

II. Situation Analysis and Agriculture Sector Overview

- 2.1** Agriculture growth and development has been modest and, relative to other sectors has declined significantly in recent years. While the potential for agriculture to supply a growing tourist sector exists, substantial agricultural surpluses must be generated for this arrangement to be viable. Currently only a small commercial sub-sector 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 largely driven by foreigners, either as laborers from the Philippines, or entrepreneurs from China. Traditional farming systems are semi-subsistence systems producing root crops, cassava, betel nut and pepper leaf, or more conventional systems that rotate vegetable crops on annual basis, using a mix of organic and inorganic inputs to ameliorate the relatively infertile acid soils. Traditional subsistence systems predominantly involve production by women.
- 2.2** Agriculture has unexploited potential in Palau in terms of long term economic self sufficiency and improved health through better nutrition and diet. At present, the population is heavily dependent on imported foodstuffs with very limited local food production. Completion of the new Compact road in Babeldaob is expected to provide substantial opportunities for farmers to grow and sell more products locally, through improved access to Koror. However, the lack of a central market, and an inefficient transportation and distribution system make it difficult for farmers and fishers to supply the main demand centers efficiently. Whilst there is considerable potential for domestic food needs to be met by an expanded agricultural sector, the likelihood of early growth is constrained due to a variety of factors which will need to be addressed through a well thought-out development strategy for the sector.
- 2.3** There has to-date been only limited sector data available for planning and the Bureau of Budget and Planning, Office of Planning and Statistics (OPS) is now preparing to undertake a

comprehensive Agriculture Census, but requires support to complete this. Aspects of the 2020 National Master Development Plan (NMDP), and other plans, have been implemented, but on a somewhat ad hoc basis. There is a need to streamline and more effectively coordinate the implementation of the various development plans and the assistance provided by Palau's development partners.

2.4 While public expenditure relative to GDP has trended down from 1994 to 2005, it remains high at 60–65% (Office of Planning and Statistics, website). Palau is facing a period of substantial fiscal adjustment as the current US Compact allows for the end of basic grants for operations and maintenance in 2009. While some success has been achieved in expenditure control, the rate of progress suggests that such initiatives cannot be solely relied upon to meet the looming shortfall in current revenue. The required fiscal adjustment could be lessened through private sector led growth in tourism, agriculture and aquaculture. This would boost revenue collection and allow for the transfer of some responsibility for infrastructure to the private sector. It would also provide an alternative source of employment for Palauans displaced from the public sector²⁸. Tourism can continue to be a very valuable industry for Palau, but must ensure an increasing portion of each tourist dollar spent stays inside the country and in turn generates additional income generating opportunities. For this to happen, tourist accommodation and services, and the production and supply of food and souvenirs, need to have a larger domestic component. Value-added local agricultural processed products offer an area with potential for further development. However the economic viability of these enterprises needs to be fully explored and capacity building is needed to improve both the food quality (including safety) and presentation of products.

2.5 Another 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, 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. Aquaculture is still at an early stage of making a sustainable economic contribution, but offers excellent development potential. Considerable investment is now being made in fish farming operations. Finalisation of an aquaculture management plan, a comprehensive marine management plan and consolidation of policy, legal and regulatory frameworks are now urgently needed. There is a need to develop and adopt and implement a Code of Conduct for Responsible Aquaculture. There is also a need to develop species specific management plans base on biology, economic feasibility and environmental risk. Management plans for giant clam, mangrove crabs, milkfish, rabbit fish and grouper need to be finalised as a matter of priority²⁹. Marine dive tourism is very important in Palau and sport fishing is also growing in importance; the maintenance of a healthy and productive inshore marine environment is therefore essential. Market demands are currently placing increasing pressures on inshore fisheries resources.

2.6 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

²⁸ Palau: Policies for Sustainable Growth, A Private Sector Assessment (ADB, 2007).

²⁹ PINZ Marine Resources Strategy Review, November 2007 (ADB).

imported, and the value of imports is close to Palau's GDP. The minimal merchandise exports consist primarily of fish. Palau has a liberal trade regime: there are five tariff bands and most imports attract a duty of only 3%. There are some tariff exemptions that distort the trade system, but they are not extensive. Palau has a modern customs system with harmonized nomenclature; document filing takes place via the Internet (but some capacity building is still required for effective implementation of the system). Licensing is required only for agricultural and health reasons. Nevertheless, inefficient regulation is hampering the operation of the trade regime. Quarantine rules require that agricultural 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, even though Palau's climate is well suited for year round production of high value-added fruits and vegetables³⁰. The Department of Environmental Health has a new 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.

