

Outline Terms of Reference for the Review Team

Overview

The small-scale technical assistance (TA) will assist the Government in undertaking an analytical and diagnostic exercise as well as a consultative process, over a period of two months, to arrive at a concise review of the productive sectors agriculture and fisheries. The review will allow the Government to decide on the most appropriate assistance that will strengthen the economic impact of these sectors.

Three international consultants will carry out the necessary analyses and prepare a report to be discussed by the Government and ADB. The consultants will comprise specialists in (i) agriculture, particularly with experience in Pacific Island countries and their comparative advantages; (ii) fisheries, particularly with experience in regional fishery systems; and (iii) primary sector economics. The primary sector economist will act as team leader and perform the necessary coordinating and management tasks. The team will report to the Director General of MAQFF. Their report will prioritize needed interventions and suggest outline terms of reference for subsequent TA or investment activities.

Outputs of the TA

The TA will consist of two phases, with Phase 1 concentrating on analysis and diagnostics. Together with assigned counterparts, the sector specialist will review opportunities as well as concerns and problems in the productive sectors. Particular focus will be given to the sectors' current and potential impact on:

- Exports (foreign exchange)
- Food security (if and where this is an issue)
- Employment
- Income generation

The analysis will also focus on the policies, services, and institutional frameworks required for optimal impact in the following, among others:

- Marketing and market information
- Policy and regulatory framework for investment
- Research and technology
- Extension services
- Infrastructure
- Quarantine

The results of these analyses will be presented and discussed at a workshop at the end of Phase 1, with concerned stakeholders participating.

In Phase 2, options and related strategies for policy and service improvements to catalyze private-sector investment will be developed.

Proposed Methodology

Vanuatu had its last National Agriculture Census in 1994 and developed a fisheries sector master plan and National Fisheries Policy two years later. AusAID produced profiles of all important agriculture crops in 1998. Recently, the Ministry of Agriculture, Quarantine, Forestry and Fisheries has

finalized its restructuring and produced a corporate plan. Hence, the TA should not merely repeat or update past sector reviews but should use this information to clearly and succinctly define areas where comparative advantages can be pursued for overall economic growth.

The review should clearly identify the mandate of the Ministry of Agriculture, Quarantine, Forestry, and Fisheries and assess its institutional capability to fulfill this mandate. In particular, the links between the Ministry, the Vanuatu Commodities Marketing Board (VCMB), and the Vanuatu Agricultural Research and Training Center (VARTC) should be assessed and the necessary structural changes proposed. The TA will be guided overall by the goals of the Government's Comprehensive Reform Program.

The definition of Vanuatu's comparative advantages must also proceed from an assessment of the potential of indigenous crops, such as the rainforest nuts *nangai* and *navele*, not only with respect to the export of the fruits but also the timber value. Coconut plantations abandoned by the landowners after independence in particular offer potential for rapid gains in production.

Reporting

The main report shall not be longer than 50 pages, including an executive summary, and shall use ADB's *Handbook of Style and Usage*. The key economic indicators and economic analyses should be presented first, and graphics and visuals should be used as much as possible. The presentation should be such that within, say 4-5 pages, the reader can get a clear and overall picture of the sectors, their past and present contribution to the national economy, their economic potentials, and persistent concerns and problems.

The individual sector reviews shall be descriptive, focusing on opportunities and constraints. However, clear organizational charts highlighting the institutions involved and the links between them must be shown. A concluding chapter shall describe possible prioritized interventions with clear objectives and scope for each.

A draft final report shall be submitted to the Government and ADB. Any comments shall be received within 10 working days and shall be incorporated as appropriate in the report by the consultants within one week. The final version of the report shall be distributed in 15 hardbound copies and one diskette version to the Ministry, and three hardbound copies and one diskette version to ADB.

APPENDIX 2

Persons Consulted

Terry Adlington Glen Alo	General Manager, Tanna Coffee Estate Fisheries Extension Officer, Sanma Province Fisheries Division
John Aruhuri Wayne and James Armitage Edward Atteridge	Manager, Chamber of Commerce, Port Vila Aqua-life Exports Ltd. Public Reform Adviser (ADB), Department of Strategic Management
Ken Barnett Reinhard Baer	Chief Executive Officer, Vanuatu Maritime College Senior Veterinary Officer (South), Vanuatu Quarantine and Inspection Service
Lonny Bong	Livestock Officer, Agriculture and Rural Development Division, MAQFF
Robert Bohn Steven Boe	President, Vanuatu Maritime Services Ltd. Senior Livestock Officer, Agriculture and Rural Development Division, Santo
Gerard Colla	Consultant, ADB-funded Frontline Institutional Support Project
Bernard Dolacinski Rowan Downing Peter Fane	Director, VARTC/CIRAD, Santo State Law Office Manager, Government Business Enterprise Unit
Terry Gardner Adam Gerrand Bruce Gleeson Thomas Gloerfelt-Tarp Graham Hack Perry Head Richard Holstein	Public Prosecutor's Office Principal Forest Utilization Officer, Forestry Division Job Fish Vanuatu Ltd. Resource Specialist, Pacific Operations Division, ADB General Manager, Coconut Oil Production Vanuatu, Santo High Commissioner, Australian High Commission Finance Adviser/Cargo Development Manager, Air Vanuatu
Peter James Ronnie Jacobus	Senior Extension Officer (Northern), Fisheries Division Senior Administration Officer, Agriculture and Rural Development Division, MAQFF
Charles Johnson Nettie Joseph Diekson Kahua Richard Kaltonga Takatoshi Kamezawa Catherine Keys Dorosday Kenneth Cheolghee M. Kim	Deputy Director, VARTC, Santo Information Technologist, Fisheries Division Manager, Tanna Agricultural Marketing Cooperative International Tuna Services Investment Officer, Private Sector Group, ADB Managing Director, L'Pescadeau Director, Corporate Services, MAQFF Project Specialist/ Economist, South Pacific Regional Mission, ADB
Andre Lancon	General Manager, AJL Business Consultants and Managers
Lyn Lambeth,	Community Fisheries Officer, Secretariat for the Pacific Community
Thomas Lavru	Pasture Officer, Agriculture and Rural Development Division, MAQFF
Vincent Lebot Euan Lockie	Root Crops Consultant, CIRAD, Port Vila Australian Continuous Improvement Group, ADB Project on Enhancing Frontline Services
David Luders	AusAID Consultant to the Agriculture and Rural Development Division
David Malachi	Senior Planner, Tafea Provincial Government, Tanna

Geoff McConnell	First Secretary, Development Cooperation, AusAID
Leo McDonald	Job Fish Vanuatu Ltd.
Wick McArthur	Coconut Oil Products Vanuatu Ltd.
Livo Mele	Director, Forestry Division, MAQFF
John C. Millet	Alternate Director, ADB Outer Islands Infrastructure Project
Michael Moriarty	Economic Reform Adviser (ADB), Department of Strategic Management
Felix N'Guyen	Research Officer, Fisheries Department
Abel Nako	Director General, Ministry Agriculture, Forestry and Fisheries
Joe Narua	Secretary-General, Tafea Provincial Government, Tanna
Peter Napuat	Senior Agricultural Program Officer, Agriculture and Rural Development Division, MAQFF
William Naviti	Fisheries Division
Gayle Nelson	Gender Issues Adviser, Development of Economic Policy Division, Forum Secretariat
Jerry Niatu	Economist, Vanuatu Reserve Bank, Port Vila
Wesley Obed	Surveillance Officer, Fisheries Division
Augustine and Anne Pheu	Managing Directors, La Toque a Poisson
George Plant	Consultant (ADB), Vanuatu Outer Islands Infrastructure Project, Port Vila
Charles Rogers	Smallholder Development Association, Port Vila
Gilles Roche	Consultant for Producers Organization, VARTC, Port Vila
John Russen	Vanuatu Maritime Authority
Emil R. Selmen	Director, Agriculture and Rural Development Division, MAQFF
Jean Sese	Director General, Prime Minister's Department
Laurie Sewell	AusAID-funded Vanuatu Land Use Planning Project, Department of Lands
Michael Silona	Senior Agriculture Officer (South), Agriculture and Rural Development Division, MAQFF
Savanaca Siwatibau	Director, Economic and Social Commission for Asia and the Pacific (ESCAP), Pacific Operations Center
Lillian Sokomanu	Personal Assistant, Fisheries Division
Naomi Sope	Administrator/Accountant, Fisheries Division
Gavin Struthers	Principal Veterinary Officer, Quarantine Division, MAQFF
Jeffry Stubbs	Regional Representative, South Pacific Regional Mission, ADB
Benuel Tarilongi	Director, Quarantine and Inspection Services Division, MAQFF
Henry Takau	Enforcement Officer, Fisheries Division
Timothy Tumukon	Principal Plant Protection Officer, Quarantine Division, MAQFF
Anaseini T. Vatucaawaqa	Senior Project Implementation Officer, South Pacific Regional Mission, ADB
Nikenike Vurobaravu	Coordination Adviser (ADB), Department of Strategic Management
Charles Long Wah	Kava Store, Port Vila
James Selwyn Wasi	Principal Agricultural Officer, Agriculture and Rural Development Division, MAQFF
Yankee Wass	Farming Systems Officer, Agriculture and Rural Development Division, MAQFF
Justin West	Businessman/Indigenous nuts plantation owner, Port Vila

APPENDIX 3

ADB Agriculture and Fisheries Report Review Meeting

6 October 2000, Parliamentary Complex, Port Vila, Vanuatu

Introduction

A consultation meeting among members of the ADB Review Team for the Agriculture and Fisheries Sectors and representatives of the Asian Development Bank, the Government of Vanuatu, donors, the private sector, and nongovernment organizations (NGOs) was held in Port Vila on 9 October.

The report of the ADB Review Team was presented to the various stakeholders for comment before its finalization and submission to the Government of Vanuatu.

The meeting was opened by the Political Adviser of the Ministry of Agriculture, Forestry, and Fisheries, Jean Ravo. It was chaired by Nikenike Vurobaravu, CRP Coordination Adviser, Department of Strategic Management.

Conclusions of the Meeting

The participants agreed that the meeting provided a very useful opportunity for the stakeholders to review and comment on the ADB report. They concluded that:

- The Government of Vanuatu expected the review report to lead to the development of an overall policy framework that would link the Ministry's visions with its corporate plan.
- The report was an assessment, mainly from the economic standpoint, of issues and constraints that must be taken into account in developing an overall policy framework for the MAQFF and a strategy for realizing that policy framework.
- Despite the reservations raised on some parts of the report, the report had been prepared in accordance with the terms of reference of the ADB team.
- The discussions on the wide range of issues raised and the proposals presented in the report were useful, and:
 - There was no need to rework the sections of the report that dealt with the forestry, quarantine, and fisheries sectors.
 - The section on agriculture required further work, taking into account the inputs of stakeholders provided in writing to ADB through the Director General of the Ministry of Agriculture, Forestry and Fisheries by the end of October 2000.
 - References to the objectives and principles of the Comprehensive Reform Program in the report must reflect the program's public-sector as well as economic and social development scope.
- More emphasis should be given to consultation with the private sector to ensure that the MAQFF policy framework would allow for a strong role for the market in the development of the agriculture, fisheries, and related sectors of Vanuatu.
- The MAQFF urgently required capacity strengthening to effectively conduct its core functions, especially with respect to:

- Policy development
- Economic and market research
- Private-sector facilitation
- Agricultural extension services

Existing arrangements for the provision of extension services in Vanuatu urgently need review. Emphasis should be put on developing the capacity of the service to use scarce resources in answering the needs of farmers and promoting their contributions to the growth of the national economy.

