

## **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 72% 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. 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. 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.
- 2.2** The Cook Islands has one of the better performing private sector led economies in the region following the implementation of the 1996 Economic Reform Programme (ERP). The economy is, however, based on very few industries and is highly susceptible to external forces. Tourism is the primary industry, which generates receipts of about 40 percent of gross domestic product (GDP), or around NZ\$120 million annually. Tourism

also contributes significantly to a number of other industries including retail trade, agricultural production for the domestic market and construction activity. The other major export industries are offshore financial services, the offshore tuna fisheries and the black pearl industry; with the latter two together generating about 5 percent of GDP annually. The Cook Islands is import-dependent, and service exports from tourism largely cover the merchandise trade deficit (NSDP<sup>9</sup>).

- 2.3** Employment in agriculture and fishing, the traditional mainstay of the economy has been decreasing since the early 1980s, while employment in sectors dominated by formal business activities has grown strongly. The potential for agricultural development to expand has been restricted due to, amongst other things, limited agricultural land availability especially on Rarotonga, lack of agricultural infrastructure in the outer islands, limited markets, the high costs of fuel for local production combined with high shipping 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 centres in a cost effective way. The Government strategies are to concentrate on developing niche markets for viable crops and commodities for domestic use; import substitution; and/or export; as well as strengthen biosecurity policies and control structures (NSDP)
- 2.4** 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. 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 N Cooks for Albacore for sale to the canneries in Pago Pago with some activity in Rarotonga (S Cooks) for export fresh and local sales. The industry in the Southern Cooks suffered badly after a boom period in the early part of the decade with forty six boats licensed at the beginning of 2004. A dramatic “bust” followed with only 8 boats operating in 2005 and leaving a legacy of underutilised plant and serious financial losses for investors, most of whom have moved away. Currently the industry is regrouping.
- 2.5** Pearls have been a mainstay of the local economy (along with tourism & fishing), producing black pearls for export and for value adding to jewelry for in-country sale to tourists. The pearl farming industry is based largely on Manihiki Atoll with three farms on Penrhyn Atoll. Most of the local sales are in Rarotonga and Aitutaki, which are the main tourist areas. Unfortunately the industry suffered from a bacterial disease outbreak in 2002, and chronically has suffered from bad quality control and poor branding. The number of farms declined from more than 200 in 2001 to 60 in Manihiki and 3 in Penrhyn Atoll in 2006. Aquaculture opportunities are also believed to exist for a range of species, including prawns, giant clams, grape seaweed, tilapia and milkfish. To convert these opportunities into profitable reality there is a need to develop species specific management plans based on biology, economic feasibility and environmental risk.
- 2.6** The Cook Islands is a small and environmentally fragile country where the natural environment provides the foundation for the long-term economic and social well being of the nation. Industries such as agriculture, pearl and fisheries are directly dependent on a healthy ecosystem. In Rarotonga, nearly 70 percent of land area consists of steep slopes and hills. These hills, if improperly used, risk being eroded and degraded. In the coastal

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<sup>9</sup> National Sustainable Development Plan 2007-2010

areas, destruction of the coral reefs, intrusion of salinity through surface and underground water may become a major concern for agriculture. Control and prevention of degradation of the hills and the coastal areas is a major challenge and critical for sustainability of the resource base and long run sustained prosperity of the people. Water is an important requirement for increasing agriculture productivity. Increased production and quality of fresh vegetables and fruit will crucially depend on availability of water. At present 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.

**2.7** The Cook Islands is highly vulnerable to natural disasters. Establishing effective national disaster preparedness, awareness and response systems to enhance resilience to natural and manmade disasters (including climate change) is paramount. There is also increasing concerns about the introduction of pests and diseases including the possible occurrence of pandemics.

**2.8** Due to changing lifestyles and poor nutrition Cook Islands has experienced a significant increase in non communicable diseases (NCDs). More than 20% of the total resident population in 2000 suffered from some form of NCD. The NSDP under a strategy to encourage healthier lifestyles and safer environment targets improved environmental health including a focus on food safety. The need to enact food safety legislation is highlighted.

