

# Overview of Agriculture and Fisheries

## Contribution to GDP and Income

Economic growth in Vanuatu over the past 20 years has been slow by world standards (Figure 2A). Real gross domestic product (GDP) has grown at an average annual rate of only 2.2 percent since 1983, lagging behind the rate of population growth. Real GDP per capita in 1999 was almost 10 percent lower than in 1983.

In 1999, per capita GDP was around US\$1,100. This figure bears little relation to the living standards of the Vanuatu people because market activities are dominated by a small expatriate community. Ni-Vanuatu<sup>5</sup> still participate only to a limited extent in the formal economy; most rely on subsistence farming to meet their needs. The subsistence sector probably contributes much more to living standards than estimates of its value added in the national account would indicate. Subsistence farming and fishing in Vanuatu fill a high proportion of the nutritional needs of the people. But there is some malnutrition, particularly among the children of poor families.

Up-to-date employment data are not available in Vanuatu.<sup>6</sup> However, the following information can be extrapolated from the 1989 Population Census and previous studies. Out of a population of around 193,000 around 90,000 are economically active.<sup>7</sup> Allowing for some decline in the proportion employed in agriculture since the 1989 Census, around 75 percent of these economically active individuals, or about 67,000 persons, are employed in agriculture, forestry, and fishing, mostly in subsistence farming or fishing, with some cash sales. This means that only around 23,000 are employed outside agriculture.

In 1999, agriculture, forestry, and fishing (including subsistence-level activities) contributed 23 percent of GDP, below their share in 1983 (Figure 2B). These have generally performed below the average for the economy,<sup>8</sup> their real value added rising at an average annual rate of only 1.6 percent between 1983 and 1999. Excluding subsistence farming, commercial agriculture accounted for 13 percent of GDP in 1999, as against 15 percent in 1983. Industry, including construction, manufacturing, and electricity, contributed

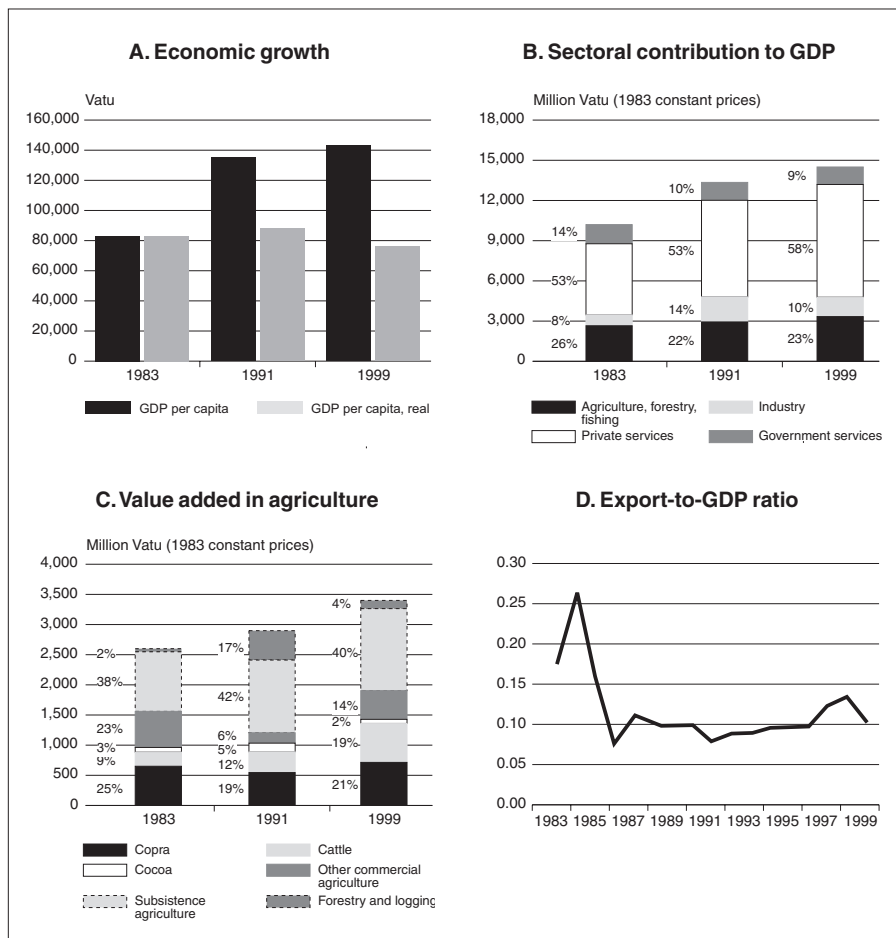
<sup>5</sup> The term used to refer to the people of Vanuatu, excluding expatriates.

<sup>6</sup> An employment census is to be held in 2000.

<sup>7</sup> Considered economically active are residents aged 15 years and over who participate in some form of economic activity, either paid employment or subsistence farming.