APPENDIX 4

Developments in the Agriculture Sector

Copra

Copra contributed 5 percent of GDP in 1999, similar to its share as in the early 1980s, and 46 percent of merchandise export earnings. Coconuts contribute significantly to both subsistence and cash incomes of smallholders in Vanuatu. According to the 1993 Census, 70 percent of rural households had their own coconut trees. Most smallholders plant coconut as part of a food garden. For many in rural areas copra is the major source of cash income. Smallholders now account for about 90 percent of Vanuatu's copra production.

Copra production fell substantially from 1980 to 1994, and there has been a major trend in production away from the plantation to the smallholder sector. Falling world prices caused by the emergence of cheap oil substitutes such as soy and palm oil, high overheads, and relatively high labor costs in Vanuatu led to the demise of the plantation sector. Some recovery in production, primarily due to smallholder production, has occurred since the mid-1990s. Smallholders have replanted coconut at a rate sufficient to compensate for the loss of production from senile plantation plants. There has also been increased planting of improved hybrid coconut, particularly on Santo and Malo. In the short to medium term it is likely that any increased production will continue to come from the smallholder sector.

A comparative economic efficiency analysis of tree crops (copra, cocoa, and navelle nuts) undertaken by the Forum Secretariat (1998) concluded that Vanuatu is an efficient producer of copra and other traditional tree crops. As a smallholder crop copra is viable, although returns to both land and labor inputs are low.¹ For the smallholder the production and marketing risks are relatively low. Smallholder production would remain viable even at lower prices, given the alternatives available and the complementary nature of copra growing in both smallholder and plantation farming systems. Plantations are unlikely to become viable given the price outlook and Vanuatu's relatively high cost structure.²

The most important cost is transporting copra to pickup points on the beach or to Santo or Vila by boat. While areas of senile coconut characterize coastal areas, smallholder planting is mostly on new ground inland. This has disadvantages in terms of higher transport costs and displacement of food gardens to more remote areas, raising the effort required in that activity. Land that could be used for future food gardens is being drawn into coconut production. While the need to replant coconut on coastal areas has been identified, it is hard to persuade farmers to cut down old but still productive trees. Moreover, soil fertility in old coconut areas may be lower than in new inland areas.³

¹ See ADB (1997). According to this earlier review of Vanuatu's economy, the average returns per family day of labor from copra are between 800 and 900 vatu per hectare. The 1993 Census reported that 34 percent of coconut-growing households did not make and sell copra because of low returns relative to the benefits of cultivating food and other crops. A shortcoming of the viability studies is that they do not place a value on the opportunity cost of land and labor in subsistence farming.

² ADB (1997)

³ Interior planting may also be a means of establishing a claim to land.

Until recently copra was a prescribed commodity that could be exported only by the VCMB. VCMB pricing policies, often with Government direction, partially insulated producers from fluctuations in world prices and subsidized growers. For a number of years, beach prices were above FOB export prices. The VCMB thus accumulated very large losses, which until 1993 were covered by funds from the EEC's Stabilization of Export Earnings Scheme (STABEX). Under the CRP, the legislation giving the VCMB its monopoly powers will be repealed and the VCMB will be restructured into a corporate entity competing with the private sector.

In late 1999, Coconut Oil Products Vanuatu commissioned a coconut oil mill in Luganville.⁴ By April 2000 production was being maintained at 40 tons of oil a day. The mill sources its copra from smallholders on Santo and nearby islands. By offering better prices to growers, the mill has diverted substantial tonnages of copra away from the VCMB and its export markets. Increased competition for copra supplies may contribute to higher beach prices and, along with the recent reforms to interisland shipping, will enhance the viability of smallholder copra production. However, increased copra production is unlikely to provide a strong stimulus to economic growth in Vanuatu. Real copra prices have fallen continuously over the past 30 years at least and are likely to continue falling. Future growth in value added will therefore need to be based on increased efficiency as well as more processing.

Cocoa

As in the case of copra, production from cocoa plantations has fallen while smallholder production has expanded. High capital and labor costs and low prices have undermined plantation viability. According to the 1993 Agricultural Census, the country had around 3,353 hectares of cocoa plantations in 1993 but had production from only 600 hectares. In contrast, the 1993 Census reported 34 percent of rural households with cocoa, 22 percent more than the number reported in the 1983 Census. Smallholder plantings were around 4,000 hectares in 1993.

Cocoa is considered a viable crop in Vanuatu, particularly for the smallholder sector, for which it is an important cash crop. Cocoa provides a reasonable return to both land and labor and has a low marketing risk. A relatively high value-to-weight ratio makes it attractive compared with copra. Cocoa is also less labor-intensive than copra and returns to effort are higher. Vanuatu has suitable conditions for growing cocoa and is less prone to serious diseases than other cocoa-growing regions. Since cyclones are less of a problem if plants are protected by surrounding trees, cocoa has an advantage in that it can be integrated into the food garden or grown under coconut trees. Cocoa is also a suitable companion crop to kava, offering necessary shade to young kava plants and providing ongoing cash income after kava has been harvested.

All cocoa is exported in the form of dried beans. As with copra, the VCMB was the monopoly buyer of cocoa for export markets. There were a number of problems with this arrangement. High transport costs to Santo meant that growers were forced to sell to the VCMB through intermediaries and

⁴The mill is a private operation 80 percent of which is owned by Australian and 20 percent by US interests. It is 100 percent equity-financed.

were deprived of price premiums for higher grades. The cocoa handling and storage facilities and practices of the VCMB added to cost and resulted in deterioration of delivered quality, reducing export prices. With the introduction of competition following the demise of the VCMB monopoly, buyers can expect to receive higher beach prices and to benefit from increased efficiencies in exporting.

In the 1980s, the Government promoted cocoa as a diversification crop. In 1983 it entered into a joint venture in Metenesel Estates Ltd. with the Commonwealth Development Corporation (CDC) and landowners. La Caisse Centrale de Coopération funded the Government's 46 percent equity. The project failed. The plan had been to develop 1,700 hectares to produce 3,500 tons of cocoa. As it turned out, around Vt400 million was spent developing only 500 hectares. The project was undermined by high overhead costs, low yields, and falling prices. The CDC withdrew in 1992, forgave loans of Vt300 million, and handed the project over to the Government. The Government continues to operate the project, with operating losses. Total cumulative losses from the project to date are estimated to be almost Vt2 million.⁵ The CRP had proposed the sale of Metenesel but because offers made were on the low side the effort came to a stop. There is a need to restart the sale effort.

Livestock Products

The development of the commercial cattle industry in Vanuatu has been relatively slow. The number of cattle slaughtered in 1998 was comparable to the number slaughtered in the late 1980s.⁶ Where progress has been made is in average carcass weight. Improved herd management has resulted in a 50 percent rise in beef production over the past decade. In 1987, the average carcass weight was 164 kilos, well below the average weight of 225 in 1998.

The beef industry is composed of a smallholder herd and specialized beef producers. The 1993 Census reported a smallholder herd of 82,000 head, with 43 percent of rural households owning cattle.⁷ This was significantly up from the 26,000 head reported in the 1983 Census. A high proportion of sales of smallholder cattle are informal and much of the slaughtering done is for subsistence.

The development of the commercial beef industry in Vanuatu has been largely driven by the private sector, although there have been a number of Government interventions. In the 1970s, abattoirs were established in Luganville and Port Vila. The Japanese-owned Vanuatu Livestock Company Limited owns the Luganville abattoir. Most of the beef from Luganville is exported as high-quality beef to the Japanese market. There are concerns in Luganville that the Japanese were able to negotiate a very restrictive agree-

⁵ The Government Business Unit established under the CRP is examining Metenesel and considering privatization. If the estate can be restructured and made viable, the private sector has the incentives and financing to do this. If the estate succeeds, Vanuatu will benefit; if not, the estate should be closed down. Maintaining the project as a loss-making Government-owned enterprise will only mean a continuing drain on already tight budgets and national income.

⁶ In 1998, the total number of cattle slaughtered was 15,847 head (7,722 in Luganville and 8,031 in Vila), below the peak of 18,818 slaughtered in 1994.

⁷ This was equal to around 50 percent of the national herd in that year.

ment with the Government preventing the opening of another competing abattoir for 75 years. Given the high costs of shipping cattle from Santo to the Vila abattoir, this would effectively give the Japanese firm a monopoly. Some concerns have also been expressed about the low prices paid to cattle farmers on Santo.

The abattoir in Port Vila is owned by a public company, with 85 percent of the shares owned by the Government. The abattoir is privately operated and cattlemen effectively control the board, ensuring that the interests of the cattlemen are served. It is understood that while the Port Vila abattoir made a profit last year, it has accumulated losses.⁸ There are concerns that the abattoir pays higher prices than those justified if the abattoir were to account for depreciation of its assets. The abattoir could be more profitable if it could get access to more cattle. Most of the beef exported from Vila goes to the Solomon Islands and PNG. Some believe that high-quality beef is being sold into markets that do not pay premium prices for such beef, and that producers would benefit from access to high-quality beef markets.

In the early 1980s, the Government (financed by AusAID) took a 40 percent equity in Bel-Mol Cattle Company Limited, a large-scale cattle project in South Santo. Other shareholders were Australian cattle interests, 52 percent, and CDC, 8 percent. Commercial operations began in 1987 and a herd of 10,000 was established. After an initial net profit, successive operating losses were made to the point where the CDC loan could not be serviced and additional pasture improvement required for viability could not be done. Bel-Mol was placed in receivership in November 1992.

The Government owns the Vanuatu Livestock Development Limited (VLD), which operates a cattle property on Efate. The objective of the VLD was to provide genetic diversity to cattle farmers in Vanuatu and to encourage smallholder cattle holdings. The VLD has been losing money for some time and the herd has been allowed to run down. The future of the VLD is currently under consideration.

In addition to beef, Vanuatu has small pig, poultry, and dairy industries. In 1997, the Luganville and Port Vila abattoirs slaughtered 757 pigs, below the average of around 1,200 pigs in the previous 10 years. There is one small commercial dairy producer in Vanuatu, which serves the Vila market. Efate has two commercial poultry producers. Chicken meat production has experienced some growth in recent years, while egg production has grown marginally. Poultry and dairy producers are protected by high import duties and are unlikely to survive competition at world prices.

Kava

Kava is a traditional crop that has become a major cash crop recently as well as a major export crop in the last two years. Kava exports rose sharply in 1998 to 23 percent of merchandise export earnings. A significant growth in exports to established markets in Europe and the US and the emergence of markets in the People's Republic of China and in India accounted for the surge. Speculative buying forced prices to rise steeply and the rush for markets created quality problems and reports of unscrupulous dealings.

⁸ From discussions with the Government Business Unit.

This situation was unsustainable and both volumes and prices have since declined. In 1999, kava accounted for 13 percent of export earnings.

The emergence of the commercial kava industry has been an entirely private-sector phenomenon with little Government involvement. While kava has traditionally been used to make a beverage, it has recognized medicinal properties and there is substantial pharmaceutical industry interest in its natural ingredients.⁹

Kava is grown and used throughout Vanuatu. The 1993 Census showed that 90 percent of households planted kava, up from 40 percent in 1983. Kava is traditionally planted as part of a multicrop garden, although increasingly bush is cleared to monocrop kava. A number of studies have indicated that kava provides better returns than any of the conventional cash crops.¹⁰ The growing of kava as a commercial product in the food garden has a number of advantages. Kava, unlike coconuts, coffee, and cocoa, does not tie up large tracts of land over long periods. It is well suited to traditional farming methods, farmers are familiar with its cultivation needs, planting material is readily available, and the plant can be harvested to realize funds when needed. Labor intensity is relatively low over the entire cropping period, although an intensive effort is needed in harvest and post-harvest periods. For kava grown in isolated gardens, a major effort is required to carry kava to the selling point on road or beach.