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

- Limited livelihood options for people on outer islands (particularly Northern atoll group)
- Poor agricultural production potential on atoll soils
- Isolation of Northern Group and very expensive transport costs
- Labour constraints for growth in the agriculture sector, including limited skilled workers in technical and specialised fields.
- Lack of agricultural (and fisheries) infrastructure in the outer islands to improve production levels.
- Limited land available for agriculture production on Rarotonga.
- Limited water supply for competing demands between domestic and agricultural uses.
- High cost of livestock feed (including for aquaculture).
- Lack of competitiveness of agricultural products on domestic and international markets.
- Lack of awareness on safe use of Pesticides.
- Meeting food quality and safety standards for domestic and overseas marketing.
- Increased reliance on agricultural imports as agricultural and livestock production levels decline nationwide.
- Increased risk of introduction and establishment of foreign plant and animal pests and diseases.
- Increasing levels of food and nutrition related non communicable diseases, which impact negatively on health system, families and national economy.
- Vulnerability to adverse impacts of Natural Disasters and Climate Change

- Outdated agricultural statistical data in terms of the last agricultural census in 2000, and the need to have this updated to assist decision-making processes within and outside of the agriculture and fisheries sectors.

#### **IV. Country programme framework**

**4.1** The National Sustainable Development Plan (NSDP 2007-2010) and vision “Te Kaveinga Nui,” approved by the Government in 2007 guides development and identifies programmes for addressing the constraints to growth for the period until 2020. 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 priority areas for Cook Islands development: social services, governance, private sector development, natural resources and environment, infrastructure, security, foreign affairs, and improved development. To address the key binding constraints to growth, the NSDP recognizes that managing the natural environment is of prime importance, not only to the tourism industry, but also to other important economic sectors, including agriculture, aquaculture, and fisheries. The NSDP identifies a substantial list of sustainable development and environmental issues. These include issues around sustainable development and better regulation of the key inshore and offshore fisheries; pearl industries; reduced land availability on Rarotonga; lack of agricultural infrastructure on outer islands; weak land use policies; lack of coordinated inter-sectoral management of natural resources and environmental programmes with weak agency capacity in this area; and the need to reduce the impact of waste and pollution on the environment.

**4.2** New Zealand is the most significant development partner to Cook Islands with substantial support to the natural resources sector through a Marine Resources Industry Strengthening (CIMRIS) project. The purpose is to increase the economic potential of the marine sector in a sustainable way by institutional strengthening and capacity building. Other development support to the sectors of interest is principally through programmes of the CROP agencies (SPC, FFA and SPREP). The World Health Organisation is providing core programme support for improved nutrition, food hygiene and safety, and to review food legislation and regulations. UNDP operates within an environment-economic-governance nexus, seeking to demonstrate MDG impact through an integrated and coordinated and gender responsive approach to equitable economic growth and poverty reduction, good governance and human rights.

#### ***Overview of FAO recent assistance***

**4.3** In recent years FAO has focused attention on strengthening policy and planning through support for a review of the agriculture sector policy and a study to assess the potential impact of climate change on agriculture and food security. Further support for food security has been through the Trust Fund RPFS. This project promoted the growing of local and introduced species of fruit trees including improved varieties, among farmers in Cook Islands’ Southern Island Group. The main activities in the two result areas (increased bulking up capacity of fruit tree seedlings, and farmers trained on fruit tree husbandry practices) included: construction of nursery; procurement of inputs; field study to Australia to procure planting material; propagation and distribution of improved tree species and varieties; training of staff and farmers; field days and extension visits; and fruit market study. To-date fifty seven varieties of fruit tree seedlings have been imported from Samoa, Australia and New Zealand and more than 2,000 seedlings of different fruit trees have been distributed to farmers in three islands of the Southern Group. Twenty five

farmers have been trained and many more trained during field days and extension visits. This work should be further supported under the current NMTPF.

#### ***On-going TCP Projects***

**4.4** Current TCP projects under implementation focus on enhancing capacity of young farmers in farm management, marketing and agribusiness; strengthening floriculture development; and aquaculture development. These projects will continue under the NMTPF.