<sup>8</sup> While agriculture and fisheries have grown at a below-average rate over the past decade, forestry, according to the Forestry Division, has increased its share of GDP.

Figure 2: Contribution of Agriculture, Forestry, and Fisheries to GDP



Source: Reserve Bank of Vanuatu (1999)

about 10 percent of GDP in 1999; manufacturing's GDP share was only 4 percent. The high share of services may reflect past policies that discriminated against the traded goods sector.<sup>9</sup>

The commercial sector continues to focus on a few commodities (Figure 2C). In 1999, commercial production was mostly copra, cocoa, kava, and beef, and copra and beef together accounted for 68 percent of commercial value added. The past 16 years have seen only limited diversification, although dependence on copra has fallen somewhat.

<sup>9</sup>The traded goods sector includes exporting and import-competing industries.

Vanuatu derives little economic benefit from offshore fisheries other than the income from access fees paid by foreign-based fishing vessels, and the fees are on the low side. Deepwater snapper fisheries supply domestic markets with around 80 tons of fish each year; small quantities are exported. Local markets also absorb about 40 tons of shallow-water reef fish and coastal pelagics each year. These small fisheries have an annual value of around Vt48 million to coastal communities throughout the country. The trochus fishery in particular yields cash income of Vt25 million annually. Smaller fisheries, principally bêche-de-mer and, to a lesser extent, aquarium life, green snail, and crustacean fisheries contribute about Vt15 million.

Vanuatu's coastal fishery harvests a diverse array of marine and freshwater life for local sale and consumption in rural areas. There are no accurate figures to establish the actual size of this artisanal and subsistence fishery, and opinions about the subsistence value of fish and shellfish to rural populations vary significantly. The subsistence harvest in 2000 was about 2,400 tons. This fishery provides food security to the country besides being an important source of protein to local communities.

The GDP share of agriculture and fishing understates the contribution of these sectors to living standards in Vanuatu. Almost 80 percent of the population lives in the rural areas and grows food for subsistence and cash needs. Many in the urban areas supplement their cash incomes by gardening. The subsistence sector appears highly productive and, with the available resources and technology, fairly efficient. The reservation wage is relatively high. This means that the opportunity cost of time spent in commercial activities rather than in subsistence activities is relatively high.

Agriculture in Vanuatu has undergone a significant shift in the past 20 years. The plantation sector, particularly copra and cocoa, has declined, and smallholders have increased their contribution to commercial agriculture. Recent developments in major crops and major fisheries are described in Appendixes 4 and 5. As discussed in Appendix 4, cost advantages and lower exposure to disease, pests, and climate risks favor smallholders over the plantations in the production of crops such as copra, cocoa, coffee, kava, root crops. But while smallholders may have increased their contribution to commercial output, this outcome is by no means efficient. Because of their relatively high opportunity costs of labor (mainly subsistence wages), low capital inputs, and small scale of production, smallholders are high-cost producers. Commercial sales returns are low and often not worth the time that could otherwise be devoted to subsistence

farming. Smallholders often sell part of their crop to meet their cash needs (for education, travel, health, and other expenses).

It is wrong to write off the larger-scale plantation sector. Small is not necessarily better, even in Vanuatu. Plantations are merely much more affected than smallholders by many constraints. These include the high costs of imported inputs and transportation, unreliable supply of labor, climate risks, and the difficulty of assembling viable tracts of land and obtaining credit on competitive terms.<sup>10</sup> Economic distortions arising from Government policies and regulations have dictated the pattern of agricultural production in Vanuatu.

### Contribution to Exports

Vanuatu's terms of trade<sup>11</sup> have markedly declined over the past two decades. The prices of copra, cocoa and beef have fallen by around 50 percent in real terms since the early 1980s (Figure 3A). Vanuatu exports its commodities to world markets where demand is sluggish or falling because of the emergence of low-cost substitutes or excess supply. These markets offer little potential for export-led growth.

The commercial agriculture sector is highly export-oriented. Much of the production is exported, and agriculture accounts for almost all merchandise exports. Vanuatu's exports continue to be dominated by a few commodities (Figure 3B). Vanuatu has not diversified its export base to any significant extent over the past decade and has not increased the degree of processing of agricultural exports, except for the processing done in the new coconut oil mill on Santo<sup>12</sup> and in the forestry industries.<sup>13</sup>

In 1989, 91 percent of the value of merchandise export earnings came from copra, cocoa, beef, and timber (see Figure 4). By 1999,