There has been limited experience to date in growing the crop monoculture. Little is known about the sustainability of intensive cropping of kava, in terms of controlling pests and diseases, maintaining soil fertility, and avoiding soil erosion. Monoculture on slopes is also susceptible to erosion and landslides. Pilferage is becoming a major problem and presents a major disincentive to investment in large-scale plantings. Kava needs shade and so is ideally suited to growing in food gardens and under coconut trees provided soil conditions are suitable. Mature kava plants are highly vulnerable to cyclones. The risk of cyclones is accentuated as kava is a long-term crop (three years to maturity and longer to reach maximum harvest). In the food garden, kava is protected from cyclone damage by the surrounding bush.

Kava is used in subsistence, sold to nakamals, mostly in Vila and Luganville, and exported.¹¹ Most of it is sold green and marketing is highly decentralized. Sales have generally been made directly to nakamals in Vila and Santo, to traders, or to the VCMB. Kava is perishable and must be consumed within 10 days. Efficient transportation is important to maximize value. The high land transport costs or effort in carrying kava to beach points has adversely affected the kava trade. Infrequent and high-cost interisland shipping is also a problem. Growers may be disadvantaged because they cannot confirm the weight lost in transportation. Buyers in urban areas are unable to control the quality of the kava shipped.¹²

⁹ Kava has potential uses in the production of antiseptics, expectorants, diuretics, and relaxants.

¹⁰ The AusAID-funded Land Use Planning Project (with reports prepared by A. McGregor) examined the economics of kava production in food gardens and found rates of return to both land and labor to be high.

¹¹ McGregor (1999) estimated subsistence use to be between 4,200 and 6,200 green tons equivalent in 1998, local market sales 2,500 tons, and exports 3,300 tons. There have been problems in delivering kava to markets in Vila and Santo and to export markets.

¹² Buyers report average losses of 20 percent on arrival in Vila, from washing, rot, and drying out.

Exports have until recently been directed at two markets: pharmaceutical markets and Pacific kava drinkers. While both the VCMB and the private sector, with VCMB authorization, have exported kava, only the private sector supplies the pharmaceutical industry. The VCMB has done little to pursue export markets as a result of both financial and staffing constraints. The VCMB in some instances has squashed private-sector initiatives by withholding export authority.

There was a proliferation of private exporters in 1998, although about four companies dominate exports. Kava is exported in dried form and dried kava for export is now sourced from all over Vanuatu. Growers have clearly benefited from competition.

Coffee

Vanuatu has a small, struggling coffee industry. While coffee has been grown for many years, profitable production and exports have been limited. Production has fluctuated from year to year over the past two decades without showing any overall gain. Coffee exports in 1999 were worth only Vt2 million, down from Vt14 million in 1997.

In the 1980s, coffee was promoted as a diversification crop and the Tanna Coffee Development Corporation (TCDC) was established with Government and CDC equity.¹³ The plan was to establish 250 hectares of smallholder arabica coffee and a 475-hectare nucleus estate with centralized processing and marketing. At a development cost of Vt300 million, coffee was planted on 250 hectares. Prices fell and yields were below expected owing to disease, cyclones, volcanic ash, and acid rain. As with Metenesel, overheads were excessive and management was dependent on the availability of a large amount of labor. CDC subsequently withdrew, sold its equity to the Government for a nominal amount, and forgave loans of Vt50 million. The Government continued to run the project on a caretaker basis, continuing to lose money. The cumulative loss incurred by the project before it was privatized was around Vt570 million.

Indigenous Nuts

Commercial interest in the development of indigenous nuts began in 1989 when some individuals began the commercial processing of nangai, navele, and natapoa nuts purchased from smallholders.¹⁴ The Kava Store in Port Vila and Pacific Nuts Ltd. (PNL) on Santo developed small markets for indigenous nuts in Europe and Japan. However, the further development of export markets is constrained by the limited availability of supplies.¹⁵

Although there is no organized large-scale planting of indigenous nuts in Vanuatu, one business in Port Vila has begun planting a combination of 6,000 natapoa trees and 1,500 nangai trees, intercropped with about 2,000 balsa wood plants. The project will produce both nuts and timber.

¹³This was a joint venture of the Commonwealth Development Corporation, the Vanuatu Government (40 percent equity funded by Caisse Centrale), and the landowners, with CDC providing management.

¹⁴*Canarium spp.* (nangai), *Barringtonia spp.* (navele), and *Terminalia spp.* (natapoa)

¹⁵For nangai, it is estimated there is only one bearing tree per hectare in the 300,000 hectares of forest land. The 300,000 trees are capable of producing 15,000 tons nut-in-shell or about 2,250 tons of kernel-in-test per year.

APPENDIX 5

Developments in the Fisheries Sector

The commercial fishing industry in Vanuatu has contracted over the last two decades. First tuna longline operators relocated offshore and then trochus shell exporters downscaled operations as the raw material became increasingly difficult to source. Since peaking during the late 1990s, bêche-de-mer production has fallen with a shortage of local stocks reported in most rural areas. Production from the deepwater snapper fishery has been consistent but significant exports from this fishery have yet to be established on a regular basis. However, the expanding population of Vanuatu means that subsistence use of coastal resources continues to increase with subsistence fishermen taking an estimated 2,400 tons a year.

Offshore Fisheries

Vanuatu derives little economic benefit from its offshore fisheries resources. At present, only foreign-owned and -based vessels exploit the resource and access fees are the only income Vanuatu derives from the resource. So far in 2000,¹ 20 licenses have been issued to foreign longliners to access Vanuatu's exclusive economic zone (EEZ), compared with 13 in 1998 and 26 in 1997.

Some Taiwanese vessels enter the EEZ under a commercial agreement the Government negotiated in 1989 with the Kaoshiung Fishermen's Association (KFA). These vessels each pay a US\$5,000 access fee. Other vessels operate under a new bilateral agreement that incorporates many of the Minimum Terms and Conditions for Access by Foreign Fishing Vessels (MTC's), developed as a regional standard by member countries of the Forum Fisheries Agency (FFA); these vessels pay US\$8,000 annually.

Vanuatu once had a shore-based tuna fishing industry that made a significant contribution to export earnings. Depressed markets and falling prices forced a rationalization of the fleet of 20 longliners based at Palekula up to 1983. The fleet relocated to American Samoa in response to incentives offered by processors there. The Palekula facility fell into disrepair and, apart from the slipway, the workshop, and electrical equipment, most assets are beyond repair. The Government is considering a proposal to give the site to Ni-Vanuatu fishermen in lieu of unpaid entitlements for their service on Taiwanese fishing vessels.²

¹ Up to the time this report was completed.

² A previous government entered into a joint-venture arrangement with a Taiwanese fishing association to take over SPFC after the longliners that used to be based there were relocated to Pago Pago in 1983. While little activity occurred at the Palekula base, the company also served as an agent for placing Ni-Vanuatu on foreign, predominantly Taiwanese, fishing vessels. The entitlements of some of the fishermen were mismanaged by the SPFC office in Santo. This resulted in the Government, as a partner in the company, formally accepting liability for entitlements amounting to Vt63 million for around 113 seamen. As the Government does not have the funds to pay the entitlements in cash, a proposal is reported to have been negotiated that will result in ownership of the Palekula base being transferred to the seamen. If that occurs, the fishermen have indicated they may seek a foreign partner to reestablish Palekula as a fishing base. As Palekula is the only slipway in the country there is significant overseas and local investor interest in the facility.

It is reported that 85 Ni-Vanuatu fishermen currently work as crew on foreign fishing vessels, mainly in other oceans. Two agents in Vanuatu manage crew deployment, administer their entitlements, and make disbursements to families. However, there is no agency that can provide details about Ni-Vanuatu crew or protect their interests.³

As Vanuatu is south of the major purse-seine fishing grounds in the central western Pacific, activity in the EEZ has been sporadic.⁴ Despite this, Vanuatu has received substantial benefit as a party to the Treaty on Fisheries between the Governments of Certain Pacific Islands States and the Government of the United States of America, administered by the Forum Fisheries Agency (FFA). Since the Treaty took effect in June 1987, US seiners licensed under the Treaty have accessed Vanuatu's EEZ only in four years, taking small catches.

Game fishing is the only other offshore fishing activity in Vanuatu. Although still in its infancy, this industry offers good development prospects. Two main operators managing four boats reported gradual increases in the number of overseas sports-fishing clients over the last four years, mainly as a result of extensive international advertising. Given the potential for generating broad economic benefits for hotels and other linked industries, this fishery requires encouragement and facilitation.

Inshore Fisheries

With no local tuna industry, Vanuatu's fisheries production is concentrated in near-shore coastal areas. Shell is estimated to account for 90 percent of total marine product exports in most years, with an annual average value during the last decade of Vt98 million. Other exports are aquarium life, bêche-de-mer, lobster, coconut crab, and finfish. Marine exports have on average accounted for only 3 percent of Vanuatu's export earnings during the last decade.

Commercial activity is limited because, despite Vanuatu's size and tropical location, few atolls or extensive reefs surround the islands. Inner reef areas are limited to narrow fringing reefs and reef platforms surrounding islands. There are only a few lagoons and barrier reefs, covering an area of 478 sq km. The mangrove and estuarine habitat is even more limited, with a total area of only about 25 sq km.⁵

Although the accuracy of data is often questioned, available information indicates a significant internal trade in fisheries products. Lobster, finfish, and coconut crab are shipped from all over the country to cater to the demands of urban residents and tourists, mostly in Port Vila and Luganville. Deepwater snapper fisheries provide an estimated 80 tons a year to domestic markets, with minor amounts exported. The same markets are also

³ The crew reportedly believe they are on a salary of US\$250 per month. The agents allegedly pay each crew member Vt25,000 per month (around US\$190), releasing up to Vt10,000 per month to family and relatives designated by the crew member. At a current exchange rate of Vt132:US\$1, agents receive around Vt8,000 per month for each crew member on their books. This is a commission of over 25 percent!

⁴ In 1987 a Russian seiner paid US\$1.5 million to gain access to the zone. It reported a catch of 12 tons of tuna during the short period it operated.

⁵ Bell and Amos (1993)

estimated to absorb 40 tons of shallow-water reef fish and coastal pelagics each year, although the local consumption of shallow water reef fish is adversely affected by the presence of the toxin ciguatera in some areas. Given the Vt400 per kilogram price that coastal fishermen receive for these fish, the small fisheries have an annual value of around Vt48 million to coastal populations throughout the country.

Other small-scale fisheries are also important to rural communities. There are concerns that both the *bêche-de-mer* and trochus fisheries have been overexploited, and spot reef surveys indicate *bêche-de-mer* populations in many areas are severely depleted. Shell processors report increasing difficulty securing supplies of raw material. These fisheries have been responsible for a valuable source of cash income for coastal communities for many years. Assuming trochus collectors are paid an average of Vt250 per kilogram for raw shell and the annual harvest averages 100 tons, coastal communities receive Vt25 million annually from the trochus fishery alone. Other smaller fisheries, principally *bêche-de-mer*, aquarium-life, green snail, and crustacean fisheries, contribute an estimated Vt15 million to local communities each year, albeit on a more localized scale.

Vanuatu's largest coastal fishery is the one that harvests a diverse array of marine and freshwater life for local sale and consumption in rural areas. Accurate figures are not available for the actual size of this artisanal and subsistence fishery, and opinions concerning the value of fish and shellfish to the subsistence requirements of rural populations vary significantly. According to the latest population census, the rural population is around 152,000. An estimated 70 percent live within 2 km of the coast. Although customary tenure of coastal habitats may limit the scale of exploitation in some areas, most of this rural population would, at least occasionally, fish to supply subsistence and local cash needs. If 1994 estimates for the size of the subsistence harvest in Vanuatu are reasonable,⁶ the subsistence harvest in 2000 would be about 2,400 tons. This indicates a major fishery, in terms of national food security.

