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Abbreviations

ADB	Asian Development Bank
ADS	Australian development scholarship
AusAID	Australian Agency for International Development
CFC	Community fisheries centers
CFTC	Commonwealth Fund for Technological Cooperation
CIF	Cost, insurance, freight
CIF	Consolidated Investment Fund
CPI	Consumer price index
CSD	Central Statistics Division
CTC	Community training center
DBT	Development Bank of Tuvalu
DCC	Development Coordination Committee
DOE	Department of Education
DWFN	Distant Water Fishing Nations
EDF	European Development Fund
EEZ	Exclusive economic zone
EFL	Education for Life
EKT	Ekalesia Kelisiano Tuvalu (Congregational Church of Tuvalu)
FFA	Forum Fisheries Agency
FICs	Forum Island Countries
FJC	Fiji Junior Certificate
FOB	Free on board
FTF	Falekaupule Trust Fund
GDP	Gross domestic product
GNP	Gross national product
GOT	Government of Tuvalu
HDI	Human development index
HPI	Human poverty index

INTOSAI	International Organization of Supreme Audit Institutions
MEET	Ministry of Environment, Energy and Tourism
MESC	Ministry of Education, Sports and Culture
MFEP	Ministry of Finance and Economic Planning
MNREE	Ministry of Natural Resources, Environment and Energy
MOE	Ministry of Education
MOH	Ministry of Health
MPSC	Manpower Planning and Scholarship Committee
NAFICOT	National Fishing Corporation of Tuvalu
NBT	National Bank of Tuvalu
NEMS	National Environmental Management Strategy
NZODA	New Zealand Overseas Development Agency
OAG	Office of the Attorney General
OPM	Office of the Prime Minister
PAC	Public Accounts Committee
PACER	Pacific Agreement on Closer Economic Relations
PICTA	Pacific Island Countries Trade Agreement
PMH	Princess Margaret Hospital
PSC	Public Service Commission
PSIP	Public Sector Investment Program
SDA	Seventh Day Adventist
SPBEA	South Pacific Board of Educational Assessment
SPC	Secretariat of the Pacific Community
SPREP	South Pacific Regional Environment Program
STR	Student teacher ratio
TAC	Total allowable catch
TCTC	Tuvalu Coconut Traders' Cooperative
TEC	Tuvalu Electricity Corporation
TMC	Tuvalu Media Corporation
TMTI	Tuvalu Maritime Training Institute
TNPF	Tuvalu National Provident Fund

TPB	Tuvalu Philatelic Bureau
TTC	Tuvalu Telecommunications Corporation
TTF	Tuvalu Trust Fund
TTFAC	Tuvalu Trust Fund Advisory Committee
UNDP	United Nations Development Program
USP	University of the South Pacific
VLH	Vaiaku Lagi Hotel
WCPO	Western Central Pacific Ocean
XB	Extra-budgetary

Currency Equivalents
(as of 16 May 2002)

Currency Unit	–	Australian dollar (A$)
A$1.00	=	US$0.5490
US$1.00	=	A$1.82

In this Review, "$" refers to Australian dollars, unless shown otherwise.

Weights and Measures

In this Review, "ton" refers to metric tons.

Glossary

DotTV (.tv)	the international abbreviation for a country that has become a popular Internet domain
Fakaifou	civil servant housing area
Fale I Fono	House of Assembly
falekaupule	traditional discussion-making body on each island
fatele	local dances
fusi	copra shed cooperative
Kakeega o Tuvalu	National Development Strategy — 1995-1996
kaupule	island council, local government
maneapa	communal meeting house
tafalua	second reef

Foreword

This report is a joint product of the Asian Development Bank and the Australian Agency for International Development. It analyzes the economic situation of Tuvalu, and examines key issues, including natural resources, health, education, and the public sector.

The country is economically and socially stable, and the Tuvalu Trust Fund provides a cushion against external shocks. However, its smallness, isolation and lack of resources set a continuing governance challenge. To meet it, the Government must exercise fiscal prudence and ensure that essential services are provided in the most effective way.

The Government's broad ambition, as stated in its National Development Strategy, is "to provide an environment, based on existing culture(s), within which all of the people of Tuvalu can strive to attain the highest possible standard of living." To achieve this goal, the effective delivery of public services and improved economic infrastructure are targeted objectives.

All providers of public services are state-owned. The Government strives to ensure that the necessary services are managed at the least cost, while at the same time guaranteeing the social wellbeing of all Tuvaluans, especially those who live on the outer islands.

This report is designed to assist the Government in making the best decisions to enable it to meet effectively its dual obligations.

Tuvalu is always going to be prone to external shocks, but with good governance it can continue to be successful.

Vulnerability is inevitable; viability is achievable.

Jeremy Hovland
Director General
Pacific Department
Asian Development Bank

Executive Summary

Introduction

Tuvalu's population of approximately 10,300 has a level of human development in the middle range of Pacific island countries and a low incidence of poverty. There is access to basic subsistence resources, and real GDP per head grew at the average annual rate of 3.7% between 1988 and 2001. Income from abroad has grown substantially in recent years, primarily through more Tuvaluan seamen working in the merchant marine, higher fisheries license fees, and increased revenue from marketing Tuvalu's Internet name DotTV.

Growth in the formal economy has concentrated on Funafuti with associated inequality of income distribution. Concern over this inequality has motivated efforts to develop the outer islands.

A new medium-term development strategy is needed. The *Kakeega o Tuvalu, National Development Strategy—1995 to 1998* which still serves as the Government of Tuvalu's (the Government) basic strategy document presents five priorities:

(i) reforming the public sector;
(ii) encouraging export-oriented business investment and overseas employment;
(iii) improving economic infrastructure, particularly interisland shipping and telecommunications;
(iv) promoting Education for Life (EFL); and
(v) upgrading human settlements.

This Review investigates progress in achieving the development policy objectives of higher living standards and greater equality of income through implementing the five priorities.

Macroeconomic Developments

Real gross domestic product (GDP) grew at an average annual rate of approximately 5% from 1988 to 2001, led mainly by the tertiary and Government sectors. The secondary sector expanded strongly, largely as a result of construction activity, while the primary sector grew sluggishly. Gross national disposable income has been substantially higher than GDP because of remittances from overseas workers, property income from overseas assets, and current transfers from abroad.

Available data suggest that overall employment in the formal sector grew at the average annual rate of 2.2% between 1991 and 2001. There was relatively rapid growth in employment in public corporations, modest expansion in the number of established civil service positions, and limited growth in private sector activity.

Inflation declined substantially in the 1980s and, after double-digit inflation in 1991, has since remained in the 0-6% range. The real value of civil servants' wages increased significantly between 1991 and 2001, although there is inequitable treatment of civil servants because all receive a housing allowance but only some obtain housing at subsidized rentals.

The National Bank of Tuvalu (NBT) has operated profitably, returning an average 58.3% on net assets before tax between 1990 and 2000, and contributing an annual average of $507,000 in company tax and dividends to the Government. Relatively high interest spreads, fees, and commissions suggest that regulation is required to avoid excessive monopoly pricing that hinders private sector development.

The Tuvalu National Provident Fund (TNPF) membership grew from 1,136 in 1984 to 3,726 in 2000. The return on net assets averaged 9.2% during this period, but fluctuated between a high of 15.3% in 1993 and a low of minus 1.7% in 1999. The Development Bank of Tuvalu (DBT) has had difficulties since it began in 1993, and by the end of 2000 had accumulated losses of $1 million. A proposal to merge DBT with NBT should be revisited.

Using the Australian dollar as currency in Tuvalu's ultra-small and open economy effectively eliminates monetary policy as an instrument for macroeconomic management. Total bank deposits grew at the average annual rate of 5.5% between 1990 and 2000.

Tuvalu's merchandise export base of copra, stamps, and handicrafts has diminished and imports have grown. The merchandise trade deficit and payments for freight and insurance continue to be covered by net private transfers, and fisheries and telecommunications license fees, investment income, DotTV revenue, and official transfers.

As a signatory to the Pacific Island Countries Trade Agreement (PICTA), Tuvalu is committed to tariff reduction. Import taxes in total have generated 55% of taxation revenue between 1996 and 2001, and 9% of total current revenue and grants. Any tariff reform therefore needs to consider the implications for Government revenue. The existing tariff system could be rationalized and its administrative costs reduced by

(i) eliminating specific rates;
(ii) reducing the number of ad valorem rates;
(iii) combining import duties and sales tax; and
(iv) levying duties on imports valued as cost, insurance, and freight (CIF), rather than as free on board (FOB).

Analysis of fiscal developments is hampered by the absence of reliable data. Between 1996 and 2001, actual recurrent revenue exceeded budget estimates, most notably in 2000 when windfall revenue was received from the DotTV marketing arrangement. Taxation revenue also grew as import duties, company tax, and income tax all rose. Fishing license fees grew strongly, whereas telecommunications fees fell following nonrenewal of the agreement with the lessee. Current grants from external assistance agencies were significant sources of finance.

The Tuvalu Trust Fund (TTF) provided additional revenue for public expenditure. Drawdowns into the budget from the TTF-related Consolidated Investment Fund (CIF) account provided 21% of recurrent revenue (inclusive of the drawdowns) between 1996 and 2001.

The nominal annual rate of return on the TTF A account from 1 January 1988 to 30 June 2000 averaged 12.2%, compared with an average annual rise in the Australian CPI of 3.2%, so that the objective of maintaining TTF's real capital value was achieved easily. However, the downturn in global financial markets in 2001 lessened the market value of the A account portfolio, which was $62.9 million at 30 September 2001.

Between 1996 and 2001, actual recurrent expenditure was close to budget estimates, except in 2000 when it exceeded projections as windfall revenue from DotTV encouraged numerous supplementary appropriations. Externally-funded development expenditure consistently fell far short of estimated levels.

The share of staff costs in total operating expenditure rose from 24% in 1996 to 33% in 2001, while the share of grants and transfers rose from 8% to 40%. Special expenditures including payments of arrears, compensation, and special parliamentary committee expenses jumped in 2000. Government purchases of goods and services fluctuated markedly, falling from 52% of total operating expenditure in 1996 to 14% in 2001. Expenditure on maintenance had its share of operating expenditure halved during the same period to just 4%. Public capital expenditure fluctuated between a high of $12.6 million in 1996 and a low of $2.8 million in 1998.

The Government has funded an increasing share of its total expenditure in recent years. Special development expenditures that began in 1998 have substituted in part for development expenditure funded by external capital grants.

A notable feature of overall budget outcomes between 1996 and 2001 was to rely in 2001 on drawdowns from the CIF account to finance a $9.6 million budget deficit. At the end of 2001, the CIF account balance was under half the recommended target level. The Government also remained in arrears on some payments, and there was an apparent need to improve fiscal arrangements.

A new administration presented a delayed 2002 budget intended to pursue fiscal discipline, but it still involved core budget expenditure in excess of core revenue. Once adjusted for posting errors, the budget numbers projected a 6.5% rise in operating expenditure, an approximate 5% rise in capital expenditure, and a 6% rise in total expenditure. With substantial windfall revenues expected from DotTV and fisheries licenses, an overall budget surplus of $10.2 million was projected for 2002. Of this amount, $7.8 million was earmarked for equity injections into the TTF A account. Larger contributions to the TTF A account in 2002 might have been considered; however, the Government intends to investigate establishing a second, solely Tuvalu-owned fund in the United States.

Activity in the market economy will continue to be concentrated in Funafuti and will be dominated by the public sector. Growth in 2002 and 2003 is projected to be about 3%, with inflation in the 1-2% range. There will be no automatic distribution from the Tuvalu Trust Fund in 2002 and a relatively small distribution in 2003. Ongoing revenue from marketing DotTV will be at least $4.2 million annually, while fishing license fees are expected to be stable. Public expenditure management needs a medium-term perspective to ensure fiscal sustainability.

The Role and Performance of Government

Tuvalu is a parliamentary British-style democracy. Although ministers responsibilities are broadly defined in a schedule to the Constitution and elaborated in some cases in acts of Parliament, redefinition of roles and responsibilities is required.

Policy-making lacks direction, coherence, and coordination. There is limited capacity to provide policy advice to the Prime Minister and Cabinet members. A previous Prime Minister began the illegal practice of appointing special ministerial advisors from those parliamentarians not holding portfolios. The key Ministry of Finance and Economic Planning (MFEP) is limited in advising on policy, and reviewing policy priorities and resulting budgetary requirements.

A functional review of the needs of the Office of the Prime Minister (OPM), Cabinet, and MFEP would be a first step in strengthening OPM's and MFEP's capacities to advise on policy, develop a Government agenda, and resolve interministerial differences.

The civil service in 2001 had 822 positions, or about eight servants for every 100 people.

The civil service was disrupted by changes in Government between 1997 and 2001 leading to changes of ministers and movement of senior officials, with inevitable inefficiencies in policy formulation and implementation. In addition, efficiency has suffered with the service being scattered around Funafuti in small rented accommodation and increased numbers of in-service scholarships granted to servants in the late 1990s.

Progress in implementing the public sector reform program begun in late 1996 has been slow. A 1998 review proposed changes that Cabinet endorsed in January 1999. However, they remained unimplemented by mid-2002.

The effort to improve public financial management through output-based budgeting seems to have been introduced without diagnosing public financial management, and by erroneously assuming that establishing a performance orientation necessarily required a major change in the budget system. Also, costs of introducing the new system were not explicitly weighed against the purported benefits.

Nonetheless, Tuvalu's National Budget 2000 was introduced as "the first comprehensive output budget." The monitoring and reporting task was so large in relation to domestic capacity that it is difficult to see how it could be fulfilled. Lack of fulfillment inevitably undermines output budgeting, for there is no accountability without management reports, variance analyses, and consequences. Output budgeting could become no more than a ritualistic grafting of an output list onto the traditional line-item budget.

It is recommended that Tuvaluan authorities seek external technical assistance for assessing the budgeting and accounting system, and for formulating a strategic plan for improving public financial management. This would require obtaining diverse views and studying actual country experiences.

Private sector development can be encouraged if the Government

(i) provides a stable macroeconomic environment;
(ii) promotes education and technology; and
(iii) invests in physical and institutional infrastructure (law and order, property rights, and contract and bankruptcy laws).

Tuvalu's rejection of a protectionist policy is inherent in its signing of PICTA in late 2001. While tariff reform is on the Government agenda, tax policy and administration are still to be reviewed. Reducing the company tax rate and introducing a tax-free threshold for company tax should be considered.

In early 2002, the Government was considering revising the 1996 Foreign Investment Act to help implement a national investment policy being prepared by a task force that was half-way through its deliberations.

The Government has committed to aligning the commercial legal environment with modern international practices to attract foreign investment. This will be achieved by reviewing commercial laws and prioritizing areas for reform and external technical assistance. The focus in Tuvalu should be on the Companies Act and business licensing.

For property rights, the short- to medium-term need is still to ease leasehold access to small land areas that potential domestic and foreign investors might need, and to ensure the rights are secure. This will require land surveys, title registrations, and dispute resolution for parts of urban Funafuti.

In Tuvalu, the private sector's main concerns are slow decisions and administration in the public sector. Improving public administration therefore is key to private sector development through reduced transaction costs.

The Public Enterprise Sector

The focus of reform in the public enterprise sector is on improving the corporate governance of 10 government-owned public enterprises to ultimately increase resource productivity. Public enterprise management itself must be improved through transparent selection, training, and a focus on performance.

NBT is the only public enterprise that consistently returns dividends to the Government. But, its monopoly pricing disadvantages consumers and hinders private sector development. TNPF is to complete an effective management information system. The unprofitable DBT could benefit from merging with NBT for economies in administration and better Tuvaluan involvement in monetary activity.

The Tuvalu Electricity Corporation (TEC) generates and distributes electricity on Funafuti, Amatuku, and all outer islands. TEC has not prepared accounts for audit since 1995, and has not presented annual reports to Parliament as prescribed in legislation. TEC appears to operate at a loss; and while Funafuti's power supply is reasonably reliable by regional standards, generating capacity limits are now being reached.

The real price of power fell for households between 1990 and 2001, and rose for other user groups towards the end of the period. The substantial 2000 rise in rates for commercial users and the Government is an effective cost-recovery measure. Greater cost recovery will be essential for improving TEC's finances and reducing substantial Government subsidies. A service operating agreement between TEC and the Government should be negotiated and implemented.

The Tuvalu Telecommunications Corporation (TTC) provides direct dialing domestic and international telephone services, limited operator-assisted and phone card services, and facsimile, telex, and telegraph services. Internet and e-mail services are under OPM. Outer-island and intraFunafuti calls, suffer large losses while international calls are profitable.

The last audited set of TTC accounts is for 1998. TTC contributed

$60,000 to the Government in 1997, and received $1.2 million in grants and aid between 1995 and 1998. The 1998 draft service operating agreement with the Government needs to be reconsidered and implemented.

The history of the Government's commercial fisheries arm, the National Fishing Corporation (NAFICOT), is one of decline in the 1980s, externally-assisted expansion in the early 1990s, and subsequent renewed decline. Net losses were made annually between 1994 and 2001. NAFICOT's draft budget for 2002 anticipates another year of loss-making. There is pressing need for greater accountability and transparency.

The Tuvalu Media Corporation (TMC) operates the national broadcasting service, but has submitted no reports or accounts since 1999. In 2000 and 2001, it relied on Government grants of $234,750 and $250,000 respectively, and part of a 2002 revenue shortfall is to be met by a third Government grant of $100,000. TMC needs to offset future revenue shortfalls by improving and expanding its broadcasting services.

The Tuvalu Philatelic Bureau (TPB) profits from 1998 to 2000 were disappointing. TPB needs to increase market share, reduce sales returns and production costs, and contain operating expenses, particularly its wages bill. To reduce production costs and operating expenses, TPB could amalgamate with the Post Office.

The Vaiaku Lagi Hotel (VLH) reported losses from 1995 to 1998, even with Government grants of $50,000 in 1995 and 1996. The Government should consider a management contract, although it must have the capacity to prepare and enforce it.

Tuvalu Maritime Training Institute (TMTI) operates a quality control system under International Maritime Organization standards. Its accounts for its first full year of operations (2001) report a small net surplus, but 98% of income was a Government grant, with course fees accounting for just 9%. Large annual cash injections from Government are expected, and upgrading TMTI facilities is to be funded by an Asian Development Bank (ADB) loan. Increasing the degree of cost recovery through fees, especially from seamen receiving in-service training, could be considered.

Tuvalu's domestic shipping is provided by two Government-owned vessels. Freight rates and passenger fares are well below levels that would permit operations to break even, leaving aside depreciation expenses. Continued subsidies seem inevitable, and should be transparent and justified by the quality of service provision they support. A first step in accountability would be to review the appropriateness of current performance indicators, monitor activities, and report on results.

International air services consist of twice-weekly flights by Air Fiji to and from the Fiji Islands. The Government is the largest single shareholder in the airline, and needs to work with the Government of the Fiji Islands to ensure Air Fiji is soundly managed.

Human Development

Developing human resources through education has been prioritized since Tuvalu's independence in 1978. Regional comparisons of literacy consistently show Tuvalu in the upper quartile with 95% of its population literate. Ambitions to improve this figure and to educate and train its population in skills relevant to Tuvalu's economic and social goals remain key development objectives. For this, the EFL program was introduced in 1994 to provide compulsory quality education for all children to the age of 15 years. In 2002, EFL remains the Government's principal strategy for developing Tuvalu's human resources.

Tuvalu's basic education system consists of 2 years of preschool, 8 years of primary, and 4 years of secondary schooling. Private education is limited to a Seventh Day Adventist (SDA) primary school. In-country postsecondary training and education is confined to seamanship training at TMTI and a University of the South Pacific (USP) Center in Funafuti that offers distance learning. Overseas training remains the principal avenue for tertiary education for in-service and preservice students.

Between 1991 and 2000, national primary student enrollment increased by 21%. The rise reflects the addition of forms 1 and 2 to primary schooling under EFL. In 2001, there were 558 secondary enrollments. The teacher-student ratio has improved over the last 10 years: in mid-2002 standing at 18:1 for primary and 17:1 for secondary. The school curriculum and infrastructure have improved and the number of trained teachers has risen. Despite this, basic numeracy and literacy among primary students is declining, and the pass rate in the Fiji Junior secondary examination has fallen from 61% in 1991 to just 13% in 2001. A review of EFL planned for April 2002 had not occurred by mid-2002. The review will examine standards, teacher motivation, and management. Establishing school boards is worthy of consideration.

Plans to establish TMTI as a national center for technical and vocational education and training should consider the high risks of disrupting existing programs, and the negative impact this might have on the number and quality of graduates produced. The USP Extension Center and TMTI lack the capacity to satisfy all of Tuvalu's tertiary education needs. Consequently, the country relies heavily on overseas institutions for tuition, and on overseas governments for funding its students.

The Ministry of Education, Sports and Culture's (MESC) share of the national budget from 1996 to 2001 fluctuated between 13% and 35%, growing in nominal terms at an average annual rate of 14.8%, while public expenditure as a whole rose at 12.2%.

Primary education absorbed 22% of MESC's 2002 budget allocation. Salaries absorbed 84% of the Government's recurrent expenditure on primary education, and housing allowances for teachers accounted for a further 10%, leaving little for operations. Secondary education absorbed 16% of the budget allocation, with parents and guardians paying school fees and covering uniform and travel costs. The largest share (36%) of the education budget for 2002 was allocated to preservice scholarships.

The dramatic rise in the number of Government-sponsored overseas scholarship awards since 1999 has affected the Government's ability to function optimally. Many senior Government positions are vacant or staffed by inexperienced personnel until incumbents return from training. Enforcing the bonding system would ensure that recipients of overseas scholarships return for at least 2 years of public service upon completing studies.

As a first step in solving education problems in the Pacific region, education ministers agreed in early 2001 on a Pacific Islands Forum Basic Education Action Plan which emphasizes different forms of secondary and vocational education, and nonformal education.

Tuvalu's population has a reasonable standard of health by comparison with other lower-middle income countries. The infant mortality rate has fallen from about 43.5 per 1,000 live births in 1990 to just 13.1 in 2000. Life expectancy has increased from approximately 57 years for men and 60 years for women in 1990 to 64 years for men and 70 years for women in 2000.

Acute respiratory infection was the most commonly notified illness in 2000, followed by diarrhea and conjunctivitis. Infectious and communicable diseases are under control. Medical staff report a rising incidence of hypertension, diabetes, heart disease, cancer, and obesity.

Environmental health indicators are mixed: 85% of Tuvalu's population reportedly has access to safe water, but most water needs boiling. Access to sanitation is lower at 49%, and there are some poorly constructed sanitation facilities on the outer islands.

One 45-bed hospital in Funafuti offers public referral and general health services. There is one clinic on each of Tuvalu's outer islands with a midwife, general nurse, nurse aide, and sanitary aide. Cases that cannot be treated domestically are referred to the Colonial War Memorial Hospital in Fiji, or to New Zealand under the NZ Medical Assistance Scheme. Fiji referrals are at Government expense. Plastic surgeon teams from Australia visit biennially. Traditional healers and several nongovernment organizations augment public medical services. There are limited private health services.

The share of health expenditure in total public expenditure fluctuated between 5.5% and 8.5% from 1996 to 2001, with nominal spending on health growing at the average annual rate of 9.2%, or about 6.6% in real terms. In 2002, staff costs absorbed 53% of the health operating budget, compared with 29% in 1996. Preventative services accounted for just 5% of 2002's health budget.

Any shift in policy emphasis towards curative service provision will have budgetary implications. And any lightening of the budget burden through greater cost recovery and encouraging of membership in voluntary health insurance schemes has implications for those unable to pay. The Government has a role to play in providing a social safety net for this group.

In 2002, the Government signed a $10 million-$11 million financing agreement for upgrading Funafuti's hospital. New buildings will be constructed and new equipment acquired. However, the project plan includes no high-temperature incinerator for disposal of hospital waste and no estimate of recurrent costs for effectively running a hospital.

Social Policy

Tuvalu's social development policy lacks detailed strategies and requires a better quantitative database. A key feature of the policy expects families and nongovernment organizations to deliver most social support services, with the Government assisting where such resources are inadequate.

Natural Resource Development

The Government supports subsistence agriculture by

(i) preventing entry of pests and diseases;
(ii) disseminating improved varieties and breeds; and
(iii) supporting the copra industry through price subsidies.

A recent production slump, despite artificially high prices, suggests the copra subsidy is ineffective and should be terminated.

DBT has traditionally financed small-scale agriculture but, even with external agency and Government financial support, poor management has left it burdened with defaulted loans. Continuing the DBT function would be best done through a merger with NBT.

NAFICOT continues a range of activities that should be privatized. However, ice making, cold storage, and fish marketing should be retained as essential services. The Government also heavily subsidizes the community fisheries centers on the outer islands. To become viable the centers need to reduce operating costs through alternative management arrangements.

Fishing license fees extracted from foreign fleets are a crucial but unreliable source of Government revenue because of overcapacity in tuna fleets. Domestic production of fresh and canned tuna is unlikely to be commercially viable. Ratification of all existing treaties designed to govern tuna and other international treaties that affect Tuvalu, such as dumping at sea, would be to Tuvalu's long-term benefit.

Fish production from Funafuti lagoon should be monitored for signs of overfishing.

Tuvalu's tourism industry is very small and is likely to remain so, even with the potential for expanding ecotourism.

A comprehensive waste management system on Funafuti has been developed and trialed with bilateral assistance to manage household rubbish as well as industrial, hospital, and animal waste. A dispute over Government and Funafuti Town Council roles in waste management is threatening the system's efficiency. An early resolution is required.

For the Environment Unit to perform as expected, its human resource base needs strengthening.

Outer-Island Development

The Tuvaluan economy is dualistic with Funafuti's monetary economy dominated by the public sector and outer-island economies dominated by the subsistence sector. A Funafutian household's average weekly cash income and expenditure in 1994 were $231 and $177 respectively, compared with $68 and $57 amongst outer-island households.

Food and nonalcoholic beverages is the largest item of expenditure for both Funafutian and outer-island households. Funafutian homes are larger, but so are the households. Houses in Vaitupu are mostly metal-roofed with concrete walls and floors. Homes on the other islands are commonly of thatched roof with rib or coconut-screen walls and crushed-coral floors. Sanitation is mostly by flush toilets in Funafuti and water seal latrines on the outer islands. Outside tanks are the primary source of water everywhere.

All of the main settlement areas on the outer islands have access to diesel-fuelled electricity supply. Funafuti households have more electric appliances and more motorcycles and vehicles than outer-island households.

The extent of inequality between Funafuti and the outer islands is exaggerated if the focus is only on inequalities in cash income and expenditure, and differences in housing and household amenities. Nonmarket production per head is higher on the outer islands.

Island communities believe a better quality of life would result from improving the water supply, health system, housing, education, agriculture, roads, business development, and reef passage.

Increased autonomy for outer islands began in 1997 with the Falekaupule Act authorizing local government (kaupule), to design and implement island programs and projects. Community residents over the age of 18 may participate in community planning and decision-making.

The Falekaupule Trust Fund (FTF) had $15.9 million by November 2001 for supporting decentralization.

The per capita shares in FTF are estimated at $2,357 for Funafuti, $1,885 for Nukulaelae, $1,212 for Vaitupu, $1,105 for Niutao, $1,090 for Nukufetau, $986 for Nui, $925 for Nanumaga, and $695 for Nanumea. The national goal of evenly balanced incomes and living standards across all island communities does not appear to have been assisted by FTF.

The first Fund distribution of $613,579 was distributed to island communities proportional to their share-holding in FTF in 2001. The distribution formula, has been criticized by outer-island communities which want other criteria like population included.

The types of projects selected for funding appear unlikely to require the level of financial or economic analysis prescribed in the project profile guidelines the Government distributed. It appears the Government may phase out recurrent funding support for local government as the value of FTF rises. To resolve the issue the Government held several meetings, and decided to leave the distribution formula unchanged until 2005. In the interim it will match dollar for dollar all additional contributions from outer-island communities up to the level of the existing Funafuti per capita contribution.

Despite the failed attempt to shift education and agriculture to Vaitupu in the 1990s, the Government is again considering decentralizing it's core departments to outer islands, particularly to Nukufetau and Vaitupu. A gradual and well-planned approach to any decentralization is required.

Clearing the airstrips on Nukufetau and Nanumea may promote outer-island development. Air services to these islands could be supported by improved shipping between the northern islands into Nanumea and between the central belt islands to Nukufetau.