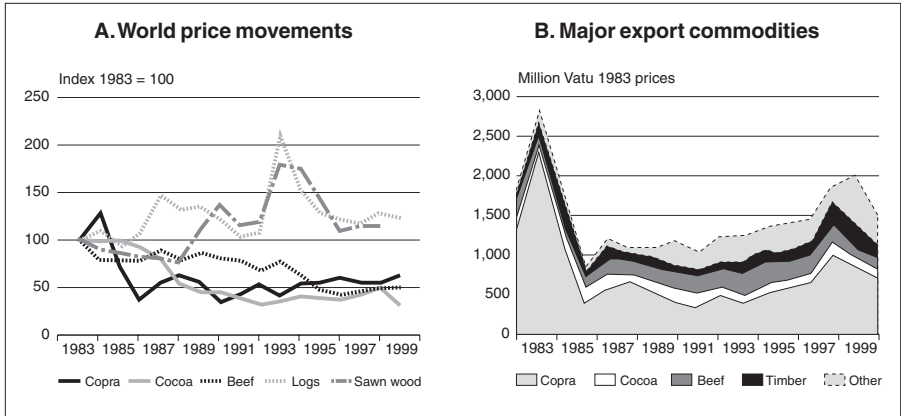
<sup>10</sup>The plantation sector received a considerable setback upon independence when land was redistributed to traditional owners. Moreover, governments and donors sponsored many plantation projects, which were subsequently mismanaged by politically appointed managers. The beef industry has a number of viable large holders, indicating that commercial agriculture can be profitably practiced in Vanuatu.

<sup>11</sup>The ratio between the prices of two countries engaged in international trade.

<sup>12</sup>There are proposals to build several other coconut oil mills.

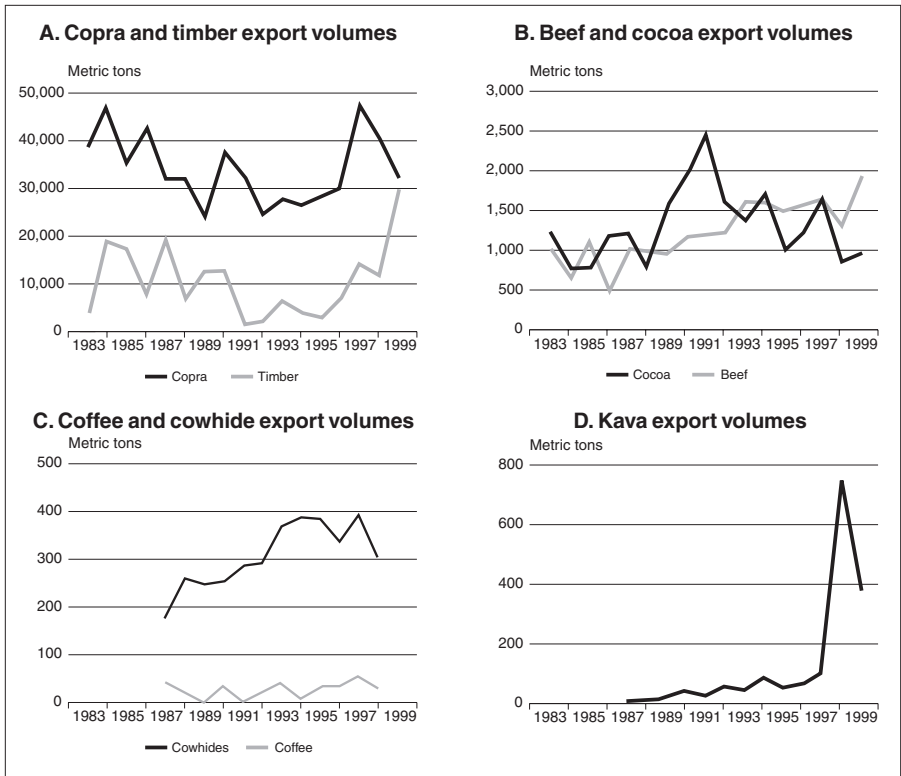
<sup>13</sup>Over the past decade there has been significant investment in processing facilities for forestry products. Santo Veneers invested over US\$20 million in 1995 to build a sawmill in Luganville. Melcoffee Sawmills has invested in kiln dryers and other equipment and expanded its product range to include finger-jointed and glue-laminated boards. Sandalwood oil was exported for the first time in 1999, after over 150 years of exporting unprocessed sandalwood. A second sandalwood oil plant expects to export oil in 2001. According to the Forestry Division, one of the first steps taken after the adoption of the National Forest Policy was the implementation of a new regulatory framework for sandalwood which has provided security for investors and an improved and more sustainable long-term return to landowners.