⁶Dalzell and Adams (1994)

The CRP and the Agriculture and Fisheries Sectors

Policy Areas and Objectives	Strategy	Actions and Original Completion Deadline
Governance and Public-Sector Management		
Governance and public-sector management reform: General	Various	Various; many of the reforms have been implemented
Enhance the efficiency and effectiveness of the Executive	Define the roles of ministers, political advisers, and senior civil servants	Government Act to define boundaries (June 1998)
	Improve public service leadership	Create new Director General positions (completed)
Strengthen financial and economic management	Enhance cost recovery for appropriate government services	Review policy and regulatory regime for services and key utilities, and introduce rational pricing/user charge schemes for cost recovery
Improve the productivity of the public service	Rebuild the capacity and skills of the public service Implement a management improvement plan Ensure structure and staffing of each ministry meet priorities and are within budget	Implement an HRD plan to enhance skills at all levels Management plans for all agencies: corporate plans, program budgeting, and performance monitoring Reduce total number employed in public sector by 10 percent to 15 percent
Redefine commercial functions of Government	Review existing policy and decide on sale or retention of public commercial functions Introduce contracting out	Set up Government Business Unit Develop policy paper on commercial functions Privatize or corporatise state assets Review opportunities for contracting out
Private Sector Development		
Encourage Ni-Vanuatu business development	Improve access to credit Mobilize savings for small business investment	Establish working committee to promote Government-NGO cooperation in provision of social services and rural credit

**Specific Role
for MAQFF?****Comments on Reform Progress and Impact on the Sector**

To the extent that these reforms produce more stable, transparent, accountable, and honest government and a more efficient bureaucracy, the agriculture and fisheries sector will benefit along with the rest of the economy

Has resulted in less interference by political advisers in the operations of the various departments

Has not improved leadership; has caused budgets to be reallocated; positions not filled because of budget constraints; additional layer of reporting with no benefit. Divisions in effect still operating as autonomous departments

Yes Cost recovery introduced in quarantine and inspection services, cost recovery in fisheries to some extent, but no cost recovery in agricultural extension. Seedlings no longer provided free or subsidized. Cost recovery in quarantine and inspection does not appear to be closely linked to benefits provided

Yes Situation has deteriorated because of lack of budget for HRD and loss of staff with voluntary redundancies. Services to the sector have deteriorated
Corporate plans produced but of poor quality. Objectives unclear and in some cases inconsistent with CRP objectives. Program budgeting and performance monitoring poor. This reflects lack of staff resources and confusion over role or mandate. A number of poorly conceived programs may be undermining the development of the sector
On top of staff losses following the 1993 strike, the cutbacks and voluntary redundancies have severely depleted the capacity of the MAQFF to undertake its core functions. This has certainly not increased the efficiency of the MAQFF. In addition, cutbacks in other ministries, particularly the Department of Public Works, have led to the deterioration of roads, wharves, and other infrastructure. Agriculture and fisheries have suffered as a result of "rightsizing"

Yes The government has privatized some state enterprises (Tanna Coffee) but others such as Metenesel Estate, the Vanuatu Livestock Development Corporation, Bel Mol remain in Government hands, and it is unclear at this stage whether recommendations of the Government Business Unit to privatize these agricultural enterprises will be accepted
Contracting out of extension functions was considered and decided against. Government still operates state farms. Research has been

These measures would improve access to credit in rural areas, including access to credit by smallholders and fishers. However, progress has been slow. The National Development Bank no longer exists. However,

APPENDIX 6 (Cont'd)

Policy Areas and Objectives	Strategy	Actions and Original Completion Deadline
Private Sector Development (Cont'd)		
	Mobilize land as loan security	Determine feasibility of credit guarantee scheme Pass Credit Union Bill Pass law to allow customary ownership land to be registered and leases to be used as collateral
Make tax system more efficient and effective	Introduce VAT to replace the turnover tax and other small and less efficient taxes	Lower import tariffs at least one third on average Pass and implement VAT Review need for income tax one year after VAT
Increase openness of trade and investment	Attract more direct foreign investment Promote exports End unfair trade practices	Pass Foreign Investment Act to create a favorable environment Phase out most export taxes Encourage promising production for niche markets Revoke all licenses that give monopolies
Improve infrastructure services	Corporatize and rationalize port services Improve reliability and affordability of interisland shipping Improve operations of public utilities	Civil Aviation Authority Ports Authority legislation Progressively allow foreign competition in coastal shipping by abolishing Ni-Vanuatu-only rule Review electricity, water, and telecommunications utilities; review contracts and tariffs; review regulatory regime; reinstate a telecommunications regulatory body
Expand primary production	Improve sector planning Prioritize private-sector growth Improve management of the resources sector	Prepare and implement five-year strategic plan Meat and livestock corporation Eliminate Government commercial activities Establish Fisheries Management Advisory Committee Strengthen land use practices

Comments on Reform Progress and Impact on the Sector

loans to the agricultural and fisheries sector made up a small proportion of this Bank's portfolio. In most cases, only small loans are required to provide working capital and to fund purchase of simple capital. The role of nucleus estates in providing working capital needs to be assessed. A review of the financial market regulations to determine if there are barriers to entry and competition is also critical to removing barriers to the private sector supplying credit to farmers and fishermen

VAT has been introduced, tariffs have been reduced somewhat, and export taxes have been phased out. To the extent that taxes on business inputs have been reduced the sector would benefit. The abolition of export taxes removes an important constraint on agricultural and fisheries exports. However, tariffs remain high and this continues to penalize export-oriented agriculture and fishing. At the same time very high tariffs on fish and certain foodstuffs provide high rates of assistance to import-competing industries, distorting the allocation of resources and imposing a large cost on Vanuatu consumers

Yes The new Act addresses some of the concerns of foreign investors. However, there are still a number of areas reserved for Ni-Vanuatu and this could impede the development of efficient local markets for agriculture and fisheries products
See above regarding export taxes
MAQFF has done nothing to encourage niche market exports. There remain areas of monopoly, collusion, and unfair trading practices that work against the development of competitive and efficient markets

International airfreight is dominated by state-owned monopoly. Deregulation would see increased competition and supply of freight services necessary for the development of niche exports of high-value and perishable foodstuffs and fish products
This will encourage, over time, new entry, resulting in increased competition, improved service quality, and reduced shipping costs. In the short term, the availability of coastal shipping will be reduced somewhat by the enforcement of higher standards by the Maritime Authority. Opening more ports to international shipping will also help, but Quarantine and Customs staff need to be located at these ports
Monopoly suppliers dominate provision of communications, water, and power. Prices in Vanuatu are extremely high relative to comparable situations overseas. Not much progress has been made in this area. There is a need to review and renegotiate contracts and to put in place an independent regulator. To avoid conflict of interest, the Government should divest any holdings in these utilities

Yes No planning has been undertaken, although, given the past record, this is no bad thing. The Government continues to be involved in agricultural production (coffee, beef, cocoa). No fisheries management advisory committee has been established

APPENDIX 7

Fisheries Policy Issues

In addition to the regulatory and policy constraints undermining longer-term development of fisheries, a number of immediate policy issues need to be addressed with some urgency.

The International Shipping Registry

Although Vanuatu does not benefit to a major extent from direct exploitation of the regional tuna resource, it has attracted interest from several operators of tuna fishing vessels active in this region because of its open registry for international ships, its tax haven status, and its membership in the FFA. These operators have established Vanuatu-based companies or reflagged vessels to the Vanuatu flag. It would appear, however, that although the number of tuna fishing vessels operating under the Vanuatu flag has increased as a result, not only in the CWP but globally, this development could lead to complications for the Vanuatu Government in the medium to longer term.¹

The international community is increasingly concerned about the extent to which flag states take responsibility for their fishing vessels and ensure that these vessels comply with internationally agreed principles for the conservation and management of fish stocks. Several global initiatives enforce increased responsibility by flag states for their vessels. The main initiatives are the Agreement for Compliance with Management and Conservation Measures for Fishing on the High Seas (the Compliance Agreement) and the Code of Conduct for Responsible Fisheries, both sponsored by the Food and Agriculture Organization (FAO). The provisions of both arrangements are largely incorporated in the 1995 United Nations Implementing Agreement for the Management and Conservation of Highly Migratory Fish Stocks.

Efforts by the international community to elicit greater responsibility for conservation and management from flag states will be felt by Vanuatu-flag vessels attempting to land their catch in countries that consider Vanuatu to be exercising insufficient responsibility for its vessels. In particular, it will affect Vanuatu-flag vessels that attempt to land southern bluefin tuna in Japan after 1 June 2000.

Perceiving a lack of responsibility by the Vanuatu Government for its vessels targeting southern bluefin tuna, Japan will impose a moratorium on Vanuatu vessels attempting to access Japanese southern bluefin tuna markets. In addition, the European Union (EU) has just completed a formal investigation into the certification of the origin of fish marketed by Vanuatu-flag vessels in EU markets. If access to principal markets is to be maintained, these two developments indicate that flag states must demonstrate that they take responsibility for vessels operating under their flag.

¹ Vanuatu's international registry is administered by a Vanuatu-based company, Vanuatu Maritime Services Ltd. (VMS). As of April 2000, 507 vessels were registered under the Vanuatu flag, including 85 fishing vessels that VMS operates principally from an office in New York. A second company, Vanuatu Maritime Marketing Ltd. (VMM), takes responsibility for marketing the registry to vessel owners. VMS is seven years into a 15-year contract with the Vanuatu Government to administer the register.

FFA member countries are also concerned about the extent to which Vanuatu takes responsibility for its vessels. Their concern is that foreign vessel operators are seeking to take advantage of Vanuatu's tax haven status and its FFA membership to extract preferential access to the tuna fishing grounds of other FFA member countries. This practice has resulted in vessels, reported to be effectively owned and controlled by Korean and Taiwanese companies, attempting to gain access to the EEZs of fellow FFA member countries under the guise of being vessels owned and operated by Vanuatu commercial interests.

In 1999, a local initiative suggested that the Government of Vanuatu derogate its responsibility for tuna vessels operating under the Vanuatu flag in the Central West Pacific in favor of a commercial entity. FFA member countries were advised to license only those Vanuatu flag vessels associated with the company established to assume this responsibility, Offshore Tuna Enterprise Ltd. (Vanuatu) (OTEV).² Only two purse seiners ever affiliated with OTEV, possibly because FFA member countries continued to license all Vanuatu-flag seiners, not just those affiliated with OTEV.

This attempt by the Government to demonstrate improved responsibility through the OTEV initiative has no legal basis as no country can derogate international obligations in favor of a private entity.³ Sovereign responsibility to enforce is a matter of international law—there can be no private right to impose a penalty in the case of a breach. In any case, in Vanuatu, the required responsibility is already vested in the Vanuatu Maritime Authority (VMA), established under the Vanuatu Maritime Authority Act (1998).⁴

In relation to Vanuatu's flag-state responsibility, assuming the registry generates real national benefit and that the Government is committed to its continued operation, then the Government should attempt to put in place an arrangement that demonstrates to the international community a commitment to take responsibility for the vessels on the registry. One course of action could involve the Ministry of Agriculture, Quarantine, Forestry, and

² Offshore Tuna Enterprise Ltd. (Vanuatu) (OTEV) was established through a joint venture between the Government and International Tuna Services Ltd. (ITS). ITS is a Vanuatu-registered company with 49 percent local shareholding. A major tuna fishing company in Korea, the Nambug Fishing Company, owns the balance. Nambug and ITS are also closely affiliated with Trimarine International, which is a major international trader in tuna and which provided the establishment capital for OTEV. Both the Director of the Fisheries Division in Vanuatu, in recognition of his authority to provide Government endorsement for management and conservation issues, and the Ni-Vanuatu Managing Director of ITS, are board members of OTEV.