1

Introduction

Human Development

Since independence in 1978, the resident population of Tuvalu's nine small islands has grown at the average annual rate of 1.5% to approximately 10,300 in 2001 (Table 1.1). With substantial internal migration Funafuti's population has expanded by 3.5% annually to account for 44% of the total population. The people are mostly Polynesian and speak a common language. Tuvaluan society is characterized by strong commitments to cultural traditions, Christianity, family, and community. These commitments are enshrined in the Constitution:

> *While believing that Tuvalu must take its rightful place amongst the community of nations in search of peace and the general welfare, nevertheless the people of Tuvalu recognize and affirm, with gratitude to God, that the stability of Tuvaluan society and the happiness and welfare of the people of Tuvalu, both present and future, depend very largely on the maintenance of Tuvaluan values, culture and tradition, including the vitality and the sense of identity of island communities and attitudes of co-operation, self-help and unity within and amongst those communities.*
>
> *Amongst the values that the people of Tuvalu seek to maintain are their traditional forms of communities, the strength and support of the family and family discipline.*

Tuvalu's 1998 Human Development Index (HDI) value of 0.583 placed it seventh among 14 Pacific island countries (UNDP 1999). The

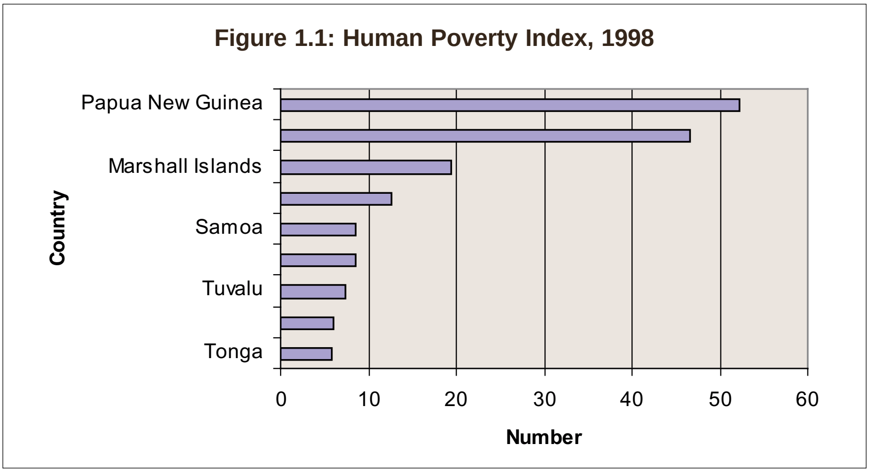
HDI has four components: the adult literacy rate (95%); the combined gross school enrollment ratio for those in the 5-19 year age group (74%); life expectancy (67 years); and GDP per capita (US$1,157). Women's life expectancy exceeded men's by 6 years, while women's and men's literacy rates were the same. The female combined gross school enrollment ratio of 75% was 1% higher than that for males.

Tuvalu also had a low incidence of poverty as measured by the 1998 Human Poverty Index (HPI) score of 7.3 (Figure 1.1). The HPI is a composite of adult illiteracy (5%), the percentage of the population not expected at birth to survive to the age of 40 (9.8%), the percentage of children less than 5 years of age who are underweight (0%), and the

Table 1.1: Area and Population of Tuvalu

Islands	Land Area (km^2)	Population 1979	Population 1991	Population 2001 (est)
Funafuti	2.79	2,120	3,839	4,518
Vaitupu	5.60	1,273	1,202	
Niutao	2.53	866	749	
Nanumea	3.87	844	824	
Nukufetau	2.99	626	751	
Nanumaga	2.78	605	644	
Nui	2.83	603	606	
Nukulaelae	1.82	347	353	
Niulakita	0.42	65	75	
Total Area	25.63			
Total Residents		7,349	9,043	10,276
Total De Jure		8,730	10,114	

Sources: ADB 1998; CSD 2001 and 2002 Census Pretest for Funafuti.
Note: The population estimate for Tuvalu in 2001 is made on the assumption that the population growth rate averaged 1.3% between 1991 and 2001. The figure arrived at is close to the Central Statistics Division estimate of 10,223 in June 2001, which is based on crude birth and death rates and overseas arrivals and departures.



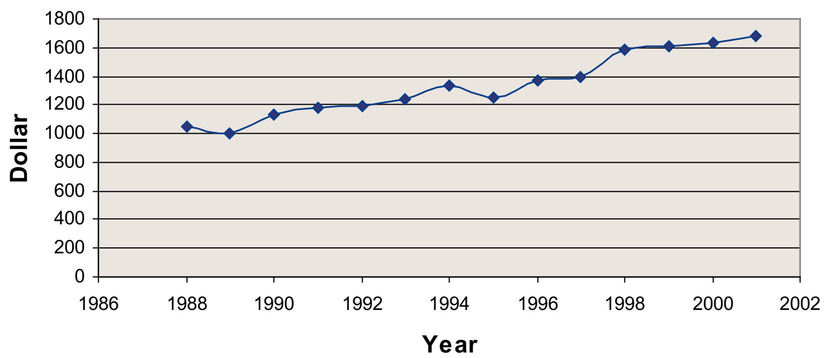
Source: UNDP 1999.

percentage of the population without access to safe water (15%) and health services (0%).

The HDI and HPI scores reflect access to basic subsistence resources, relatively rapid economic growth, and increased public expenditure on health and education. The atolls have poor soil that supports only the coconut palm, pandanus, slow-maturing taro, and a few vegetables and fruits. They are also prone to drought, coastal inundation and, occasionally, cyclones. However, pigs, poultry, and eggs are important sources of protein, and inshore fisheries are relatively rich. GDP per head in 1988 was $1,048, with about one third generated by household nonmarket production (ADB 1998). In 2001, it was estimated at $1,681 (in 1988 prices), with about 22% generated by household nonmarket production (Appendix 1, Table A2.2). Real GDP per head (Figure 1.2) therefore grew at the average annual rate of 3.7% between 1988 and 2001. This growth is attributed to expansion of the formal economy concentrated on Funafuti.

Growth has been stimulated by remittances from Tuvaluan seamen (estimated at $5 million annually), foreign aid, and spending by

Figure 1.2: Real GDP Per Capita, 1988-2001
(1988 prices)



Sources: ADB 1998; Table A2.2.

the Government of Tuvalu (the Government) supported by revenue from abroad. The latter includes fisheries and telecommunications fees, revenue from marketing Tuvalu's Internet domain name DotTV, and revenue from the Tuvalu Trust Fund (TTF). In the 1990s, the Government's current expenditure on health and especially education increased rapidly in real terms (chapters 2 and 5). In addition, there was substantial donor-funded and some domestically-financed capital expenditure.

The formal economy's growth and its concentration on Funafuti has been associated with inequality of income distribution. In 1994, the poorest 25% of households received just 2.1% of household cash income. The second poorest quartile received 11% of income, and the third quartile received 24.7%. The richest 25% of households received 62.1% of income (CSD 1998). Outer-island households accounted for 64% of the 1,528 households in the country, but were disproportionately represented in the poorest and second poorest quintiles (90% and 79%, respectively). Average weekly household income was $230.74 in Funafuti; over three times the average of $67.59 on the outer islands. Concern over this inequality has motivated recent efforts to develop the outer islands (Chapter 7).

Development Challenges

A new medium-term development strategy is needed. The *Kakeega o Tuvalu, National Development Strategy—1995 to 1998* (GOT 1995) still serves as the Government's basic strategy document. *Kakeega's* main aim was to improve living standards through the growth and equitable distribution of income. Achievement of the aim was to be pursued through five priority programs of

(i) promoting sector reform;
(ii) encouraging export-oriented business investment and overseas employment;
(iii) improving economic infrastructure, particularly interisland shipping and telecommunications;
(iv) improving Education for Life (EFL) to raise education and training standards; and
(v) upgrading human settlements.

Objective

This Review investigates the progress in achieving development policy objectives through implementing the five priority programs and subsequent programs and projects. Initiating a trust fund to support outer-island development has been particularly important.

In the Review

(i) Chapter 2 examines Tuvalu's macroeconomic performance and policy issues especially since the mid-1990s;
(ii) Chapter 3 discusses the governance environment and the Government's role in development to help identify how to generate durable improvements in public service delivery, including a policy and regulatory environment to develop the private sector;

(iii) Chapter 4 reviews experiences with public enterprise reform;

(iv) chapters 5 and 6 investigate human resources and natural resource development, respectively. Key issues are raised and possible policy responses are presented; and

(v) Chapter 7 discusses outer-island development, focusing on Government and community efforts to raise living standards by implementing projects funded by the trust fund.

2
Macroeconomic Developments

Economic Growth

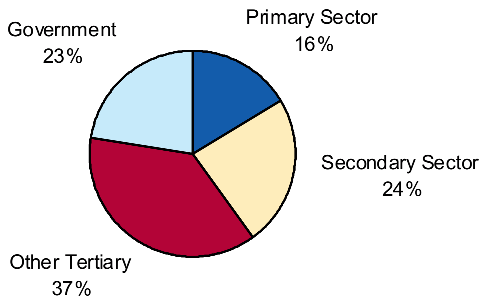
Tuvalu's real gross domestic product (GDP) grew at an estimated average annual rate of 5% from 1988 to 2001 (ADB 1998; Appendix 1, Table A2.2). The lack of continuous, consistent national accounts prevents analyzing the sectoral developments during this period precisely, but it is clear that growth was led by the tertiary sector and the Government of Tuvalu (the Government) sector in particular. The secondary sector expanded strongly, largely as a result of construction activity, while the primary sector grew sluggishly.

The most recent set of national accounts, for 1996 to 1998 (CSD 1999a), shows aggregate growth rates of 3.5% in 1997 and 14.9% in 1998. Expansion of the Government sector accounted for almost half of the rapid growth in 1998, with the construction, finance, and real estate sectors playing supporting roles (Appendix 1, Table A2.2). Gross capital formation (excluding inventory change) fluctuated between 76.9% of GDP in 1996 and 27.1% of GDP in 1998, reflecting the implementation and completion of large projects funded by external assistance agencies (Appendix 1, Table A2.3). Between 1996 and 1998, public sector investment accounted for 73.5% of total investment. See Figure 2.1 for gross domestic product by sector in 1998.

Growth is estimated to have been around 3% in 1999 and 2000, and to have accelerated to 4% in 2001 (ADB 2001a; ADB 2002a). The public sector continued to lead with public administration expanding by close to 5% in 2001, and construction activity rising as a result of Government-funded projects, most notably road improvement in Funafuti. Other sectors of the economy grew more modestly at around 2%.

The public sector-led growth in formal economic activity is mirrored by a decline in the relative importance of subsistence production as a component of GDP: from 49.5% of total GDP in 1990 to 22% in 1998. The decline in part reflects plausible changes in assumptions used in estimating subsistence agricultural output in the 1998 national accounts. Up to 1994, it was assumed that population determined subsistence production of coconuts, bananas, and pandanus. In the new accounts, lower consumption is assumed because on Funafuti, and to a lesser extent on the outer islands, land scarcity limits production capacity and consumption has switched toward imported foodstuffs (CSD 1999b).

Figure 2.1 GDP by Sector, 1998



Source: Table A2.1.

Gross national disposable income has been substantially higher than GDP because of

(i) net inflows of overseas workers' incomes;
(ii) property income from overseas assets; and
(iii) current transfers from abroad.

Box 2.1: Tuvalu Trust Fund

The TTF was established in June 1987. Its members are the governments of Tuvalu, Australia, New Zealand, and the United Kingdom. The Fund is to assist the Government of Tuvalu to achieve greater financial autonomy in its recurrent budget, to maintain and perhaps improve social infrastructure and services, to improve absorptive capacity, to enable the Government to meet the maintenance and operating costs for social infrastructure and services, and to assist the development of Tuvalu's economy.

The starting amount of the capital fund was $26.4 million, which was to be maintained in real terms by reinvestment of the inflationary premium as measured by the Australian consumer price index. Contributions since 1987 have increased the capital fund to a maintained value of $67.1 million in September 2001, split approximately 50-50 between County Investment and Solomon Smith Barney. The actual market value at that date was $62.9 million. Only if the actual market value exceeds the maintained value can there be an automatic distribution from the so-called A account in which the capital is held in the Government's Consolidated Investment Fund (CIF or B account) from which public expenditure is funded. The B account target minimum balance is the sum of the previous four years of drawdowns from the account, expressed in real terms according to the Funafuti consumer price index.

Sources: Tuvalu Trust Fund Board 2000; TTF Advisory Committee 2001.

In the early 1990s, net annual income from around 275 seamen in the merchant marine was estimated by the Central Statistics Division to be between $1.7 million and $2 million. These remittances more than doubled between 1997 and 2001: in 2001, approximately 450 seamen

Box 2.2: DotTV

In the early 1980s, the Internet Assigned Numbers Authority (IANA) assigned each country a country-code Top-Level Domain (ccTLD) Internet address. In 1999, the Government of Tuvalu signed a contract with USA based DotTV Corporation International to market and manage its ccTLD '.tv' indefinitely. In return for the exclusive rights to sell second-level domain addresses, the Government would receive US$1 million per quarter for 12.5 years and 20% equity in the company.
To 30 September 2000, the Government duly received five quarterly payments of US$1 million, plus a one-off lump sum payment of US$12.5 million after the principal investor, Idealabs Inc. Pasadena, California, exercised a call option under the agreement. In late 2000, the Government arranged with DotTV Corporation to forego quarterly payments for the December quarter of 2000 and the first two quarters of 2001, to acquire US$3 million of preferred stock in the corporation. In mid-2001, the DotTV Corporation ran into financial difficulties and in December 2001 the company was purchased by VeriSign, Inc., the domain administrator for ".com." Tuvalu's share of the sale amounted to about US$10 million, which was received as a lump sum. The new contract with Verisign provides Tuvalu with US$2.2 million per annum plus 5% of all revenue exceeding US$20 million sales per year. VeriSign holds the rights to market '.tv' for 15 years.

Source: GOT.

sent $4.9 million home, which was equivalent to 20% of nominal GDP (TTF Advisory Committee 2001). Net income receivable from the Tuvalu Trust Fund's (TTF) overseas assets has fluctuated from year to year. Between 1996 and 2001, drawdowns from the Fund's B account provided 21% of the Government's total recurrent revenue (see fiscal developments below and Box 1.1 that explains TTF). Income is also received from overseas assets of the National Bank of Tuvalu (NBT) and the Tuvalu National Provident Fund (TNPF). License fees for telecommunications dropped from over $2 million in 1997 and 1998 to under $1 million from 1999 to 2001, whereas fishing license fees grew rapidly from $3.6 million in 1997 to $11.8 million in 2001. Income from the DotTV marketing arrangement went from $1.1 million in 1999 to $24.9 million in 2000 and then to $3 million in 2001 (Box 2.2). Grants for budget support totaled $1.4 million in 2001.

Employment

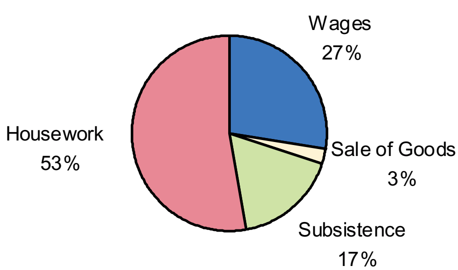
The 1991 Census showed (Figure 2.2) that 70% of the economically active population aged 15 years and over were engaged in subsistence production and housework, with supplementary cash income from the sale of handicrafts, fish, and agricultural crops. Census data on current activity revealed a higher number of 1,468 resident Tuvaluans working for wages, representing 30% of the economically active population. Employment by industry of this wage-earning group is shown in Table 2.1 and the public sector's dominance as a source of jobs is clear.

Completion of the 2002 Census will generate data on the evolution of employment after 1991. In the absence of employment surveys in the intervening years, we must rely on TNPF records, the civil service establishment list, and the civil service payroll, to at least partially quantify employment trends between 1991 and 2001. Figure 2.3 suggests that overall employment in the formal sector grew at the average annual rate of 2.2% between 1991 and 2001. There was relatively rapid growth in employment in public corporations, modest expansion in the number of established civil service positions, and limited growth in private sector activity.

Growth in employment by public corporations was concentrated in the first half of the 1990s, whereas growth in civil service employment occurred in the late 1990s. The 2001 number for Government employees refers to established positions. In fact, 636 of these positions were filled and a further 201 civil servants were employed as temporary appointees on contract, effectively making the civil service size 837. Both established and temporary civil servants make TNPF contributions. In addition, there were a further 80 casual employees not included in the total. Growth in private sector employment is understated because the 2001 figure only refers to members of the TNPF for whom fund contributions were paid in the preceding 12 months. The extent of employer compliance with requirements to pay contributions is unknown; and there are many self-employed people who choose not to join TNPF. General retailing remained the most common private sector activity in 2001 but, compared with 1991, there was an increased number of construction companies.

As noted, there was significant growth from 1997 in the number of Tuvaluans working as seafarers on German international cargo vessels. This employment is subject to fluctuations in global demand and

Figure 2.2: Economically Active Population by Usual Activity, 1991



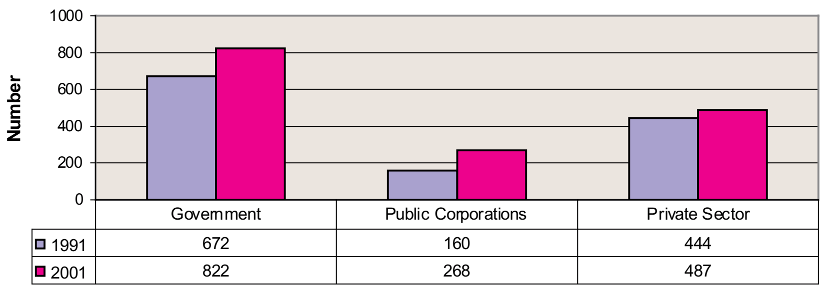
Source: CSD 1992.

Table 2.1: Tuvaluans in Wage Employment by Industry and Sex, 1991

Industry	Males	Females	Total	Percent of Total
Agriculture	53	56	109	7.4
Manufacturing	17	15	32	2.2
Electricity & Water	13	0	13	0.9
Construction	31	1	32	2.2
Commerce	119	88	207	14.1
Transport	38	7	45	3.1
Finance	9	11	20	1.4
Community Services	649	361	1,010	68.8
Administration	570	256	826	56.3
Total	**929**	**539**	**1468**	**100.0**

Source: CSD 1992.

Figure 2.3: Formal Sector Employment, 1991 and 2001



Sources: ADB 1998; Tuvalu National Provident Fund; Ministry of Finance and Economic Planning.
Note: Numbers for employment in the Government refer to established positions to ensure consistent comparison.

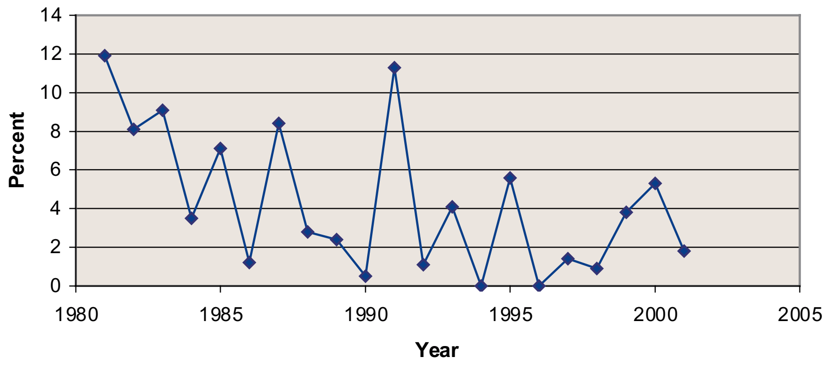
competition from other countries, but is a crucial source of income for Tuvalu's island communities (Chapter 7). The key determinant of employment prospects that can be controlled by the Government is the quality of training at TMTI (Chapter 5). In addition to temporary migration, up to 75 Tuvaluans are now permitted to enter New Zealand each year as permanent residents. This will relieve population pressure on Funafuti and provide another source of remittances, although potentially at the price of losing skills in demand domestically.

Prices and Wages

Inflation as measured by Funafuti's consumer price index (CPI) declined substantially in the 1980s and, after double-digit inflation in 1991, has remained in the 0-6% range (Figure 2.4). The index is still constructed using weights based on consumption patterns of the early 1980s, although a reweighting was to have occurred after the 1994 household income and expenditure survey. Movements in price levels of the six broad product groups in the CPI between 1997 and 2001 are shown in Table 2.2. Given that imports dominate the index and that the Australian dollar is used as currency, inflation outcomes are heavily influenced by the Australian inflation rate and movements in the Australian dollar against the currencies of other major exporters to Tuvalu, namely the Fiji Islands, Japan, and New Zealand. In 1998, for example, low inflation in Australia and the January devaluation of the Fiji dollar by 20% were major reasons for a drop in inflation. The inflation acceleration in 1999 and 2000 is largely attributable to rises in transport costs as world oil prices rose, and to higher costs of miscellaneous items, respectively.

There are no price controls, although retail markups are monitored by a Government official, and the Tuvalu Cooperative Society maintains an 18.5% markup on five essential goods (hard biscuits, kerosene, sugar, flour, and rice), compared with 25% on general stock and 33% on frozen goods. There is a need to review current price regulation

Figure 2.4: Inflation, 1984-2001



Sources: ADB 1998; Table 2.2.

and to establish a regulatory authority governing operations, particularly the pricing policies of the utilities' monopolies.

The public sector largely determines the level and structure of wages and salaries. In 1991, civil servants in established positions received salaries ranging from $1,836 to $9,672, giving a ratio of 5.3. By 2001, the respective figures were $3,223 and $18,098, and the ratio was 5.6. The top salary for a civil servant thus rose 87%, while that for the lowest paid rose 76%. During the same period, the CPI rose from 143.1 to 181.1, or 27% (ADB 1998; Table 2.2). The real value of civil servants' wages therefore increased significantly, aligning them more closely with regional levels.

Civil service salaries rose in 1998 when servants received a 13% housing allowance, as part of a plan to end subsidized housing for civil servants and to charge market rates. However, the full plan was not implemented, and those civil servants fortunate enough to have been allocated a Government house continue to pay subsidized rents. This inequity remains unresolved, and resolution lies in implementing the original plan to charge market rents for Government houses. Salaries rose by 10% in 2000 (13.8% for level one appointments) and by 3.4% in

Table 2.2: Consumer Price Index, 1997–2001

Index	Weights	1997	1998	1999	2000	2001
Food	49.0	154.22	154.46	160.52	162.22	170.77
Alcohol, tobacco	10.5	211.86	210.92	209.57	210.12	217.16
Clothing, textiles	4.0	174.12	191.66	210.08	266.80	244.60
Transport	12.0	165.56	171.88	189.98	215.34	225.81
Housing	12.5	129.61	132.89	128.04	129.72	131.41
Miscellaneous	12.0	170.98	166.76	175.92	196.53	177.57
All items	100.0	161.36	162.75	168.98	177.86	181.10
Percentage Change						
Food			0.16	3.92	1.06	5.27
Alcohol, tobacco			(0.44)	(0.64)	0.26	3.35
Clothing, textiles			10.07	9.61	27.00	(8.32)
Transport			3.82	10.53	13.35	4.86
Housing			2.53	(3.65)	1.31	1.30
Miscellaneous			(2.47)	5.49	11.72	(9.65)
All items			0.86	3.83	5.26	1.82

Source: CSD 2001b.

2001 (the automatic rate of increase introduced in 1995 assuming this was the trend rate of inflation).

Table 2.3 summarizes the salary structure in 2001. A 1998 salaries review recommended a rise in the relative salaries of professionals (doctors, teachers, and nurses especially), and of skilled tradespeople (plumbers, carpenters, mechanics, and electricians). The recommendation was adopted for 1999 but subsequently reversed in part.

The Financial Sector and Monetary Developments

The formal financial sector in Tuvalu consists of one commercial bank, NBT, TNPF, the Development Bank of Tuvalu (DBT), one insurance company, and a foreign exchange dealer.

Table 2.3: Government Positions and Salary Scales, 2001

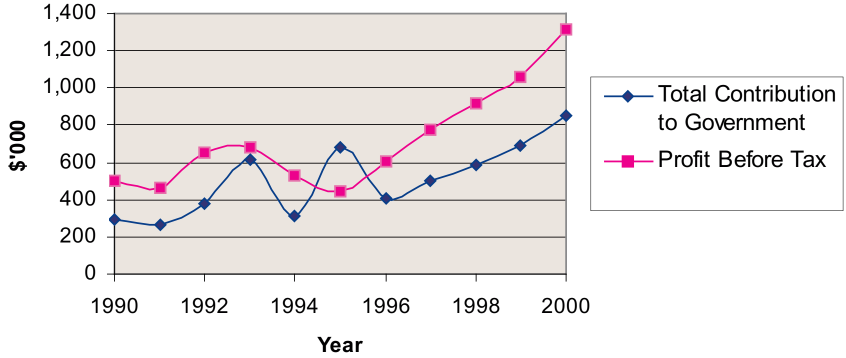
Grade Level	Salary Range ($ p.a.)	Example of Position
1A	18,098	Secretary to government
1B	17,507	Attorney General
1C	16,915	Secretaries of ministries
1D	16,561	Director of education
2	15,791-16,265	Auditor General
3	14,697-15,555	Doctors, commissioner of police (3/2)
4	11,563 -13,721	Crown counsel, director of budget
5	9,226-11,977	Second engineer, building officer
6	7,896-10,380	Housing officer, dental technician
7	6,832-8,842	Personal assistant to minister; staff nurse
8	5,856-7,541	Plumber, mechanic, electrician
9	4,170-6,565	Clerk, typist
10	3,223-4,584	Driver, cleaner

Source: Tuvalu National Budget 2001.

The Government has owned the National Bank of Tuvalu (NBT) since 1995. Its headquarters are at Vaiaku in Funafuti, and agencies are operated on all eight outer islands. It has been profitable, returning an average 58.3% on net assets before tax between 1990 and 2000, and contributing an annual average of $507,000 to the Government in company tax and dividends (Figure 2.5). Earnings on foreign exchange transactions have been the major source of income, while loans and advances have been around 28% of total deposits, reflecting the limited opportunities for domestic lending and conservative reserves management.

Figure 2.6 presents the breakdown of $1.2 million in new lending during the first quarter of 2001: 58% of personal loans were for family commitments, including funeral, wedding, and birthday expenses; 29% for traveling; and 11% for education; with the remaining 2% being advances to seamen.

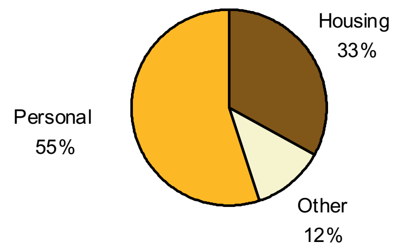
Figure 2.5: National Bank of Tuvalu Profits and Contributions to Government, 1990-2000



Source: National Bank of Tuvalu records.

NBT's interest rate structure is presented in Table 2.4. Deposit rates are low by regional standards, and lending rates are the same or above those charged in more competitive banking systems, although they have fallen from their 1997 levels. The interest rate spread of approximately 8% compares with 4% in Tonga and 6% in Samoa (ADB 2000; ADB 2002b). Relatively high spreads, fees, and commissions are not surprising in a monopolized banking sector, which probably does not have room for a second profitable commercial bank. Regulation is therefore required to avoid excessive monopoly pricing that hinders private sector development. The TTF Advisory Committee (TTFAC) (2001) has recommended that the Government arrange for regular and independent supervision, using regional assistance, and for an experienced overseas bank executive to act as a visiting director to advise and report to the secretary of finance. The Committee also recommended an open and formal arms-length relationship between NBT and the Government to minimize the risk of improper influence on bank management. To date the NBT board has only considered, and rejected, the second of these recommendations.

Figure 2.6: Distribution of New NBT Loans, First Quarter 2001



Source: National Bank of Tuvalu records.

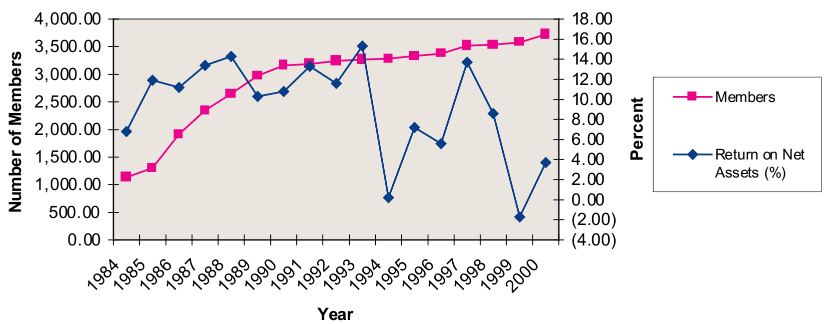
Table 2.4: National Bank of Tuvalu's Interest Rate Structure, 2002

Account	Deposit Rates (%)	Product	Lending Rates (%)
Savings	2.00	Housing loans	8.00
Call Accounts	2.50	Personal loans	11.00
Term 1-6 months		Fully drawn advances	11.00
- $200-2,000	2.50	Overdraft facilities	13.00
- $2,000-25,000	3.00		
- $25,000-50,000	3.50		

Source: National Bank of Tuvalu.

Tuvalu National Provident Fund (TNPF) membership has grown from 1,136 in 1984 to 3,726 in 2000, and net assets from $1.7 million to $13 million. The return on net assets averaged 9.2% during this period, but fluctuated between a high of 15.3% in 1993 and a low of minus 1.7% in 1999 (Figure 2.7). TNPF's investment portfolio was re-organized because of management concern over the declining rate of return in the late 1990s. The major part of the portfolio (87%) was held with the Hong Kong Shanghai Banking Corporation (HSBC) and was transferred from London to Melbourne in August 2000, to be managed by HSBC Asset Management (Australia). Simultaneously, the structure of the portfolio was changed to become a balanced diversified portfolio with 50% to growth assets and 50% to income assets. In addition, Credit Suisse Asset Management and Westpac Investment Management were appointed as new fund managers to handle the remaining 13% of the portfolio.

Figure 2.7: Membership and Profitability of TNPF, 1984-2000



Source: Table A2.5.