Figure 3: Contribution of Agriculture, Forestry, and Fishing to Export Earnings



Source: Vanuatu Statistics Office (1999)

Figure 4: Trends in the Volume of Major Exports



Note: Cowhide exports are stated in number of hides  
 Source: Reserve Bank of Vanuatu (1999)

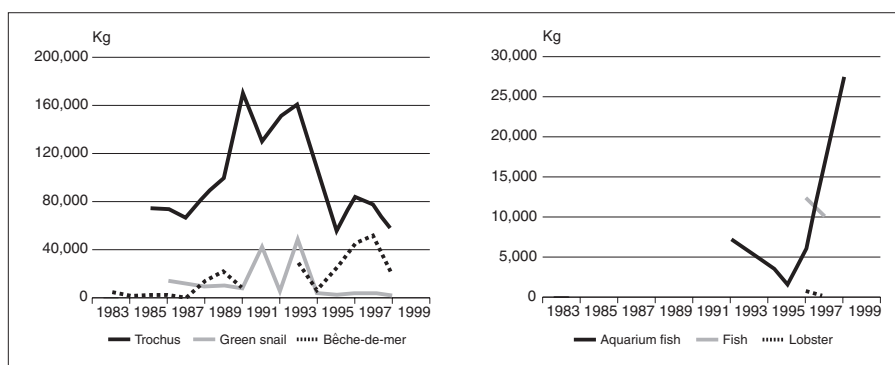
these four commodities were contributing 76 percent. Vanuatu remains highly dependent on a small group of commodity exports that are prone to sharp fluctuations in supply due to cyclones, and volatile and declining world prices. Dependence on copra exports, while less than in the past, is still high. In 1999, copra accounted for 46 percent of merchandise export earnings. Cocoa export earnings fell over the period as a whole and earnings from beef exports have not grown.

Few new export commodities have emerged in any significant way over the past decade. Squash, for which Vanuatu later lost its market in Japan to Brazilian exporters, and kava were the exceptions. Kava exports, which supplied new markets in the pharmaceutical industry, grew strongly from the mid-1990s to a 23 percent share of export earnings in 1998. But the export volumes achieved in 1998 were not sustainable and kava export earnings dropped by about half in 1999.

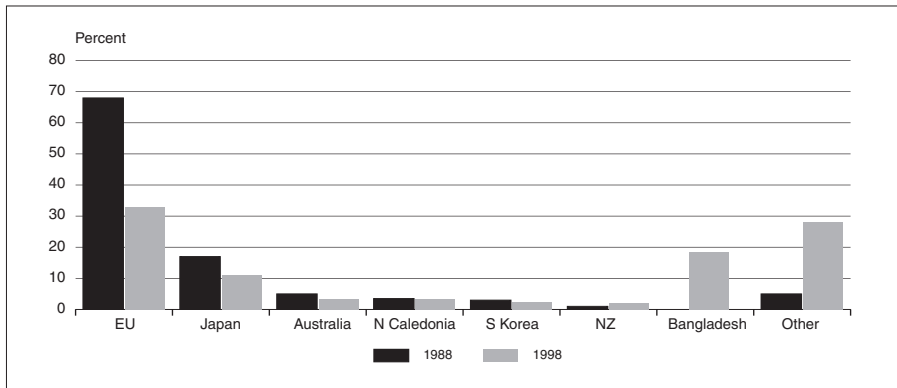
With no local tuna industry, Vanuatu derives its fisheries production chiefly from near-shore coastal areas. Shell has represented about 90 percent of marine product exports in most years, with an annual average value of Vt98 million during the last decade (see Figure 5). Other exports are aquarium life, bêche-de-mer, lobster, coconut crab, and finfish. Marine exports contributed only 3 percent of Vanuatu's export earnings on average during the last decade.

Other agricultural products valued at Vt13 million were exported in 1999. The most important of these was ice cream, at around Vt9 million. However, dairy products in Vanuatu are protected by high import duties. The other products were taro, ginger, and coconut oil, valued at around Vt1 million each, and small amounts of pepper and "other vegetables."

Figure 5: Volume of Main Fisheries Exports



Source: Fisheries Division data

Figure 6: **Vanuatu's Export Destinations** (share of total export values)

Source: Vanuatu Statistics Office (1999 and previous issues)

The destination of exports has diversified somewhat. The share of the European Union (EU) remains high but has fallen substantially since the late 1980s (Figure 6). Vanuatu's exports to the EU (mainly copra and cocoa) were influenced by preferential access to European markets and by Stabilization of Export Earnings Scheme (STABEX) funds. With the phasing out of these arrangements, additional markets need to be found. There are some promising developments in this regard. Important recent trades were those of copra to Bangladesh, beef to PNG and New Caledonia, kava to Europe and the US, and timber exports to Japan, South Korea, and Taipei, China.

The ratio of the value of the country's merchandise exports to GDP has hovered around 0.10 since the mid-1980s (Figure 2D)—extremely low by international standards. This is indicative of the emergence of a closed economy that has relied excessively on trade taxes (high import duties and export taxes) to fund Government expenditures. The exports-to-GDP ratio rose sharply in 1998—this rise was almost entirely due to the “kava boom”<sup>14</sup>—but later fell back to its long-term level.

Vanuatu's agricultural and fisheries resources have had limited commercial development, and its export earnings remain dependent on a narrow range of unprocessed products. However, these resources are important in providing a relatively high subsistence-based living standard and a high level of food security. An important trend in the past two decades has been the demise of the plantation sector and the growing importance of smallholder cash sales.