³ On advice from the State Law Office.

⁴ In the course of this review, the DCO approved a proposal for submission to the Council of Ministers that would result in the establishment of a Vanuatu company to administer the activities of Taiwanese vessels in the Indian Ocean. The proposal was reportedly put forward by a local company, Tuna Fishing Company (Vanuatu) Ltd., which serves as a local agent for Taiwanese fishing interests. In return for Vanuatu accepting Taiwanese longliners operating in the Indian Ocean onto its international vessel registry, the Tuna Fishing Company allegedly offered to pay the membership and participation costs for Vanuatu to join the Indian Ocean Tuna Commission (IOTC). In addition, the Tuna Fishing Company is reported to have offered to pay a "licensing fee" of US\$5,000 to the Fisheries Division for each vessel associated with this arrangement that receives a license to operate in the IOTC area. The Fisheries Division was never consulted on this proposal. Not only does this issue raise concern relating to Government procedures but, if this proposal is implemented as presented, it has the potential to damage Vanuatu's international reputation.

Fisheries, the VMA, and the Division of Foreign Affairs jointly sponsoring a policy paper supporting Vanuatu's ratification of the Compliance Agreement. The paper would be sent to the Development Committee Officials (DCO) to be endorsed and forwarded to the Council of Ministers for approval and subsequent signing by the appropriate Minister of State.

At the same time, the Fisheries Division and the VMA should commence a publicity program advising the international community of Vanuatu's initiatives to comply with internationally agreed principles for the management and conservation of high seas resources. The recent deregistration, by the VMA, of three Danish vessels operating under Vanuatu flag for alleged indiscriminate fishing in the Antarctic should serve as valuable evidence of a commitment to these principles.

Costs associated with monitoring compliance with internationally agreed management and conservation measures could be significant, particularly if Vanuatu officials are required to inspect and monitor vessels operating under its flag from distant ports. It is therefore recommended that mechanisms be built into the administrative agreement for each vessel to ensure that any such cost is ultimately borne by the individual vessels concerned.

Exports of Giant Clams

There are concerns that Vanuatu is violating its international responsibilities by allowing exports of giant clams. Vanuatu ratified the Convention on International Trade in Endangered Species (CITES) in July 1989 through the International (Trade Flora and Fauna) Act (1989). Through that Act, Schedules I and II (but not Schedule III) of CITES were adopted. Giant clams (family *Tridacnidae*) were added to Schedule II of CITES only in 1995. As a result, they do not appear in the International (Trade Flora and Fauna) Act and Vanuatu has not formally adopted the amendments to the CITES Schedules as provided for under Part XVII of the Convention. However, Vanuatu would appear to acknowledge giant clams as being listed in Schedule II because the Environment Unit issues export permits for shipments of *Tridacna spp.*, as provided for under Article IV of CITES.

Some observers criticize Vanuatu's approval of giant clam exports without an adequate assessment of the impact on local giant clam resources, while others are concerned that some collecting practices damage the reef habitat. The pending review of fisheries legislation provides an opportunity for the Environment Unit and the Fisheries Department to collaborate to resolve these concerns.

Fisheries Sector Reform Strategy Matrix

Item	Action
Institutional Strengthening	
<ul style="list-style-type: none"> • National fisheries policy • Revised fisheries and associated laws 	<ul style="list-style-type: none"> • Prepare a national fisheries policy for adoption by the Council of Ministers • Review and, where required, redraft fisheries and associated laws
<ul style="list-style-type: none"> • Consultative arrangements 	<ul style="list-style-type: none"> • Institute formal processes of consultation on fisheries matters for key Government departments, authorities, and the private sector
<ul style="list-style-type: none"> • Advisory and technical services delivery by the Fisheries Division 	<ul style="list-style-type: none"> • Identify the core functions and subsidiary activities of the Division • Review corporate arrangements such as work programming procedures, office administration, personnel appraisal, and staff development needs • Review the Division's structure to ensure key activity areas are adequately served • Review corporate data relationships so that information needs, both within the Division and in relation to clients, are adequately served • Develop consultative relationships elsewhere in Government and with the private sector • Recruit technical assistant for legislative work and another for the long-term TA

Outcome	Risk
<ul style="list-style-type: none"> • A transparent national policy on fisheries, adopted by the Government and widely circulated in the public service and private sector • New laws adopted and applied to the administration and management of the fisheries sector in Vanuatu • An improved, transparent administrative framework for all stakeholders in Vanuatu's fisheries sector 	<ul style="list-style-type: none"> • Political support for an agreed policy not forthcoming • Interference leads to a policy that is not in the national interest • Bureaucratic processes suffocate the policy development process • Lack of cooperation among relevant Government divisions and authorities in respect of the legislative review • A policy and revised laws are drafted but never formally adopted • Policy and revised laws are adopted but implementation is stalled
<ul style="list-style-type: none"> • Responsibilities for the administration and management of fisheries issues within six miles of the coast accepted and operational • FIB automatically refers all fisheries-related proposals to the Fisheries Division and the Environment Unit for appraisal and advice • Interdepartmental dialogue involving Customs, Foreign Affairs, Environment, State Law, Public Prosecutors, Tourism, VMA, VMC, Finance, Home Affairs, Industry, Trade and Commerce, Police Maritime Wing, and Statistics Office all improved • Offshore Fisheries Management Committee established to manage all EEZ fisheries matters for Vanuatu and foreign flag vessels, and all flag state responsibility issues for Vanuatu flag vessels operating in other oceans • Near-shore resource management committees established • Fishing industry associations established 	<ul style="list-style-type: none"> • Government departments and authorities reluctant to cooperate • Provincial governments do not cooperate in relation to the six-mile issue • Influential politicians and/or members of the private sector continue to circumvent procedures • Private-sector cooperation on issues of common interest not forthcoming • Private sector subverts collaborative initiatives to protect personal interest
<ul style="list-style-type: none"> • A departmental staff structure that serves core functions • Improved staff efficiency, office administration, relationships with other Government departments and industry • Improved management and analysis of information • Better delivery and improved quality of advisory services from the administrative center in Port Vila and in rural areas • Increased respect for the Division • Improved accountability for the Division's work 	<ul style="list-style-type: none"> • Financial support inadequate to address strengthening needs • Low level of participation by stakeholders erodes support base • No political support for the strengthening exercise • Staff do not accept the need for change • Staff numbers decline further and recruitment of competent new staff fails • Funding for technical assistance not identified • Support for adviser post shortened

APPENDIX 8 (Cont'd)

Item	Action
Institutional Strengthening (Cont'd)	
	<ul style="list-style-type: none">• Institute comprehensive reporting in the form of Divisional monthly reports for internal circulation and annual reports for distribution throughout the community
<ul style="list-style-type: none">• Extension and training services	<ul style="list-style-type: none">• Reassess fisheries extension needs• Review small-scale fisheries training needs• Appraise the strengths and weaknesses of the Fisheries Division and the Maritime College to address extension and training needs• Develop a three-year plan for support to rural fisheries, complete with appraisal procedures• Transfer boatyard and workshop on Santo to VMC• VMC to recruit a Fisheries Training Officer• Formal understanding on extension and training responsibilities between Fisheries and VMC• Collaboration on aspects of the VMC and Fisheries Extension work program that are mutually beneficial
Sectoral Issues	
<ul style="list-style-type: none">• Fishery management plans	<ul style="list-style-type: none">• Draft and implement fishery management plans• Form private-sector fisheries associations• Establish fishery management committees

Outcome**Risk**

- Improved confidence in the Division's capacity to manage the fisheries affairs of the country

- Work plan for Technical Services at the Fisheries Division widely publicized, funded, and operational
- Technical and advisory services from the Division's extension staff used in fisheries training at the VMC
- Boatyard and workshop operational at VMC
- Technical Services and VMC work programs reflect a collaborative approach to fisheries training and extension, using the boatyard and workshop facilities
- Fisheries officers assist with curriculum development at VMC
- Fisheries officers and VMC staff undertake joint field trips
- Students learning small-vessel construction, and vessels built at VMC in demand by fishermen
- Students receiving mechanical instruction at the workshop and fishermen's motors being maintained and repaired at cost

- Transfer of boatyard and workshop facilities does not proceed
- Personality differences inhibit the development of a mutually beneficial relationship between Fisheries and VMC staff
- Training and extension services are not merged so VMC facilities are not used optimally to teach fishermen new skills and train students in small-scale fisheries

- Fishery management plans for:
 - Tuna
 - Game fishing
 - Aquarium-life fisheries
 - Shell fisheries
 - Bêche-de-mer fisheries
 - Line fisheries
- Fisheries association for fishermen involved in:
 - Line fisheries
 - Game fishing
 - Aquarium-life fisheries
 - Shell fisheries
- Improved dialogue between Government and industry
- Improved dialogue among industry participants
- As each management plan is formulated, a committee representing all stakeholders will be established to oversee the formulation, implementation, and administration of the plan

- Insufficient resources assigned to the preparation of plans; plans inadequate
- Lack of cooperation among stakeholders within Government or within the private sector
- Insufficient resources assigned to the implementation and administration of the plans once approved
- Infringements and noncompliance with plans not adequately prosecuted
- Fishery Management Committee inefficient and/or ineffective

APPENDIX 8 (Cont'd)

Item	Action
Sectoral Issues (Cont'd)	
• Tuna industry	• Encourage the development of a shore-based tuna longline fleet • Renegotiate bilateral access arrangements
• Aquarium-life fishery	• Aquarium-Life Industry Association
• Game fishing	• Game Fishing Association
• Trochus shell fishery	• Trochus Shell Processors Association • Industry/Government collaboration on shell rearing

Outcome	Risk
<ul style="list-style-type: none"> • Constraints on the development of a domestic tuna industry, such as prices of fuel, power, and international airfreight linkages addressed • Small locally based fleet of tuna longliners • Irregularities with bilateral access agreements for foreign longliners resolved 	<ul style="list-style-type: none"> • Inability to reduce high local costs associated with establishing a local fleet • Inability to provide cost-efficient airfreight linking to premier markets • Lack of political support for a review of bilateral arrangements
<ul style="list-style-type: none"> • Industry association established • Association establishes guidelines or a code of conduct for participation in the fishery (an internationally accepted protocol has already been adopted for the aquarium industry and should form a useful template) • The Association becomes the formal conduit for dialogue between the Fisheries Division and the industry • Collaboration on the implementation of the aquarium-life fishery management plan • Assessment of impact of aquarium-life fisheries on reef ecosystems • Review of laws relating to the export of giant clam 	<ul style="list-style-type: none"> • Lack of cooperation among industry participants • Fisheries Division does not remain impartial in industry issues • Individuals lobby political support to subvert the work of the Division in relation to management plans or the work of the Association in relation to the code of conduct • No funding to support reef ecosystem assessment • No mechanism to review laws relating to the export of giant clam • No political will to review issues associated with giant clam exports
<ul style="list-style-type: none"> • Existing association requires strengthening • Association establishes guidelines or a code of conduct for participation in the fishery • Association becomes the formal conduit for dialogue between the Fisheries Division and the industry • Collaboration on the implementation of the game fish management plan 	<ul style="list-style-type: none"> • Inability to resolve issues with the Tourism Authority • Lack of cooperation among industry participants • Fisheries Division does not remain impartial in industry issues • Individuals lobby political support to subvert the work of the Division in relation to management plans or the work of the Association in relation to the code of conduct • Differences between game fishermen and other coastal fishermen cannot be resolved
<ul style="list-style-type: none"> • Industry association established • Association establishes guidelines or a code of conduct for participation in the fishery • Association becomes the formal conduit for dialogue between the Fisheries Division and the industry • Collaboration on the implementation of the shell fishery management plan • Hatchery rearing of large quantities of juvenile trochus • Commercial processors access some hatchery-reared trochus for button processing 	<ul style="list-style-type: none"> • Lack of cooperation among industry participants • Fisheries Division does not remain impartial in industry issues • Individuals lobby political support to subvert the work of the Division in relation to management plans or the work of the Association in relation to the code of conduct • Suitable MOU for industry/Government cooperation cannot be negotiated • Hatchery production not sufficient to maintain interest of industry