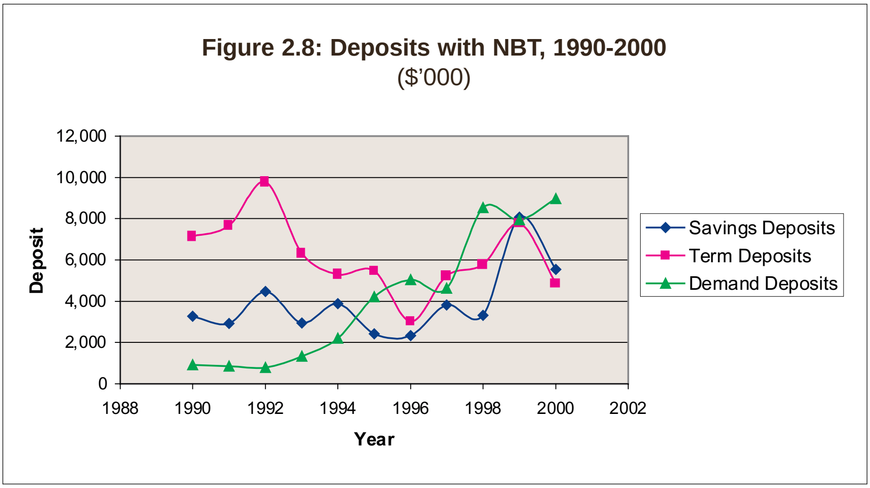
In contrast to NBT and TNPF, the Development Bank of Tuvalu (DBT) has had difficulties since it began in 1993, with a loan portfolio heavily weighted toward general retailing and high provision for bad debts. An average return on net assets of minus 77% was recorded between 1990 and 1996 (ADB 1998); and operating losses totaling $407,000 were made in 1997 and 1998, despite the inclusion in income of $51,000 in grants from the New Zealand Government and a $250,000 grant from the Government of Tuvalu. In September 1998, the Government directed DBT to suspend all lending, pending a merger with NBT. This did not occur because Cabinet rejected the proposal. The lending freeze remained in place in 1999, when the Government provided another grant of $295,000. This grant allowed management to report an operating profit, but the bottom-line trading loss was over $200,000. It was followed in 2000 by an operating loss of $112,000. Lending resumed in 2000, and the DBT board saw a profitable future with a $4 million portfolio focused on the housing retail market and personal consumer loans—areas already well served by NBT. The reality was that by the end of 2000, accumulated losses totaled $1 million, net worth was minus $77 million, and arrears, although down on previous years, were still 17% of a $1.6 million loan portfolio. The proposal to merge DBT with NBT should be revisited, to create a microfinance unit to fulfill DBT's original mandate of promoting private sector development.

Using the Australian dollar as currency in Tuvalu's ultrasmall and open economy effectively eliminates monetary policy as an instrument of macroeconomic management. Figure 2.8 shows the movements in demand, savings, and term deposits from 1990 to 2000. Total deposits grew at the average annual rate of 5.5%, with term deposits stagnating and rapid growth occurring in demand deposits. Data on currency in circulation are not available, but it is likely the population has grown more comfortable with the formal banking system and consequently shifted its holdings of narrow money away from cash in hand toward demand deposits.

External Trade, Balance of Payments, and Tariff Policy

Tuvalu's merchandise export base is extremely narrow, being confined to copra, stamps, and handicrafts. Copra exports of 381 tons in 1979, peaked at 680 tons in 1984, and have fallen since. Production responded to price subsidies in 1999 and 2000, but in 2001 exports were down to 32 tons valued at $7,376. Stamp exports also have declined from the levels of the 1980s. Data on handicrafts exports are not available.

Imports of goods valued as free on board (FOB) increased from $6 million in 1990 to $12.3 million in 1995 (ADB 1998). Their value

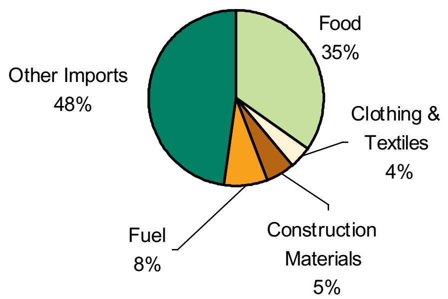


Source: Table A2.4.

inclusive of cost, insurance, and freight (CIF) was $12.4 million in 1999 and $13.2 million in 2000 (CSD 2001a). Imports were 53% of GDP in the latter year. The composition of imports in 2000 is shown in Figure 2.9. The share of food imports rose substantially from the 20% recorded in 1995. Historically, large merchandise trade deficits and heavy payments for freight and insurance continued to be covered by net private transfers, fisheries and telecommunications license fees, investment income, DotTV revenue, and official transfers. Figure 2.10 shows the amounts from these sources in 2001.

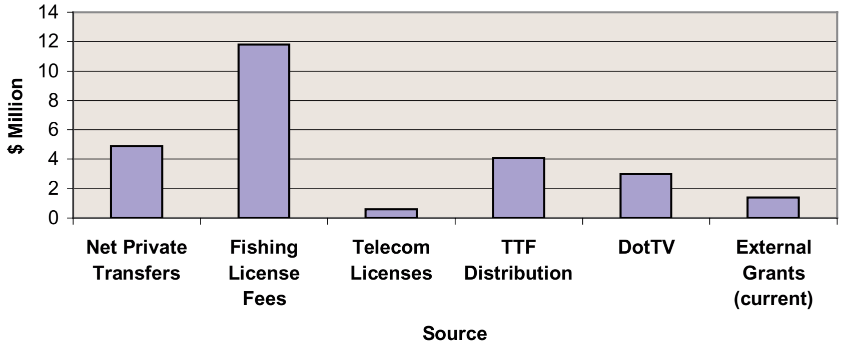
Governments meeting at the Pacific Islands Forum in Nauru in August 2001 signed the Pacific Agreement on Closer Economic Relations (PACER), which includes all forum members. As a first step under PACER, they also initiated a free trade agreement, the Pacific Island Countries Trade Agreement (PICTA), which applies to the 14 Forum Island Countries (FIC) and will come into force in 2002, once ratified by at least six FICs. PICTA is aimed at removing most tariffs on trade between member countries by 2010 and removing all tariffs by 2016. As a signatory to PICTA, Tuvalu is therefore committed to tariff reduction.

Figure 2.9: Composition of Goods Imports, 2000



Source: CSD 2001a.

Figure 2.10: Income from Overseas, 2001



Source: Government of Tuvalu Accounts.

The present tariff system consists of specific rates and ad valorem (percentage) rates applied to import values FOB. Imported goods that are free of duty include fresh, chilled, and dried vegetables and fruits, rice and flour, cement, fertilizers, building products, ships and boats, most items of manufacturing machinery, hand tools, refrigerators, freezers, and outboard motors. Examples of specific rates and of each of the ad valorem rates are in Table 2.5. Specific rates on alcohol and tobacco are high, while other goods purchased by households usually bear a tariff of between 20% and 40%.

Goods in 13 categories are eligible for duty concessions. These include educational materials, equipment and uniforms for sports, goods produced in a Forum island or any other country approved by the minister responsible, goods for producing exports, and frozen chickens. Exemptions also apply to Government imports (except those for commercial use), aid projects, and personal belongings.

In addition to import duties, a sales tax is applied to all imported goods at 2.5% of the import value plus tariff payment. This sales tax is a general ad valorem tariff.

It has been reported that about 50% of imports account for about 75% of import tax collections (Economic Insights 1997). The main sources of revenue are alcoholic beverages and tobacco (21%); electrical machinery and equipment, sound equipment, television, and sound recorders (14%); and petrol, diesel, and oils (12%). Import taxes generated 55% of taxation revenue between 1996 and 2001, and 9% of current revenue and grants (Appendix 1, Table A2.6). Any future tariff reform, therefore, will need to consider the implications for Government revenue.

Reducing import taxes might be covered by a general goods and services tax that removes the distorting effects of just taxing imports. However, the additional administrative costs of this more complex tax system would need to be assessed against the potential benefits. Given the heavy import dependence of the Tuvaluan economy and the constraints on administrative capacity, it is not a foregone conclusion that the net benefits would be positive, as noted in a 1997 review of tariff policy (Economic Insights 1997). Also as noted in the 1997 review, complete replacement of import taxes by direct taxation is not feasible, since it would require unacceptably high marginal tax rates on personal and company incomes.

Whatever options are to be contemplated, the existing tariff system could be rationalized and its administrative costs reduced by adopting recommendations made in the 1997 review. These include eliminating specific rates, reducing the number of ad valorem rates, formally combining import duties and the sales tax, and levying duties on the basic of import values inclusive of CIF.

Fiscal Developments

An analysis of fiscal developments between 1996 and 2001 must begin with the cautionary observations

(i) that Government accounts for these years were yet to receive audit certificates in early 2002;
(ii) that data for any given year have been revised in successive budgets (often substantially); and
(iii) that there are occasional discrepancies in the data (for example, the sum of operating and capital expenditure may not equal the figure presented for total expenditure).

The Auditor General and Government reviewed accounts for 1996 and 1997 and found major problems with them (TTF Advisory Committee 2001). Problems were also found in reconciling the 1998 accounts with the Government's bank accounts and with the ledgers. However, the Government accountant returned from overseas study leave in early 2002 and submitted the accounts for 1996 to 1999 to the Auditor General in April 2002. Final preparation of the 2000 and 2001 accounts was continuing in early 2002. Public financial management issues are discussed further in Chapter 3.

Table 2.5: Tariff Rates on Major Commodities

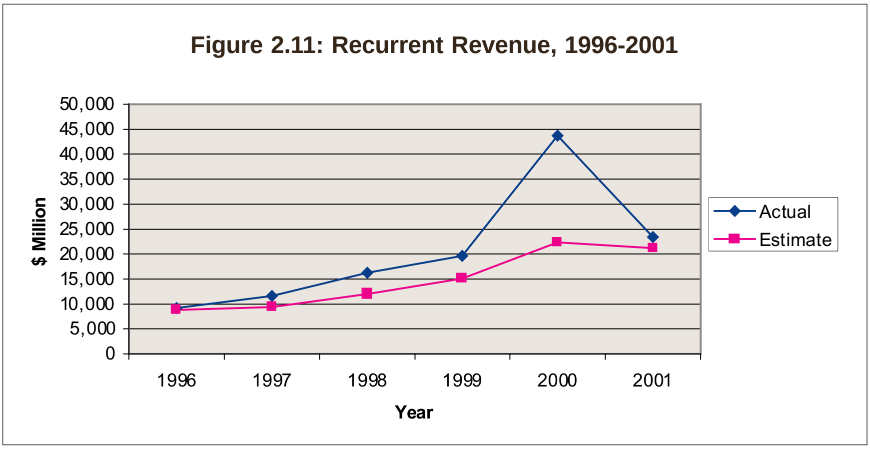
Commodity	Rate
Spirits	$13 per liter
Wine	$3 per liter
Beer	$1.40 per liter
Cigarettes	10 cents per cigarette
Petroleum oil	33 cents per 10 liters
Motor spirit	12 cents per liter
Distillate	7 cents per liter
Kerosene and white spirit	4 cents per 10 liters
Fresh, chilled or frozen meat other than poultry, cameras, musical instruments, watches, air conditioners, motorcycles (subject to minimum payment)	10%
Orange, grapefruit, pineapple, tomato juice	15%
Apple juice, poultry meat other than chicken, animal and vegetable fats and oils, butter and cheese, jewelry, televisions, most paper products	20%
Chicken, processed fish, footwear, clothing (not knitted or crocheted), cooking appliances, most kitchenware, most washing machines, calculators, telephones, furniture, motor vehicle and motorcycle parts	25%
Blankets, spices, ice cream, soap, cotton and synthetic fabrics, floor coverings, clothing (knitted or crocheted)	30%
Coffee, tea, sugar, sausages, sweet biscuits, photographic film, cigarette lighters	40%
Soft drink, hats, safety headgear, precious stones	50%
Motorcycles of 500 to 800cc capacity, firearms	60%
Fish	75%
Other articles of plastics (item 3926.2090)c	100%

Source: ESCAP 1995; Customs Division.

The Tuvalu national budget papers present budget estimates and outcomes for revenue and expenditure in the 4 years preceding the budget year, and show appropriations for the forthcoming fiscal year by 14 line ministries and agencies, broken down by their major subdivisions. Appropriations relate to the recurrent budget, which since 1998 has been further disaggregated into core expenditure and special development expenditures. Core expenditure is an estimate of essential, predominantly current expenditure that must be sustained, and is arrived at by estimating underlying revenue and adding the average automatic distribution from TTF's A account to the CIF, or B, account. Underlying revenue is estimated by assuming that it will rise routinely at the rate of the sum of population growth and inflation. Special development expenditures involve both current and capital expenditures, including some that could be construed as core expenditures (such as subsidies to nonfinancial public enterprises). These special development expenditures are made subject to availability of finance from cash reserves in the Government's CIF and general revenue accounts, and from windfall revenue, which is equal to estimated total revenue minus core revenue.

In addition to core and special development expenditure, the budget papers present estimates of extra-budgetary (XB) development expenditure that is subject to availability of external finance. This expenditure, with special development expenditure, is itemized by line ministry in the first year of a 3-year public investment program included in the budget papers. Generally, the XB development projects so listed do not have secured funding, so that approved and actual expenditure diverge widely. There is also an absence of estimates of the medium- to long-term operations and maintenance costs of assets acquired as a result of XB expenditure. External assistance in kind is not fully recorded.

Between 1996 and 2001 actual recurrent revenue (exclusive of automatic distributions from TTF) exceeded budget estimates in each year (Figure 2.11). On average, the excess was almost 40%; but this largely reflected a major rise in revenue in 2000 attributable to windfall

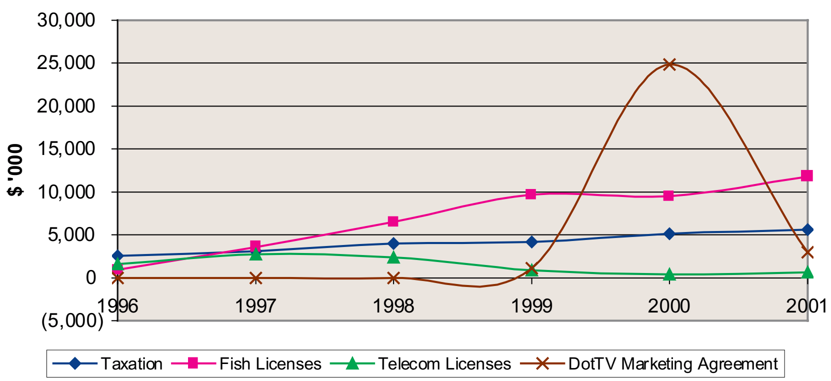


Source: Table A2.6.
Note: Data are exclusive of automatic distributions from the TTF A account to the CIF account.

revenue from the DotTV marketing arrangement. Figure 2.12 shows movements in the main components of revenue in 1996 to 2001. Taxation revenue grew steadily as import duties, company tax, and income tax all rose (Figure 2.13). Fishing license fees increased, whereas telecommunications fees fell following nonrenewal of the agreement with the lessee (the lease was congtroversial because it involved telephone sex services).

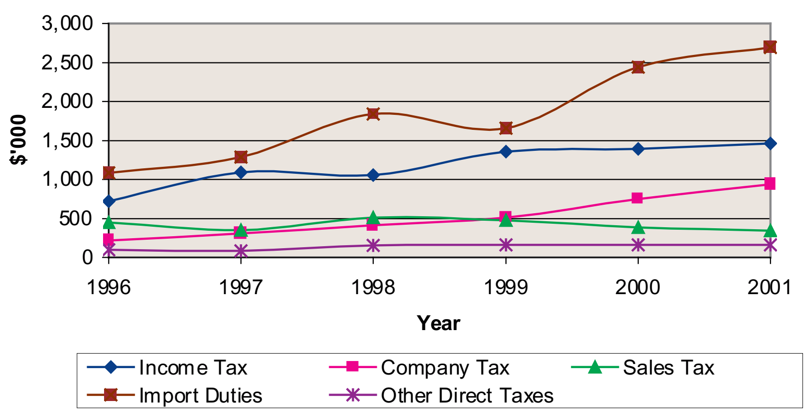
Current grants from external assistance agencies are not shown in Figure 2.13, but were significant sources of finance in 1996, 1998, 2000, and 2001 (Appendix 1, Table A2.6). In 1996 and 1998, a European Union-supported Fuel Import Program provided recurrent budget support that involved external financing of diesel fuel purchased by the Government-owned Tuvalu Electricity Corporation (TEC). This created counterpart funds to be spent on health and education, and matching Government contributions to the TTF A account. The Program was replaced by a second budgetary support scheme, the Development Support Program, in 2000. This involves providing 1.9 million euros (about $3.8 million) in three equal installments for 2000 to 2002, and

Figure 2.12: Main Sources of Recurrent Revenue, 1996-2001



Source: Table A2.6.
Note: Data are exclusive of automatic distributions from the TTF A account to the CIF account.

Figure 2.13: Taxation Revenue by Source, 1996-2001

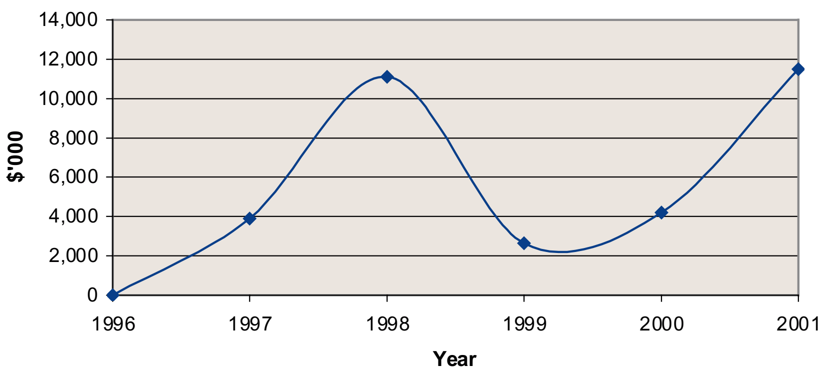


Source: Table A2.6.

operates like the Fuel Import Program. Budgetary support is provided to education, the environment, civil aviation, private sector development, and women in development. The consequent budgetary savings are to be transferred to the TTF A account. Grants from Taipei,China were also used for budgetary support in 2001.

As noted above in Box 2.1, TTF provides an important additional source of finance for public expenditure. Strictly speaking, the automatic distribution from the TTF A account to the Government-controlled CIF account should be shown in budget papers as a source of revenue; and drawdowns from the CIF account should be presented as a financing item below the line. The budget papers do not follow this procedure, instead presenting as "other revenue" a line item labeled "automatic distribution from TTF to CIF," which includes drawdowns from CIF. Most notably, for 2001, there was an automatic distribution of $11.5 million shown, which was entirely a drawdown from the CIF account. That said, Figure 2.14 shows the automatic distributions from TTF to CIF as recorded in the budget papers between 1996 and 2001. Over the entire period, these distributions provided 21% of recurrent

Figure 2.14: TTF Contribution to Revenue, 1996-2001



Source: Table A2.6.

revenue (inclusive of the distributions), which compares with 19% between 1990 and 1996 (ADB 1998).

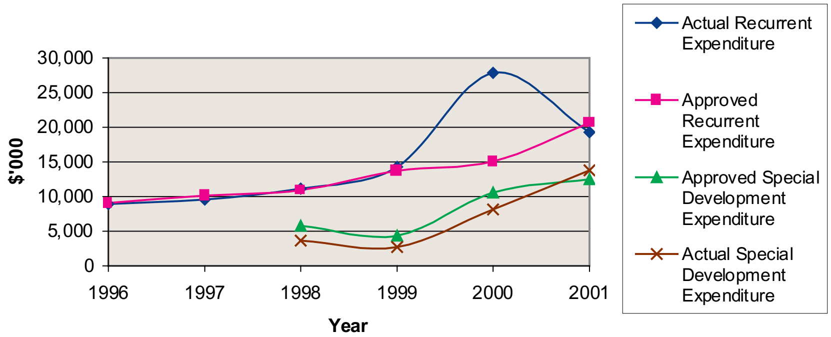
TTF's basic investment objective is to maintain the real capital value of the Fund by reinvesting the inflationary premium as measured by the Australian CPI. Since its beginning with start-up capital of $26.4 million, the Fund has grown as a result of contributions from the Government and external assistance agencies. These contributions totaled $8.8 million up to 30 September 1996 ($7 million coming from the Government's reinvestment of CIF funds), and $18.2 million between 1997 and 2001 ($10.2 million reinvested from CIF, $7.8 million from the Government's General Revenue Account, and $0.16 million from donors). Augmentation of TTF capital could have been substantially greater had the majority of windfall revenue received in 2000 been allocated to this purpose.

The nominal annual rate of return on the A account between 1 January 1988 and 30 June 2000 averaged 12.2%, compared with an average annual rise in the Australian CPI of 3.2%, so that the objective of maintaining TTF's real capital value was achieved easily. By June 2000, the market value of the A account stood at $65.3 million (TTF Board 2000). However, the downturn in global financial markets in 2001 adversely affected the market value of the A account portfolio, which was $62.9 million at 30 September 2001, compared with a maintained value of $67.1 million (TTF Advisory Committee 2001). Thus no automatic distribution in 2002 was possible. Also, in the context of investment management advice on TTF'S constitution and prospects, the Government needed to consider making contributions to the A account from more DotTV windfall revenue received in 2002 (Box 2.2).

Figure 2.15 shows estimated and actual recurrent and special development expenditure between 1996 and 2001. Actual recurrent expenditure was close to budget estimates except in 2000, when it exceeded estimates because the windfall revenue from DotTV encouraged numerous supplementary appropriations. Special development expenditure fell well short of the estimated level, except in 2001. The estimated versus actual paths of extra-budgetary development expenditure shown in Figure 2.16 demonstrate the long-established tendency to prepare ambitious, largely unfunded public investment programs. These would place impossible demands on absorptive capacity if they were fully financed.

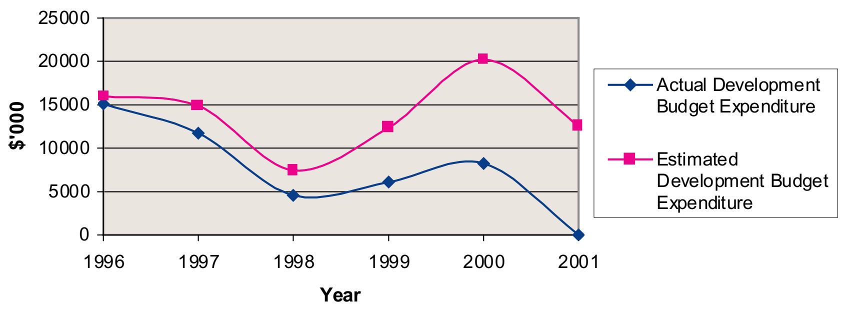
Figure 2.17 shows movements in the components of operating expenditure funded from all sources between 1996 and 2001. The striking features are the rise in the wage bill, the rapid growth in operating grants and transfers, and the growing importance of special expenditures, while expenditure on maintenance and goods and services tended to stagnate. The staff figures include wages and salaries of established, temporary, and casual government workers (including those in statutory utilities), and the statutory salaries and allowances paid to the Governor General, the Prime Minister, ministers, parliamentarians, the Attorney General, the Auditor General and the chief of police. The share of this item in total operating expenditure rose from 24% in 1996 to 33% in 2001.

Figure 2.15: Recurrent and Special Development Expenditure, 1996-2001



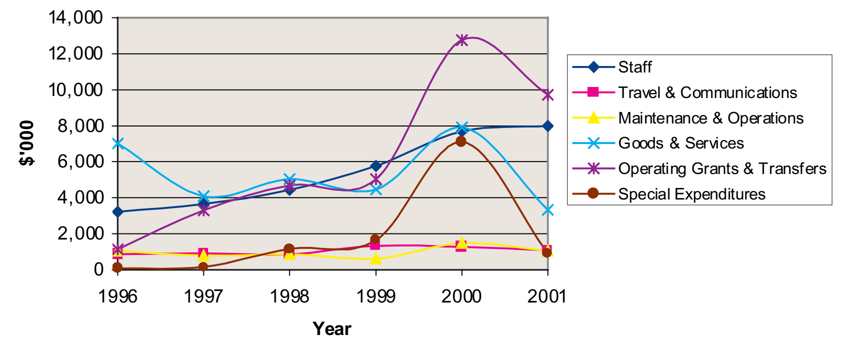
Source: Table A2.6.

Figure 2.16: Externally-Funded Development Expenditure, 1996-2001



Source: Table A2.6.

Figure 2.17: Government Operating Expenditure, 1996-2001



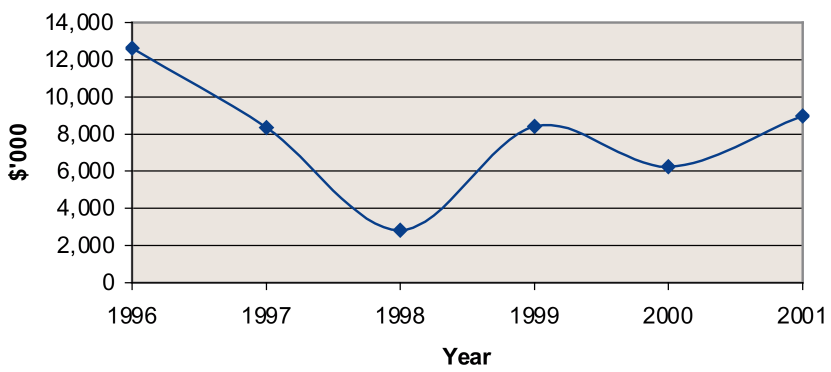
Source: Table A2.6.

The share of grants and transfers in operating expenditure rose from 8% in 1996 to 40% in 2001. This was partly attributable to an enormous expansion in preservice and in-service overseas scholarships (Chapter 5). Special expenditures include one-off payments that supposedly cannot be allocated elsewhere in the budget, including payments of arrears, compensation, and special parliamentary committee expenses. Growth in such expenditures in 1999 and 2000 was concentrated in the Ministry of Finance and Economic Planning (MFEP), the Office of the Prime Minister (OPM) and the Ministry of Local Government, Women and Youth. Major items in 2000 were the Government's matching payments for the Falekaupule Trust Fund (FTF) and scholarship payments (Chapter 7).

Government purchases of goods and services which include school textbooks, teaching materials, and medical supplies fluctuated markedly between 1996 and 2001, falling from 52% of total operating expenditure in 1996 to 14% in 2001. Expenditure on maintenance halved its share of operating expenditure during the same period, to just 4%.

Public capital expenditure fluctuated between a high of $12.6 million in 1996 to a low of $2.8 million in 1998 (Figure 2.18). About two thirds of capital spending during this period was on construction, with the bulk of the remainder being purchases of plant and equipment.

Figure 2.18: Government Public Capital Expenditure, 1996-2001



Source: Table A2.6.

Over three quarters of total public spending between 1996 and 2001 occurred in the six ministries highlighted in bold in Table 2.6. Chapter 5 discusses expenditure by the health and education ministries.

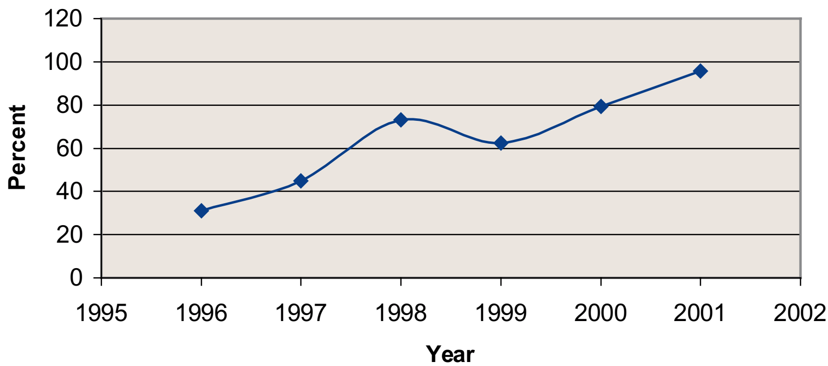
Table 2.6: Administrative Classification of Total Public Expenditure, 1996-2001 (%)

Ministries	1996	1997	1998	1999	2000	2001
Office of the Governor General	0.4	0.3	0.4	0.3	0.2	0.3
Office of the Prime Minister	**12.6**	**19.0**	**25.6**	**26.2**	**15.3**	**9.3**
Legal & Judicial Services	0.4	0.7	0.9	0.9	0.6	0.6
Parliament	0.7	0.8	0.8	1.2	0.7	1.0
Office of the Auditor General	0.3	0.3	0.4	0.3	0.5	0.5
Finance & Economic Planning	**6.7**	**5.4**	**12.6**	**11.5**	**7.2**	**5.5**
Works, Communications & Transport	**26.0**	**9.9**	**12.3**	**9.9**	**25.4**	**31.7**
Health	**5.9**	**6.9**	**8.5**	**7.0**	**5.9**	**5.5**
Natural Resources, Energy & Environment	**24.5**	**14.7**	**10.8**	**7.3**	**6.0**	**9.4**
Local Government, Women & Youth	**5.0**	**3.0**	**4.7**	**17.4**	**12.9**	**10.1**
Police & Prison Services	2.9	3.1	3.2	3.0	2.3	2.7
Tourism, Trade & Commerce	1.6	1.2	0.8	1.3	1.8	1.3
Education, Sports & Culture	**13.2**	**34.8**	**18.9**	**13.6**	**21.1**	**22.2**
Total	**100**	**100**	**100**	**100**	**100**	**100**

Source: Table A2.7.