<sup>14</sup>The sharp increase in both the volume and the value of kava exports in 1998.

## Recent Policy Reforms

Agriculture and fisheries are subject to the Comprehensive Reform Program (CRP), with its economy-wide as well as sector-specific measures. The major CRP areas of reform and actions that have significant implications for Vanuatu's agriculture and fisheries are summarized in Appendix 6. The CRP focuses on public-sector reform and on financial and economic reform. Key aspects of public-sector reform include: determining the core functions of government; rightsizing,<sup>15</sup> restructuring, and improving the efficiency of the public service; improving government decision making; and reducing political interference in the management of statutory and state-owned bodies. A major objective of the CRP is to stimulate private sector-led economic growth. This marks a departure from past policies of direct Government intervention in production and restricted development of competitive markets through impediments to trade, investment, and competition. According to the CRP (p 9):

The public sector can be more efficient if it restricts itself to core activities and plays a facilitating role in other areas.... Most attempts by Government to involve itself directly in creating economic growth have failed.... Therefore the central theme of CRP must be private sector led growth.... To the extent that the Government has become involved inappropriately in commercial activities, redefinition will entail a contraction. But this does not imply that its role will become less important.

Promoting private-sector development will involve redefining the role of the public sector. The CRP defines the future role of the public sector as:

- Making and enforcing laws, and maintaining law and order, external relations, and defense
- Issuing currency and foreign exchange, and setting and carrying out macroeconomic and other policy
- Facilitating private development subject to regulations to protect the national interest
- Providing infrastructure, health, education, and other community services
- Redistributing resources through taxation and expenditure policies
- Leading change in the country's policies and institutions

<sup>15</sup>The CRP defines "rightsizing" as "increasing or decreasing the size of an organization as necessary to match its tasks. It entails defining the task and finding ways to fulfill it with a high level of efficiency" (CRP page 24). In practice, rightsizing has meant downsizing with little or no attention given to the appropriate tasks of each ministry and the staff resources required to efficiently undertake these tasks.

The CRP will progressively reduce Government intervention in commercial activities and enhance the role of the private sector by:

- Strengthening the policy and regulatory framework for a stable, competitive business environment
- Restructuring, rehabilitating, and strengthening public financial institutions
- Implementing a program of corporatization and privatization of state-owned enterprises
- Promoting private investment, particularly for small enterprises in rural areas, and the participation of Ni-Vanuatu in business
- Enhancing the international competitiveness of Vanuatu's exports and of the country as a place for investment by reducing the costs of doing business, introducing a business-friendly tax regime, improving public infrastructure and utilities, and introducing tariff reforms

Notable achievements under CRP that will benefit the agriculture and fisheries sectors are:

- The abolition of export taxes, some reductions in tariffs, the removal of turnover taxes, and the introduction of a value-added tax. Nevertheless, tariffs remain high and detract from the international competitiveness of agriculture and fishing.
- Progress in removing the monopoly powers of the Vanuatu Commodity Marketing Board (VCMB). Developments in marketing need to be monitored, however, as the end of the VCMB's monopoly powers does not necessarily herald the end of Government intervention in marketing.
- The removal of monopoly import licenses. However, local markets for food products are still subject to a number of anticompetitive regulations that restrict market development.
- The removal of restrictions on entry into interisland shipping. While not much has improved to date, there is some interest from foreign vessel operators in providing interisland shipping services.<sup>16</sup>
- The ongoing review and reform of loss-making state-owned enterprises through corporatization and privatization. Progress has been slow and there is evidence of some backpedaling in this area.
- The restructuring of the Ministry of Agriculture, Quarantine, Forestry, and Fishing (MAQFF) and the introduction of measures to reduce political interference in its affairs.

<sup>16</sup>Discussions have been held with the Vanuatu Maritime Authority.

- The Foreign Investment Act, which addressed many of the concerns of foreign investors. However, certain activities are still limited to Ni-Vanuatu and residents, and even for unrestricted activities the necessary approvals can be difficult or time-consuming to obtain.

Agriculture and fisheries have not benefited from certain areas of reform, particularly public-sector reform. Reform has severely reduced the capacity of the MAQFF to provide resource management, extension, policy development, and other services to agriculture and fisheries. The “rightsizing” exercise, on top of the 1993 public service strike and sackings, has reduced staff and other resources to a point where the MAQFF can achieve very little. The benefit it currently provides to agriculture and fisheries is small relative to the amounts spent on its own activities.

Although the MAQFF has failed, for various reasons, to undertake a number of CRP actions that would have been of longer-term benefit to agriculture and fisheries, the Quarantine Division has introduced user pay-based cost recovery in a number of its services and plans to move to full cost recovery over the next five to ten years. The Division has also taken an initial step toward contracting out services.<sup>17</sup> Other MAQFF divisions have made little or no progress.