APPENDIX 8 (Cont'd)

Item	Action
Sectoral Issues (Cont'd)	
• Deepwater snapper and shallow-water reef fish	• Commercial Line Fishermen's Association
• Rural fisheries	• Rural Fisheries Working Group
• Bêche-de-mer	• Bêche-de-mer Exporters Association

Outcome	Risk
<ul style="list-style-type: none"> • Reef trochus population stock enhancement program established countrywide 	<ul style="list-style-type: none"> • Trochus reseeded programs not sustainable because of unregulated commercial exploitation
<ul style="list-style-type: none"> • Industry association established for drop, hand, and demersal longline fishermen • Association establishes guidelines or a code of conduct for participation in the fishery • Association becomes the formal conduit for dialogue between the Fisheries Division and the industry • Collaboration on the implementation of the bêche-de-mer fishery management plan 	<ul style="list-style-type: none"> • Lack of cooperation among industry participants • Fisheries Division does not remain impartial in industry issues • Individuals lobby political support to subvert the work of the Division in relation to management plans or the work of the Association in relation to the code of conduct
<ul style="list-style-type: none"> • Association representing the interests of small-scale subsistence and artisanal fishermen, coordinated by the Fisheries Division and the VMC • The facility for each island or province to establish small local subsidiary groups • Improved delivery of services at VMC based on the needs of the small-scale sector 	<ul style="list-style-type: none"> • VMC and Fisheries Division cannot collaborate to support such a group • No political support for the Group • Rural fishermen do not cooperate to further the goals of the Group • The Group is established and VMC and Fisheries Division support falls • The Fisheries Division, VMC, or provincial governments do not consider the interests of the Group in policy decision making
<ul style="list-style-type: none"> • Improved delivery of services by the Fisheries Division based on the needs of the small-scale sector • Industry association established • Association establishes guidelines or a code of conduct for participation in the fishery • Association becomes the formal conduit for dialogue between the Fisheries Division and the industry • Collaboration on the implementation of the bêche-de-mer fishery management plan 	<ul style="list-style-type: none"> • Lack of cooperation among industry participants • Fisheries Division does not remain impartial in industry issues • Individuals lobby political support to subvert the work of the Division in relation to management plans or the work of the Association in relation to the code of conduct

APPENDIX 9

S-W-O-T Analysis of the Fisheries Division

With the help of staff of the Fisheries Division, the Review Team conducted an analysis of the strengths, weaknesses, opportunities, and threats facing the Division and its resources. The following are the results of the analysis.

Strengths

Resources

- The majority of Vanuatu's fisheries resources are underexploited.
- Vanuatu has diverse resource bases, much of which offers development potential—tuna/game, fish/deepwater, snapper/aquaculture, etc.
- There is a contraction in global supplies of many resources that are available in Vanuatu.
- International interest in obtaining fisheries products from new sources is increasing.
- Many of the fish resources of Vanuatu are high-value commodities on international markets.
- New markets do not need to be developed for Vanuatu's fisheries resources; their market acceptance is already established.
- Near-shore fish resources have the capacity to continue to contribute to national food security and reduce demands for import substitutes.
- Vanuatu's marine and coastal environment is relatively pristine and so the risk of product contamination should be low, assuming that appropriate handling practices are used.
- Fish resources are generally accessible to rural communities and to Ni-Vanuatu fishing enterprises.
- Customary claims can be used to effectively enhance conservation programs. In fact, traditional practices can be used to manage some coastal resources with little input from the Fisheries Division.

Administration

- In the Vanuatu Quarantine and Inspection Service Division (VQIS) and the Fisheries Division there is a high level of awareness of seafood export quality requirements (i.e., Codex Alimentarius and Hazard Analysis and Critical Control Points, or HACCP).
- Fisheries and other Government officials have a high level of awareness of the potential of the sector.
- Over a period of almost 20 years, a basic administrative framework (i.e., legislation, licensing systems, etc.) has been developed and implemented to assist with the management of the sector.
- Regional knowledge of resources that exist in Vanuatu is extensive—i.e., in the South Pacific Commission, Forum Fisheries Agency, Office de la Recherche Scientifique et Technique de Outre-Mer (ORSTOM), International Center for Living Aquatic Resources Management (ICLARM), and the fisheries establishments of other South Pacific countries. This knowledge can be tapped to assist with the development and management of Vanuatu's fish resource.

- Collaboration with nongovernment organizations environmental groups is good.
- The staff of the Fisheries Division is knowledgeable about in-country issues and well informed about regional developments, and has a good appreciation of Vanuatu Government processes and constraints.
- Fisheries Division relations in the Vanuatu rural community are generally perceived to be good. However, recent budget and staff reductions have reduced the frequency of visits to rural areas by fisheries officers, adversely affecting the image of the Division.
- The Fisheries Division Director is respected by his staff.
- Some provinces have contributed funds to support the work of the Fisheries Division (e.g., Shefa, for trochus research).
- The Fisheries Division Director is the Chairman of the Vanuatu Maritime College (VMC).
- The VMC has excellent training facilities.
- The Division has an excellent small-boat building facility on Santo.
- Rural communities appreciate the value of the boatyard.
- Reporting procedures, including monthly reports to headquarters from provincial offices and an annual Divisional report, are in place.

Weaknesses

Resources

- At present there are no resource-specific management plans.
- The Taiwanese and Korean longline fleets that have historically accessed Vanuatu's EEZ are largely inefficient and therefore have little capacity to pay fisheries access fees. The fleets are now significantly reduced relative to the number of vessels active in the fishery in the 1960s.
- Vanuatu's purse seine tuna resource is seasonal and small relative to that of other Pacific Island nations to the north and west.
- Data and information holding for the majority of individual fish resources in Vanuatu is poor.
- There are diverse species of reef-associated resources, presenting marketing challenges.
- The resources are far from preferred markets.
- Market intelligence for Vanuatu products is practically nonexistent. Hence, the Fisheries Division is not well placed to give advice about the fairness of returns to local resource owners providing access to their resource or to fishermen selling their products.
- The cost of transporting fisheries commodities, particularly perishable product, within Vanuatu and to international markets is high.
- Customary claims to resources (or land, in the case of aquaculture) can limit commercial development.
- Commercialization of fisheries adjacent to coastal communities can jeopardize local subsistence requirements.
- Because of social and other commitments in Vanuatu rural communities, local fishing effort is often sporadic. Except for nonperishable commodities such as shell, this makes it difficult to guarantee commercial volumes of marketable product.

- Industrial tuna fisheries are technically and financially demanding and beyond the capacity of Ni-Vanuatu to venture into without significant foreign involvement.
- Some resources are overexploited (e.g., bêche-de-mer).
- Shallow-water fin fish from some areas are ciguatoxic. This affects the marketability of the species from areas free of ciguatera.
- There is some environmental disturbance associated with logging and road building in some areas, which is affecting adjacent marine environments and their fish resources.
- There is no developed market network for rural fisheries production.

Administration

- The boatyard receives virtually no funding support or direction from the Division.
- The supporting infrastructure for fisheries development is poorly developed.
- Transport between remote fishing grounds in Vanuatu and preferred markets is unreliable and expensive.
- Coordination in fisheries policy and administrative matters between Government departments is often confused. Specific examples are the responsibilities of the Fisheries Division and provincial governments relating to the Decentralization and Local Government Act, and the responsibilities of the Fisheries Division and the Foreign Investment Board relating to foreign investment in Vanuatu's fisheries sector.
- The Fisheries Division has limited capacity to assess the status of fisheries stocks. The capacity referred to includes the ability to undertake regular monitoring and data collection in remote locations and the professional capacity of staff to complete detailed assessments of stocks.
- Fisheries extension officers do not receive enough professional development support, particularly in areas such as fisheries management.
- Community understanding or appreciation of the Division's goals in fisheries management is poor, especially in remote areas.
- Ni-Vanuatu wishing to invest in fisheries projects experience major difficulties accessing credit.
- The Fisheries Division has limited analytical capability to inform remote communities of fisheries management issues and legislation, obtain market information, undertake monitoring, control, and surveillance, etc.
- The Fisheries Division is underresourced in terms of staff and budget. Although some recruitment is planned during the year, in 2000 the Division had a staff of 14 and a total recurrent budget of Vt29 million, 66 percent of which went to cover staff costs.
- There is no apparent policy, and the existing laws require review.
- Existing penalties are too lenient to discourage infringements of fisheries laws.
- There are virtually no fisheries awareness materials on extension, policy, regulations, training opportunities, marketing information, etc., in French, English, or Bislama.
- Fisheries cases are difficult to prosecute. The Public Prosecutor's office is short-staffed and neither public prosecutors nor magistrates have a good appreciation of fisheries issues.

- The information database on Vanuatu's resources (e.g., tuna) is poor. This means that the Fisheries Division has only a basic understanding of the dynamics of tuna fleets operating in Vanuatu waters and has little appreciation of the true value of access.
- The lack of data on industrial tuna fisheries makes it difficult for Vanuatu to renegotiate tuna fisheries access agreements that seek to improve benefits to Vanuatu.
- Internal pressure by the Government on the Fisheries Division to generate revenue means that the incentive to renegotiate existing access agreements is low. If the renegotiation is unsuccessful, and the fishing party terminates the access agreement, then fisheries revenue is dramatically affected.
- There is a perception elsewhere in Government that the Fisheries Division has an uncertain role in rural fisheries development. While the Government is attempting to stimulate private-sector activity, the Fisheries Division continues to fund the purchase of ice-making equipment, an activity that has not generated positive benefit in past years.
- Fisheries staff consider their pay scales insufficient to extract maximum efficiency.
- Staff housing, at least for staff based in the provinces, is extremely poor (12 percent of the salary of a public servant living in Government housing goes to a housing fund).
- Personnel management within the Division requires improvement. Staff are of the view that they require more direction to reduce the tendency to drift in and out of the office at their leisure. Administration in the form of office procedures, organization, and management is poor and staff attendance could be improved. Also, staff in provincial offices consider the current level of communication with headquarters to be inadequate.
- VMC is just starting to address the training needs of the fisheries sector.
- Fisheries Division staff consider themselves to be inadequately involved in the design of fisheries training programs at VMC, and consultation regarding rural training activities of VMC in the provinces is weak.
- Few expatriate staff at VMC have Ni-Vanuatu counterparts.
- The workshop facilities on Santo, and a considerable amount of equipment provided under Japanese development assistance, have not been used for more than 12 months.
- The Fisheries Division in Port Vila is too slow in paying for overseas materials for the boatyard.
- There is uncertainty about the status of the Revolving Fund. This affects the boatyard in particular.
- Fishermen consider the duty-free rebate of 5 percent for fuel, fishing gear, and outboard motors insufficient.
- The concept of providing a rebate in return for cooperation in data collection programs is weak.
- Relations between VMC and the Fisheries Division, at least among program staff, require strengthening.
- The data and information contained in the monthly and annual reports are not of high quality.
- Rural fishermen do not have access to good supplies of fishing equipment.

- Fisheries officers in remote locations such as Lakatoro have no means of communicating with staff based in provincial centers or in Port Vila.