#### ***Other assistance***

**4.5** Cook Islands has benefited from the Telefood Programme of FAO. Since its inception in 1997, there have been 23 Telefood projects approved and implemented. Cook Islands also benefited from short term consultancy on Pesticide Management, safety awareness and pesticide trade issues under the PIC procedures. Emergency assistance has also been provided to Cook Islands, most recently, emergency assistance was provided to the Cook Islands in June 2005 in the aftermath of the 5 cyclones that devastated the Northern and Southern Islands.

### **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) Increased agricultural production (particularly on Southern Group of islands) for local consumption and to meet domestic market demands.
- 2) Increased income and employment opportunities (particularly in the Outer Islands), through further development of aquaculture and commercial inshore fisheries.
- 3) Enhanced capacity in food processing and value adding of agriculture and fisheries products
- 4) Strengthened data collection and management systems

#### ***Increased agricultural production (particularly on the Southern Group of islands) for local consumption and to meet domestic market demands***

**5.2** The *Makatea* islands have soil derived from weathered volcanic rocks and therefore have good potential for agricultural production and can grow a variety of crops (Root Crops, Bananas and fruit trees). In the past, these islands contributed to economic growth through producing crops and fruits for marketing and processing. Increasing production (and productivity) of root crops and fruits to ensure local food security and for marketing in Rarotonga is being promoted by the government on these islands. FAO will support this by assisting the relocation of the agriculture research station to Mauke Island, developing the capacity of a mobile extension unit and ensuring that an effective and efficient agricultural mechanization service is in place. Youth will be encouraged into farming through skills training in farm management and agri-business. The biosecurity service will be strengthened to reduce the threats from introduction of foreign pests and diseases. Support may also be provided to develop an irrigation strategy (including water-use efficiency) to ensure adequate supply of water to meet competing demands for agriculture and domestic use. On atoll islands, agriculture (organic bulking and biocontrol pest management) will be strengthened through capacity building in improved techniques of 'Narrow Pit Systems' of growing Bananas, and vegetables to improve food security.

***Increased income and employment opportunities for people in the Northern Group of islands, through further development of aquaculture and commercial inshore fisheries.***

**5.3** Food security for the island communities on the atolls of the north is predominantly based on their most common resources; the sea and coconuts. Sustainable development of inshore fisheries and aquaculture is a government priority for these islands. FAO will help build capacity in aquaculture through support for technical training and a hatchery/production facility. Support will also be provided for the residents of Penrhyn to increase their involvement in fishing for home consumption and income generation.

***Enhanced capacity in food processing and value adding of agriculture and fisheries products.***

**5.4** 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 both strengthen food security and increase marketable products. FAO will support these endeavours through technology transfer and training for food processing and value adding, and capacity building in food safety and quality standards.

***Strengthened data collection and management systems***

**5.5** Agricultural statistical information is seen as critical to informed decision-making both on-farm and off-farm. For this reason, FAO facilitated the conduct of the country's agricultural censuses in 1988 and 2000, both covering the fisheries sector as well. Given the significance of the information gathered, and the scale and timing involved in such a huge undertaking, the Cook Islands, through the Ministry of Agriculture, has recently expressed to FAO its desire to update the 2000 exercise via the conduct of an agricultural census. A proposal was recently submitted to FAO for this purpose.