Under the CRP, the MAQFF is to review its activities and to introduce user payment where appropriate. Departments or agencies that provide goods or services to the public (or other parts of the public sector) would be required to review their charges and to move toward full cost recovery.<sup>18</sup> Some services provided by the MAQFF are, or could be, provided by the private sector. To develop private providers, public provision should not undercut private provision.

Under the CRP, each ministry is to “examine the scope for contracting out services the Government is now providing but which would more efficiently and effectively be provided privately under a contractual arrangement” (page 29). A priority area for contracting out in agriculture and fisheries is the management of Government projects and any service involving the provision of professional skills.

<sup>17</sup>The Quarantine Division says that contracting out the provision of services at the small animal clinic in Port Vila has lowered the cost of drugs, given the veterinary officer more time to perform core functions, and allowed funds to be directed to animal health programs.

<sup>18</sup>The purpose, according to the CRP, is threefold: to increase Government revenues other than through taxation while reducing demand for underpriced services; to allow private-sector providers to compete with the Government on equal terms; on equity grounds, to require recipients of Government services to meet their true costs.

While there is general agreement in the Government that research may be contracted out, extension services are still considered as not suitable for contracting out. More thought must be given to this area, especially since the MAQFF has done so poorly in extension in recent years despite allocating a high proportion of its budget to the services.

Moreover, MAQFF has not yet implemented specific actions that, according to the CRP, were designed to increase agricultural production. These include the preparation and implementation of a five-year plan (a corporate plan and business plans have been prepared); the creation of a meat and livestock corporation; with a business management unit; the withdrawal of Government from commercial activities (the fisheries company has been privatized but the disposal of Belmol Cattle Estate and Metanasel Cocoa Estate has been stalled); and the establishment of a fisheries management advisory committee. Anyhow, these modest sector-specific initiatives, even if implemented, would not have increased agricultural and fisheries production significantly because they do not deal with the real impediments to agricultural and fisheries development.<sup>19</sup>

### **The Ministry of Agriculture, Quarantine, Forestry, and Fisheries**

The CRP restructuring created the five divisions of the MAQFF (see Figure 7) from the former departments of agriculture, livestock, forestry, and fisheries. The position of Director-General was created, with responsibility for the overall management of the MAQFF. The structure of the MAQFF was designed to ensure, among other things, that political advisers and the Minister could not interfere in the day-to-day operations of the divisions. All policy advice must go through the Director General to the Minister. Directors of the divisions report to the Director General, who in turn reports to the Minister.

A total of Vt760 million (US\$5.8 million) was available for the Ministry's programs in 2000. Division funding by source (Government contribution, aid in kind, and donor grants) is summarized in Table 1. The MAQFF received Vt302 million (US\$2.3 million) in

<sup>19</sup>The creation of a meat and livestock corporation would also appear to be inconsistent with the Government withdrawing from agricultural production. While little detail is available on the concept, it would appear that the Government has in mind an organization that would promote livestock exports and provide services to the industry. It is also not clear whether this entity would be owned by the state or by farmers.

Figure 7: Structure of the Ministry of Agriculture, Quarantine, Forestry, and Fisheries

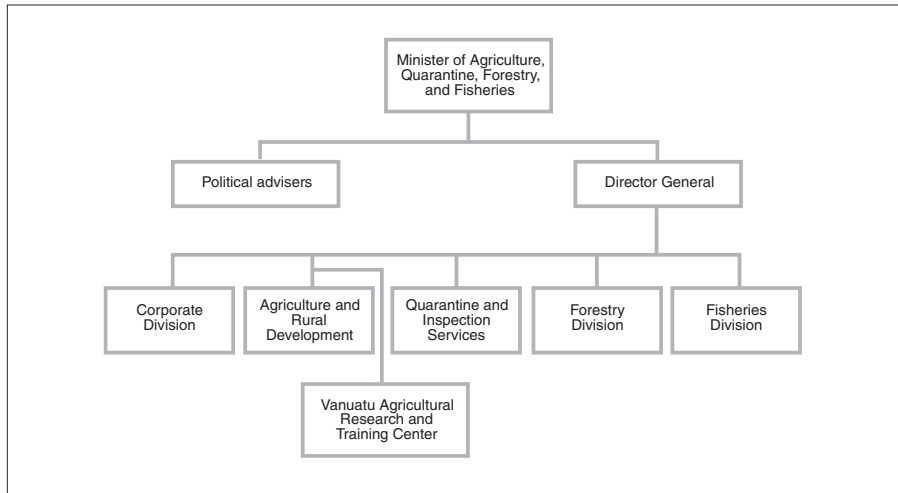


Table 1: MAQFF Budget Allocation by Division, 2000 (vatu)