Opportunities

Resources

- Market demand, both domestic and international, for most local fish resources exceeds supply.
- Vanuatu offers a new and exciting destination for game fishing, whether offshore heavy tackle or inshore light recreational.
- Established operators, both in Vanuatu and abroad, are continually seeking new sources of product.
- Successful development of the fisheries sector will make a positive contribution to the country's foreign exchange reserves.
- It will also make a positive contribution to employment growth, onshore as well as on fishing vessels.
- Generally Vanuatu fisheries production has good growth prospects—most resources are only moderately exploited relative to the estimated sustainable yield (although there are exceptions such as *bêche-de-mer*).
- The local commercial fisheries sector is relatively underdeveloped; local competition in the sector is therefore low at present. Operators have the opportunity to establish an influential role in the future growth and/or regulation of the sector.
- There are still resources whose commercial potential remains to be assessed (e.g., seamount resources such as *Beryx sp.*).
- Vanuatu's relatively pristine environment, abundant clean seawater, uncontaminated coastal land, and excellent freshwater supplies are attractive attributes for aquaculture ventures.
- The boatyard would benefit from a nationwide advertising campaign extolling its products and services.
- Transferring the Santo boatyard and the Santo workshop to VMC would put these underutilized resources to better use and provide some security for the boatyard. But this should be done under a Memorandum of Understanding that preserves the extension and development assistance services initiated by the Fisheries Division for fishermen.
- The upgrading of Luganville and Tanna airports to international standards provides new opportunities for fish exports.

Administration

- There is an opportunity to revise existing fisheries access arrangements to extract improved benefits, which could include increased fees and increased access to the activities of fishing vessels operating under license in the zone.
- The depth of local knowledge of Vanuatu fisheries resources and local administrative requirements is impressive. This knowledge base could be tapped to update administrative procedures and promote economic development in the sector.
- The current Government is reported to be supportive of activities promoting private-sector growth, contributing to foreign exchange, pro-

moting employment opportunities, etc., although how that support translates into practice is often unclear to Ni-Vanuatu fishermen.

- The Government is anxious to improve its own efficiency and effectiveness under the CRP process.
- The investment climate is supposed to be improving.
- There are significant opportunities to use customary practices to help reduce Government overhead in fisheries management.
- Any opportunity to promote staff training in the Fisheries Division, particularly in organization and management, should be pursued.
- With the position established, the Fisheries Division should seek opportunities to support an adviser.
- The Fisheries Division should build on improved efficiencies in the Division, increase community appreciation of its work, and galvanize stronger budgetary support within the Government.
- International support for initiatives to develop and responsibly manage the sector is good (e.g., through development assistance agencies).

Threats

Resources

- The sustainability of resources is threatened by unregulated expansion.
- Exports are poorly received in preferred markets because supply is unreliable and inconsistent in quality, and some shipments are contaminated (e.g., with ciguatera).
- Access to fishing grounds is increasingly restricted so that the resource base is insufficient to support commercial operations.
- Environmental disturbances threaten the health of local stocks or supplies become polluted with environmental contaminants.
- Suppliers are unable to consolidate sufficient volumes of preferred commodities and so cannot meet market expectations.
- Overexploitation adversely affects subsistence fisheries sharing the same resources.
- Local stocks or habitats are threatened by escaped introduced species from aquaculture facilities. This principally relates to freshwater organisms.
- Natural disasters such as cyclones damage Vanuatu's resource base, for example, by stimulating outbreaks of ciguatera.

Administration

- Vanuatu's seafood exports fail requirements for access to major markets.
- The sector is increasingly politicized.
- There is indiscriminate approval of investment proposals that do not align with preferred policy.
- Foreigners dominate fisheries that Ni-Vanuatu are able to operate in. The poulet fishery, shell harvesting and processing, and the bêche-de-mer fishery are appropriate examples.
- Management regulations are inadequate or inadequately enforced.
- There is a lack of adequate professional and technical expertise to manage the sector.

- The Fisheries Division lacks the personnel and budget resources to effectively manage the sector.
- A lack of data continues to constrain management arrangements for the sustainable management and development of specific fisheries.
- The costs of fishing gear and boats become prohibitive for Ni-Vanuatuan fishermen.
- Local infrastructure does not develop in support of sector growth.
- Business and tax costs associated with fishing become too high.
- The Fisheries Division is unable to recruit a suitable adviser.
- Freight agents do not meet schedules, or shipments are damaged in transit through poor handling by freight agents.
- The costs of accessing markets (e.g., freight) become prohibitive.

Proposals for ADB and Donor Assistance to the Agriculture Sector of Vanuatu

Table A10-1: Summary of Technical Assistance Proposals for Agriculture and Forestry

No.	Proposed Project/Project Type	Objective	Executing Agency
1	Assistance in formulation of a Vanuatu National Agriculture Sector Policy/Technical assistance	To assist the Government in instituting a consultative and participatory process involving all stakeholders in the agriculture sector The process will lead to the development and formulation of a national agriculture policy accepted by stakeholders and sanctioned by Government and major political parties	MAQFF, assisted by the Department of Economic and Social Development (DESD)
2	Human Resource Needs Assessment of MAQFF/ Technical assistance	To assist the Government in a comprehensive assessment of the human resource requirements of MAQFF	MAQFF
3	Project Preparation for Vanuatu Agricultural Development Capacity Building Project/ Technical assistance	The TA will formulate a sector investment project to strengthen the capacity of Government agricultural agencies	MAQFF
4	Capacity Building for Development of Provincial Development Master Plans/ Technical assistance	To assist the provincial governments of Malampa, Sanma, Penama, and Torba in instituting a participatory and consultative process using the REDI approach to the development of Provincial Development Master Plans	MAQFF
5	Inventory Assessment of Vanuatu Forest Resources/ Technical assistance	To assist the Government in a comprehensive updating of the inventory of forest resources	Forestry Division (MAQFF)
6	Support for the Development of the Forestry Management Plan/ Technical assistance	To assist the Forestry Division of MAQFF in developing a forestry management plan	Division of Forestry (MAQFF)

Approx. Duration	Priority	Justification
4 months	Priority 1	There is no national agriculture policy framework that would enable stakeholders in the public and private sectors to strategize and collaborate toward the economic growth of the sector. The TA will provide a "road map" for Vanuatu's agriculture
4 months	Conditional on completion and Government approval of the Vanuatu National Agriculture Policy Priority 2	There is uncertainty in the optimum staffing requirement following the restructuring of MAQFF and the loss of experienced staff as a result of the 1993 public service strike and CRP implementation. The TA will provide a rational basis for the recruitment and deployment of MAQFF staff
6 months	Conditional on completion of: <ul style="list-style-type: none"> • Vanuatu National Agricultural Policy • Human Resource Needs Assessment of MAQFF Priority 3	The TA will identify detailed project components, programs and activities, investment costs of proposed project components, scheduling of activities, investment benefits, implementation risks, and funding arrangements and submit these in acceptable formats with which the Government can approach ADB or other donors for financial assistance
6 months	Priority 5	The proposed TA will study lessons learned from the Tafea and Shefa provinces and use these to assist other provincial governments in instituting a consultative process based on the REDI concept to develop their respective development master plans
9 months	Priority 1	The last inventory was done in the late 1980s. The TA will help fulfill a requirement of the approved National Forestry Policy
5 months	Conditional on completion of the Inventory Assessment of Forest Resources Priority 4	The development of a forestry management plan will enable MAQFF to bring together and implement the requirements of the Forest Policy, the Code of Logging Practice, and the proposed Inventory of Forest Resources

Table A10-2: **Vanuatu Agricultural Capacity Building Investment Loan**

No.	Proposed Project	Project Type	Objective
8	Vanuatu Agricultural Development Capacity Building	Investment project (7 years)	To assist the Government in promoting economic growth in the agriculture sector and in creating opportunities for Ni-Vanuatu agricultural smallholders to increase farm incomes and improve their livelihood

Table A10-3: **Components of the Investment Loan**

No.	Component	Component Objectives
a)	Institutional Capacity Building of MAQFF in Policy Planning	To strengthen the capacity of MAQFF to: <ol style="list-style-type: none"> 1. Provide sectoral policy research, planning, and advice to the Government and to other divisions of the MAQFF 2. Develop and implement policy instruments to facilitate private investment 3. Develop a detailed collaborative framework for establishing a working relationship between relevant Government agencies and key stakeholders
b)	Strengthening the Agricultural Extension Services	<ol style="list-style-type: none"> 1. To reorganize the agricultural extension system and the management of extension field activities 2. To strengthen research-extension linkages to ensure that research priorities are responsive to the needs of the private sector 3. To upgrade the skills and expertise of field extension staff by providing in-country and long-term training opportunities 4. To upgrade the extension communication support facilities of the Agriculture Division 5. To upgrade/renovate agricultural extension facilities in the outer islands

Considerations

Conditional on completion and Government approval of:

- Vanuatu National Agricultural Policy
- Human Resource Needs Assessment of MAQFF

Priority 4

Justification

Over the last 7–8 years, the Government has not effectively served the agriculture sector. The project seeks to rebuild the institutional capacity of the newly integrated MAQFF to enable it to contribute to the sustainable development of the agriculture sector

Justification

The newly established Office of the Director-General under MAQFF has no capacity to formulate policy and regulations

In the past, there was no policy imperative for MAQFF to facilitate or establish any collaborative work with the private sector. It lacks the institutional experience to play its role in a policy environment that emphasizes private-sector-led agricultural development

Agricultural extension is weak and ineffective. It has little capacity and technical capability, if at all, to collaborate or lend support to meet the needs of the private sector

There is a serious concern raised by the extension service that it has little or no input into the determination of VARTC research priorities and that these research priorities do not reflect the needs of the sector

There has been little in-service training for field extension staff in the last 3–4 years and no training needs assessment for extension staff. Of over 120 staff (excluding fisheries and forestry), less than 10 have university degrees. More than 96 percent of front-line extension staff do not have formal training in agriculture

Supporting extension media materials such as printed extension materials and radio are more cost-effective than interpersonal channels in the delivery of extension messages over the scattered outer islands. The use of low-cost information technology for extension is to be exploited

Most extension facilities in the outer islands are in need of repair and renovation

APPENDIX 11

Assistance in the Formulation of a National Agriculture Policy for Vanuatu

TA Project Name

Assistance in the formulation of a national agricultural policy for Vanuatu

TA Scope and Objectives

The objective of the technical assistance is to assist the Government in instituting a consultative and participatory process involving stakeholders in the agricultural sector that will lead to the development and formulation of a national agricultural policy.

The TA would develop and implement a participatory process involving a series of working groups, workshops, and summit meetings among all key stakeholders. Stakeholders include the private sector, NGOs, government agencies, community leaders, and political leaders.

The outcome of the TA would be a national agricultural policy document that is accepted by key stakeholders in the agricultural sector and approved by the national and provincial governments and major political parties.

Services

The technical assistance would provide four person-months of consulting services from an international consultant specializing in agricultural policy development. The consultant would be assisted by a team of local counterparts with expertise in policy development, workshop facilitation, and public/media relations.

TA Period

Four months

Implementation Arrangement

The MAQFF would be responsible for implementing the TA with counterpart support provided by the Department of Economic and Social Development.

Recommended Funding Arrangement

ADB advisory TA

APPENDIX 12

Assessment of MAQFF Human Resource Needs

TA Project Name

Assessment of MAQFF Human Resource Needs

TA Scope and Objective

The objective of the TA is to assist the Government in undertaking a comprehensive assessment of the human resource requirements of MAQFF. The TA would determine the optimum level of staffing and staff skills required for MAQFF to effectively provide its core services.

The TA would propose an improved organizational structure for MAQFF and its technical divisions to reflect MAQFF's role in the implementation of national agricultural policy. The TA team, in consultation with central agencies such as the Public Service Commission, the Ministry of Finance, and the Department of Social and Economic Development, would take budgetary and public-sector policy reform implications into account. The outcome of the TA would be a Government-approved report detailing findings and recommendations for the optimum staffing needed to implement national agricultural policy.