Figure 2.19 shows that the Government has funded an increasing share of its total expenditure in recent years, peaking at 96% in 2001. Special Development Fund expenditures that began in 1998 have substituted in part for development expenditure funded by external capital grants. These remained substantial until a reported zero XB expenditure in 2001; a year in which external current grants covered 4% of total public spending.

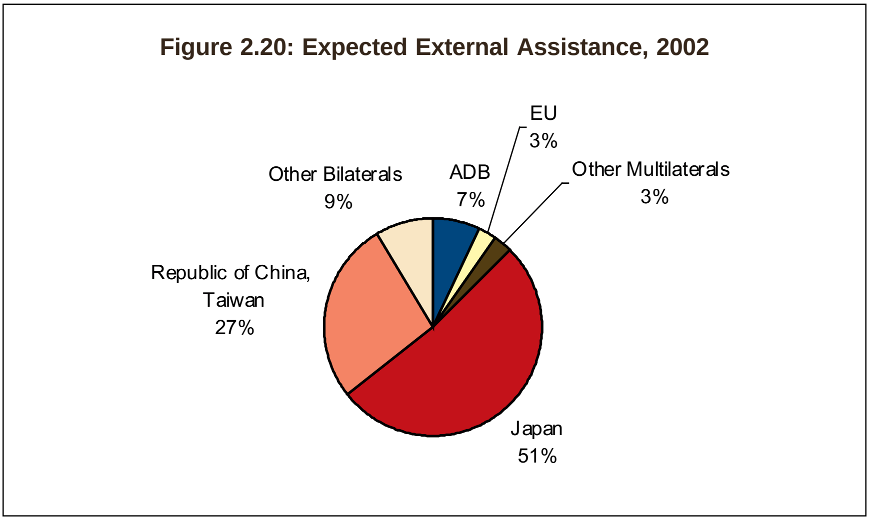
Figure 2.19: Share of Government Expenditure Funded by Domestic Revenue, 1996-2001



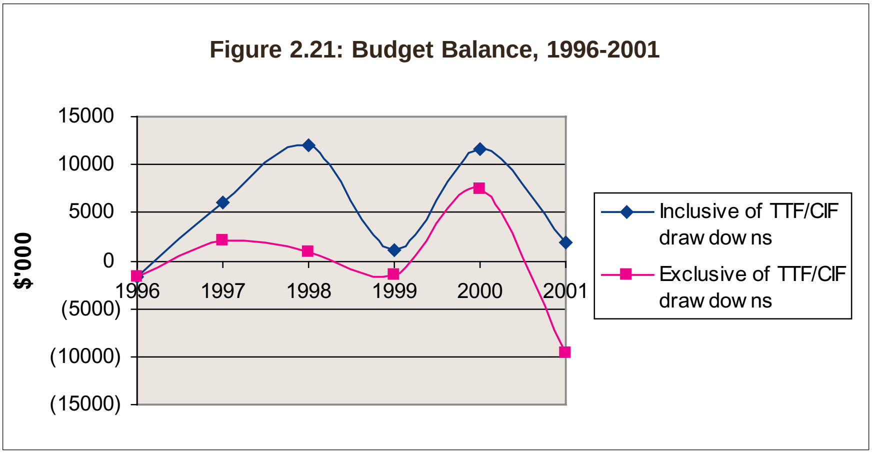
Source: Table A2.6.

The Government took a $4 million concessional loan from the Asian Development Bank (ADB) in 1999 for establishing the FTF outer-island development trust fund (Chapter 7). The first and second tranches of the loan were released in 1999 and 2001, respectively. Figure 2.20 shows the distribution by agency of $48.1 million in all forms of external assistance that was expected in 2002, which was (up from $22.8 million in 2001). However, such numbers are not integrated with the public investment program presented in the budget, and are not elaborated or reported upon in any way. Specifically, the budget papers do not explain the reported zero level of externally-financed development expenditure in 2001, despite expectations of millions of dollars in external assistance that year. The relative contributions of Japan and Taipei,China in 2002 reflect their funding of the new hospital and Government buildings projects, respectively.

The overall budget balances, both inclusive and exclusive of TTF-related drawdowns, and exclusive of extra-budgetary grants and expenditure, are shown from 1996 to 2001 in Figure 2.21. The notable feature



Source: Tuvalu National Budget 2002.



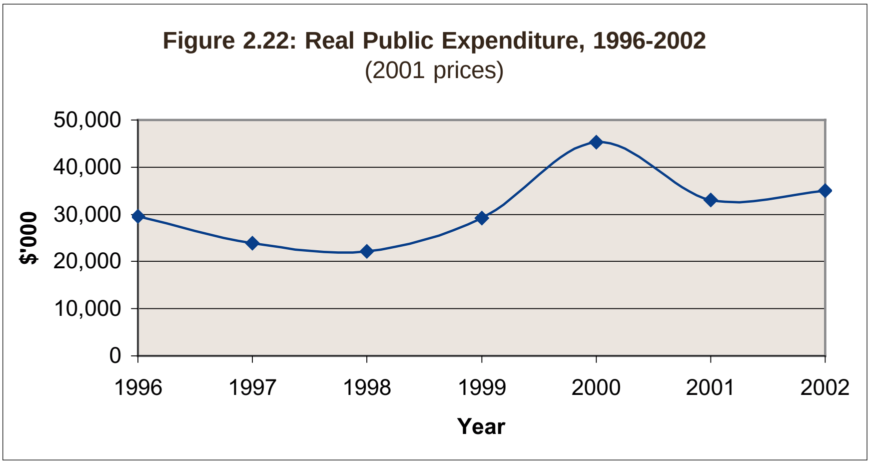
Source: Table A2.6.
Note: Data are exclusive of extra-budgetary (XB) revenue and expenditure.

is the reliance on the CIF drawdown to finance a $9.6 million budget deficit in 2001. At the end of 2001, the balance in the CIF account stood at $7.2 million, which was under half the recommended target balance of four years of drawdowns to the core budget (TTF Advisory Committee 2001). The Government also remained in arrears on some payments: as of 31 March 2000 there was $3.4 million in outstanding telephone bills (PAC 2001); and as of 31 December 2000 there was over $1 million in unpaid debts to various domestic and international agencies (Tuvalu Audit Office 2001). In early 2002, there was an apparent need to reorder finances.

The 2002 budget was delayed until late February 2002 because of a change in Government that occurred in December 2001. The new administration said it intended "to pursue appropriate fiscal discipline" (GOT 2002) although the historical convention of confining core budget expenditure ($20.2 million) to core revenue ($15.5 million) was again ignored because substantial windfall revenues were expected, mostly from DotTV and fisheries licenses (Appendix 1, Table A2.6).

The published national budget for 2002 shows total operating expenditure to be 94% up on the 2001 level, primarily because of an increase in special expenditures from $0.9 million in 2001 to $24.5 million in 2002 (of which $10.5 million was allocated to OPM, and $9.3 million to the Ministry of Health). However, extra-budgetary development expenditure was incorrectly posted to this line item, and the true figure for special expenditures was $3.3 million (TTF Advisory Committee 2002). With this adjustment to the figures approved by Parliament, operating expenditure was projected to rise by 6.5% in 2002. Capital expenditure was projected to be up almost 5% on the 2001 level, so that total (operating plus capital) expenditure was estimated to increase by 6% above the 2001 level (Appendix 1, Table A2.6). This represented a modest rise in real terms (Figure 2.22).

An overall budget surplus of $10.2 million was projected for 2002. Of this amount, $7.8 million was earmarked for equity injections into the TTF A account, leaving $2.4 million to augment the Government's



Source: Table A2.6.
Notes: The figure for 2002 is the budget estimate, adjusted for posting errors in the official budget papers. Other years are reported actuals, deflated by the Funafuti CPI.

cash reserves. Larger contributions to the TTF A account in 2002 might have been considered to increase future core revenue flows; however, the Government announced its intention to investigate establishing a second, solely Tuvalu-owned fund in the United States.

Medium-Term Prospects

Activity in the market economy will continue to be concentrated in Funafuti and will be dominated by the public sector. In 2002, construction of a new $9 million government office building and a new $8 million hospital are scheduled to begin, while road reconstruction continues. New school classrooms are to be built in two of the outer islands. A slight increase in public service employment is projected as existing vacancies are filled. These developments will stimulate private sector activity, which generally is constrained by remoteness from markets, poor international transport links, and difficulties of access to land. Growth in 2002 and 2003 is projected to be about 3%, with inflation of 1-2%.

Given the projected state of regional financial markets, no automatic distribution from TTF will occur in 2002 and any distribution in 2003 is likely to be relatively small. After the large windfall revenue in 2002 from the sale of DotTV Corporation, revenue from the marketing of the Internet domain address will be at least $4.2 million annually (in early 2002 exchange rates). Fishing license fees are expected to be stable, although as noted in Chapter 6 the medium- to long-term outlook is uncertain. Public expenditure management needs to be conducted in the context of a medium-term perspective, to ensure fiscal sustainability.

3

The Role and Performance of Government

Introduction

Public sector reform is one of the five priority programs of the *Kakeega o Tuvalu*, and encompasses improving public administration, public financial management, and public enterprise performance. This Chapter examines developments in the first two areas since 1997, and also the second priority program of restructuring the economy through encouraging export-oriented private investment. The public enterprise sector is discussed in Chapter 4.

The Government System

Tuvalu is a parliamentary democracy operating under the Constitution of 1986 and subsequent amendments. The Government of Tuvalu's (the Government) executive branch includes the British monarch as head of state, represented by a Governor General appointed on the Prime Minister's recommendation, as head of the Government. The Prime Minister and Deputy Prime Minister are elected by and from the members of Parliament. Cabinet is appointed by the Governor General on the recommendation of the Prime Minister and currently includes the Prime Minister and four ministers. The number of ministers may not exceed one third of the members of Parliament.

The Government's legislative branch consists of a unicameral Parliament or House of Assembly (Fale I Fono) with 15 members elected for four-year terms by popular vote of the population aged 18 and over. It should be noted that efficient functioning of Government has been affected adversely between 1997 and 2001 by the failure of elected governments to serve their full terms. Members crossing the floor unseated Prime Ministers in 1997, 1999, and late 2001. In addition, the unfortunate death of the incumbent Prime Minister in late 2000 forced a change of leadership.

The Government's judicial branch consists of the Privy Council (United Kingdom), the Court of Appeal, the High Court, a Magistrate's Court, island courts, lands courts, and the lands courts appeal panel. The High Court consists of a Chief Justice appointed by the head of state acting on Cabinet's advice (and potentially other judges who may be appointed in the same manner), and is expected to sit at least once a year. The Resident Magistrate's Court is scheduled to sit at least once a week, while island courts are scheduled to sit once a month and have their decisions regularly reviewed by the resident magistrate.

The legal system is defined by the Acts of Tuvalu Parliament, some English Acts, common law, and customary law. The Constitution explicitly states that laws are to be relevant to the customs and traditions of the Tuvaluan people, and that the Government's overriding aim is to provide an environment to enable Tuvaluans to live a full, free, and happy life (Pita 1999). A people's lawyer, currently an expatriate volunteer, is appointed to provide legal advice and technical assistance to the public. New legislation is published in the English-language *Tuvalu Gazette.*

Legal affairs and the judiciary are administered by the Office of the Prime Minister (OPM) through the Office of the Attorney General (OAG). The Attorney General is appointed by the head of state on advice from the Public Service Commission after consultation with Cabinet; and at present acts also as the director of public prosecutions. The Constitution provides that salaries and allowances for judges and the

Attorney General are prescribed by specific Acts of Parliament; but the Ministry of Finance and Economic Planning (MFEP) determines the budget for legal and judicial services as part of the national budget preparation process. The judiciary consists of one magistrate paid at level five of the 10-level civil service salary structure, one court registrar, and one clerical officer. The capacity of the judicial machinery is therefore limited. As civil servants, magistrates make much less than comparable professionals in the private sector. There is no annual report from OAG detailing the activities of courts and the time it takes to resolve cases.

The functional areas for which ministers are responsible are broadly defined in a schedule to the Constitution and elaborated in some cases in Acts of Parliament. For example, the functions of the Minister of Finance are explained in the Public Finance Act. However, the organizational structure of Government has changed since 1986, and there is need to redefine ministers' responsibilities.

There is constitutional provision for a neutral and independent civil service, with a Public Service Commission (PSC) advising the Governor General on appointments. There is also constitutional protection for the secretary to government, PSC members, Attorney General, and Auditor General.

Policy-making lacks direction and coordination. Although a Development Coordination Committee (DCC) of secretaries of ministries is to ensure interministerial consultation and meets regularly, it is not always comprehensive in its coverage. There is limited capacity to provide policy advice to the Prime Minister and Cabinet. OPM is primarily an administrative unit that encompasses the personnel and training functions related to the civil service. It includes a public sector reform unit with one staff, and a special service unit staffed by an expatriate advisor. A previous Prime Minister began the practice of appointing special ministerial advisors from those members of Parliament without a portfolio. There is no provision in law for these appointments, and they appear to be politically motivated.

MFEP also has limited capacity to advise on policy, and to review policy priorities and resulting budgetary requirements. A functional review of the needs of OPM, Cabinet, and MFEP would be a first step in strengthening the capacity of OPM and MFEP to provide policy advice, develop a Government agenda, and resolve interministerial differences.

Policies are translated into law by OAG and reviewed by the Chief Justice after a first reading in Parliament. There is no obligation to provide any budgetary, economic, social, or environmental impact analysis for proposed laws, and there appears to be no planned legislative program.

Under the Constitution, the raising and spending of money by the Government (including imposing taxes and raising loans) is subject to authorization and control by Parliament, and is regulated by the Public Finance Act, 1978. Parliament receives reports from the Auditor General after these have been submitted to the speaker of the house. A Public Accounts Committee (PAC) acts as a standing committee of Parliament, with members appointed by the speaker. Since early 2000, PAC membership has consisted of three members of Parliament (from whom the chair is chosen), and three citizens. Previously, membership was confined to parliamentarians, and PAC was inactive: the 1994, 1995, and 1996 Auditor General's reports and Government accounts for 1997, 1998, and 1999 were not considered until 2000 (PAC 2001).

Legislative debate is open to the public, and is broadcast on radio. There is a strong tradition of participation in decision making through the communal meeting house (maneapa) system. There is also growing involvement of nongovernment organizations, but limited participation by professional associations such as the Chamber of Commerce.

There are no codes of ethics for Cabinet members or for legislators, and ministers and legislators are not required to declare their assets.

Local government is discussed in Chapter 7.

The Civil Service

The civil service has suffered disruption and uncertainty in recent years. Changes of Government between 1997 and 2001 have led to frequent changes of ministers and movement of senior officials, with inevitable inefficiencies in policy formulation and implementation. In addition, the aging government office building was demolished in 1998, and the civil service scattered around Funafuti in small units of rented accommodation. This has reduced the efficiency of public administration through loss of records during relocation, weakened communication between and within ministries and departments, and lowered morale. There are plans to construct new government offices by 2003.

Related to the issue of office accommodation is the security of the Government's land leases. The original government leases for the airfield and the civil servant housing area (Fakaifou) were for 99 years, the land having been acquired under the Crown Acquisition of Lands Act. The Funafuti landowners were unhappy with the acquisition and the 99-year term, and in 1992 the Government revoked the acquisition order and reduced the lease terms to 25 years. According to some assessments, the 25-year leases commenced from the agreed date of the repeal of the acquisition order (1 September 1992) the exceptions being for the deep sea wharf area (leased for 25 years from 1 March 1979) and Amatuku (leased for 25 years from 1 March 1978). However, this interpretation is disputed by the landowners, who argue that the commencement date is 1978. Whatever the correct interpretation, the Government is operating under an exceptionally short tenure arrangement. Moreover, Funafuti landowners reportedly have indicated in writing their unwillingness to renew leases, prompting the current Government to contemplate splitting the central administration between Funafuti, Vaitupu, and Nukufetau.

Another event affecting administrative capacity was the sustained increase in the number of in-service scholarships granted to civil servants in the late 1990s (Appendix 2, Table A5.1). The desire to upgrade qualifications of staff is understandable, but the increase in awards seems to have not considered the impact on public administration. And, in the absence of enforcement of the 2-year bonding requirement, many awardees are likely to remain overseas after completing their studies, or to return to Tuvalu for a short time before finding overseas employment.

Tuvalu has a Public Service Act 1979, a Public Service Ordinance 1982, and General Administrative Orders 2000 issued under Section 7 of the 1979 Act. PSC consists of a chairperson and three other members, who are appointed for four-year terms by the head of state on advice from Cabinet. A PSC member cannot be a member of Parliament, a candidate for election to Parliament, the holder of any other office or position established by the Constitution, or in a state service. PSC is responsible for efficiently managing and controlling the civil service, including all personnel matters: appointment and confirmation of appointment, promotion and demotion; transfer from office to office or from place to place (except movement within a common cadre); disciplinary action and suspension; and cessation or termination of employment (except where these occur at the end of the person's regular period of employment as determined by law).

According to regulations and established tradition, civil servants are responsible for helping to formulate and implement policies, evaluate their impact, provide service delivery, and produce certain public goods.

With the exception of the *Code of Professional Conduct* of OAG (GOT 1998), there is no ethics code for civil servants. However, civil service regulations contain a section that covers some ethical areas in public service such as values and gift taking. Breaching of regulations and misappropriation of funds lead to dismissal of the civil servant in question. Senior civil servants come from the ranks and there are no political appointments aside from the special ministerial advisors.

As explained in Chapter 2, the civil establishment in 2001 had 822 positions, of which 636 were filled. A further 201 civil servants were employed as temporary appointees on contract, effectively making the civil service size 837, or about eight civil servants for every 100 people. There were also 80 casual employees working for the Government. The 268 employees of public enterprises should be added to these numbers to understand the size of the entire public sector, which is large by regional standards. The pay structure is standardized and is based on a 10-level scale.

Advancement in the civil service seems associated more with years of service and seniority than a well-defined career progression program. Numbers in the senior levels are small; and there is an actual executive level of the civil service that meets in DCC.

A striking feature of public administration in Tuvalu is the poor state of record keeping. Key policy and strategy documents are often unavailable. Files have been lost and are not always current. Widespread use of personal computers has encouraged casual practice in record keeping, while simultaneously the capacity to better manage information using computers has not been exploited. Improving efficiency in the public service requires improving such basics.

Public Sector Reform: An Overview

In 1994, the Government funded a public sector review (Baker et. al. 1994) that became the foundation of the public sector reform program presented in the *Kakeega o Tuvalu* (GOT 1995). The program's goal was

> *To define the set of functions that are best provided by Government and to provide these services in the most efficient and cost-effective way to maximize the contribution of the public sector to community welfare and economic growth.*

Civil service downsizing was the first strategy in pursuing the program goal, with the establishment being reduced from 694 to 641 by March 1995, and with an intention of confining further growth in established posts to the rate of population growth. A Public Sector Review Committee consisting of the PSC chairperson, the deputy secretary to Government and the staff development officer was then created to guide the reform process.

Four main components of the program were

(i) commercializing, corporatizating, and contracting out service provisions;
(ii) improving public sector performance through corporate planning that encompassed formulating performance indicators, revising job descriptions, and training middle and senior management;
(iii) introducing output based budgeting to link outputs specified in corporate plans with budget allocations (starting with the 1997 budget); and
(iv) formulating appropriate pricing policies for Government services.

Technical assistance by an expert in public sector management was provided to the review committee by UNDP between late 1996 and 1998.

Progress in implementing the public sector reform program was slow. Corporatizing the Broadcasting and Information Office and the Tuvalu Maritime School were the only public enterprise reforms, aside from workshops on corporate planning that were run for middle and senior public sector managers. Adopting output based budgeting was delayed.

A 1998 review observed that the governance environment was sound by regional standards, but went on to note that

(i) the effectiveness of the public sector could be improved;
(ii) the impetus for public sector reform had waned because of election-induced delays, practical constraints on imple-

mentation capacity, reconsideration of public enterprise reform, and a lack of capacity for coordinated action; and
(iii) the future large windfalls of revenue from DotTV could pressure the ethical conduct of politicians and government officials (Mellors 1998).

These three observations applied with greater force in 2002, by which time the civil service had grown well beyond the level targeted in the public sector reform program.

The 1998 review concluded that there was need to upgrade both the capacity to brief Cabinet on technical aspects of cross-ministry submissions, and Cabinet's capacity to monitor and drive implementation of its key decisions and priorities. Also, DCC's functioning and understanding between ministers, permanent secretaries, and special ministerial advisers of their roles and responsibilities both needed improvement—especially in governance issues. The latter concerned basic matters, such as ministries ceasing to prepare annual reports for tabling in Parliament.

The review further concluded that there was need to

(i) clarify ministers and public servants roles in directing public enterprises;
(ii) improve procedures for appointing boards and management; and
(iii) implement public sector reform for promoting private sector development, given that the private sector identified slow decision-making and administrative action in the public service as major concerns.

The 1998 review recommended

(i) adopting a leadership code;
(ii) introducing nonstatutory guidelines to standardize current practices for release of public records;

(iii) agreeing to the annual release of accountable allowances and outstanding imprests for politicians and others;
(iv) establishing an independent body to review office holders' pay and conditions;
(v) enacting an Audit Act and introducing a requirement for ministers to report to Cabinet on responses to audit management letters;
(vi) adopting peer group review of the Audit Office;
(vii) developing guidelines for preparing annual departmental reports to Parliament;
(viii) coordinating annual "bids" for overseas travel and approving an annual travel program;
(ix) disclosing details of individuals' overseas travel expenses;
(x) running seminars on working with ministers and secretaries; and
(xi) clarifying and communicating the role and tasks of special ministerial advisors.

In January 1999, Cabinet endorsed all these recommendations and by 2002 an Audit Act was drafted but not passed. Otherwise, there has been no follow-up action. However, output-based budgeting has been attempted, as discussed in the next section.

Public Financial Management and Budgetary Reform

Public financial management is the means by which resources are collected and allocated under society's economic and social choices. It is therefore central to implementing development policy and plans; and considerable effort worldwide has gone into making it a better tool (Premchand 1999). These efforts reached Tuvalu in the mid-to-late 1990s as a performance-oriented technique of output-based budgeting. This Section includes

(i) a brief background discussion of budget formulation and implementation, including audit; and

(ii) an assessment of the effectiveness to date of budgetary reform.

Note that an important requirement of effective public financial management is employing a medium-term perspective, and this remains largely absent.

Budget Formulation and Approval: As explained in Chapter 2, the budgetary process in Tuvalu focuses on core and noncore programs, and adopts a 1-year time horizon. MFEP's Economic Research and Policy Division projects tax revenue for a forthcoming fiscal year, which is the calendar year. These projections concentrate on underlying revenue, which is assumed to grow at the trend rate of inflation (3.4%) and the population growth rate (1.2%). The plausibility of the assumption appears unquestioned. The addition to underlying revenue of the average automatic distribution from the Tuvalu Trust Fund (TTF) then generates an estimate of core revenue available for funding essential expenditure. This approach to revenue estimation has evolved as an understandable response to the uncertainty of sources of Government revenue other than taxation, and the relative size of these sources. However, the uncertainty should not be overstated and does not alter the need for a multi-year estimation of all revenue if the link between policy and expenditure is to be strengthened.

The tax revenue to GDP ratio has risen from 16% in 1996 to 23% in 2001, which is close to other countries in the region. As noted in Chapter 2, import taxes (duties plus sales tax) are the main source of taxation revenue, accounting for 55% of taxation revenue between 1996 and 2001. Previous analysis indicates that these taxes are mildly regressive, with the most adverse effect on the lowest income earners. This result is inevitable, given that the sales tax applies to all goods, and some basic commodities like clothing and footwear have high tariffs, and some luxury goods have low tariffs (Economic Insights 1997).

A progressive income tax structure tends to offset the regressive import taxes. Income tax is not payable on the first $2,600 of income, with a rate of 30% applying thereafter.

Historically, the overriding objective in budget formulation has been to maintain essential or core expenditure at a level equal to or less than core revenue. This has underpinned aggregate fiscal discipline, but is not conducive to efficiency in resource allocation or structural adjustment. Planned core expenditure constituted between 33% and 45% of total planned expenditure from 1996 to 2001, and was almost entirely current spending. In 2001, for example, the core program in principle isolated and protected almost 100% of staff costs, all travel and communications costs, 76% of planned maintenance spending, 58% of spending on goods and services, 63% of operating grants and transfers and, confusingly, 4% of special expenditures. Core capital expenditure was just 4% of total planned capital expenditure.

Noncore, domestically-financed expenditure is determined by windfall revenue from external current grants, fishing and telecommunications licenses, DotTV marketing, and so-called surplus TTF distribution. Between 1998 and 2001, this revenue, supplemented by drawdowns of reserves, financed special development expenditure equivalent to 23% of total expenditure. External capital grants financed extrabudgetary (XB) expenditure that accounted for 22% of total expenditure during the same period. A 3-year rolling public sector investment program (PSIP) is presented in the annual budget papers, but this is essentially a shopping list of projects to present to external funding agencies. Most projects are listed in the first year of PSIP, and there is no estimation of maintenance and operating expenses. The lack of integration between current expenditure and investment expenditure programming means that noncore investment projects are undertaken that have implications for core expenditure in later years. The most conspicuous example is the new hospital project for Funafuti, due to begin in late 2002 (Chapter 5). This project was not listed in the PSIP for 2001-2003, and no estimation of the implications for recurrent costs was made during the project planning stage.

Rather than adhere to the established practice of core and noncore budgeting, the Government should consider the alternative of preparing a realistic, unified budget that consistently employs a standardized expenditure classification system. This would allow greater efficiency in resource allocation. Improvements in this area at base require strengthening Cabinet-level and interministerial arrangements, and coordinating current and capital expenditure by line ministries. It would also simplify the presentation of budget papers. These currently include a summary budget framework that excludes XB expenditure, and summary tables at national and ministry levels for core and total expenditure by broad class of expenditure. The presentation is familiar to the initiated, but is not user-friendly. It is important to emphasize that contemplating changes to budget formulation should be part of a general reexamination of public financial management that emphasizes getting the basics right (see Budgetary Reform below).

MFEP presents the budget framework to Cabinet, which approves it and establishes expenditure ceilings that are communicated to line ministries through a budget circular, typically issued in August. Line ministries are invited to prepare their budgets based on the circular's guidelines, which include a requirement to present submissions in an output-based format. A process of negotiation between MFEP and line ministries then occurs, out of which a revised draft budget is prepared for DCC to consider before submitting it to Cabinet. Once endorsed by Cabinet, the budget is sent to the legislature, usually in November, and the Minister of Finance makes a budget speech to the House. Parliamentary approval is normally granted before the beginning of the fiscal year with little, if any, review and discussion.

Budget Execution and Reporting: Systems and procedures are formally in place to ensure compliance with the budget, but there are weaknesses in the cash accounting system arising from a lack of reconciliation of accounts produced separately by MFEP's Treasury and Budget divisions (the divisions having been created by ministerial decision in 1996), and also from occasional failure to ensure transactions are recorded accurately (see the Internal Controls and Audit subsection below). Systematic comparisons with bank statements are not made, and would be complicated by the Government operating 24 accounts at the National Bank of Tuvalu (NBT). The Commission of Inquiry (2000) noted "the practice of reconciliation or the balancing of accounts by Treasury is no longer used or in practice." Cash management has been a weakness, although efforts were made in 2001 to establish a more effective cash planning function in MFEP. Since privatization of the Government Supplies Store in the early 1990s, ministries have undertaken their own procurement, which is an arrangement that can lead to corrupt practices in a nonregulated environment.

There are many budget amendments during the fiscal year, which are more likely a reflection of poor initial budget preparation than of reasonable operational flexibility. Virements (transfers between line items) are common; and can involve the deliberate running down of essential line items to strengthen the case for a supplementary appropriation. Determining the effect of these virements on the priorities of the budget would require careful investigation. In the first 9 months of 2001, there were 27 supplementary appropriations, and some additional expenditure for which no appropriation had been made (TTF Advisory Committee [TTFAC] 2001). It appears that expenditure ceilings are soft.

The budget reporting system is of limited effectiveness. Managing the implementation of the budget would benefit from more frequent and reliable reports on cash flows and budget execution reports detailing (possibly revised) appropriations and expenditures at each stage of the expenditure cycle (commitment, verification, and payment). An annual appropriation report is not prepared, but the Public Finance Act 1978 specifies that within 6 months of the end of the fiscal year (or longer if approved by Parliament), the Minister of Finance is required to submit to the Auditor General "accounts showing fully the financial position of Tuvalu." The Act specifies that these accounts are to include

(i) a statement of assets and liabilities;
(ii) a statement of receipts and payments by heads, and other receipts and payments;

(iii) a comparative statement of actual and estimated revenue, by subheads;
(iv) a comparative statement of actual and estimated expenditure, by subheads;
(v) a statement of special funds' balances, by annual and aggregate receipts and payments;
(vi) a statement of other ledger balances;
(vii) a statement of balances on the advances account from the Consolidated Fund;
(viii) a statement of balances on the advances account from deposits;
(ix) a statement of balances on the deposit account;
(x) a statement of contingent liabilities;
(xi) a statement of investments, showing the funds on behalf of which such investments have been made;
(xii) a statement of outstanding loans made from the Consolidated Fund, by annual and aggregate receipts and payments;
(xiii) a statement of the public debt;
(xiv) a statement of arrears of revenue by subhead;
(xv) tabulated summaries of unallocated stores and manufacturing accounts;
(xvi) a statement of the balance of the Development Fund account by annual and aggregate receipts and payments;
(xvii) a statement of the balances on the clearance account;
(xviii) a statement of unauthorized expenditure by subhead and item showing the provision at 31 December, expenditure for the year, and the excess of expenditure over provision; and
(xix) a statement of balances on the remittance account.