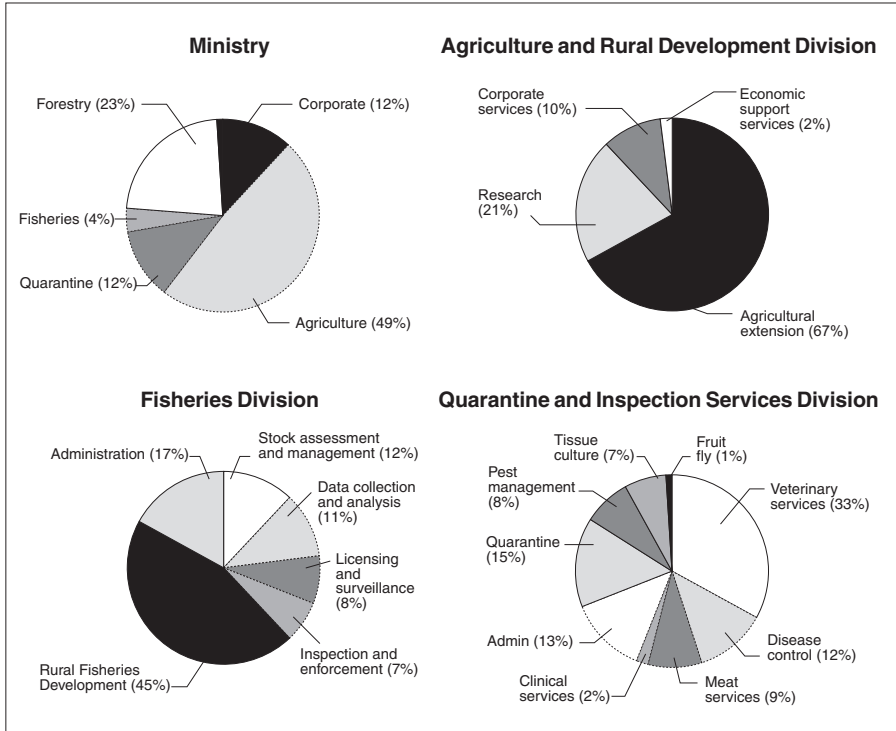
Division	Total, 2000	Percent Allocation	Sources of Funding		
			Government Contribution	Aid in Kind	Donor Contribution
Corporate	89,706,488	12	18,882,988	70,823,500	0
Agriculture	369,960,457	49	117,757,148	218,288,309	33,915,000
Quarantine	92,172,000	12	85,847,000	0	6,325,000
Fisheries	31,360,331	4	29,118,029	0	2,242,302
Forestry	177,173,798	23	51,039,848	124,136,450	1,997,500
<b>Total</b>	<b>760,373,074</b>	<b>100</b>	<b>302,645,013</b>	<b>413,248,259</b>	<b>44,479,802</b>
<b>Total (US\$)</b>	<b>5,804,375</b>		<b>2,310,267</b>	<b>3,154,567</b>	<b>339,540</b>

Source: Government of Vanuatu (2000)

budget allocation from the Government, Vt413 million (US\$3.1 million) in aid in kind, and Vt44 million (US\$339,540) in donor grants. Agriculture took up the largest share, 49 percent, followed by Forestry with 23 percent. The Quarantine and Corporate divisions each received about 12 percent,<sup>20</sup> while Fisheries accounted for only 4 percent of the budget. (See Figure 8.)

<sup>20</sup> Although the share of the former is almost entirely due to an ADB technical assistance project.

Figure 8: Allocation of Funding to Broad Categories of Activity in MAQFF



Source: Government of Vanuatu (2000)

Donor-funded or co-funded projects are predominantly in agriculture, which accounted for 89 percent of the total spending projected for 2000. Fisheries, forestry, and quarantine received little donor funding. Donor projects in agriculture are mainly in extension and research. In extension, the focus is very much on developing and advising cooperative groups of farmers.

The Director General supports and advises the Minister, and provides guidance to the various divisions of the Ministry; ensures that the divisions carry out their duties; identifies and addresses weaknesses in the divisions; ensures that programs are consistent with CRP principles; and develops appropriate policies for implementation by the divisions and assists the divisions in coordinating and implementing policies.

The Corporate Development Division provides policy advice to the MAQFF; assists the divisions in staff recruitment and training, budget control, and asset planning and allocation; and undertakes performance monitoring of MAQFF programs. The Division gives

the Minister the capacity to exercise central control over budgets and staffing. It also undertakes research and provides policy formulation and advice.