2.7 Principle opportunities for growth lie in sectors which are highly reliant on access to, and development of key natural resources, mainly land, marine and terrestrial ecosystems, and water and renewable energy. All of Palau's medium term development plans reflect the important contributions the country's environment and natural resources make to the economy, not only at the national level, but also at the state and community levels. In order to minimize the impacts on the environment and natural resources from development, it is important to strengthen natural resource and environmental management. Increased water consumption resulting from economic and social progress in the coming years will necessitate further development of Palau's surface water resources, including identification and development of additional water sources (e.g. watersheds) and ensuring appropriate protection of all watersheds that are currently used to provide potable water. To ensure a strong terrestrial system in the future, there is a need to develop comprehensive forest and mangrove monitoring and management plans. Regulatory regimes must also be improved in a number of different areas, including watershed protection and forest and mangrove management. There are significant areas of savannah land on Babeldaob Island which have potential for commercial forestry and opportunities exist for extending planting of timber species in sustainable systems. A forest policy, legislation, regulations and management plan are urgently needed. The performance of government agencies in assessing and managing quarantine risks associated with the nation's fisheries (inshore and offshore) and aquaculture activities also need to be improved to reduce the risks of introducing invasive marine species and pathogens. A nation-wide quarantine strategy and development plan including detailed quarantine procedures need to be completed and incorporated into legislation and actions implemented.

III. Key issues shaping priorities for FAO assistance

- ☐ High and volatile food and oil prices and a significant trade balance deficit.
- ☐ Unexploited potential for increased local agricultural production.
- ☐ Unexploited potential for sustainable timber production in agroforestry systems.
- ☐ Lack of appropriate forest policy and legislative framework.
- ☐ Lack of local produce market and weak market chain linkages.
- ☐ Lack of capacity to implement food quality and safety standards.
- ☐ Rapidly increasing levels of food and nutrition related non communicable diseases, which impact negatively on health system, families and national economy.
- ☐ Knowledge and skills of most farmers need to be strengthened to ensure their activities are sustainable, including adoption of appropriate conservation practices.
- ☐ Weak agricultural extension capacity and human resources for sector development.

³⁰ Palau: Policies for Sustainable Growth, A Private Sector Assessment (ADB, 2007).

- 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.

IV. Country programme framework

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 Government's vision, goals and macroeconomic framework and related development strategies are set out in the Management Action Plan (MAP 2005-2008) which provides both short-term and longer-term strategic roadmaps for development. The Government is committed to develop sectors of the economy that have the potential to support sustainable economic growth, such as tourism, fisheries, aquaculture, agriculture financial services and trade. The NMDP recommended upgrading research and extension, establishing a central market and undertaking market research in key agricultural products. The Management Action Plan (MAP, 2001) established "guiding principles" that supported privatization of government services and in relation to agriculture, development of a strategic plan to diversify and significantly increase agricultural production and to support subsistence agriculture by expanding extension services. The Economic Development Strategy Framework (2001-2004) stated that the specific policy for agriculture was to "expand production to meet domestic consumption". ADB and UNDP are currently providing technical assistance to develop a more focused and streamlined Medium Term Development Strategy 2008-2012 and link this to performance budgeting. The Bureau of Agriculture has a strategic plan, produced in 2006 which identifies some 201 activities, but less than 15 percent have currently secured funding for implementation. There is now a need to prioritise and streamline this plan to identify a more balanced set of activities in line with resources available for implementation in the medium term.

4.2 The US provides an estimated US\$20 million per annum 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. USDA Forest Service funds forestry staff posts in invasive weeds, urban and community forestry and forest resources, but no additional operational funds are provided. Taiwan (ROC) is the second largest development partner after the USA. They maintain a technical mission which is promoting agriculture for self-sufficiency. It is 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 TTM's objective is to develop and transfer new technologies in agriculture in order to improve rural livelihoods, generally with a focus on commercial agriculture. Japan has a significant cooperation programme focusing on transport infrastructure (including upgrading of roads, bridges and the airport terminal). JICA is providing technical assistance support for coral reef conservation through the Palau International Coral Reef Center (PICRC). The EU is providing support for renewable energy projects. The strategic focus of ADB is to strengthen economic and fiscal management, promote policies for private sector development, and facilitate sound infrastructure development and management. ADB has provided technical support for strategic planning in environment, agriculture, fisheries, aquaculture and tourism sectors. The Nature Conservancy (TNC) has 2 main programmes: watershed protection and "The Protected Areas Initiative

Programme”, which aims to protect Palau’s biodiversity and to help States to manage their natural resources.

Overview of FAO on-going and recent assistance

4.3 Earlier FAO assistance focused on marketing and value adding agricultural products. Support has also been provided to strengthen fisheries policy, including drafting of a National Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing, and aquaculture development. Palau has also benefited from implementation of four Telefood projects.

V. Proposed Programme 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 partner’s programmes, the following four priority outcomes will be pursued in the next four years:

- 1) Strengthened policy, legal and regulatory frameworks for sustainable agriculture, fisheries (including aquaculture) and forestry development.
- 2) Increased production, productivity and resilience of crop and livestock systems.
- 3) Improved income and employment opportunities through sustainable development of aquaculture and inshore fisheries.
- 4) Strengthened institutional and human resource capacity for food safety and standards.