The Act further specifies that the Auditor General has 3 months after receipt of the accounts in which to audit and certify them and prepare a report to Parliament.

These Public Finance Act requirements have not been complied with. The 1996 and 1997 Government accounts were presented to the Auditor General, who reported "serious problems" to Parliament and did not issue certificates (TTFAC 2001, p.12). The problems largely involved incomplete and improper recording of numerous assets and liabilities (PAC 2001). The 1998 accounts had not been finalized because of problems with the ledgers and bank reconciliation that were still to be resolved. As a consequence, the 1999, 2000, and 2001 accounts could not be finalized for audit and reporting to Parliament (Tuvalu Audit Office 2001). The Public Accounts Committee has reported that this situation is "absolutely unacceptable" (Pac 2001, p.3). Urgent official action and external technical assistance are needed to deal with this fundamental governance issue. As noted in Chapter 2, accounts for 1996 to 1999 were prepared and submitted to the Auditor General in April 2002, and preparation of the 2000 and 2001 accounts started. In the absence of audited accounts, PAC and the legislature do not appear to conduct hearings to assess whether the budget has been used as approved.

The breakdown in reporting to Parliament encompasses the previously routine annual reports of ministries, which apparently have not been prepared since the mid-1990s; and there is no sign of any reporting that would be expected in an effectively implemented output-based budgeting system. There are no reports on investment/development expenditure that present expenditures by program and project, including estimated costs over the medium term. Even the well-managed TTF has not been exempt: at the May 2000 meeting of the TTF Board of Directors, it was observed that "in recent years an annual report had not been prepared" (TTF 2000, p.1).

Internal Controls Audit: Internal audit is generally considered an integral part of a management control structure to ensure effective operation of the managed entity. However, there is no internal audit function in Tuvalu's government system.

As noted, the Auditor-General fulfills an external audit function with statutory responsibility under Section 172 of the Constitution to audit the public accounts, as elaborated in the Public Finance Act. The

Auditor General is also empowered to audit all Government corporations except NBT, the Tuvalu National Provident Fund (TNPF), and the Tuvalu Media Corporation.

The Audit Office consists of the Auditor General, a deputy Auditor General, two auditors, four assistant auditors, and one clerical officer. The office works under auditing standards published by the International Organization of Supreme Audit Institutions (INTOSAI), but is hampered by inadequate technical qualifications and experience among staff, and staff shortages. During 2000, for example, two assistant auditors were away on training for the whole year, a third was ill from February to June, and a fourth transferred to another department in June. Also, one of the two auditors resigned in December 2000.

Section 171 of the Constitution provides for the independence of the Auditor General from direction or control, but in practice independence is weakened by

(i) an employment contract that violates the Constitution and auditing standards (Tuvalu Audit Office 2001);
(ii) a salary classification three levels below the Attorney General's; and
(iii) an arguably inadequate budget for the Audit Office set by MFEP, rather than statutory expenditure established by PAC.

The last audit report presented to the speaker of Parliament was finalized in May 2001 (Tuvalu Audit Office 2001), and raised concerns over

(i) the reliability and comprehensiveness of public financial data;
(ii) the functioning of the accounting system; and
(iii) the irregularities in the use of public funds.

Some of these concerns are summarized by selected quotations from the audit report (Box 3.1).

Box 3.1: Quotations from the Auditor General's Report 2001

"The Ministry of Finance and Economic Planning has serious problems in its accounting processes."

"It is obvious that Budget and Treasury operate independently of each other and there is no attempt to reconcile accounts."

"There is no reconciliation performed on any of [the Government's 24 bank] accounts other than the general account and that work is not up to date."

"There is no evidence that the current budget has taken these debts [from 2000 and before] into account." (The debts totaled over $1 million).

"It is my conclusion that the Asset Registers are not complete or accurate…"

"Government is making decisions without knowing the true financial position."

Source: Tuvalu Audit Office 2001.

Audit staff visited ministries and departments to review procedures for expenditure, payroll, assets, and receipting, and unearthed these problems:

(i) Posting of payments into vote books was incomplete at times and often reconciliation of vote books with treasury records was irregular.

(ii) Altering carbon copies of receipts in receipt books with ballpoint or ink and without attaching original cancelled receipts was common.

(iii) In one department the cashier signed blank receipts in advance.

(iv) In other departments payment vouchers were not completed to follow the Financial Instructions, or were authorized by the person controlling the vote book.

(v) There were posting errors in the Treasury Department on payroll expenses.

The Audit Office also audited three aid projects, and in two of them there was adequate overall reporting for monitoring and evaluating. The main weakness was a lack of control over the posting of entries to the Government's ledgers: "There was no reconciliation of the projects' disbursements to the disbursements recorded in the Government's ledger. The Government's accounts showed a balance greater than the correct figure in both cases" (Tuvalu Audit Office 2001). The difference was due to duplicate entries to the ledger and postings from other accounts wrongly entered to the project account.

For the third project, which was cross-ministry, each ministry assigned a different name for their segment of the project, which bore no relationship to the project name. In the Treasury accounts, nonproject transactions were recorded. "Overall Audit found it impossible to trace the transactions and records necessary to carry out this audit."

In all three project audits, Audit Office staff were unable to locate original copies of key documents in the Government's filing systems.

Finally, the 2001 Audit Report noted that fraud cases, some involving senior civil servants, had been reported to the Audit Office and passed on to the police. No investigations were complete at the time of the Report.

The Auditor General's summary conclusion was that "The poor state of accounting in Government is largely caused by a lack of qualified accountants." Commenting on the accounts for 1994 to 1999, PAC concluded that "the breakdown of the accounting system contributed enormously to the inefficiency and ineffectiveness of the Treasury

Department…[and that] carelessness was another factor" (PAC 2001, p.2). PAC went on to recommend more formal and on-the-job training in accounting for Treasury staff.

Budgetary Reform: The cash-based, line-item budgeting system is to ensure financial compliance, but is subject to the common criticism that it is input-oriented and therefore does not help link government policy objectives with the budget. Various performance-oriented budgetary reforms to overcome this issue have been attempted in many countries since the 1950s, and have been the center of wide debate. The specific variety of reform introduced to Tuvalu by expatriate consultants in the late 1990s was the most ambitious: output-based budgeting.

The rationale for attempting output-based budgeting was to help link policy and expenditure, and to introduce performance orientation into the civil service. But this best practice technique seems to have been introduced without adequate diagnosis of the existing situation in public financial management, and by erroneously assuming that establishing a performance orientation necessarily required a major change in the budget system. Moreover, costs of introducing the new system were not explicitly weighed against the purported benefits.

Evidence presented above suggests that in the existing situation there was still considerable room for improving basic management information and accounting and reporting systems, and that there was a severe accounting capacity constraint in Government. Put alternatively, there was need for better performance in budgeting as practiced, and an essential element was training in accounting. To attempt output-based budgeting in this context was to strain administrative and technical capacities further, for the "data requirements, methodological difficulties, and demands on implementation and monitoring capacity are vast" (Schiavo-Campo and Tommasi 1999, p.68). There was a risk that the effort would be unsuccessful and even counterproductive, as Hemming (1999, pp.52-53) has suggested in his general evaluation of performance-oriented budgetary reforms in the Pacific:

> *While some Pacific Island countries…have introduced selected best practices of fiscal management, these may have made excessive demand on local absorptive capacity, with essential good practices having been crowded out in the process* [good practices include unified budgets, medium-term budget frameworks, and improved accounting and financial management systems].

> *There is no guarantee that the adoption of some best practices of fiscal management ensures that…even the most basic requirements of fiscal transparency…are met. Moreover, if these basic requirements are not met on a fairly broad and consistent basis, this could significantly compromise the effectiveness of best practices.*

At the outset there also seemed to be logical confusion between the end of improved performance by Tuvalu's civil service and the means of output-based budgeting. Performance in public administration is a complex and contentious issue (Schiavo-Campo and Sundaram 2001, pp.649-671); but it is clear that performance can be improved without adopting performance-based budgeting. Quantitative and qualitative performance indicators can be employed and perhaps used for benchmarking (making comparisons of organizational performance over time or with other organizations). Appropriateness is defined by the criteria of clarity, relevance, economy (data availability at reasonable cost), adequacy as a means of assessing performance, and monitorability (Schiavo-Campo and Sundaram 1999). Where performance indicators are inappropriate, rely on techniques such as open dialogue with management and opinion surveys of consumers of public services. In general, efforts to improve performance should be designed as country-specific based on an understanding of the formal and informal rules of organizational behavior.

Tuvalu's National Budget 2000 was introduced as "the first comprehensive output budget." Staff in the 14 government agencies identified 128 outputs, associated sets of "program activities," and 687 key performance indicators. Costs of outputs were determined by costs of inputs.

This was the first attempt at producing an output budget, and that experience in the few countries that have adopted output budgeting suggests full implementation takes years. In 2000, Samoa was in its fifth year of output budgeting, and an independent review reported that "there is considerably more work to do," especially on reporting and performance evaluation (ADB 2000, p.68). It would therefore be unreasonable to expect that all outputs and their respective performance indicators met the appropriateness criteria mentioned above. The ministries' competencies, and presumably enthusiasm, for the task varied. Table 3.1 presents a few examples where more work would have to be done to produce meaningful and monitorable indicators set at achievable but challenging levels.

A related issue to examine is the risk of adopting indicators that could be counterproductive, especially where the quality of the activity is paramount. For example, using the numbers of in-country and overseas tours and official functions as performance indicators of the Governor General's constitutional functions being strengthened would be widely regarded as bad practice.

Also, it is unclear how much effort went into ensuring that planned inputs were sufficient to produce planned outputs. Anecdotal evidence suggests that early in the budgetary process ministries presented a list of outputs to MFEP with requests for resources that were not (and could not) be met, and with the final, lower budget allocation there was no commensurate adjustment of outputs. It was reported in late 2001 that "there appears to be little ownership by ministries of the budget process" (TTFAC 2001, p.9).

Finally, the monitoring and reporting task was so large for domestic capacity that it is difficult to see how it could be fulfilled. Lack of fulfillment inevitably undermines output budgeting, for there is no accountability without management reports, variance analyses, and consequences. The risk is that output budgeting could become no more than a ritualistic grafting of an output list onto the traditional line-item budget. So, it is a concern that outputs and program activities in the 2001 and 2002 national budgets were the same as those in 2000, except that the Tuvalu Maritime School no longer appeared because it was corporatized into the Tuvalu Maritime Training Institute (TMTI).

To help formulate a strategic plan for improving public financial management, Tuvaluan authorities should seek external technical assistance for a top-to-bottom assessment of the state of the budgeting and accounting system and of options for the future. In this exercise, it would be essential for the authorities to obtain a range of diverse views, and

Table 3.1: Examples of Performance Indicators in Tuvalu National Budget 2000

Output	Program Activities	Key Performance Indicators
Cabinet transparency and accountability	Cabinet code of conduct Leadership code Monitoring of Cabinet decisions Greater public awareness Establishment of formal link between Cabinet and DCC	Cabinet makes informed decisions Cabinet is more accountable Achieve set development objectives
Inpatient care and supervision	Doctors' consultation: outpatient & clinic; surgery; obstetrics & gynaecology; medicine & paediatrics; anaesthetics & intensive care; overseas referrals	Reduced inpatient days Reduced diseases incidence Increased primary & general health care
Custody of prisoners	Counseling and rehabilitation	Improved citizen upon release

Source: Tuvalu National Budget 2000.

inform themselves of a variety of actual country experiences. It would also be desirable for this to be assessed prior to the completion of new government office buildings and installation of computer systems.

Economic Policy, the Regulatory Environment, and Private Sector Development

Tuvalu's prospects for promoting private sector development (excluding subsistence economic activity) are limited by

(i) the ultra-smallness of the local market;
(ii) the extreme geographic and economic remoteness from major markets;
(iii) the insecurity of property rights; and
(iv) the generally poor service delivery by the public sector.

Formal private sector activity centers on nontraded goods and services, notably construction, retailing, and transport. Exports are very low and there is little import-replacement production. The *Kakeega's* second priority program of restructuring the economy through encouraging export-oriented private investment therefore confronted severe obstacles. Nonetheless, private sector development can be encouraged if the Government fulfils familiar core functions of

(i) providing a stable macroeconomic environment;
(ii) promoting education and technology;
(iii) investing in physical infrastructure;
(iv) investing in institutional infrastructure (law and order, property rights, contract and bankruptcy laws, and policies to promote competition and regulate imperfectly competitive markets);
(v) providing a social safety net, including access to basic health services for vulnerable groups; and
(vi) preventing environmental degradation.

The Government has progressed with functions (i)-(iii) and (v), with most opportunity for improvement being in functions (iv) and (vi). Function (vi) is discussed in Chapter 6. Here we focus on function (iv).

Past governments have adopted an import-substitution development strategy. In the early 1990s tariff rates of 60% on clothing and 50% on footwear imports were imposed to stimulate local production; but the one business that was established produced for export and so did not benefit from the protection given (Economic Insights 1997). Consumers suffered as a result of higher prices and in 1995 the tariff rates on clothing and footwear were reduced to 30% and 25%, respectively. Local egg and chicken production was also protected by the introduction of a 60% tariff, and further encouraged by loans from the Business Development Advisory Bureau and then the Development Bank of Tuvalu (DBT). The Department of Agriculture imported feed and an aid-funded slaughterhouse was constructed. Consumers again bore the higher prices of chickens and eggs, until production failed because of difficulties with feed supplies and day-old chicks. Subsequently, the tariff was reduced to 20% and a private hatchery started production.

The failure of these attempts at import substitution is local evidence of the relevance of the conclusion that protectionist policy generally is ineffective and costly. Tuvalu's rejection of protectionist policy is inherent in its signing of the Pacific Island Countries Trade Agreement (PICTA) in late 2001. If there were a genuine infant industry argument, production subsidies would be appropriate for encouraging local industry. But it must be noted that global experience shows that infants have a habit of not growing up. The merits of the Government's subsidy to copra producers are discussed in Chapter 6.

While tariff reform is on the Government's agenda, tax policy and administration are still to be reviewed, even though such a review is listed in the budget as an MFEP activity. Presently, company tax is payable by those whose primary source of income is a company and is levied at two rates: 30% for Tuvaluan-owned companies and 40% for foreign-owned companies. The latter rate is high by international standards and reducing it under a one-rate structure should be considered.

Additionally, a review of tax policy should contemplate introducing a tax-free threshold for company tax, just as there is for personal income tax. The absence of such a threshold acts as a disincentive to establishing companies (Economic Insights 1997).

A 1993 report on Tuvalu observed that much had been done to rectify the lack of a cohesive strategy to promote private sector development. Specifically

(i) the Business Development Assistance Bureau was to be upgraded into DBT to provide finance and business advisory services, including project planning and market intelligence;
(ii) a commercial center was planned to provide rental accommodation for businesses;
(iii) a tourism development plan had been adopted; and
(iv) a timetable for privatization had been prepared.

The report also noted that clear investment guidelines were still needed, and that other requirements included "the need to remove unnecessary regulations and licensing systems, many of which are from the colonial era and are now inappropriate" (Fairbairn 1993, p.23).

Since 1993, DBT has had difficulties (chapters 2 and 6). The commercial center has not eventuated; and the tourism development plan has remained largely unimplemented and without a successor. Progress on public enterprise reform has been limited (Chapter 4). However, a Foreign Investment Act was passed in 1996 and a Foreign Investment Facilitation Board was formed, consisting of the secretary to government, the secretaries of finance and commerce, the Attorney General, and two private sector representatives. In early 2002, revising the Act was to be considered subsequent to a task force that was half-way through formulating a national investment policy. The Government should consider requesting the Foreign Investment Advisory Service to draft guidelines for any amendments to legislation. These guidelines would include a list of activities reserved for citizens and a list of sectors with restrictions applied (for example, local equity requirements), so that potential foreign investors could know in advance and with certainty what sectors they may invest in and under what, if any, conditions. Regulation then could occur through registration.

In general, the Government has an in-principle commitment to aligning the country's commercial legal environment with modern international practices, to attract foreign investment. It committed to this at the Pacific Islands Forum Economic Ministers' Meeting in Niue in 1999, and was to begin by reviewing all commercial laws and prioritizing areas for reform and external technical assistance. The focus in Tuvalu should be on the Companies Act and business licensing. Other areas could be examined later. These might include

(i) labor codes for employment in the private sector, which could introduce minimum protections for a safe workplace, dispute resolution mechanisms, and employment agreements that set out the minimum terms and conditions of employment;
(ii) consumer protection legislation;
(iii) competition and fair trading legislation; and
(iv) legislation to regulate persons or organizations marketing financial investment schemes, bonds, and shares.

On the issue of property rights, the *Kakeega* (GOT 1995 p.60) observes

> *Management of land is currently a source of confusion and uncertainty, for all sectors of the economy, Government, community, and business. The very high value put on land by owners, the customary system of land tenure, the lack of commonly accepted records, and inadequate legal institutions have meant that land disputes are common.*

As a result, land is not usually collateral in securing commercial loans and is not easily leased. These constraints substantially inhibit private sector development, particularly the prospects of joint ventures with foreign investors in the export sectors of fisheries and tourism. However, as noted in ADB (1998), land is central to Tuvaluan culture and society and any freeing up of the land market has to be seen as a long-term goal to be approached gradually with what is politically and administratively feasible. The short- to medium-term need is still for the Government to ease leasehold access to such small areas of land as potential domestic and foreign investors might need, and to ensure that such property rights are secure. This will require the Government to promote land surveys, title registrations, and dispute resolution for parts of urban Funafuti.

The range and complexity of issues affecting private sector development should not obscure what the private sector in Tuvalu itself has identified as a major concern: slowness of decision-making and administrative action in the public service. Improving the efficiency of public administration is key to private sector development through reduced transaction costs.

Conclusion

Attempts to improve public administration and public financial management between 1996 and 2001 have paid insufficient attention to domestic administrative and technical capacity. Development fashions have tended to override the need to get the basics right. The mismatch between available and required capacity was exacerbated by the dispersal of the civil service following demolition of the government office building, and the departure of many civil servants to training overseas. Future efforts to improve public sector management, and specifically public financial management, need realistic designing. Developing the private sector requires greater efficiency in public administration.

4

The Public Enterprise Sector

Introduction

When the Government of Tuvalu (the Government) presented its public sector reform program in the *Kakeega o Tuvalu* (GOT 1995), it was the sole owner of seven public enterprises and effectively controlled the Tuvalu National Provident Fund (TNPF), which is owned by its members. These eight enterprises collectively accounted for about half of marketed GDP at the time, so that their performance greatly affected economic efficiency and service delivery (ADB 1998). Introducing performance-oriented corporate planning in these enterprises was a key component of the public sector reform program, along with formulating appropriate pricing policies for public services. Additionally, the Government identified a range of initiatives for commercializing, corporatizing, and contracting out public service provisions (GOT 1995, p.16):

- (i) issuing shares in NBT to private investors, including foreign banks;
- (ii) privatizing the Government Travel Office;
- (iii) commercializing and subsequently corporatizing *Nivaga II*;
- (iv) leasing or selling the Vaiaku Lagi Hotel;
- (v) privatizing or contracting out some Public Works Department services;
- (vi) corporatizing the Post Office and amalgamating it with the Philatelic Bureau;

(vii) privatizing commercial fisheries, involving the lease, sale, or closure of the National Fishing Corporation of Tuvalu and the Teone fish market;
(viii) commercializing and subsequently corporatizing the Broadcasting and Information Office;
(ix) managing the Vaitupu Fishing Centre;
(x) commercializing and corporatizing Government housing;
(xi) contracting out stevedoring and port services; and
(xii) contracting out fisheries research activities.

The Government's commitment to reforming the public sector was reiterated in the 1997 *Vision 2015* statement (GOT 1997a) and elaborated in the 1997 *Amatuku Plan* (GOT 1997b and 1997c). However, few of the initiatives listed above were taken between 1995 and 2001:

(i) the Broadcasting and Information Office was corporatized into the Tuvalu Media Corporation in 1999;
(ii) a private travel company, Manu Travel, began arranging travel for some government departments in 2000;
(iii) some PWD services like maintaining government-owned property were contracted out; and
(iv) the Tuvalu Maritime School was corporatized into the Tuvalu Maritime Training Institute (TMTI) by an Act of Parliament in July 2000.

Corporatizing the Post Office and amalgamating it with the Philatelic Bureau is expected after the 2002 general election.

Therefore, in early 2002, there were 10 100% Government-owned public enterprises operating under their own Acts of Parliament (Table 4.1). Most, if not all, of these enterprises are likely to remain in the public sector, so that reform of the public enterprise sector will continue to focus on improving its performance without changing state ownership. This Chapter

(i) examines the operations of the 10 public enterprises since 1996;
(ii) assesses the extent to which corporate governance has improved; and
(iii) discusses removing constraints to improve corporate governance.

The Rationale for Corporatization

The first step in improving corporate governance in the public enterprise sector is to separate and clarify the roles of owner (the principal) and manager (the agent) (Schiavo-Campo and Sundaram 2001). The intention of the separation is to allow the manager to manage, without the owner interfering unduly in daily operations. The owner is to ensure the enterprise maximizes benefits to society, and should confine interventions to strategic issues.

Corporatization separates roles by creating an independent legal identity for the agency delivering services, either as a public corporation established by an Act of Parliament, or as a public company incorporated under companies legislation, with the Government owning 51% or more of voting shares. However, more than legislative change is needed if roles are to be fulfilled effectively and corporatization is to generate efficiency gains.

In particular, the principal-agent problem has to be solved. This problem exists when the welfare of the principal is influenced by the agent, who knows more about the enterprise's operations than the principal but who cannot be relied upon to act in the owner's interest. Therefore, granting autonomy to the manager of a public corporation must be matched by effective control, monitoring, and reporting mechanisms that make enterprise management accountable. The control function is exercised by boards of directors that walk a fine line between conflicting demands, as Schiavo-Campo and Sundaram (2001, p.205) observe:

Table 4.1: List of Public Enterprises, 2002

Enterprise	Origin	Governing Legislation
National Bank of Tuvalu	Subsidiary of Barclays 1980-85; joint venture GOT (60%)-Westpac (40%) 1985-95; 100% GOT 1995-present	NBT Act 1980
Tuvalu National Provident Fund	Original business	Provident Fund Act 1986
Development Bank of Tuvalu	Took over assets and liabilities of the Business Development Advisory Bureau in 1993	DBT Act 1990
National Fishing Corporation of Tuvalu	Fisheries division of Government ministry	NAFICOT Act 1982
Tuvalu Philatelic Bureau	Transferred from Post Office in 1985	Tuvalu Philatelic Act 1982
Vaiaku Lagi Hotel Corporation	Government ministry	VLHS Act 1988
Tuvalu Electricity Corporation	Government ministry	Tuvalu Electricity Act 1990
Tuvalu Telecommunications Corporation	Government ministry	TTC Act 1993
Tuvalu Media Corporation	Broadcasting and Information Office of Government ministry	TMC Act 1999
Tuvalu Maritime Training Institute	Tuvalu Maritime School in Ministry of Education	TMTI Act 2000

Source: GOT.

They must exercise their legal oversight responsibility, but without stifling the initiative of the management; and they must represent the interests of the state, but without becoming involved in the operational affairs of the company. Their capacity *to walk that line depends far less on the structure of the board than on the capacity of its members, the quality of information and resources they have, and the degree of government support they receive.*

Additionally, because management quality really determines whether corporate objectives are achieved, public enterprise management itself must be improved through a transparent selection process, training, and a focus on performance. Performance evaluation of management should extend to independent feedback to Government from employees and consumers. As noted, management possesses more relevant information than the Government and therefore can mount convincing but misleading explanations of its performance.

In sum, corporatization is a means to a more commercial public service delivery, while allowing the Government, as owner, to guide strategic management decisions. This guidance may include a requirement to undertake a "community service obligation" that is commercially unprofitable (and which may attract an explicit Government subsidy to the public corporation). Necessary conditions for successful corporatization include

(i) clear objectives and roles for ministers, boards, and general managers;
(ii) autonomous management with only rare ministerial intervention in routine operations;
(iii) strict accountability for performance; and
(iv) competitive neutrality with services provided on the same terms as actual or potential private sector providers (Economic Insights 1998).

The ultimate purpose of corporatization is to increase the productivity of resource use, which is reflected in lower prices for services and/or a higher quality of service. Higher productivity also potentially permits higher staff wages and increases revenue flow to the Government (or reduces the drain on the public purse). Corporatization must be judged by whether or not the purpose is achieved.

Operations and Performance of Public Financial Institutions

The National Bank of Tuvalu (NBT) and TNPF are exceptions to the general rule that public enterprises in Tuvalu originally were Government departments or divisions. NBT was a joint venture with Barclays Bank and then with Westpac between 1980 and 1995, prior to the Government becoming the sole owner (Table 4.1), while TNPF was created as a new enterprise in 1984.

The **National Bank of Tuvalu** (NBT) was established as a corporate body by a 1980 ordinance, which specifies that "the Bank shall act in accordance with any policy directions in the national interest given to it from time to time in writing by the Minister [of Finance]" (GOT 1982). A board of directors consists of the secretary for finance and four others (excluding members of Parliament) appointed by the minister for periods determined by the minister. Board meetings are scheduled for at least every 6 months. The board is required "to ensure that Bank policy is directed towards the national interest and has due regard to the stability and balanced development of the economy of Tuvalu." Board members are empowered to decide their own fees and allowances, subject to ministerial approval; and the board appoints a general manager for up to 5 years. The general manager must attend board meetings but has no voting rights, and in 2001 presided over a staff level of two managers (finance and administration, and lending and operations) and 38 officers, clerks, and tellers.

An annual report and NBT's financial accounts are by law prepared within 6 months of the end of the financial year, and the accounts are audited by an external agency selected by the board with ministerial approval. The minister presents the annual and audit reports to Parliament. NBT's reporting has been reasonably timely.

As noted in Chapter 2, NBT has operated profitably, returning an average 58.3% on net assets before tax from 1990 to 2000, and contributing an annual average of $507,000 to the Government in company tax and dividends. It is the only public enterprise to return a dividend to the Government consistently.

Also as noted in Chapter 2, NBT's status as a public (and perhaps natural) monopoly inevitably means relatively high interest rate spreads, fees, and commissions, and possibly a lower quality of banking services than in a more competitive banking sector. Although for the latter, staff exchanges with the ANZ bank in the Fiji Islands permit informal benchmarking. Appointing an experienced overseas bank executive as a visiting board director would be a formal way of introducing a comparative perspective (Tuvalu Trust Fund Advisory Committee 2001). Monopoly pricing disadvantages consumers and hinders private sector development, the board and the minister need to understand the national interest. Presently, this means equating the national interest with what is good for the Government. This reflects the importance of NBT as a revenue generator in a public enterprise sector that otherwise is a revenue absorber. In addition, while there is no suggestion of declining prudential standards, it would be appropriate to arrange for regular and independent prudential supervision, using regional assistance, as suggested by the TTF Advisory Committee (TTFAC) (2001).

The principal activity of the **Tuvalu National Provident Fund** (TNPF) is receiving member contributions and their investment in financial assets through professional fund managers. A six-person board of directors including NBT's manager is responsible for overseeing the Fund's operations. TNPF membership and net worth grew substantially between 1984 and 2000, with the return on net assets averaging 9.2% (Chapter 2). However, poor results in 2000 prompted a reorganization of the Fund's investment portfolio. TNPF management is eager to complete installing an effective management information system. But by early 2002 a computer-based system introduced in 2001 remained incapable of generating reliable information. A cumbersome manual system is used with persistent discrepancies between members' contribution account balances in the general ledger and the members' subsidiary ledger—with consequent qualified audit opinions on the 1999 and 2000 financial accounts.

The **Development Bank of Tuvalu** (DBT) was established under a 1990 Act as a general banking business to promote participation of Tuvaluans in economic and social development, especially rural, export oriented, or import substituting development. DBT's policy is determined by a six-member board of directors that includes three public servants and three representatives of the private sector (including a minister of religion and two businesspeople). The board appoints a general manager and support staff responsible for daily operations. Originally, there was provision for eight staff, and in January 1999 there were 15.

In contrast to NBT and TNPF, DBT has been unprofitable since its opening in June 1993 when it took over the assets and liabilities of the Business Development Advisory Bureau (Chapter 2). An operating profit was reported in 1999, but this reflected the impact of a $295,000 government grant. In fact, there was a bottom-line trading loss of over $200,000. A task force review of DBT presented to the board in May 2000 pointed to "unfortunate malpractices by past staff members and the inability of staff to perform to standards required by DBT" as major problems (DBT 1999). The general manager and the manager of finance and administration had resigned in December 1999, and there were several other vacancies. Record keeping was so poor that the officer in charge of DBT could not assess which loans were nonperforming.