The Division of Agricultural and Rural Development (DARD) in Tagabe near Port Vila serves the agriculture and livestock industries. The Division has two sections,<sup>21</sup> Administration and Agricultural Extension Services, and a research and training center, the Vanuatu Agricultural Research and Training Center (VARTC). Extension accounts for 67 percent of the total expenditure of the Division, research 21 percent, corporate services (mainly administration) 10 percent, and economic services (including market support) 2 percent.<sup>22</sup>

The VARTC conducts agronomic (cash and food crops) and livestock research and trains Agriculture Division staff.<sup>23</sup> These services are provided under a contract with the Government. The center is funded partly by the Government and partly by donors. It is accountable to the Government through a steering committee chaired by the Director General of the Prime Minister's Department and consisting of staff of the Government and of the Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), France. The VARTC was created in 1993 and has been managed under contract by CIRAD since 1994 and headed by a management team headed by a CIRAD-funded expatriate Director.

The Vanuatu Quarantine and Inspection Service Division (VQIS) is a new division that assumed the regulatory functions of the former departments of livestock, agriculture, and fisheries. The Division also provides plant protection services to farmers.

Two institutions are involved in Vanuatu fisheries, the Fisheries Division and the Vanuatu Maritime College (VMC).<sup>24</sup> The Fisher-

<sup>21</sup> In 1998, the Division disagreed with the organization structure proposed by the Director General because the number of staff positions proposed was considered excessive in relation to the budget available. The Division then developed its own organizational structure. Its role was reduced to two main functions: (a) crop and livestock extension services, and (b) oversight and support for the activities of the Vanuatu Agricultural Research and Training Center (VARTC).

<sup>22</sup> There are inconsistencies between the budget and the business plan. The Review Team was unable to reconcile the budget submission with the business plan. There is no standard approach to business plans across divisions and no centralized coordination. As a result, the allocation of funds in the budget is only broadly indicative of the amount to be spent on these activities.

<sup>23</sup> All agricultural research programs, except for regionally funded research initiatives, are now undertaken by the VARTC, with facilities in Santo. There are no built-up research facilities on any other islands, including Efate, where the headquarters of all agricultural agencies are located.

<sup>24</sup> VMC is the result of an amalgamation, in 1998–1999, of the Marine Training School operated by Ports and Marine in Port Vila and the Fisheries Division's Fisheries Training Center at Luganville. VMC is a limited guaranteed company owned by the Government. The Director of Fisheries is Chairman of the VMC Board. VMC shares a site at Luganville with the Fisheries Division.

ies Division takes primary responsibility for fisheries administration and management. The VMC has traditionally focused on training for seamen, but there is considerable interest, and scope, for its gradual involvement in training programs for small-scale local fishermen.

This review does not cover the forestry sector. However, since the MAQFF is also responsible for forestry, some comments are in order. Of the five divisions in the Ministry, the Forestry Division is perhaps the best focused on its core activities and has the most capacity to carry them out. The Division had a staff of 38 and a recurrent budget of Vt50 million funded by the Government for each of the years 1999 and 2000.

The functions of the Forestry Division are grouped into four main programs:

- Corporate Services, involving forest policy, budget and administration, and legislation
- Forest Management and Industry, involving forest resource management, logging planning and supervision, and mapping and inventory
- Forest Conservation and Extension, involving afforestation and conservation
- Forest Research, covering tree growth monitoring, nursery management, and seed collection and distribution

A National Forestry Policy was put in place in 1997 following a two-year consultative process. The policy outlined a vision for the forestry sector, objectives, and detailed policies and strategies. It identified the need for a logging code to set the minimum standards for the forestry operations. AusAID assisted the Division with a five-year project, the Vanuatu Sustainable Forest Utilization Project, completed in early 2000. Among the outputs of the project was the development of the Code of Logging Practice (COLP) and staff training manuals.

In its discussions with the Forestry Division, the Review Team identified two tasks in forestry that need urgent attention—an inventory assessment of Vanuatu's forest resources and the development of a forestry management plan. These were considered to be beyond the capacity of the Forestry Division to satisfactorily carry out without technical assistance. Proposed technical assistance projects for the forestry sector are set out in Appendixes 15 and 16.

## Conclusions

Agriculture, forestry, and fishing contribute in a major way to living standards in Vanuatu. They are important to subsistence and pro-

vide a high degree of food security. At present, most Ni-Vanuatu have access to land while those in urban areas have supplies sent over by relatives in rural areas. The contribution of the sector to the commercial economy, in terms of its contribution to GDP and exports, is also critical. Agriculture accounts for almost all of Vanuatu's merchandise exports.

However, the commercial development of agriculture and fishing over the past 20 years has been slow. Commercial agriculture has grown at an average annual rate of only around 1.6 percent, below the rate of growth of the economy as a whole. The agriculture sector has not diversified to any great extent and Vanuatu remains dependent for its merchandise export earnings on a narrow range of unprocessed commodity exports. Five commodities—copra, cocoa, kava, beef, and logs—accounted for 90 percent of Vanuatu's export earnings in 1999 and these same commodities, except for kava, accounted for a similar percentage of export earnings back in the early 1980s. No significant new export commodity other than kava emerged over this period.

The fisheries sector makes a small contribution to export earnings, far less than it did in the 1980s when there was a tuna export industry on Santo.