Strengthened policy, legal and regulatory frameworks for sustainable agriculture, fisheries (including aquaculture) and forestry development

5.2 Palau supports a pristine environment and a growing tourism industry dependent on it. A careful balance needs to be maintained between growth in the productive sectors and sustainable environmental management. Considerable potential exists for aquaculture development, productive forestry and increased food crop production both for self-sufficiency and the domestic market. However, to get the balance between production and conservation right will require a strengthened policy and regulatory framework in place. FAO will provide technical assistance to support policy formulation, legislation and regulation reviews, and strategic planning. Particular emphasis will be placed on linking planning to financing. Capacity building support may also be provided to improve sector data collection and management systems. To strengthen environmental sustainability support could be provided for a review of the quarantine services and development of a “Code of Conduct for Responsible Aquaculture”.

Increased production, productivity and resilience of crop and livestock systems.

5.3 Whilst the nature of the acid soils in Palau limit productivity, opportunity does exist for increased crop and livestock production to strengthen food security and offset the large trade balance deficit. The development of agroforestry systems and composting practices should be encouraged. The capacity of local extension services to deliver support to a potential, but relatively inexperienced farming community needs considerable strengthening support. FAO will focus on capacity building activities to strengthen crop and livestock production.

Improved income and employment opportunities through sustainable development of aquaculture and inshore fisheries.

5.4 Development of the marine resource offers good potential for economic growth, sustainable livelihoods and food security in Palau, but it is also essential to ensure conservation of stocks of vulnerable species. Potential for mariculture development has already been demonstrated, and it is necessary now to effectively manage the transition from government research to commercial production. Resources from the FSSLP and TCP could be available to support sustainable development of aquaculture, inshore fisheries and value added products. Attention

should also focus on finalisation of aquaculture management plans, and individual species management plans based on assessments of biology, economic feasibility and environmental/social aspects; and support for development of sustainable fisheries management plans, which include responsible income-generating opportunities.

Strengthened institutional and human resource capacity for food safety and standards.

5.5 Government recognizes the need to strengthen food safety and standards and have recently completed construction and equipping of a food testing laboratory. Capacity building support in the area of food safety and standards will enhance opportunities for processed and value added products. FAO assistance could include national and regional training opportunities.

Priority NMPTE Outcomes and their Relationship to the to the Government and UN Medium-term Priorities

National Medium-Term Development Agenda NMDP 2020		UNDAF Results Areas: 1. Equitable economic growth and poverty reduction, 2. & 4. Sustainable environmental management		
Strategic Goals	Key Issues/constraints	NMPTE Outcomes	NMPTE Outputs	Potential areas for FAO assistance
<p>Develop those sectors of the economy that have the potential to support sustainable economic growth</p> <p><i>Expand production to meet domestic consumption</i></p> <p><i>Upgrade research and extension capability</i></p> <p>Environmental Sustainability</p>	<ul style="list-style-type: none"> <input type="checkbox"/> High and volatile food and oil prices and a significant trade balance deficit. <input type="checkbox"/> Rapidly increasing levels of food and nutrition related non communicable diseases <input type="checkbox"/> Lack of appropriate forest policy and legislative framework. <input type="checkbox"/> Unexploited potential for sustainable timber production in agroforestry systems. <input type="checkbox"/> Unexploited potential for increased local agricultural production. <input type="checkbox"/> Knowledge and skills of most farmers need to be strengthened. <input type="checkbox"/> Weak agricultural extension capacity and human resources for sector development. <input type="checkbox"/> Lack of local produce market and weak market chain linkages. <input type="checkbox"/> Limited capacity of quarantine bio-security services (with implicit threat to biodiversity). 	<p><i>Strengthened policy, legal and regulatory frameworks for sustainable agriculture, fisheries (including aquaculture) and forestry development.</i></p> <p> </p> <p><i>Increased production, productivity and resilience of crop and livestock systems</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Increased local food production, more men and youth involved in home gardening, awareness and training conducted. <input type="checkbox"/> Forest policy and regulations developed <input type="checkbox"/> Updated fisheries legislation and regulations developed <input type="checkbox"/> Piggery farm established, Abattoir established and training in husbandry provided <input type="checkbox"/> TA in post to coordinate FAO assistance and provide training. <input type="checkbox"/> Rural feeder roads upgraded <input type="checkbox"/> Review of quarantine services? 	<p>Integrated food security-gender (FSSLP)</p> <p>TA for development of Forest Policy, Legislation, regulations and management plan (TCPF)</p> <p>TA for consolidation of fisheries legislation and regulations.</p> <p>Livestock development (FSSLP)</p> <p>Pest management and composting project (FSSLP)</p> <p>Capacity Building TA (FSSLP)</p> <p>Agricultural feeder roads (FSSLP)</p> <p> </p> <p>TA support for review of quarantine services (TCPF)</p>