Services

The technical assistance would provide 18 person-months of consulting services, comprising eight person-months of international consultants and 10 person-months of domestic consultants. The international consulting team would consist of an organizational management and planning specialist/team leader (four person-months) with relevant expertise in public-sector organizational planning and work experience in developing countries; and an agriculture specialist (four person-months) with relevant experience in the Pacific. The domestic consultants would be specialists in public-sector policy (four person-months); institutional development (three person-months); and agro-forestry (three person-months).

TA Period

Six months

Implementation Arrangement

The implementation of the TA is conditional on the completion of the national agricultural policy. The Executing Agency of the TA would be MAQFF. The Office of the Director-General of MAQFF would supervise the TA work program.

Recommended Funding Arrangement

ADB advisory TA

APPENDIX 13

Project Preparation for the Vanuatu Agricultural Development Capacity Building Project

TA Project Name

Project Preparation for the Vanuatu Agricultural Development Capacity Building Project

TA Scope and Objective

The TA would formulate a sector investment project to strengthen the capacity of the Government agricultural agencies to promote economic growth in the agricultural sector and create opportunities for Ni-Vanuatu agricultural smallholders to increase farm incomes and improve their livelihood.

The TA would identify detailed project components, programs and activities, costs of project components, scheduling of activities, economic analysis of investment benefits, implementation risks, and funding arrangements and prepare an investment project proposal for the Government to present to ADB and/or donors.

Strategies would be developed and implemented under the Project for agricultural smallholders and rural communities to contribute to and benefit from the development of the agriculture sector. To achieve these goals, the Project would be based on an effective working partnership between appropriate Government agencies and the private sector.

The Project would strengthen MAQFF's institutional and technical capacity to facilitate private-sector development, as well as to provide appropriate services to farmers and rural communities.

Project components would include: strengthening MAQFF's institutional capacity in policy planning; refocusing and reorganizing the agricultural extension services; enhancing agricultural research programs; developing skills; and establishing an agricultural training institute.

The Project would be guided by the public-sector reform principles of the CRP. In particular, the MAQFF would be encouraged to be cost-effective in delivering its services, to contract out services, and to charge fees for services where appropriate.

Services

The technical assistance would be implemented over a period of six months by a team of consultants to be recruited through an international firm engaged in accordance with ADB's Guidelines on the Use of Consultants and other arrangements satisfactory to ADB on the engagement of domestic consultants. A total of 36 person-months of consulting services would be required (21 person-months of international consultants and 15 person-months of domestic consultants). The international consultants would comprise: a project design specialist/team leader (six person-months); an agricultural extension management specialist (three person-months); an agricultural research and commodity specialist (three person-months); an agricultural economist/financial analyst (two person-months); a training specialist (two person-months); a curriculum development specialist (two per-

son-months); an infrastructure design engineer (two person-months); and an environmental impact assessment specialist (one person-month). The domestic consultants would have expertise in institutional assessment (four person-months); agricultural extension (two person-months); agronomy and horticulture (two person-months); public sector policy analysis (three person-months); livestock (one person-month); extension communication and media development (one person-month); and rural sociology/community development (two person-months).

TA Period

Six months

Implementation Arrangement

The implementation of this TA is conditional on the completion and approval by the Government of the Vanuatu National Agricultural Policy and the completion of the human resource assessment TA.

Recommended Funding Arrangement

ADB project preparation TA

APPENDIX 14

Capacity Building for the Development of Provincial Development Master Plans

TA Project Name

Capacity Building for the Development of Provincial Development Master Plans

TA Scope and Objective

To assist the provincial governments of Malampa, Sanma, Penama, and Torba in instituting a participatory and consultative process using the Rural Economic Development Initiative (REDI) approach to the development of provincial development master plans.

The REDI is a “bottom-up planning approach” developed by several ministries for the planning and coordination of service provision to the outer islands. The first REDI provincial master plan was prepared for Tafea province in 1999. A donor-funded consultant was recruited to assist Shefa province in using the REDI approach to master plan development.

The proposed TA would study the lessons learned from the Tafea and Shefa province planning exercises and thereby assist other provincial governments in developing their development master plans.

Services

The technical assistance would require 20 person-months of consulting services comprising six person-months for an international rural development planner/team leader and 14 person-months for three domestic consultants (two stakeholder/community participation specialists for four person-months and a rural development specialist for six person-months)

TA Period

Six months

Implementation Arrangement

The executing agency for the TA would be the Department of Economic and Social Development. The work program for the TA would be supervised by the Office of the Secretary-General of the provincial governments of Malampa, Sanma, Penama, and Torba.

Recommended Funding Arrangement

ADB advisory TA or co-funding with bilateral donors

APPENDIX 15

Inventory Assessment of Vanuatu Forest Resources

TA Project Name

Inventory Assessment of Vanuatu Forest Resources

TA Scope and Objective

To assist the Government in preparing an inventory of available forest resources in the country. The last inventory of forest resources was made in the late 1980s. The TA would produce a forest resource inventory to define suitable areas for commercial production within the framework of the National Forestry Policy. The inventory would also provide basic information for planning reforestation projects and other forest operations, using aerial photographs and field sampling; up-to-date estimates of the volume of the remaining resources; yields and products that can be expected; and the precise location of these resources.

Services

The technical assistance would provide the services of an international forest inventory specialist for nine months. The consultant would have the following responsibilities: define areas suitable for commercial timber production; using aerial photographs, map the forests into relatively homogenous strata based on forest type, cover, class, and species distribution; estimate yields within strata; prepare maps showing the location and yields of the various strata defined; and train Forestry Division counterparts in inventory preparation and aerial photo interpretation techniques.

TA Period

Nine months

Implementation Arrangement

The Executing Agency will be the Forestry Division of MAQFE.

Recommended Funding Arrangement

ADB advisory TA or bilateral donor funding

APPENDIX 16

Support for the Development of a Forestry Management Plan

TA Project Name

Support for the Development of a Forestry Management Plan

TA Scope and Objectives

The objective of the TA is to assist the Forestry Division in developing a forestry management plan that would bring together and implement the requirements of the National Forest Policy, the Code of Logging Practice, and the proposed inventory assessment of forest resources. The management plan would form the basis for the preparation of the Forestry Division's annual work plans and budget.

Services

The technical assistance will provide the services of an international forestry management specialist for five months to assist in the preparation of the forestry management plan. The consultant will conduct a series of training workshops for forestry staff in the preparation and use of the management plan in their work programs.

TA Period

5 months

Implementation Arrangement

The implementation of this TA would be conditional on the completion of the forest inventory TA. The Executing Agency of this TA would be the Forestry Division of MAQFE.

Recommended Funding Arrangement

ADB advisory TA or bilateral funding

APPENDIX 17

Proposal for an Investment Project

Project Name

Vanuatu Agricultural Development Capacity Building Project

Project Period

Seven years

Recommended Funding Arrangement

Parallel funding

Project Cost

ADB will fund a PPTA to detail the full components, the associated project costs, and the funding arrangements with other donors.

Brief Project Description

The twin long-term development goals of the Project are: (a) to assist the Government in promoting economic growth in the agricultural sector; and (b) to create opportunities for smallholders to increase farm incomes and improve their livelihood.

Project Scope

The investment project would cover the following:

- Strengthening the institutional capacity of the MAQFF by:
 - developing the capacity of the Office of the Director-General to provide sectoral policy research, planning, and advice to national development agencies as well as support to the technical divisions
 - assisting the MAQFF in developing and implementing policy instruments to facilitate and encourage private-sector investment
 - developing a detailed collaborative framework for a working relationship between relevant Government agencies and key private-sector stakeholders in the agriculture sector. The framework will use case situations to define specific roles and responsibilities. During the loan period the project will implement at least one collaborative effort for development of an export commodity, as a pilot
 - reorganizing the agricultural extension system and the management of extension field activities to support agricultural development initiatives led by the private sector
 - upgrading the skills and expertise of field extension staff by providing in-country and long-term training opportunities
 - upgrading the expertise of Ni-Vanuatu research staff by providing training opportunities and developing a phased program for Ni-Vanuatu to take over the leadership role in planning and managing all the research programs of the VARTC
 - strengthening research-extension linkages, in particular, the role of VARTC in ensuring that research priorities are responsive to the needs of the private sector

- Strengthening research capacities by providing infrastructure facilities to support:
 - the development of key commodities such as kava and food crops
 - the expansion of Vanuatu's agricultural base.
- Developing an institutional framework to enable and encourage more Ni-Vanuatu entrepreneurs to compete for opportunities to profitably participate and invest in the agriculture sector

Procurement and Services

- Upgrading of extension facilities in the outer islands
- Upgrading of the extension communication support facilities of the Agriculture Division
- Development of infrastructure facilities at Efate for establishing research capabilities in kava, commodity diversification, food crops, and indigenous nuts
- Scholarships for Ni-Vanuatu to pursue higher qualifications
- Procurement of office equipment, vehicles, research, and extension equipment and facilities
- Consultancy assistance to the MAQFF in policy planning, extension management, research-extension, training, training and curriculum development, institutional strengthening, farmer organization, extension communication, etc.

Project Implementation

The implementation of the investment project would be conditional on the final approval of the National Agriculture Policy and the agreed staffing requirements of MAQFF as determined by the ADB-TA. The MAQFF will be Executing Agency for the investment project.

APPENDIX 18

Recommended Technical Assistance for Fisheries

The long-term objective is to make the Fisheries Division more efficient in promoting the sustainable development and management of the fisheries sector in Vanuatu so that it contributes more to the country's economic growth.

This will be achieved by strengthening the institutional capacity of the Fisheries Division to effectively administer increased activity in the fisheries sector. While the basic policy framework and supporting laws are being implemented, the Division will begin developing a broad participatory approach, involving other Government departments and authorities and the private sector, to implement effective management arrangements for the sustainable development of the fisheries sector. Industry representatives will be key partners in this endeavor.

The project will begin with a TA to develop a national fisheries policy that will be adopted by the Council of Ministers. The policy will be drafted with the help of all Government departments and authorities, including provincial governments, rural communities, and private-sector representatives.

The TA will also assess the status of fisheries and related laws. It will encourage all Government and private-sector stakeholders in fisheries and fisheries-related fields to participate in identifying the strengths and weaknesses of fisheries and associated laws. Legislative revisions will be recommended to provide the basis for a functional legislative framework for the future development and sustainable management of the fisheries sector for the national benefit of Vanuatu. This TA will have a term of six months.

Simultaneously, a second TA, for a period of five years, will begin a program to improve the institutional capacity of the Fisheries Division to efficiently administer and manage the fisheries sector. The TA will develop a program to achieve significant efficiency gains in the Fisheries Division in respect of the following issues:

- identifying institutional weaknesses in administration and management, corporate planning, structure, functions, and activity areas, including those associated with technical aspects of the Division's work such as data acquisition, analysis, and reporting
- formalizing the relationship between the Vanuatu Maritime College (VMC) and the Fisheries Division
- (with the policy and legislative TA) formalizing responsibilities and links between the Fisheries Division, provincial governments, and the Foreign Investment Board in the administration of near-shore fisheries
- developing consultative mechanisms for the relevant Government authorities and industry to implement strategies for the management and development of the fisheries sector
- implementing management plans for the following fisheries:
 - tuna
 - game fishing
 - aquarium-life fisheries
 - shell fisheries

- bêche-de-mer fisheries
- line fisheries
- resolving issues associated with Vanuatu's responsibilities as a flag state
- addressing constraints on the development of domestic tuna fishing, namely, the relatively high cost of power and diesel fuel and the operation of international airfreight carriers, and developing a strategy to promote the growth of this industry
- developing a program of support for private-sector interest in promoting Vanuatu's recreational sports fishery

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