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

<b>National Medium-Term Development Agenda NSDP 2007-2010</b>		<b>UNDAF Results Areas: 1. Equitable economic growth and poverty reduction &amp; 4. Sustainable environmental management</b>		
<b>Strategic Goals</b>	<b>Key Issues/constraints</b>	<b>NMPTF Outcomes</b>	<b>NMPTF Outputs</b>	<b>Potential areas for FAO assistance</b>
<p>(Goal 1) Sustainable use and management of environment and natural resources :</p> <p><i>Revitalize the agriculture sector</i></p> <p><i>Sustainable Inshore Fisheries and Food Security</i></p> <p><i>Strengthen national capacity in Biosecurity</i></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Limited land for agricultural production (Rarotonga).</li> <li><input type="checkbox"/> Poor agricultural production potential (atoll soils Northern Group)</li> <li><input type="checkbox"/> Labour constraints for growth in agriculture</li> <li><input type="checkbox"/> Limited skilled workers in technical and specialised fields</li> <li><input type="checkbox"/> High cost of livestock feed (including aquaculture)</li> <li><input type="checkbox"/> Limited water supply for competing demands</li> <li><input type="checkbox"/> Limited livelihood options on outer islands</li> <li><input type="checkbox"/> Vulnerability to adverse impacts of natural disasters and climate change</li> <li><input type="checkbox"/> Increased risk of introduction of foreign pests and diseases</li> <li><input type="checkbox"/> Outdated agricultural statistical data</li> </ul>	<p><i>Increased agricultural production (particularly on Southern Group of islands) for local consumption and to meet domestic market demands.</i></p> <p><i>Increased income and employment opportunities in the Northern Islands, through further development of aquaculture and commercial inshore Fisheries.</i></p> <p><i>Strengthened data collection and management systems</i></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Agriculture research station located on Mauke Island</li> <li><input type="checkbox"/> Mobile extension unit established and farmer trainings conducted</li> <li><input type="checkbox"/> Effective and efficient agriculture mechanization service in place</li> <li><input type="checkbox"/> Training in Floristry, Orchids / Dendrobium for women's groups conducted</li> <li><input type="checkbox"/> Training for youth skills in agriculture conducted</li> <li><input type="checkbox"/> Opportunities for local livestock feed production appraised</li> <li><input type="checkbox"/> Irrigation strategy in place</li> <li><input type="checkbox"/> Aquaculture hatchery and production facility constructed</li> <li><input type="checkbox"/> Increased numbers of people trained in technical aspects of aquaculture</li> <li><input type="checkbox"/> Training and awareness programmes on biosecurity delivered</li> <li><input type="checkbox"/> Agricultural statistical data updated via an agricultural census</li> </ul>	<p>Support for construction of research station on Mauke (FSSLP)</p> <p>Enhanced crop production on Southern Group project (FSSLP)</p> <p>Agricultural mechanization project (FSSLP)</p> <p>Floriculture (TCP)</p> <p>Training in farm management and agribusiness for youth (TCP)</p> <p>TA to appraise opportunities for local livestock (TCP)</p> <p>TA to develop an irrigation strategy (TCP)</p> <p>Demonstration Aquafarm project (FSSLP)</p> <p>TA to develop framework to implement recommendations on fish farming (TCP)</p> <p>Capacity building and support for awareness for implementation of Biosecurity Bill</p> <p>Support for Agricultural Census (TCP)</p>

National Medium-Term Development Agenda NSDP 2007-2010		UNDAF Results Areas: 1. Equitable economic growth and poverty reduction & 4. Sustainable environmental management		
Strategic Goals	Key Issues/constraints	NMTPF Outcomes	NMTPF Outputs	Potential areas for FAO assistance
<p><i>Agro processing for local and export markets</i></p> <p>(Goal 5) A strong basic infrastructure base to support national development</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Lack of agriculture (and fisheries) infrastructure in the outer islands to improve production levels</li> <li><input type="checkbox"/> Poor market infrastructure</li> </ul>	<p><i>Enhanced capacity in food processing and value adding of agriculture and fisheries products.</i></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Training in agro-processing and food safety delivered</li> <li><input type="checkbox"/> Upgraded fishing infrastructure on Penhryn Island in place</li> <li><input type="checkbox"/> All weather shelter for Punanganui Market constructed</li> </ul>	<p>Training and technology transfer for food processing and value adding (TCP) Capacity building in food safety/quality and awareness in Codex and HACCP.</p> <p>Penhryn Snapper Fish Industry Development project (FSSLP)</p> <p>Support to construct Fresh Produce Section at Punanganui Market (FSSLP)</p>

The FAO activities have been determined through dialogue with the government and other sector stakeholders, and in accordance with the priorities set out the National Sustainable Development Programme 2007-2010.

