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## **II. 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. 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. Agricultural subsistence activities are estimated to make a substantial contribution to GDP, but production is locally-based and small scale. 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.
- 2.2** Copra was a former ubiquitous cash crop throughout the FSM, but production has now ceased almost completely due to inefficiency and low prices for copra, coupled with increasing senility of the coconut palms. A perception persists among local growers that returns from agriculture are low and slow to materialize compared to other activities such as fishing, tourism, non-traded services, and government employment. US Compact assistance has exerted upward pressure on wages, turning the terms of trade against agriculture, and making agricultural production unattractive. Nevertheless, profitable opportunities do exist for some niche agricultural products for local and export markets and these needs to be fully exploited.
- 2.3** The government-run Coconut Development Authority is processing relatively small amounts of copra into virgin oil and other edible products. Rehabilitation of the coconuts industry is considered a priority, including replanting to replace predominantly senile palms. The government would also like to decentralize oil extraction through small extraction mills placed strategically in rural areas and on outer islands primarily for virgin coconut oil and biofuel. Pepper (*Piper nigrum*) is being processed and packaged on Pohnpei to supply both the local tourist market and export markets. Noni juice is also bottled locally for marketing.

Agro-processing opportunities need to be further developed along with improved quality standards. Additional varieties of value added products derived from unique indigenous food varieties need to be promoted.

- 2.4** 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.
- 2.5** 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 by DWFNs under license from the FSM government and fishing access fees make a substantial contribution to national government revenues. The Government of FSM, and the various state governments, in Yap, Kosrae and Chuuk have all attempted to enter fisheries, but these enterprises have been far from successful and most are now either defunct or operating with continuing losses. FSM has yet to establish a sustainable fishing industry and the sector is fragile and financially vulnerable.
- 2.6** There is, however, a thriving local reef fishing industry, but it is small scale and not well organized. Many people go out and fish and sell their catch which is presented for sale in insulated boxes by the side of the road, through shops and stalls and in supermarkets. Aquaculture is seen as a way of providing alternative livelihoods and is receiving interest and support from the government. Generally progress has been slow as expected, given the scattered geography of the islands which require chartering of dependable and safe sea transports to facilitate implementation of supportive activities. Pearl aquaculture is presently only a nascent industry, but holds promise. Operation of the National Aquaculture Center in Kosrae has been privatized and targets the international marine ornamental trade. Lack of access to capital has been suggested as being a constraint to private sector development. 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.
- 2.7** 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.

### **III. Key issues shaping priorities for FAO assistance**

- Weak data on primary economic sectors limiting the basis for planning.
- Lack of a clear strategic framework for agriculture and food security across the four states.
- 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.
- Lack of food quality and safety standards and legislative framework.
- Limited market opportunities and low competitive advantages of local agricultural products.
- The coconut remains an important potential cash crop for people in the outer islands, but extensive replanting is needed to replace senile coconut trees.
- The potential for aquaculture development remains unrealized.
- Vulnerability to adverse impacts of natural disasters and climate change, including salt water intrusion, drought and storms.

### **IV. Country program framework**

- 4.1** The trade account of the balance of payments runs a significant deficit reflecting the excess of imports over exports. The soaring 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<sup>13</sup>. Nationally, 72% of households<sup>14</sup> have income below US\$15,000 and these households incur annual dis-savings resulting in increased hardship. FSM economy has contracted for the fourth year in a row, with GDP falling by 2.5% in 2007 and the weak economy in recent years is reflected in a decline in living standards and in emigration. 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. Achieving sustainable growth will depend on reforms that support private sector development and increased foreign investment<sup>15</sup>. Export earnings, among other things need to be increased and in particular tourism and fisheries have development potential. Agricultural production for food security and livelihoods remains crucially important, but must be addressed by a socio-culturally sensitive community-based approach which addresses the different priority needs across the four States.
- 4.2** 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.
- 4.3** 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

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<sup>13</sup> 2005 Household Income and Expenditure Survey Report

<sup>14</sup> A household comprises 7-8 persons

<sup>15</sup> Asian Development Outlook 2008 (ADB)

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 has established an agriculture demonstration and training farm on Pohnpei.

