food processing, storage and preparation methods practiced														
Output 2.4: Women empowered for food production, processing, preparation and marketing														

Year	2013		2014		2015		2016		2017		Responsible		Resource Cost (US$) '000	FAO Budget (US$) '000	Other Partner Budget (US$) '000	Resource Gap (US$) '000
Outcome 3: Integrated Sustainable Land and Coastal Management											**FAO Lead Officer (s)**	**Partners**				
Output 3.1: Development of marine protected area network											SAP ForO	DoE MAQFF	1,050		GEF 2,800?	2,800
Output 3.2: Enhanced capacity for management of forest carbon													1,150			
Output 3.3: Development of renewable energy technologies for community value adding activities													600			
Resource Mobilization	1,514	50	400	300			3,450						**5,714**	**1,800**	**1,114**	**2,800**