There have been efforts to revitalize DBT business. A clear and forceful *Statement of General Business Policies* was issued with board approval in January 2000 and, if acted upon consistently, would lead to sound lending practices. Early in 2000, the loan portfolio of $1.6 million was segregated into performing and nonperforming components.

Volunteers under the Australian Executive Service Overseas Program helped in this effort to improve loan recovery. A move to a computer-based management information system was underway, again with external assistance. However, an operating loss of $112,000 was recorded in 2000, and at yearend accumulated losses totaled $1 million, net worth was minus $77 million, and arrears, although down on previous years, were still 17% of the loan portfolio. Prospects for achieving sustained profitability seemed limited, even with a new general manager, in-house training, and cautious lending resuming following the 1999 freeze. As observed in chapters 2 and 6, the 1998 proposal to merge DBT with NBT should be revisited for possible economies in administration.

Operations and Performance of the Utilities

The Public Works Division of the Ministry of Works, Communication and Transport remains responsible for public provision of water and sewage services. Most of Tuvalu's water supply comes from private rainwater storage and its sewage is provided by individual septic tank systems. Public utilities operate in the power and communications sectors and, after NBT, are the largest corporations by turnover (ADB 1998).

The **Tuvalu Electricity Corporation** (TEC) is responsible for generating and distributing electricity on Funafuti, Amatuku (the TMTI site) and, since the successful rural electrification project of 2000, all outer islands (except the almost uninhabited Niulakita). TEC also sells electrical appliances. The Corporation is guided by a four-member board of directors reporting to the minister of environment, energy, and tourism (prior to 2002, the minister of works, energy, and communications). The board consists of two public sector and two private sector representatives and appoints a general manager, who is supported by a deputy manager (the chief engineer) and a staff of 31 on Funafuti and Amatuku, and 24 on the outer islands. Salary levels are set under the civil service structure, with the general manager paid at level three (equivalent to senior crown counsel and in the range of $14,697 to $15,555 per annum in 2002).

In early 2002, four of the established TEC positions on Funafuti were vacant, including that of accountant; a position unfilled since its creation in 2000. That this position was not created until 2000 and was not filled is partly why TEC's financial accounts have not been prepared and accepted for audit since 1995—despite governing legislation requiring accounts to be prepared within 6 months of a fiscal year ending. Similarly, annual reports have not been presented to Parliament via the minister as prescribed in legislation. Not surprisingly, TEC is criticized by consumers and government officials for its lack of accountability and transparency (TTF Advisory Committee 2002).

Evidence shows that TEC has been operating at a loss. The average return on net worth was minus 4.6% from 1990 to 1996 (ADB 1998); and in-house accounts show operating losses in each subsequent year up to and including 2001. To some extent, losses may be desirable: the economies of scale in the electricity sector are so large that a (natural) monopoly is inevitable. In such a situation, adopting a marginal cost pricing policy for economic efficiency must mean that prices are set below the average cost of production. Additionally, services may be provided at a price below cost to disadvantaged groups (for example, outer-island populations), although the argument loses weight if nondisadvantaged groups also benefit from the below-cost price. When decreasing costs exist or there is a valid equity argument, there is a case for government subsidies funded from general revenue (Coase 1970).

However, neither marginal cost pricing nor equity-based pricing are explicit TEC policies; and while the theoretical case for a policy of allowing a public enterprise to make losses may seem reasonable, there are implementation problems of measurement and application. There are also risks that adopting such a policy would encourage management to maintain an excessively costly operation, and to perhaps overinvest in supply capacity (since there is no need to achieve a viable rate of return on funds). These are key reasons why governments generally have moved towards greater cost recovery for state enterprises and in some instances established target rates of return on assets employed.

Management began preparing a strategic plan for TEC in 2000. The resulting document, *TEC Strategic Plan FY 2001*, remains incomplete because appropriate standards of performance were still to be agreed on by the board and the minister, and most of the historical data on performance indicators were missing. Nonetheless, missions and

Box 4.1: Summary of TEC Strategic Plan FY 2001

The new strategic direction for TEC is to provide power for development by extending the use of electricity and improving the quality of service and reaching appropriate standards of technical, financial, economic, and environmental performance.

The new direction is summarized by six key objectives:

1. To improve consumer satisfaction by ensuring price increases are less than the inflation rate
2. To provide an electricity supply that meets reliability and quality targets (reduce power interruptions by 10% per annum)
3. To meet financial directions [*sic*]
4. To increase the number of people connected to power (at rates exceeding 3% per annum)
5. To actively market the effective use of the supply system
6. To increase the efficiency of our organization (as measured, for example, by the number of consumers per employee)

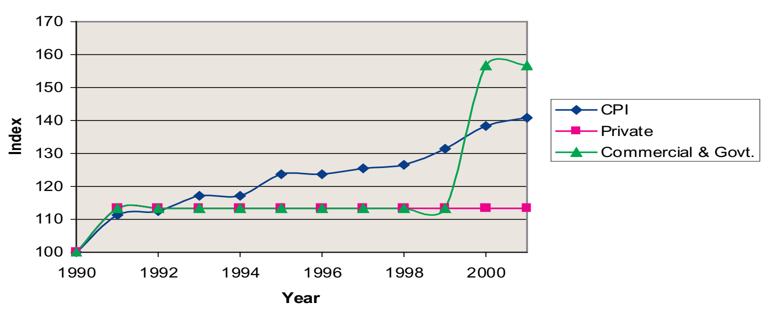
Source: TEC 2001.

objectives were set out (Box 4.1), and a general commitment was made to upgrading the Corporation's human resources.

The pricing policy in the *TEC Strategic Plan* is "to contain price increases below the rate of inflation," to achieve the first objective of improving consumer satisfaction (TEC 2001, p.1). The electricity tariff started at 30 cents per kilowatt hour for all user groups in 1990; rose to 34 cents in the following year; and has remained at that level for private households in Funafuti, but was increased to 47 cents in 2000 for commercial and industrial users and the Government. The tariff for outer-island households is 30 cents. Therefore, as Figure 4.1 shows, the real price of power has fallen for households between 1990 and 2001, and risen for other user groups towards the end of the period. The uniform nominal rate charged before 2000 was about double the rate in the Fiji Islands, on a par with the rate in Samoa, and about 17% below the high rate in Tonga (ADB 2000). The substantial 2000 rise in rates for commercial users and the Government is a cost-recovery measure that is likely to be effective, since it affects those user groups whose demand can be expected to be relatively price insensitive. Simultaneously, the cross-subsidy to households is increased. In setting tariff charges, the major cost is fuel oil, which in 2001 accounted for 60% of total operating costs exclusive of depreciation.

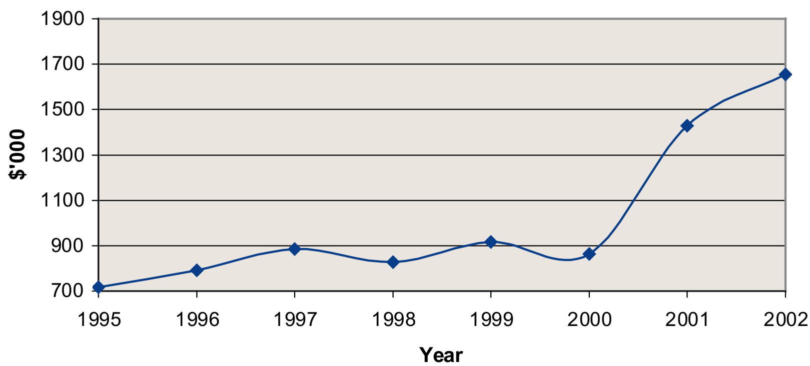
Power supply in Funafuti is reasonably reliable by regional standards. In the early 1990s, there was an average of one 5-10 minute disruption per month. (ADB 1998). The number of interruptions declined until 1998, when there was an increase because of generator problems, and then reportedly fell again in subsequent years (TEC 2001). The limit of current generating capacity is now being reached as a result of recent growth in electricity consumption on Funafuti, and TEC proposes to expand capacity in the next few years. Total consumption increased from 2,328 kilowatt hours in 1996 to 3,392 kilowatt hours in 2001, a 7.8% average annual rate of increase. Between 1996 and 2001, household consumption grew at 14.3%, commercial consumption at 4.9%, and government consumption at 4.7%.

Figure 4.1: TEC Tariff Rates and the CPI, 1990-2001



Source: TEC 2001.

Figure 4.2: TEC Energy Sales, 1995-2002



Source: TEC accounts.

Note: The 2002 figure is a budget estimate.

Figure 4.2 shows energy sales from 1995 to 2002. The creation of generating capacity in the outer islands contributed to the rise in sales in 2001; but most of the growth was concentrated on Funafuti (which accounted for 90% of country-wide sales), and largely reflected the impact of the higher tariff for commercial users and the Government. Sales revenue from these two groups rose above the 2000 level by 59% and 53%, respectively, while revenue from households increased by 33%. In 2001, private households accounted for 30% of total energy sales, commercial and industrial users for 37%, and the Government for 33%. Compared with 1996, there was a slight increase in the sales share of households.

Greater cost recovery of the sort begun in 2000, and reflected in the 2001 sales revenue increase, will be essential to improving TEC's financial performance and reducing government subsidies. The 2001 national budget showed a $200,000 subsidy to TEC as a special development expenditure, and also $588,000 as special development expenditure on outer-island electrification through the Ministry of Natural Resources, Energy and Environment (MNREE). The 2002 national budget reveals that the 2001 subsidy actually turned out to be $285,000, and shows estimates of special development expenditure that include a $1.2 million subsidy to TEC and $500,000 in expenditure through the new Ministry of Environment, Energy and Tourism (MEET) for the second phase of outer-island electrification. TEC should be accountable for its use of public funds, and for greater clarity on the respective roles of TEC and the ministry. A service operating agreement between TEC and the Government should be negotiated and implemented. This would cover the following areas (see Economic Insights 1998):

(i) objectives, nature, and scope of the Corporation's main activities;
(ii) performance targets and other measures by which the Corporation's performance is to be judged under its stated objectives;

(iii) accounting policies to be applied;
(iv) broad financial guidelines and constraints, such as maximum debt to equity ratios;
(v) major infrastructure investments, their expected rates of return, and proposed financing arrangements;
(vi) proposals for varying the Government's equity contribution;
(vii) dividend policy;
(viii) noncommercial activities to be performed and the arrangements for costing, funding, and performance monitoring;
(ix) specific employment, wage, and industrial regulations requirements not reflected in general legislation;
(x) proposals for external technical assistance;
(xi) type of information for the Corporation to give to the minister during the financial year, including information in quarterly and half-yearly reports; and
(xii) such other matters as might be agreed on by the minister and the board.

The Tuvalu Telecommunications Corporation (TTC) was established in February 1994 under the TTC Act of 1993, which grants TTC a monopoly of telecommunications service provision in Tuvalu, as a commercial organization. TTC's corporate plan for 1997 to 2002 states its mission is "to provide efficient, reliable and cost effective telecommunications services to both domestic and international destinations, to the benefit of the people of Tuvalu and the social and economic development of the nation" (Economic Insights 1998, p.7). Direct dialing domestic and international services are available through the main exchange on Funafuti, as well as limited operator-assisted and phone card services. The exchange has a potential capacity to service over 2,000 subscribers, of which there were 740 by 1997. Outer-island and international calls use Intelsat satellites. Fax, telex, and telegraph services are also provided by TCC, but Internet and e-mail services have been removed to the Office of the Prime Minister (OPM), reportedly because

TTC was becoming "too powerful" (TTFAC 2002). As explained in Chapter 2 (Box 2.2), the registry of Tuvalu's top level domain name has been privatized.

A five-member board of directors of three Government and two private sector representatives oversees TTC operations. Although the numerical dominance of Government personnel potentially compromises the board's independence from Government, it appears that this has not been an issue in practice. Indeed, in 1997 the board decided to disconnect government telephones because of unpaid bills (Economic Insights 1998). The general manager acts as secretary to the board and is responsible for TTC operations. He is supported by four branch managers (finance, administration, operations, and engineering) and 50 other staff. This staffing level has been stable in the past five years.

The telecommunications tariff structure set by TTC (Table 4.2) is unchanged since a 1998 analysis that demonstrated large losses were made on outer-island and intraFunafuti calls, while profits were made on international calls (Economic Insights 1998). This same analysis shows that full cost recovery would have entailed massive hikes in rates for outer-island calls and a large rise in rates for intraFunafuti calls. Such hikes were regarded as inappropriate, given that capital costs were funded largely by external grants and that there was a community service obligation to outer-island populations. Rather, it was suggested that the tariff structure should ensure that revenue covered "critical costs" of Funafuti, outer-island, and international services. Critical costs are defined as cash costs actually incurred by TTC (the noncritical costs being depreciation). The implied tariff adjustment again involved large rises in rates for outer-island and intraFunafuti calls (although lower than for full cost recovery), alongside reduced rates on international calls. However, if the aim was to cover critical costs in total, as opposed to covering costs of each service category, TTC was already successful, since 1998 revenue covered costs exclusive of depreciation. Since then, the TTC board has maintained a policy of setting tariffs under affordability considerations and the need to cover critical costs.

Table 4.2: TTC Tariffs for Direct Dialling, 2002

Call Destination	**Peak Rate** (per minute)	**Off-Peak Rate** (per minute)
Domestic		
- within Funafuti	$0.10 unlimited time	$0.10 unlimited time
- outer islands	$0.60	$0.60
International		
- Australia	$1.50	$1.20
- Fiji	$2.00	$1.60
- other Pacific islands	$2.50	$2.00
Rest of the world	$4.00	$3.20

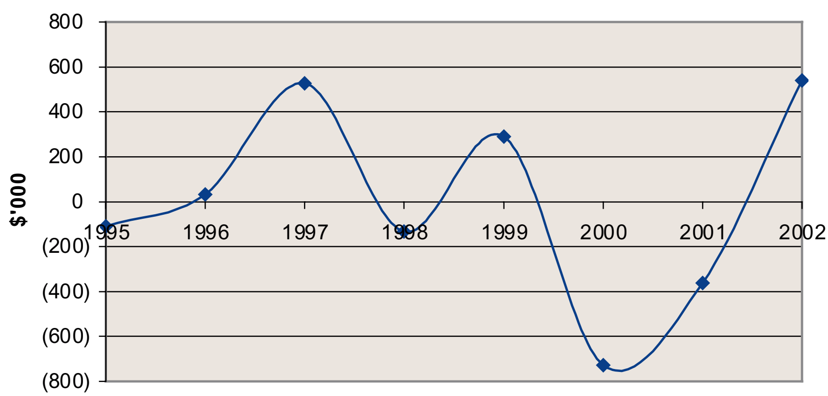
Source: TTC.

The TTC Act requires the board to prepare financial accounts and an annual report on operations within 6 months of the end of the financial year. The accounts are to be audited by the Auditor General and reported to Parliament at least once a year. These requirements have not been met. The last audited set of TTC accounts was for 1998, and the auditor was Peat Marwick. The audit reports for 1996 to 1998 are all qualified. In each report, it is noted that TTC "is unable to rely on its traffic system for completeness and accuracy of incoming and outgoing traffic. Total reliance is placed on foreign administrations to provide all incoming and outgoing traffic minutes. We are unable to satisfy ourselves that outpayments and inpayments are complete and accurate and the balance of traffic creditors and debtors is fairly stated" (Independent Auditors' Reports, 1996-1998). Additionally, in 1996 the record of transactions could not be verified because of a computer malfunction (which had a flow-on effect to the 1997 accounts), and the auditors were concerned that there was no independent valuation of the $4.4 million in assets transferred to TTC in 1994.

Figure 4.3 shows TTC's profitability as revealed in the 1996 to 1998 accounts presented to the external auditors and in-house accounts yet to be prepared for audit. It must be noted that there are major discrepancies in data provided from the two sources. For example, the financial statements presented for audit report an operating profit of $318,562 in 1997. The in-house 1999 budget summary reports an operating loss of $72,673 in 1997. The observation made in 1998 that "Computer-based information systems are poorly developed and records are manifestly inadequate" (Economic Insights 1998, p. 9) is still pertinent. TTC contributed $60,000 to the Government in 1997, and received $1.2 million in grants and aid between 1995 and 1998, which is included as income in the TTC accounts.

TTC management, like TEC's, has been accused of a lack of transparency and accountability (TTF Advisory Committee 2002). TTC, like TEC, should be working under a service operating agreement with the Government. Such an agreement complete with performance indicators was drafted in 1998 (Economic Insights 1998), but there seems to have been little follow-up action since then.

Figure 4.3: Operating Profits of TTC, 1995-2002



Source: TTC accounts.
Notes: The outcome for 2000 reflects a particularly large allowance for depreciation. Figures for 2001 and 2002 are budget estimates.

Operations and Performance of Other Public Enterprises

The Government's commercial fisheries arm the **National Fishing Corporation of Tuvalu** (NAFICOT) has had a history of decline, expansion, and renewed decline. The 1980s was characterized by unprofitable operations and deteriorating infrastructure and equipment. A brief period of profitability in the early 1990s was largely attributable to the leasing out of a long-lining vessel that was unprofitable domestically. From April 1994 to March 1998, assistance from the Japanese Overseas Fishery Corporation Foundation allowed NAFICOT to expand its operations by acquiring three fishing vessels and restoring infrastructure and equipment (ADB 1998). However, operations remained unprofitable and, with the ending of external assistance, it appears that there has been a renewed decline.

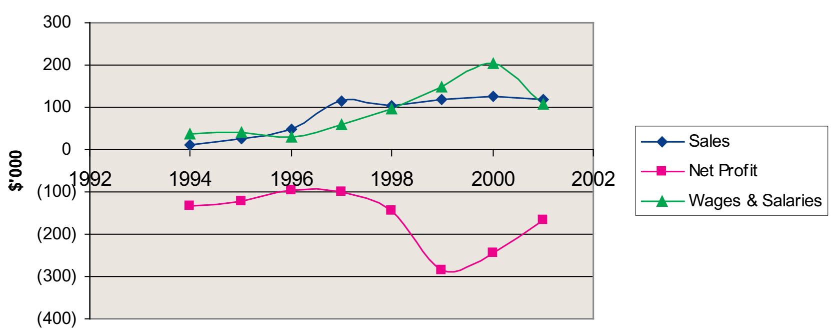
The last set of audited NAFICOT financial accounts is for 1992 (TTF Advisory Committee 2001). Accounts for 1993 to 1999 remained outstanding until early 2002, despite repeated requests from the six-member board of directors that they be completed under NAFICOT's governing Act. The general manager blamed lack of data and supporting documentation for delays in 1994, 1995, and 1996. Accounts presented for audit in early 2002 and additional in-house data show net losses for each year between 1994 and 2001. Losses have been incurred despite some growth in sales and, especially in 1999 and 2000, have been associated with large rises in the wages and salaries bill (Figure 4.4). This may be partly attributable to staffing community fishing centers in the outer islands (Chapter 6). NAFICOT's draft budget for 2002 indicates another year of loss-making operations is anticipated. A new fishing vessel is expected to increase sales revenue substantially through increased collections from the community fishing centers, but upgrading of infrastructure and equipment is needed, and the wage and salaries bill is estimated to rise by about two thirds from the reported 2001 level.

As discussed in Chapter 6, NAFICOT continues to offer fresh fish in Funafuti through two outlets leased at retail stores. NAFICOT vessels and local fishers supply the fish. The corporation also operates a boat motor repair workshop, and sells ice and fishing gear. It is recommended in Chapter 6 that NAFICOT

(i) sell its fishing vessels;
(ii) lease its motor repair and gear sales facilities to private operators; and
(iii) continue supporting private fishers with infrastructure like ice making, cold storage, and marketing services.

Whatever the future scope of NAFICOT operations, there is a pressing need now for greater accountability and transparency in its operations.

Figure 4.4: NAFICOT Sales, Profits, and Wages, 1994-2001



Sources: NAFICOT accounts; NAFICOT Proposed Annual Budget 2002.

The **Tuvalu Media Corporation** (TMC) was established by an Act in December 1999. Its functions are to continue the national broadcasting service "Radio Tuvalu" and any other business previously undertaken by the Government's Broadcasting and Information Division. The Corporation's charter (Box 4.2) states that the Corporation and its board

Box 4.2: Tuvalu Media Corporation Charter

(1) The principal function of the Corporation shall be to provide a national broadcasting service which informs, educates and entertains the people of Tuvalu and, in doing so, reflects its commitment to the interests of Tuvalu.

(2) The Corporation, in performing its principal function, shall:

(a) make all reasonable endeavors to maintain broadcasting services to all regions of Tuvalu and seek financial assistance by way of grant or loan from any person if the cost of extension of such services to remote areas renders this expedient or necessary;
(b) provide adequate coverage of news and information from all parts of Tuvalu and from overseas sources, including the widest possible range of perspectives and opinion in its broadcasts and publications;
(c) make its broadcasting facilities available as a means of communication ....if for any reason conventional telecommunications are unavailable;
(d) maintain a policy of social responsibility by having regard at all times for the interests of the people of Tuvalu and endeavor to accommodate or encourage these when able to do so;
(e) be accountable to the people of Tuvalu through their elected representative in Parliament.

(3) The Corporation is not to be regarded as the servant or agent of the Government or ...as exempt from any tax, duty, rate, levy or any other charge whatsoever and that its property is not to be regarded as property of, or held on behalf of, the Government.

(4) ...the Corporation and its board are not subject to direction by or on behalf of the Government or any Minister thereof.

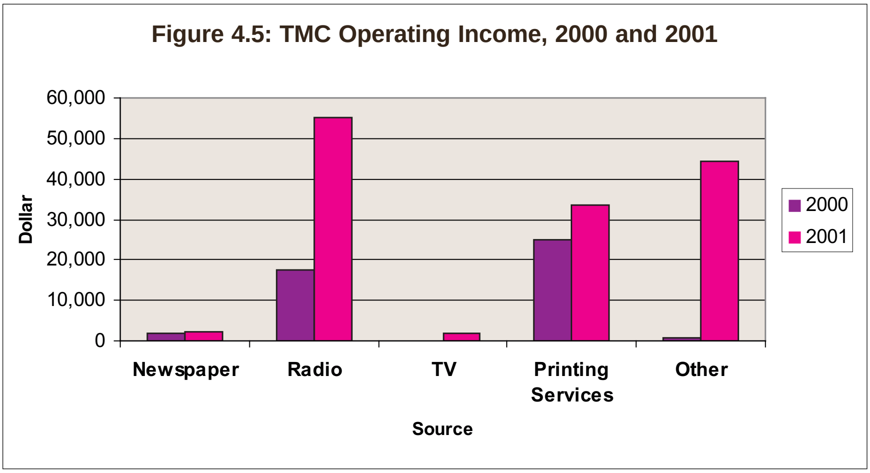
are not directed by or on behalf of the Government or any minister. However, all five board members are appointed by the minister, who also selects the chairperson and deputy chairperson and may terminate their appointments if the reasons are disclosed. TMC's chief executive is the general manager, appointed by the board with the minister's approval. The general manager's term is 3 years, but this can be renewed by the board, with the minister's approval. Permanent employees are appointed (and dismissed) by the board, which also sets their terms and conditions of employment. Because the chairperson is the permanent secretary of the responsible ministry, the Government maintains de facto control.

TMC is obliged by law to submit an annual report, including accounts and financial statements, for the minister to table in Parliament, but has so far failed to comply with this requirement. In 2000 and 2001, TMC relied heavily on government grants of $234,750 and $250,000, respectively, to operate. Excluding these grants, operating losses were recorded in both years, (Table 4.3). Income tripled in 2001 compared with the previous year, largely due to a rise in income from radio and other sources (Figure 4.4). However, gains were more than offset by higher operating costs. Wages increased by 49%, and telecom costs rose significantly, (Table 4.4).

Table 4.3: Tuvalu Media Corporation Financial Summary, 2000 and 2001

Item	2000	2001
Net income	41,510	133,225
Expenses	232,954	343,419
Operating profit/loss	(191,445)	(210,194)
Government grant	234,750	250,000
Net profit	43,305	39,806

Source: TMC accounts.



Source: TMC accounts.

TMC's 2002 budget predicts total operating income of around \$200,000 and expenditure of \$485,928. However, the latter includes depreciation of fixed assets (\$104,066), which were omitted from the 2000 and 2001 statements. Part of the 2002 revenue shortfall is to be met by a third government grant of \$100,000. There is need for greater financial self-reliance as underlined by 20% of TMC's 2002 income exclusive of the grant being expected from its printing services. These largely involve photocopying and binding services for government departments and the public. Constructing and equipping the new government administration block in 2003 is likely to decrease the Government's reliance on these TMC services.

It is important, therefore, that the Corporation offset future revenue shortfalls by improving and expanding its broadcasting services; an area it monopolizes. Examining broadcasting operations in other small Pacific islands would help. In Niue, for example, a private broadcaster once successfully ran a TV cable network. Using "free-to-air" programs interspersed with nightly local news, the Niue operator derived income from advertising fees paid by local companies and monthly cable charges to subscribers. TV services in Niue have now been

Table 4.4: TMC Operating Expenditure, 2000 and 2001
($)

Item	2000	2001
Audit fee	465	0
Bank charges	70	253
Board expenses	4340	5318
Customs, freight	4863	4959
Wages	149291	222938
Hire charges	1275	659
Hospitality	139	181
Maintenance bldgs.	17738	7239
Maintenance car	1205	1219
Administration	3266	10580
Utilities	27205	48647
Replacements	15501	4064
Staff development	3634	7906
Consultancies	859	4086
Subscriptions	205	178
Telecom	2891	25183
Total	232947	343410

Source: TMS accounts.

corporatized and income is derived from a flat-rate license fee levied on all television receivers. With its larger population, the market demand for such services in Funafuti would appear to be much greater than in Niue. Currently, television broadcasting is limited to one night per week in Funafuti where prerecorded local events such as local dances (fatele) are shown. Foreign free-to-air programs were broadcast in Tuvalu briefly in the mid-1990s, but ceased in 1998 when receiver equipment failed. Attempts to repair the equipment have been unsuccessful.

The **Tuvalu Philatelic Bureau** (TPB) was established soon after independence in 1978 and for its first few years was the country's major foreign exchange earner. In a buoyant world market, international demand for Tuvalu stamps was fueled by the quality of the stamps issued, with Tuvalu gaining the distinction of being "the No.1 in the world of philately" (UK Stamp Catalogue & Stanley Gibbons Stamp Catalogue – 1977-1979). TPB was the country's third largest employer for a few years, but by the mid-1980s its fortunes had changed dramatically. Faced with a recurrent budget deficit caused by a decrease in British grants and a severe downturn in the global philatelic market, and acting against the advice of TPB management, the Government launched the so-called "Leaders of the World" issue in an attempt to shore up sales and offset the impending budget shortfall. This issue, depicting famous foreign football players, trains, aircraft, and so on, did not receive market acceptance. Instead it caused a sharp fall in demand for Tuvalu stamps. 'Leaders of the World' was soon abandoned, but the experience severely dented market confidence in Tuvalu's stamps for more than a decade. Only recently have TPB sales recovered.

Table 4.5 summarizes TPB performance from 1996 to 2001. Accounts for 1998 to 2000 remain unaudited, but the figures show a disappointing profit history, with some improvement towards the end of the period. Current assets remained under one third of current liabilities throughout; and at the end of 1999 accumulated losses were almost $739,000. In late 2000, the Auditor General observed that TPB was "in such a poor financial position that it should be closed" (Audit Office 2001).

If TPB is to trade out of financial difficulty, there is need to continue improving gross profits by

(i) increasing market share;
(ii) reducing sales returns and production costs; and
(iii) containing operating expenses, particularly a wages bill that increased 59% between 1997 and 2001.

This need is recognized in TPB's corporate plan for 2002 to 2004, which has adopted a conservative policy of limiting stamp issues to between six and eight per year, while seeking to capture more market share by penetrating the Asian market and by developing a TPB website. The plan also envisages amalgamating TPB with the Post Office to reduce production costs and operating expenses.

Table 4.5: TPB Financial Summary, 1996 – 2001

($)

Item	1996	1997	1998	1999	2000	2001 (est.)
Sales	282,274	469,079	390,432	243,901	400,700	395,800
Gross profit	125,150	153,218	102,337	92,562	246,974	255,800
Operating expenses	269,640	87,438	105,235	115,823	138,780	149,703
Net profit, loss	(165,596)	62,965	(12,555)	(23,189)	108,274	106,497

Source: TPB Accounts

The **Vaiaku Lagi Hotel** (VLH) has been owned and run by the Government since independence. Rebuilt in 1993, it is Tuvalu's main hotel and is used extensively to accommodate foreign officials, hold national and regional workshops, and to host government functions. Corporatizing VLH in 1988 has not changed significantly the way it is governed or managed. As with the other public corporations, management is appointed by a board of directors that the minister appoints. Invariably the chairperson is the permanent secretary of the responsible ministry. Employment conditions for hotel employees mirror those of government workers.

VLH accounts up to 1998 have been audited. It reported losses in all years between 1995 and 1998, even allowing for the inclusion of government grants of $50,000 in 1995 and 1996 as income (Table 4.6). Depreciation costs (Table 4.6) were a substantial component of expenses, while bad debt write-offs increased significantly (Figure 4.7), accounting for some 47% of losses in 1998. Wages, telecom, and electricity costs remained relatively constant or fell over the four years (Figure 4.7). Poor management was reflected in a 1998 loss of $58,000 in VLH's beverage department, where substantial stock was missing. There is little evidence of managerial or financial improvement since 1998.