**4.4** JICA is providing technical assistance for training in coastal fisheries. Australia 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 has also provided funding for advisers to undertake short-term projects in support of the government's economic reform program. These included a statistics adviser and a financial analyst. 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 is enhancing small business development and trade in products from local micro-enterprises in order to increase income generation and sustainable livelihoods development. WHO is providing 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 through agricultural extension projects such as DSAP. Collaborative partnership amongst national, regional and international organizations donor agencies/organizations need to be organized to maximize benefits given limited capacity of absorption.

#### *Overview FAO recent assistance and lessons*

**4.5** FAO support has focused primarily on the fisheries sector including strengthening coastal fisheries legislation for management, elaboration of a National Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing and developing aquaculture. The RPFS supported a banana development project on Chuuk through plant tissue propagation in Kosrae and FSM need to gain maximum benefit from the Telefood program and others as applicable.

### **V. Proposed 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 partner's programs, the following four priority outcomes will be pursued in the next four years:

- 1) Strengthened policy, legal and regulatory frameworks for sustainable agriculture (including baseline data), fisheries (including aquaculture) and forestry development.

- 2) Expanded production, increased productivity and resilience of root crops, livestock and fisheries systems to changing environment, local and marketing demand.
- 3) A strengthened and diversified coconut industry.
- 4) Improved product development, marketing systems and market access for high value specialty commodities.

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

**5.2** FSM does not have a national policy or strategy on agriculture which coordinates development across the four states. This limits collaboration between the National Government and the States in working towards common goals. Strengthening policy frameworks at national and state level is a high priority for government. Request for FAO assistance in conducting a national agriculture census to provide baseline data for planning purposes has been submitted for consideration. Assistance is also sought to strengthen capacity in data collection and management. FAO will focus technical assistance to support a strengthened policy framework for sustainable agriculture and fisheries development to enhance food security and livelihoods. Capacity building for the local manpower to ensure long-term benefit and sustainable agriculture and fishery development is indeed a top priority.

***Expanded production, increased productivity, and resilience of crop, livestock and fisheries systems to changing environment, local and international marketing demands.***

**5.3** Soaring international food and oil prices and deteriorating diets, make it imperative that the level of self-sufficiency in food production is improved. Particular challenges are faced by the atoll islands. Furthermore, opportunities exist to improve livelihoods through improved agriculture and fisheries (including aquaculture) productivity. Through the FSSLP and TCP resources support will be provided to strengthen traditional food production systems, livestock and aquaculture development, and services to the sector. Particular attention will be accorded to FSM's vulnerability to the impacts of climate change and sea level rise.

***A strengthened and diversified coconut industry.***

**5.4** 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 through private sector business activities. Extensive replanting is now required. The FSSLP will provide assistance for an integrated coconut development programme and further support through TCP funds could be provided to strengthen processing and utilization of the coconut timber resource.

***Improved product development, marketing systems and market access for high value specialty commodities.***

**5.5** FSM has had some positive experiences developing high value specialty commodities for the domestic and overseas markets such has black pepper, noni juice, betelnut, kava, and seasonal crops for processing (jam and juices) for local, regional and high-end international niche markets. There is a need to develop other products to create increased income earning and employment opportunities in the primary sector. Support through the FSSLP will strengthen market infrastructure, and improve capacity for product processing and value adding. Capacity building in the area of food safety and standards will further enhance market opportunities for processed and value added products. FAO assistance could include national and regional training opportunities. Processing of seasonally abundant crops (i.e., breadfruit) could be explored to extend shelf-life and availability. Local farmers/producers need assistance for gradual and smooth transition from solely subsistence to combine with market driven production.

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

National Medium-Term Development Agenda SDP 2004-2023		UNDAF Results Areas: 1. Equitable economic growth and poverty reduction, 2. & 4. Sustainable environmental management		
Strategic Goals	Key Issues/constraints	NMPTF Outcomes	NMPTF Outputs	Potential areas for FAO
Agriculture (Goal 4)  “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.”	<ul style="list-style-type: none"> <li><input type="checkbox"/> Weak data on primary economic sectors limiting the basis for planning.</li> <li><input type="checkbox"/> Lack of a clear strategic framework for agriculture and food security across the four states.</li> <li><input type="checkbox"/> Lack of capacity in the agricultural sector including/ministry</li> <li><input type="checkbox"/> High and volatile food and oil prices and a deep trade balance deficit.</li> <li><input type="checkbox"/> Increasing levels of food and nutrition related non communicable diseases.</li> </ul>	<p><i>Strengthened policy, legal and regulatory frameworks for sustainable agriculture, fisheries (including aquaculture) and forestry development.</i></p> <p><i>Expanded production, increased productivity, and resilience of crop, livestock and fisheries systems to changing environment, local and international marketing demands.</i></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Sector plans developed</li> <li><input type="checkbox"/> Fisheries policy developed</li> <li><input type="checkbox"/> Harmonisation of fisheries statistics</li> <li><input type="checkbox"/> Forest resource assessment and management plans</li> <li><input type="checkbox"/> Agriculture census conducted</li> <li><input type="checkbox"/> Promotion and awareness of local foods undertaken</li> <li><input type="checkbox"/> Increased planting of local food crops, processing facilities and training provided</li> <li><input type="checkbox"/> Work plans developed and planting materials made available</li> <li><input type="checkbox"/> Demonstration plots established and training provided</li> <li><input type="checkbox"/> Food processing facility and training provided</li> <li><input type="checkbox"/> Feasibility studies undertaken and management plans in place</li> <li><input type="checkbox"/> Improved breeding stock, feasibility study of rural butcheries, food safety training, local feeds developed</li> </ul>	<p>Capacity building and TA support for policy and strategic planning (TCP, TCPF &amp; regional component FSSLP)</p> <p>Capacity support for data collection and management (TCP)</p> <p>Island Food Community (FSSLP)</p> <p>Small crops and traditional staples project (FSSLP)</p> <p>Kosrae Citrus development (FSSLP)</p> <p>Pohnpei agroforestry development (FSSLP)</p> <p>Food processing development (local food crops and niche markets seasonal food crops for food security (FSSLP)</p> <p>Climate change response to disasters and sea-level rise (ie salt tolerant taro etc.)</p> <p>Integrated livestock development (FSSLP)</p>

National Medium-Term Development Agenda SDP 2004-2023		UNDAF Results Areas: 1. Equitable economic growth and poverty reduction, 2. & 4. Sustainable environmental management		
Strategic Goals	Key Issues/constraints	NMTPF Outcomes	NMTPF Outputs	Potential areas for FAO
	<ul style="list-style-type: none"> <li><input type="checkbox"/> The potential for aquaculture development remains unrealized.</li> <li><input type="checkbox"/> The coconut remains an important potential cash crop for people in the outer islands, but extensive replanting is needed to replace senile stands</li> <li><input type="checkbox"/> Limited market opportunities and lack of competitiveness of agricultural products.</li> <li><input type="checkbox"/> Lack of food quality and safety standards and legislative framework.</li> </ul>	<p><i>A strengthened and diversified coconut industry.</i></p> <p><i>Improved product development, marketing systems and market access for high value specialty commodities.</i></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Replanting scheme established, processing facilities established and training provided</li> <li><input type="checkbox"/> Produce and fish markets in place in four states, regulatory framework and operational plans in place</li> <li><input type="checkbox"/> Food safety/standards legislative framework in place and training provided</li> </ul>	<p>Fisheries &amp; aquaculture development (FSSL &amp; TCP)</p> <p>Integrated coconut development (FSSL)</p> <p>produce market infrastructure (FSSL)</p> <p>Food safety/standards capacity building in HACCP and Codex. (Core, TCP and FSSL regional component)</p>

The FAO activities have been determined through dialogue with the government and other sector stakeholders, and in accordance with the priorities set out in the Sustainable Development Plan 2004-2023.