Since the early 1980s, the Government has considered a management contract with a private sector manager, to improve returns on its investment in VLH. Such a contract could be

(i) a lease (where the Government would receive a fixed rent);
(ii) a concession (where the Government would be responsible for fixed investments); or
(iii) a joint venture (where the private sector manager owns part of the equity).

The Government hesitates, perhaps because it could lose control of an asset it uses extensively for official purposes. However, given the state of VLH finances and management, the Government should seriously consider a management contract, noting that it must have the capacity to prepare, monitor, and enforce the contract.

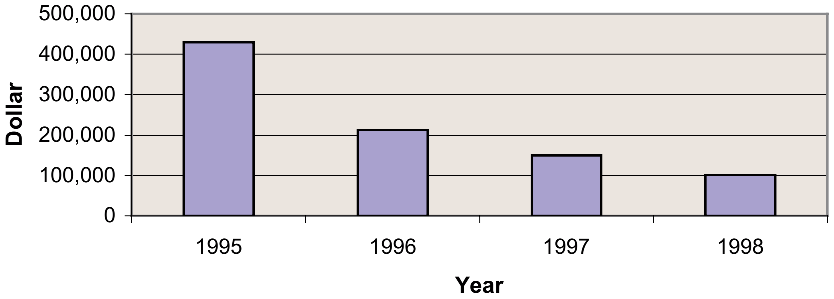
Table 4.6: VLH Financial Summary, 1995—1998

($)

	1995	1996	1997	1998
Revenue	315,277	288,562	361,600	191,948
Expenses	642,203	489,384	400,870	369,230
Profit, loss	(326,926)	(200,822)	(39,270)	(177,282)

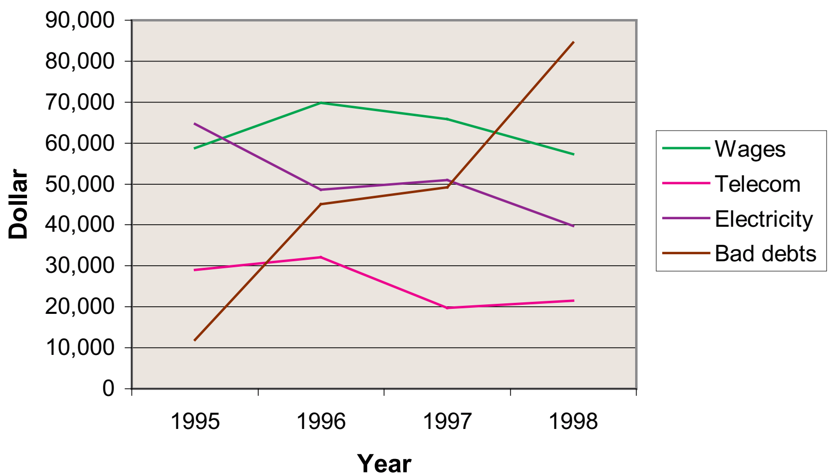
Source: VLH accounts 1995-98 (audited).

Figure 4.6: VLH Depreciation Costs, 1995-1998



Source: VLH accounts 1995-98 (audited).

Figure 4.7: VLH Expenses, 1995-1998



Source: VLH accounts 1995-98 (audited).

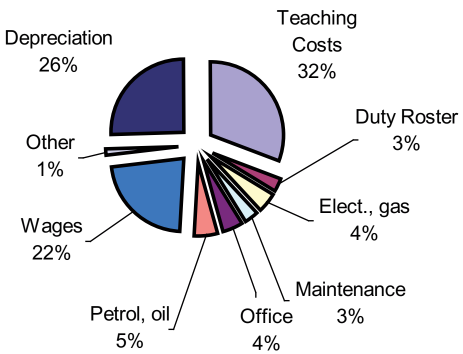
The **Tuvalu Maritime Training Institute** (TMTI) was the Maritime School, a division of the Ministry of Education, Sports and Culture (MESC) from independence until mid-2000, when it was corporatized by an Act and changed its name. TMTI's mission is to provide "quality training for seafarers at all levels to enhance their employment opportunities in the maritime industry" (TMTI 2001). The training activities and outcomes are examined in Chapter 5. In general, TMTI operates a quality control system approved to International Maritime Organization standards.

A board of directors oversees TMTI's operations: it consists of the chief executive officer, two employer representatives, a representative of the Tuvalu Overseas Seamen's Union, a public servant, and a community leader from Funafuti. The Board reports through the secretary of education and culture to the minister of education and culture. It appears that corporatization has involved little more than the name change, and that TMTI still operates as a division of the ministry, with a commensurate degree of ministerial involvement in daily operations.

TMTI's accounts for its first year (2001) report a net surplus of $91,197; but 98% of that was from a government grant, with course fees accounting for just 0.9%. Large annual government cash injections are expected to continue, with the 2002 national budget providing a subsidy of $300,000 and a special development expenditure of $200,000 on a submarine cable to Amatuku (the TMTI site). Upgrading TMTI facilities is to be funded by an Asian Development Bank (ADB) loan, arranged in early 2002. Figure 4.8 shows the breakdown of TMTI expenses in 2001.

Given the importance to Tuvalu of income from overseas maritime employment (chapters 2 and 7), it is crucial that TMTI training and facilities be maintained to required international standards. The TMTI Quality Control Manual expressly sets out the policies and procedures for such compliance; and the Government and external development assistance agencies have indicated their willingness to provide ongoing funding. Consideration could be given to increasing the degree of cost recovery through fees, especially from seamen receiving in-service training.

Figure 4.8: TMTI Expenses, 2001



Source: TMTI accounts, 2001.

The Transport Sector

Domestic shipping services in Tuvalu were provided entirely by the government-owned *Nivaga II* until early 2002. In 2000, a privately-owned ship began operating in the interisland trade, but services soon ceased because the vessel sank. In March 2002, Japan donated, the *Manu Folau.* This 46.5-meter vessel was built specifically to transport cargo and up to 160 passengers. It will complement services provided by the *Nivaga*, in particular improving the frequency of visits to outer islands, and freight and passenger lifting from Suva. Like the *Nivaga*, the Government will run the *Manu Folau* through the Marine Division of the Ministry of Works, Communications and Transport. It appears the Government has not estimated the impact of running the new vessel on the Ministry's recurrent budget.

Various proposals for commercializing, corporatizing, and privatizating domestic shipping services have been discussed. Most recently, the Government considered retaining the majority shareholding of a proposed limited liability company, with the remaining shares being offered to the public. The local governments (kaupules) were considered potential investors in the "Tuvalu Shipping Proprietary Limited," but community responses to initial approaches were not positive. A memo of incorporation and articles of association of the proposed company were drafted but no bill was ever brought to Parliament. The total share value of the proposed company was set at $3 million with 3,000 shares at $100 each. The *Nivaga II* was to be the main asset, valued at $1,430,630 and the Government was to retain 14,306 shares (the value of the *Nivaga*). The maximum number of shareholders would have been limited to 20 with a minimum of three. However, the Government has not proceeded to create the company.

Island communities' reluctance to invest in shipping is not surprising, given the financial results of *Nivaga* operations. From 1996 to 2001, the *Nivaga* recorded a surplus only in 1996 (Table 4.7). Since 1996, substantial losses have been made. The huge loss of $3.7 million in 2000 was largely from renovating the ship. Such costs had been estimated at around $300,000 before slippage, but escalated quickly once the ship was dry-docked in New Zealand. The absence of a detailed cost estimate, plan of work, and executable contract with the repairers was unfortunate and left the Government vulnerable.

Table 4.7: Nivaga Financial Summary, 1996—2001

($)

Item	1996	1997	1998	1999	2000	2001
Income	670,117	603,045	409,452	301,553	337,647	667,000
Expenses	116,349	835,270	966,612	827,961	4,110,862	1,700,000
Profit, loss	553,768	(232,225)	(557,160)	(526,408)	(3,773,215)	(1,033,000)

Source: MFEP, Treasury Accounts.

Freight rates and passenger fares are well below the levels that would permit *Nivaga* operations to break even, leaving aside depreciation expenses (ADB 1998). Continued subsidies seem inevitable, even if domestic shipping were privatized, and can be defended on equity grounds. Similar equity considerations lay behind introducing the Import Levy (Special Fund) Act 1997, which allows disbursements from the Fund "to finance or assist to finance the transportation by ship within Tuvalu of goods in respect of which the import levy has been paid." Effectively the Act equalizes consumer prices within Tuvalu, meaning that consumers purchasing goods in Funafuti subsidize freight charges to the outer islands. Prior to the Act, the Tuvalu Cooperative Society had achieved much the same result by applying a freight equalization mark-up on all goods imported, ensuring that its retail prices remained the same on each island irrespective of interisland freight rates. The Act extended this concept to all importers and traders.

The real issue for domestic shipping is if Government subsidies are transparent and justified by the quality of service provision they support. The national budget identifies "upgrading of shipping services" as a key output of the Marine Department of the Ministry of Works, and lists program activities and performance indicators. A first step in making shipping operations more accountable would be for the Ministry to review the appropriateness of these indicators, to monitor activities, and report on results.

International air services consist of flights to and from the Fiji Islands twice weekly by Air Fiji. The Government of Tuvalu is the largest single shareholder in the latter company following its 2001 purchase of the Ah Koy family share in the holding company, Aviation Investments Limited. This investment turned out to be risky, as the TTF Advisory Committee reported in April 2002:

> *A year ago the Committee expressed concern about deficiencies in the Government's 'due diligence' preparation for its investment in Air Fiji. That concern has turned out to be well founded. Tuvalu has only now become aware of the depth of mistrust and*

> *ill feeling between the Ah Koy family and CATIC, the two shareholders who jointly controlled Air Fiji through the holding company Aviation Investments Limited (AIL) until the Ah Koys sold their shares in AIL to Tuvalu. As part of the sale agreement Tuvalu undertook to keep an Ah Koy nominee on the board of Air Fiji indefinitely. The bitter dispute between the Ah Koys and CATIC, which goes back several years, was concealed from Tuvalu by both Ah Koy and CATIC until very recently. This hostility is handicapping Air Fiji's commercial viability, and seems unlikely to end until either the Ah Koy family or CATIC are no longer involved.*
>
> *To extricate Air Fiji and itself from this risky situation the Government will have to be particularly clear-minded and astute* (TTF Advisory Committee 2002, p.27)

The TTF Advisory Committee went on to recommend working with the Government of the Fiji Islands (also a shareholder of Air Fiji) to ensure the airline's competent technical and commercial management.

Conclusion

It was noted at the beginning of this Chapter that necessary conditions for successful corporatization included

(i) clarity of objectives and roles to be played by ministers, boards, and general managers;
(ii) management autonomy and authority; and
(iii) strict accountability for performance.

The fourth condition of competitive neutrality is less relevant in the Tuvalu context because of the extremely small markets. This Chapter's review of operations by the 10 public enterprises has shown that these conditions have not been met generally. This is although efforts have been made, beginning with

(i) the Amatuku retreat of August 1997 (GOT 1997b, 1997c);
(ii) the continuing externally-provided advice and training on corporate planning; and
(iii) the drafting of a service-operating agreement for TTC.

Lack of accountability is the most conspicuous weakness in the corporate governance environment, and reflects a failure to act under legislation that requires timely annual reports and financial accounts. In the absence of information, the small Public Sector Reform Unit in OPM has been unable to monitor and report. Also the Government continues to provide substantial financial support to the public enterprise sector, while only assuming its shareholder interests are adequately protected (in markets where there are no competitive pressures to perform).

Lack of accountability in the public enterprise sector partly reflects two types of capacity constraint:

(i) the shortage of qualified and experienced board members who are not current or former government employees, and who can exercise the control function without being captured by public enterprise management; and
(ii) the shortage of qualified accountants to operate a functioning accounting system that generates information for sound decision-making, internal and external auditing, and financial performance monitoring.

Corporatization increases the demand for board members and accountants and will not succeed unless there is a supply-side response that significantly eases these constraints. As the Auditor General has observed: "Every new corporation that is created will require accounting staff. The Government should cease its program of creating new corporations until the problems within current corporations are under control" (Tuvalu Audit Office 2001). The practicality of corporatization under Tuvalu's current circumstances remains to be established.

5

Human Development

Introduction

Since independence in 1978, successive governments have identified developing Tuvalu's human resources as a priority. In Tuvalu's introductory speech to the United Nations General Assembly in 1999, the Prime Minister stated, "Culture, faith, and education are the foundation of modern Tuvalu." Regional comparisons of literacy consistently show Tuvalu in the upper quartile, with 95% of its population literate. Improving this figure and educating and training the population in skills relevant to Tuvalu's economic and social goals remain key development objectives.

Faced with its small size, limited natural resources, isolation, and remoteness from major markets, Tuvalu considers a well-educated and trained labor force critical for economic growth. Like other small Pacific island countries, the small widely dispersed population of Tuvalu confronts acute difficulties in achieving economies of scale. These same factors present education and training planners with special challenges.

In the late 1980s, a review of Tuvalu's human resource and training needs and the education system resulted in the Education for Life (EFL) program in 1990. EFL's main goal was to create a system of compulsory quality education for all children to the age of 15 years. It emphasized equal access for all Tuvaluans and encouraged parental and community participation. Twelve years later, EFL remains the principal strategy for achieving the Government of Tuvalu's (the Government) human resource development objectives (MESC 1997).

This Chapter examines the structure, functioning, and performance of the education and health systems and reviews current issues and social development policy.

The Education System

Responsibility for administering education lies with the Ministry of Education, Sports and Culture (MESC). The minister of education is also responsible for the Ministry of Health. MESC headquarters has a permanent secretary, an assistant secretary, a higher executive officer, and three support staff. Under MESC is the Department of Education (DOE) staffed by 11 employees: a director of education, a senior education officer, a curriculum officer, three school supervisors, an education officer, a training officer, and three support staff. DOE is responsible for developing and managing Tuvalu's primary (94 staff) and secondary (74 staff) school education.

As part of Tuvalu's decentralization plans in 1996, the administration of education was moved from Funafuti to Vaitupu. It subsequently returned to Funafuti because of communication difficulties with MESC headquarters and outer-island primary schools.

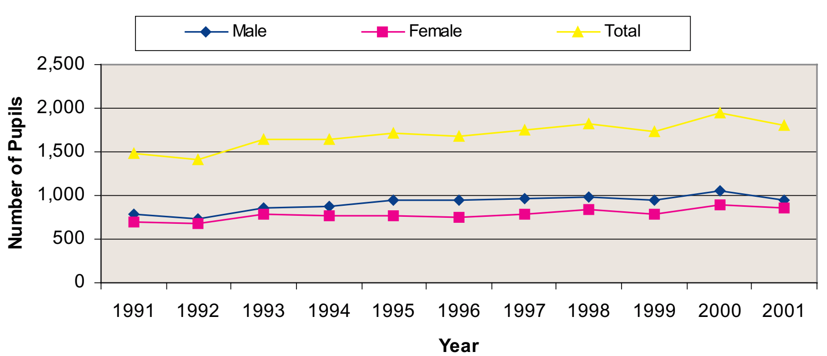
The basic education system in Tuvalu consists of 2 years of preschool, 8 years of primary, and 4 years of secondary schooling. There are 17 registered preschools in Tuvalu, which are voluntary managed by parent associations that employ teachers from their own resources. Historically, the Government has not been involved with preschools, but is now considering a more supportive and regulatory role. The Government now provides annual grants for salaries of up to three qualified teachers in each registered preschool. Canadian and New Zealand aid have provided support for preschool infrastructure and materials.

There is one Government-funded primary school on each of Tuvalu's nine islands. Additionally, on Funafuti there is a privately funded Seventh Day Adventist (SDA) primary school. The primary school curriculum emphasizes language, mathematics, science, and the social sciences. Total national primary student enrollment increased by 21% between 1991 and 2001 (Figure 5.1). The rise reflects a change to the educational system brought about by EFL: specifically, the addition of extra years of primary schooling (forms 1 and 2). In 2001 there were 1,798 children enrolled in primary school. Of these 52% were male; a figure broadly reflecting the male percentage of the 1991 Census population.

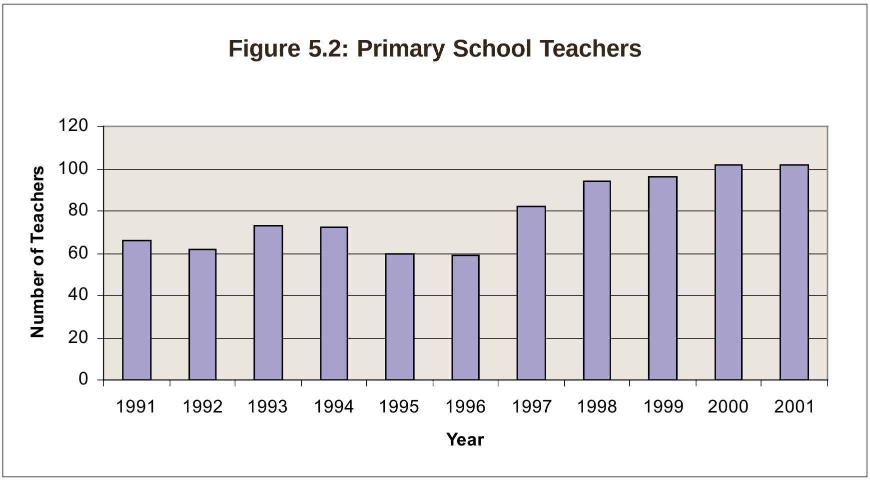
The number of primary school teachers from 1991 to 2001 is shown in Figure 5.2. In 2001 there were 102 teachers, 92 in government schools and 10 in the SDA school, giving a national student-teacher ratio (STR) of about 18:1. This is an improvement on the 1991 STR of 22:1 and an even greater improvement on 1996 STR figures, of 28:1. However, the figures are based on the number of established posts and do not account for teachers who may have been studying overseas or otherwise unavailable.

In 2001, women formed 86% of primary school teachers. In 2000 it was reported that 51% of teachers employed were untrained (Westover 2000); but MESC data show that in 2001 92% of teachers held at least a primary teacher's diploma qualification, while six teachers held

Figure 5.1: Primary School Enrollment by Year and Sex



Source: CSD database.



graduate degrees. The increase in teacher numbers can in part be attributed to government policies in 1998 to weight salaries and benefits in favor of professional staff grades. The rationale for introducing such inducements was to encourage new graduates into the teaching profession and to help retain those staff who might otherwise seek better paid jobs elsewhere.

All primary school education in government schools is free. The SDA school on Funafuti receives some government financial support ($30,000 in the 2001 budget), but continues to rely on technical advice and materials from the SDA Schools Division in Fiji. Term fees at the SDA school are nominal and discounts are available to children of SDA church members. Most enrollments at the SDA school are from nonSDA families, and competition for places is high. Despite its fee-paying status, a long waiting list for enrollment exists.

The physical maintenance of state primary schools remains the duty of individual island councils (kaupules). School supervisor and Public Works Department reports indicate that maintenance is adequate. Between 1997 and 1999, Nanumea and Nukufetau schools were refurbished, and double-storey classrooms were constructed with funding by the 8th European Development Fund (EDF). In the same period, new classrooms were added to Funafuti Primary School to ease overcrowding; and phase three of this program, funded by France, will extend the number of classrooms. EDF funds are also earmarked for renovating all other state primary schools, with work beginning on Nukulaelae and Nanumanga in early 2002. However, funding does not cover equipment, and many classrooms have been without furniture since 1997. This often forces children to sit on mats they bring to class, and constrains learning.

Prior to EFL, primary students would complete 6 years of schooling on their home island and then sit for an entrance examination to Motufoua Secondary School on Vaitupu. Only 25% of the examinees would be accepted because of budget constraints and the limited physical capacity of the School. Those who failed returned for a further year in primary school, at the end of which they could resit the Motufoua entrance examination, most often unsuccessfully. Those students not gaining entrance to Motufoua either left to undertake secondary schooling overseas, if their families could afford it, or moved to the Community Training Center (CTC) on their home island for a further 3 years of vocational education.

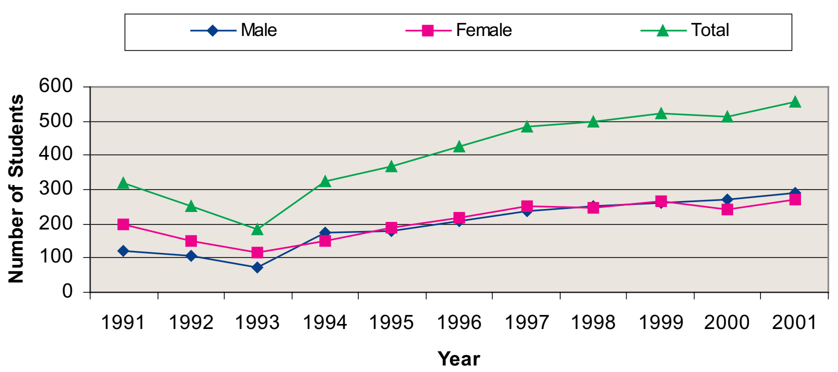
Under EFL the CTCs on each island were closed, the Motufoua entrance exam was abolished, and primary schooling on each island was extended by 2 years (forms 1 and 2). All children now proceed to secondary school after 8 years of compulsory primary schooling.

In 1998, the secondary school on Funafuti, Fetuvalu High School was closed. The school was run by the Ekalesia Kelisiano Tuvalu (EKT), the Congregational Church of Tuvalu, but was later taken over by the Government because of EKT's mounting debts. On closure, the majority of students and teachers were transferred to Motufoua, while some parents opted to send their children overseas for schooling. The building now houses MESC headquarters, but the Government plans to vacate the premises and return the building to EKT in 2002.

Currently, Motufoua High School, a coeducational government-run boarding school, is Tuvalu's only secondary school. Before 1999, education fees were levied at $100 per student per term. Fees were abolished in 1999, and reintroduced in 2001. Current term fees are $50 per student. In addition to school fees, parents and guardians provide uniforms and travel costs to the school. Such costs burden many families who are often assisted by their extended families.

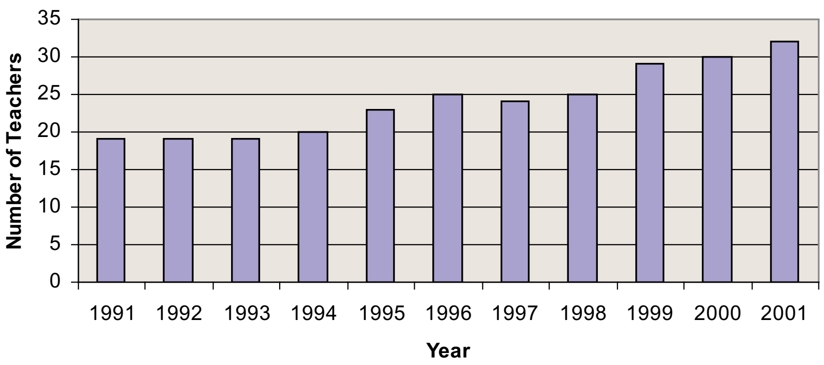
In 2001, total enrollments at Motufoua were 558, of which 51.7% were male (Figure 5.3). This represents a 56% increase in pupils enrolled at the school since 1991 due partly to EFL's removal of the Motufoua Entrance Examination in 1994 and partly to the absorption of Fetuvalu students in 1998. Taking account of Fetuvalu enrollments to 1998, the national increase in enrollments between 1991 and 2001 is only 1%. Over the same period, the national STR improved from about 24:1 in 1991 to just over 17:1 in 2001. For Motufoua alone, STR has deteriorated only marginally, from 16.7:1 in 1991 to 17.4:1 in 2001. Of the 32 teachers at Motufoua in 2001, three were expatriates. Teacher numbers are supplied by the Central Statistics Division and represent positions filled. The establishment figures record a higher number of teacher positions in 2001.

Figure 5.3: Motufoua Secondary School Enrollment



Source: CSD database.

Figure 5.4: Motufoua Teachers, 1991-2001



Source: CSD database.

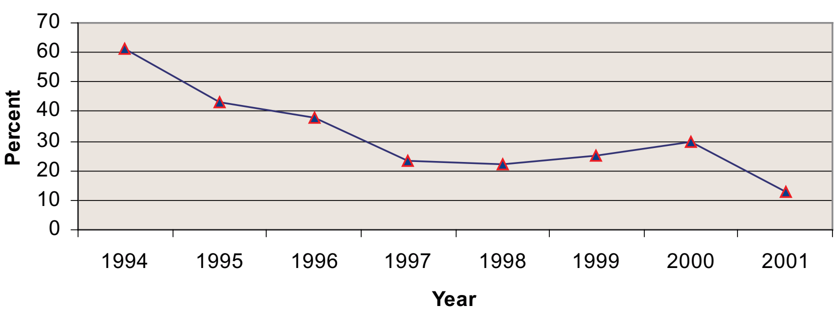
Motufoua High School provides secondary education for forms 3 to 6. In 1998 a Form 7 curriculum (New Zealand Form 7 Bursary) was introduced with a termination examination equivalent to USP's Foundation Year. The rationale for introducing Form 7 was to better prepare students for tertiary education overseas. However, after 1 year of operation it was scrapped due to capacity constraints within Motufoua and DOE.

The South Pacific Board of Educational Assessment (SPBEA) in Suva prescribes Motufoua's curriculum which is academically focused with little attention to vocational subjects. All students progress automatically to Form 4 (Year 8), at the end of which they sit for the Fiji Junior Certificate (FJC). Those scoring over 300 automatically move on to forms 5 and 6 when the Tuvalu School Certificate and the Pacific Senior Certificate exams are taken. Those scoring between 250 and 300 in the FJC are able to reenter Form 4 and can sit again for FJC the following year. Those failing to achieve 250 either drop out of the school system altogether or, if their parents can afford it, are sent overseas to complete their education. Examinations are set externally by SPBEA.

This procedure is useful as it ensures objectivity in marking and monitoring school quality.

Education authorities and parents are concerned by the deteriorating pass rate FJC recorded between 1994 and 2001, from 61% to only 13% (Figure 5.5).

Figure 5.5: Fiji Junior Results: Pass Rate, 1994-2001



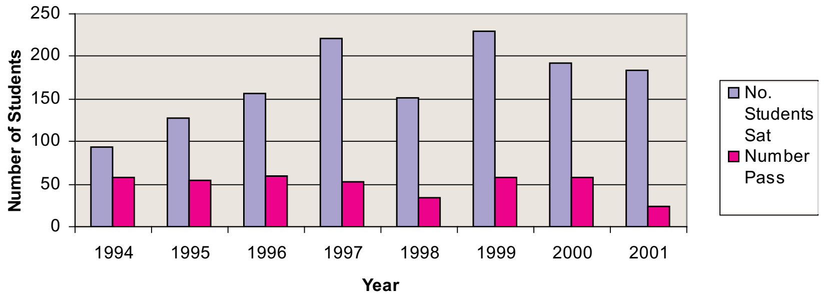
Source: CSD database.

Between 1994 and 2000, the absolute number of FJC passes remained fairly flat at about 50 per year. In 2001, however, the number of passes was just 24 out of 183 students sitting for the FJC exam (Figure 5.6). This represents a fall of 57% on results in 2000. Clearly, investigating the causes of such a sharp decline is warranted. Examining the performance of students who undertook primary school education at the SDA school compared to those who attended state schools is warranted.

Postsecondary Education and Training

The Tuvalu Maritime Training Institute (TMTI) is on Amatuku islet 2 kilometers northeast of Fongafale, the main settlement on Funafuti. Established in 1979, TMTI provides preservice and in-service training for merchant seamen. Skilled Tuvaluan seafarers are in demand on the

Figure 5.6: Fiji Junior Exam: Students Sitting and Passing, 1994-2001



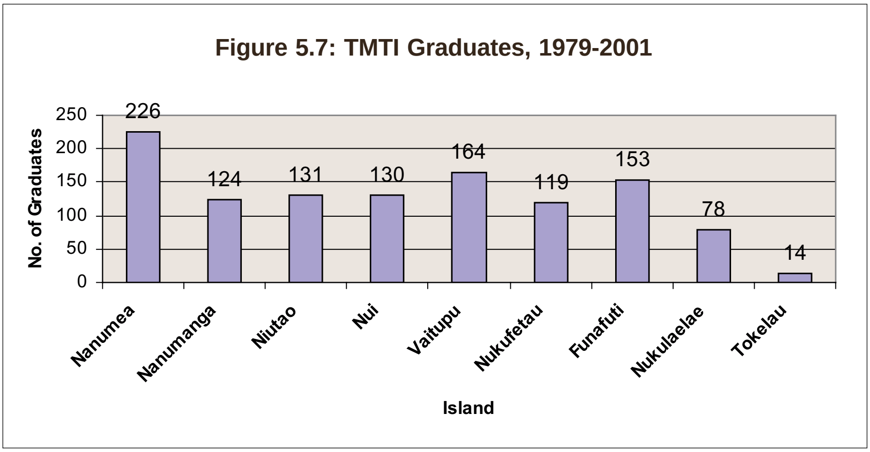
Source: CSD database.

international market, and their contribution to national income is significant (Chapter 2).

TMTI has produced a total of 1,139 qualified seamen, under 55 courses. Preservice training consists of a 12-month course in one of three disciplines, Engineering, Deck Watch, or Stewardship. Enrollment requires passing a medical fitness exam and achieving pass marks in written and oral examinations in English set by TMTI. Touring TMTI staff conduct tests three times annually on each island. Competition for places is high with an average 200 applications received for the 60 places available each year. Recruits are accepted based on exam results and no island quota is applied.

Between 1979 and 2001, Nanumea produced the largest number of graduates (Figure 5.7), representing 19.8% of the total, followed by Vaitupu (14.3%), Funafuti (13.4%), Niutao (11.5%), Nui (11.4%), Nanumanga (10.8%), and Nukufetau (10.4%). In the early 1980s, recruits from Tokelau attended the school and these make up 1.2% of graduates.

A common curriculum for all preservice courses includes First Aid, Occupational Health and Safety, STD/AIDS, Survival Techniques, Fire-Fighting, and English. Each course is run once a year with an average enrollment of 20 a course. A majority of trainees succeed in their chosen



Source: CSD database.

course. TMTI estimates the dropout rate to be less than 1%. Sea training on the *Nivaga II* is mandatory for all participants. In the mid-1990s, the Government considered procuring a training vessel for TMTI. This proposal was subsequently dropped due to the estimated high costs of operation and maintenance. The expected arrival in 2002 of a second interisland vessel funded by Japan is likely to allow TMTI to expand the scope of student training at minimal cost to the Institute.

On graduation, seamen apply for overseas employment on foreign vessels through shipping agents: currently Alpha Pacific Navigation, South Pacific Agency, and Pacific Overseas Employment Agency. Employment duration is variable, usually lasting between 9 and 13 months a tour. TMTI estimates that about 75% of seamen return to Tuvalu after each tour and remain for an average 4 to 6 months before taking another contract. The remaining 25% opt to remain employed until completion of their second or third contracts. Seamen can expect to earn US$400 per month on entry, rising to US$1,000 per month as experience and qualifications accumulate. TMTI estimates that 75% of earnings are returned to Tuvalu as remittances. Retirement age is 60 years. The Seamen's Union in Tuvalu allows for airing collective concerns.

In addition to the 12-month basic seamanship courses, TMTI offers short refresher courses to qualified seamen. As revalidation of seamanship is mandatory every 5 years under International Maritime Organization rules, TMTI's training is crucial. Currently, TMTI requires no fee for participation in these short courses, although it has discussed with the Tuvalu Seamen's Union deducting a nominal amount ($1.25 a day for the period the seaman is abroad) from seamen's salaries. As cadet training is unavailable at TMTI, candidates are usually sent to the Fiji Islands, New Zealand, or Australia.

TMTI is well run and graduates are of a high international standard. Plans to establish TMTI as a national center for technical and vocational education and training should consider the risk of disrupting existing programs. Seamanship training requires a disciplined approach, preparing graduates for the rigors of long periods on ocean-going vessels. Adopting new programs aimed at different target groups may result in deteriorating standards and is likely to decrease the number and quality of graduates. TMTI might improve its services by regularly visiting Motufoua Secondary School to counsel Form 4 students on the benefits of seamanship training and maritime careers.

While TMTI administration is of a good standard, some basic equipment and materials need replacing. An Asian Development Bank loan proposal was being considered for this in early 2002 (ADB 2001b).

The University of the South Pacific (USP) Center in Funafuti provides extension courses allowing students to continue their education at postsecondary level. The Center is staffed by a director, a program officer, and three support staff. In 2000, facilities were upgraded with connection to the USP Net—a multimillion dollar telecommunications project that links all USP centers to each other and to the main USP campuses in Suva, Apia, and Port Vila. This provides 24-hour, daily e-mail, Internet, audio, and video conferencing. The Funafuti Center offers certificate, diploma, vocational, and degree courses. Although full degree courses are offered, only the first 2 years of studies can be taken and students must attend USP in Suva to complete their studies.

Students are mature age people, both employed and unemployed, and secondary school leavers unable to secure public or private funding for further studies. Included in the mature category are retired civil servants, many of whom take English at preliminary level and Foundation Accounting. Video conferencing has allowed the Center to expand its range of courses, and annual enrollment increased from 210 in the early 1990s to 270 in 2000. Degree courses are the most popular, accounting for 46% of all enrollments. This is followed by preliminary studies (21%), foundation (18%), vocational (9.5%) and continuing education (5.5%).

The USP Extension Center and TMTI do not have the capacity to satisfy all Tuvalu's tertiary education needs. Consequently, the country relies on overseas institutions to provide tuition, and on overseas governments for funding its students. Scholarships fall into two categories, preservice and in-service. The former are awarded by the minister under Section 6 of the Education Act; the latter under procedures in the General Administrative Orders. The Manpower Planning and Scholarship Committee (MPSC), a statutory body appointed by the minister of education, selects candidates for overseas scholarships. MPSC consists of all permanent secretaries, the director of education, and appointees from the Public Service Commission, the National Council of Women, and the Tuvalu Chamber of Commerce. It meets at least twice annually and is chaired by the secretary to government.

In 1997, Tuvalu formalized its policy for scholarships and training awards by introducing an operations manual to guide MPSC members (OPM 1997). The manual stipulates that all scholarship awards are to be based on merit and are to be nondiscriminatory between male and female. Prior to the policy, female scholarship holders marrying foreigners would commonly have their scholarships terminated. The new policy removed this practice, giving women the same rights as men. The policy also aims to remedy other system deficiencies such as

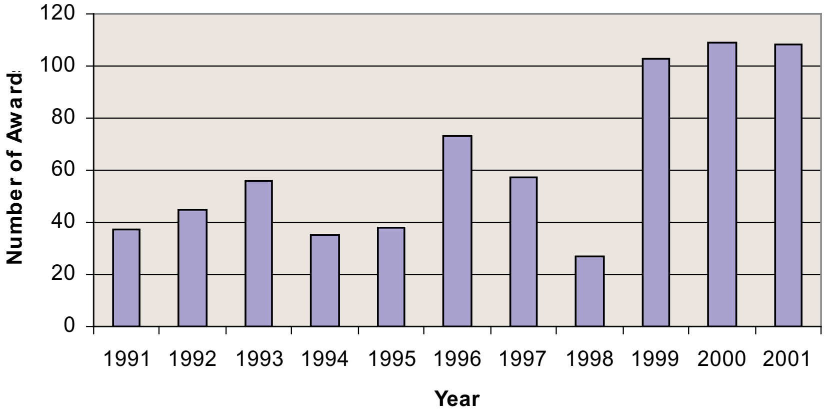
(i) inadequate selection procedures;
(ii) poor orientation and preparation of students prior to commencement of tertiary studies; and
(iii) high incidence of students arriving late to their appointed overseas institutions. The policy also provides permanent female representation in MPSC.

To ensure impartiality, MPSC considers preservice awards unaware of the name or island of the nominee. This is achieved through a coding system that disguises the candidates' identities. For in-service awards identities are known. Once selection is complete, the Prime Minister approves in-service awards, while the minister of education approves preservice awards. If the minister rejects or changes MPSC's recommendation, reasons must be written to MPSC's chairperson.

Two government departments administer and manage overseas scholarships. In-service scholarships are administered through OPM's Personnel and Training Division. DOE manages preservice scholarships and these are allocated to students for senior secondary completion or for first-degree level training. In-service training scholarships are awarded under departmental training needs and can be for any type of training. The private sector and nongoverment organizations (NGOs) can also nominate candidates for in-service training scholarships: 10% of in-service scholarship awards are notionally reserved for the private sector, although the actual allocation depends on the number and quality of applications received. All in-service nominations, including those from the private sector, are initiated by individual ministries. The target distribution of awards is generally 60% preservice and 40% in-service. As in other Pacific islands, the opportunity to win a scholarship is regarded as one of the major incentives for becoming a civil servant.

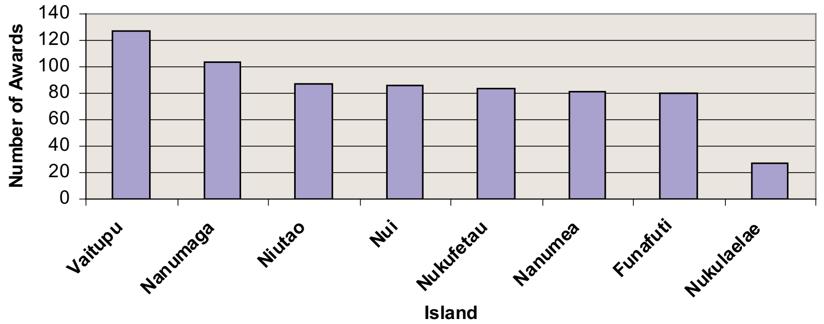
Between 1991 and 2001, 676 scholarships were awarded (Figure 5.8). Females made up 45% of the awardees. The distribution of scholarships per island group broadly reflects population distribution (Figure 5.9).

Figure 5.8: Overseas Scholarship Awards, 1991-2001



Source: CSD database.

Figure 5.9: Overseas Scholarship Awards by Island, 1991-2001



Source: CSD database.

Until 1996, Australia and New Zealand funded the majority of scholarships. Since then, government-sponsored awards have risen, most noticeably from 1999 to 2001. This reflects a reemphasis in government policy on upgrading Tuvalu's human resources, and an increased capacity to fund scholarships because of windfall revenue from the DotTV licensing agreement and fishing licenses (OPM 2001).

From 1991 to 2001, government funding of scholarships amounted to 49% of overseas education expenditure (Figure 5.10). The remainder was distributed between the New Zealand Overseas Development Agency (NZODA) 23%, the Australia Agency for International Development (AusAID) 19%, the Commonwealth Fund for Technical Cooperation (CFTC) 4%, Australian Development Scholarship (ADS) 1%, the United Kingdom (UK) 1%, and others 3%. Preservice scholarships accounted for 70% of the total number of awards. Women made up 52% of the 475 preservice awardees. The number of in-service awards totaled 201, of which 72% were male (Appendix 2, Table A5.1). The annual number of scholarships averaged about 43 through much of the 1990s, but has risen to over 100 since 1999.

Students pursuing diploma and degree courses accounted for 31% and 28%, respectively, of those undertaking overseas training between 1991 and 2001. Students completing forms 6 and 7 overseas accounted for 25%. The remaining 16% was split between certificate courses (11%), and masters (4%) and seaman cadet courses (1.5%). In addition, three people undertook PhDs, one a postgraduate certificate, and one a postgraduate diploma (Appendix 2, Table A5.2).

Education Expenditure and Financing

MESC's actual share in the national budget from 1996 to 2001 fluctuated between 13% and 35% (Table 2.6), growing in nominal terms at an average annual rate of 14.8%, while public expenditure as a whole rose at the rate of 12.2%. Growth in real education expenditure therefore was substantial, given an average annual CPI increase of 2.6%.

Figure 5.10: Overseas Training: Source of Funds, 1991-2001

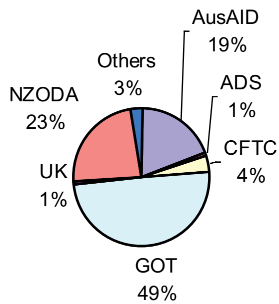
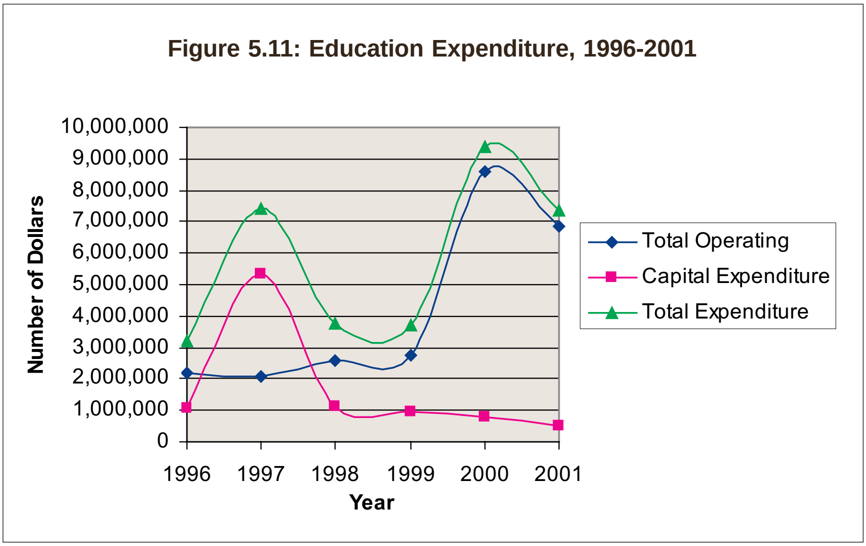


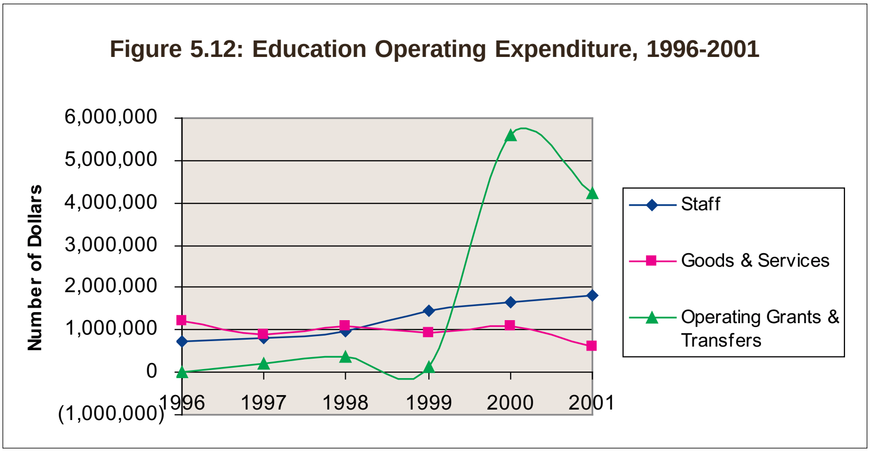
Figure 5.11 shows the breakdown of total expenditure on education into its operating and capital components. The rise in expenditure in 1997 was attributable to Japanese-funded capital expenditure on Motufoua School, whereas the 2000 expenditure increase reflected growth in operating expenditure. The latter rise primarily reflects a jump in operating grants and transfers that in turn was associated with the granting of overseas scholarships (Figure 5.12). The education wage bill continued to grow also, rising at an annual average rate of 22%, although declining as a share of operating expenditure (from 34% in 1996 to 26% in 2001). Special expenditures rose toward the end of the period because of compensation payments arising from the Motufoua School fire tragedy. Expenditure on goods and services, maintenance, and travel (not shown in the figure) all declined in nominal terms.

Available data do not permit a comprehensive assessment of the actual allocation of public resources by level of education. However, some indication is provided by the budget estimates for 2002, which are presented by "institutions" that collectively constitute MESC (Figure 5.13).

Remember that the 22% allocation to primary education does not include resources used by the kaupule in maintaining schools, and that parents and communities make unquantified but significant cash and



Source: Table A5.3.



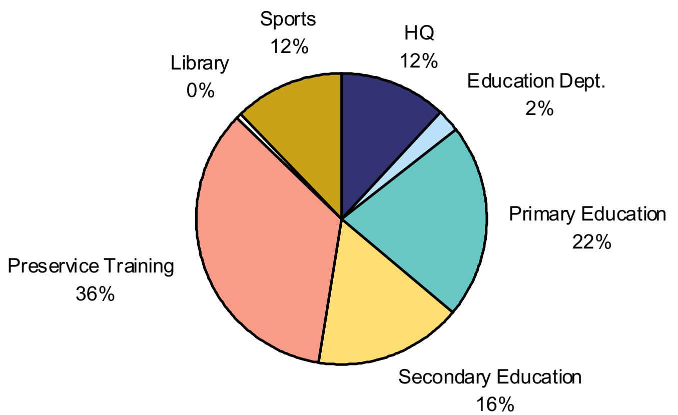
Source: Table A5.3.

in-kind contributions to primary education. On the other hand, the share of primary education is exaggerated by historical standards as it includes a $1.1 million allocation for refurbishing outer-island schools. That said, the salary bill, inclusive of provident fund contributions, absorbed 84% of the Government's recurrent budget allocation to primary education, and housing allowances for teachers accounted for a further 10%, leaving little for operations. The specific allocation for school supplies and textbooks in 2002 was less than $15,000.

Salaries accounted for 35% of the total recurrent budget for secondary education in 2002, with a further 3% provided for housing allowances. Rations for students accounted for 20% of recurrent spending. School supplies and maintenance received allocations of 7% and 1%, respectively. As noted, parents and guardians pay school fees and are expected to cover costs of uniforms and travel to and from Motufoua School.

The largest share of the education budget for 2002 was allocated to preservice training scholarships. Ongoing awards absorbed about two thirds of scholarship expenditure, with new awards and TMTI scholarships accounting for the remainder. Planned spending on sports was relatively large by historical standards because of the expected externally-funded development of sports facilities.

Figure 5.13: Education Budget Estimates by Institution, 2002



Source: Tuvalu National Budget 2002.

Education Policy and Issues

EFL continues as the Government's main development strategy for human resource development. Its broad policy goal is to restructure the education system to align it with the aspirations and overall needs of the country, while drawing from and supporting essential elements of Tuvaluan culture. EFL's long-term aims are

(i) to ensure that education spurs future economic growth and national development;
(ii) to provide free universal education from preschool to Form 6; and
(iii) to increase the number of scholarships awarded.

At the core of EFL are four goals: compulsory education; increasing educational opportunity; equal access to a good education for all Tuvaluans; and greater parental and community support for, and participation in, the education system. To achieve these goals, EFL set out an ambitious agenda including

(i) redesigning and strengthening administration of the education system;
(ii) providing a minimum of 10 years compulsory education for all between the ages of 6 and 15;
(iii) providing preschool education for children 3 to 5 years old;
(iv) upgrading facilities and improving services for educating and rehabilitating disabled people;
(v) increasing the provision of technical and vocational education for students following Year 10 (Form 4, 16 years and older);
(vi) renewing and reforming the curriculum at all levels, with greater attention to technical and vocational training and study of Tuvaluan culture;

(vii) setting up a system of in-country teacher training to increase the number of qualified teachers;
(viii) constructing, refurbishing, and rehabilitating school buildings to upgrade educational infrastructure, and to meet the growing demands on Tuvalu's education system;
(ix) setting up an assessment mechanism to regularly monitor individual achievements and national standards; and
(x) establishing a Careers Advisory Committee to guide Year 10 students into career paths in harmony with individual preferences and national needs.

Following 12 years of implementation, EFL's development goals are not fully achieved. There has been progress on infrastructure elements, largely through external donor funding, but other key programs have yet to be realized. Under the Tuvalu-Australia Education Support Project, commenced in 1996,

(i) the entire Department of Education was to be upgraded through training and the supply of computer equipment;
(ii) the teachers were to receive upgrading in teaching skills and knowledge; and
(iii) the curriculum in the priority subjects of English, Science, Health, and Business Studies was to be redesigned.

In 1999, Teaching English as a Foreign Language (TEFL) was added and the Project was extended to 2004. An independent review in 2001 (Hayward and Ware) concluded that while some progress had been made on curriculum development, there had been little progress in improving education management. The review suggested that the intended system was too complex for the nation and that too few staff could be allocated to implement it.

Capacity constraints within education and other government departments are a recurring problem cited by many observers. The

Commission of Inquiry into the Motufoua fire tragedy of March 2000, for example, pointed to a breakdown in school discipline caused in part by EFL's policy of increasing student numbers (GOT 2000). Investigation into two outbreaks of typhoid at the school in 2001 pointed to similar problems of management and capacity constraints. These opinions were expressed at a time when both the number of teachers and overall expenditure on education had risen.

Anecdotal evidence suggests that a fundamental problem in the education system lies not with the curriculum or the ability of teachers to teach, but rather in the motivation of teachers and in the management structures employed.

Improving the curriculum, investing in teacher training and infrastructure, and decreasing the student teacher ratio would suggest an overall improvement in achievement levels. Yet the opposite appears to have occurred. Westover (2000) states that basic literacy and numeracy levels are falling and that the education system and the Department are facing a crisis in community confidence. He cites several areas for improvement, including

(i) creating a cohesive central administration;
(ii) developing educational leadership; and
(iii) updating the educational framework.

The Government is aware of growing public concern with education. Following the FJC results for 2001, a taskforce headed by the minister of education was established to investigate the reasons for the poor performance; and the long-awaited EFL review was planned for April 2002, but had not occurred by mid-year. Both of these actions provide the Government and the public with an opportunity to assess and solve the problem. Management of schools will be an obvious topic of discussion. One area that might be investigated is introducing school boards, particularly for Motufoua, made up of a cross-section of society and including parent representation. The common procedure of referring disciplinary decisions taken by headmasters to the minister regularly results in the reversal of a decision. This dilutes headmasters' authority and pressures the minister to whom a disciplined child's parents often appeal. School boards mandated to deal with these and other issues may improve school management.

The dramatic rise in the number of government-sponsored overseas scholarship awards since 1999 has affected the Government's ability to function optimally. Many senior government positions are vacant or staffed by inexperienced people until the incumbent returns from training. Sometimes, training lasts as long as four years. This stresses the relatively small workforce. For much of the 1980s, government policy limited civil servant training to undergraduate studies. From 1991 onwards this policy was reversed, with most senior civil servants receiving postgraduate scholarships. Some attempt was made to tailor scholarships to government and private sector needs, but often courses are selected by entry requirements or funding availability. The Government recognizes that the present expenditure level on scholarships is unlikely to be sustainable, and it adversely affects the Government's functioning. The rate of scholarship awards is expected to be scaled back.

A related issue is that benefits of postsecondary education are largely private and therefore beneficiaries of scholarship awards could be expected to share the costs. A review of cost-sharing options would be desirable. Meanwhile, enforcing the bonding system would ensure recipients of overseas scholarships return for at least 2 years of public service following studies.

Regional Actions

Education empowers people to participate in decision making, to increase their earnings potential, and to transform their lives and societies. In particular, good basic education is strongly connected to the capacity to improve technical skills and to adapt to changing social circumstances (Psacharopoulos 1985). Basic education establishes the foundation for all future learning and has high potential returns for society.

For decades, Pacific island governments have invested high proportions of their budgets in education. Donors have also assisted greatly, notably for the tertiary sector. Yet many children leave school prematurely, lacking skills that equip them for earning a livelihood in the formal or informal sectors of the economy. There is concern about the standard of students reaching secondary and tertiary institutions who are unable to cope with academic demands. Students who fail at these levels often become disenchanted dropouts lacking the skills to contribute effectively to their societies. USP lecturers, for example, observe a lack of basic reading, writing, and critical skills amongst undergraduates. Indeed, some Tuvalu students were refused full foundation enrollment at the USP centers in Suva and Funafuti in 2002 because they lacked basic entrance requirements. Low levels of receptivity to the relatively small number of nonformal education and training programs are also attributed to poor basic education.

Improving educational outcomes, especially at the primary level, involves planning to meet the needs and aspirations of the next generation of students. At the 1991 Tuvalu census, it was projected that the primary school age population would rise by between 11% and 37% by 2011 (CSD 1992). Demands on educational resources were expected to increase accordingly, if the status quo alone were to be maintained. Governments around the Pacific islands region confront this issue in varying degrees of severity.

To tackle these issues, education ministers of Pacific island states, including Tuvalu, met in Auckland in May 2001. Ministers recognized basic education as the fundamental building block for society. If it is weak, then earning a livelihood is more difficult, or students struggle at higher levels of education. Furthermore, through teaching health, culture, governance, and other subjects, basic education can engender the broader life skills that lead to social cohesion. And when it is

Box 5.1 Forum Basic Education Action Plan (abstract)

Vision

Basic education as the fundamental building block for society should engender the broader life skills that lead to social cohesion and provide the foundations for vocational callings, higher education and life long learning. These when combined with enhanced employment opportunities create a higher level of personal and societal security and development. Forum members recognized that development of basic education takes place in the context of commitments to the world community and meeting the new demands of the global economy, which should be balanced with the enhancement of their own distinctive Pacific values, morals, social, political, economic and cultural heritages, and reflect the Pacific's unique geographical context.

Goal

To achieve universal and equitable educational participation and achievement. To ensure access and equity and improve quality and outcomes.

In adopting this vision the Forum reaffirmed its commitment to the Dakar 2000 Education for All Framework for Action goals and noted the actions being taken at the national level for the development of strategic plans. These goals are:

Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.

Ensuring that by 2015 all children, with special emphasis on girls and children in difficult circumstances and from ethnic minorities, have access to and complete free and compulsory primary education of good quality.

Ensuring that learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programs.

Box 5.1 cont.

Achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.

Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls full and equal access to and achievement in basic education of good quality.

Improving all aspects of the quality of education and ensuring excellence for all, so that recognized and measurable learning outcomes are achieved, especially in literacy, numeracy and essential life skills.

Strategies

Promoting different forms of secondary and vocational education.

Reviewing the curricula of training centers and nonformal education programs to match skills taught (outcomes) with the requirements for employment and livelihood in the traditional subsistence economy.

Developing nonformal education and work-based programs in cooperation with civil society and the private sector.

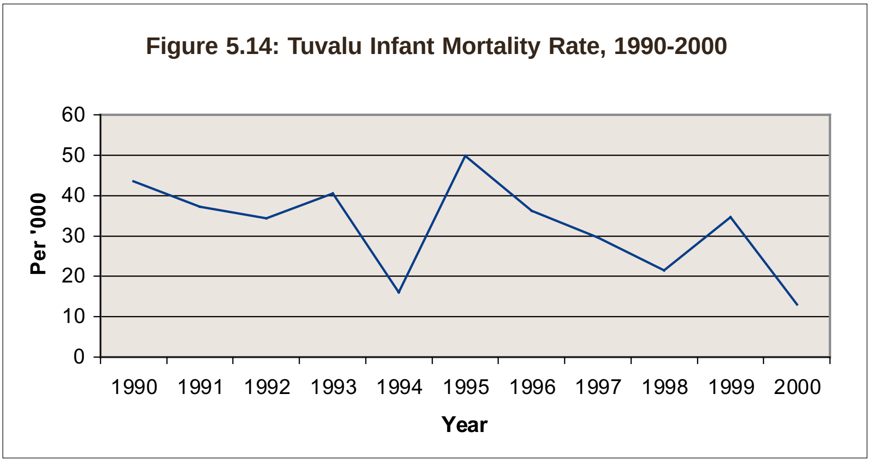
Promoting the role of civil society in providing nonformal skills training.

Source: PIFS 2001.

combined with better employment opportunities can create greater personal security. As a first step in solving problems facing education in the Pacific, ministers agreed on the Forum Basic Education Action Plan (Box 5.1). The Pacific Islands Forum Secretariat has been mandated to help implement the Plan (PIFS 2001).

Health Outcomes

Tuvalu's population is reasonably healthy by comparison with lower- and middle-income countries. A common measure for summarizing health status is the infant mortality rate, which has fallen from about 43.5 per 1,000 live births in 1990 to just 13.1 in 2000 (MOH 2002). This is among the lowest rates in Pacific island countries; and it is lower than would be predicted by GDP per capita. However, the relatively small absolute number of births per annum cause this rate to fluctuate significantly (Figure 5.14).



Source: MOH 2002.

Life expectancy has increased from approximately 57 years for men and 60 years for women in 1990 (ADB 1998) to 64 years for men and 70 years for women in 2000 (SPC 2000). Tuvaluans now expect to live longer than the residents of Kiribati, Nauru, Papua New Guinea, and Solomon Islands, but not as long as people elsewhere in the Pacific. The crude birth rate has fallen from over 25.3 per thousand in 1990 to 20.4 in 2000, and the crude death rate has dropped from 11.2 to 9.7 in the same period

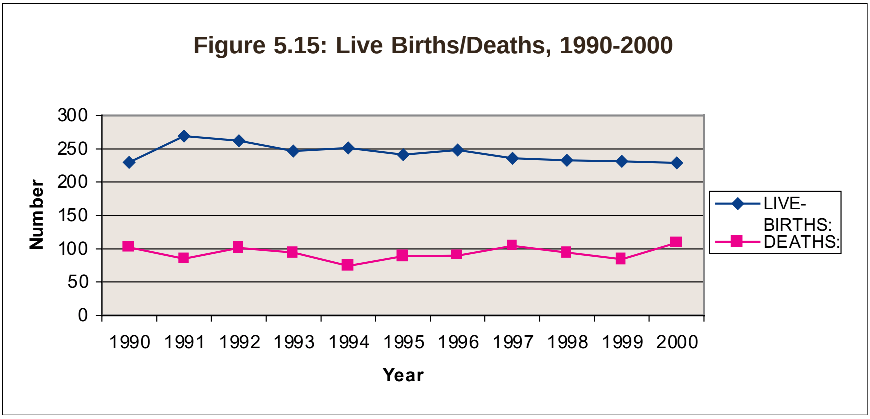
(Figure 5.15). These falls and the increasing average life spans are evidence of the general economic and social progress since 1990.

Acute respiratory infection was the most commonly notified illness in 2000, accounting for over half of all complaints (Table 5.1). This was followed by diarrhea (36%), conjunctivitis (10%), and fish poisoning (1%).

Infectious and communicable diseases are controlled, although the low-level persistence of some diseases requires continued vigilance. The increase in new tuberculosis cases in 2000 is a concern despite the ongoing TB program (Table 5.1). Of potentially greater concern are the four confirmed cases of typhoid fever at Motufoua School in 2000-2001. Without test equipment, diagnosis was slow. The first case was diagnosed after referral to Fiji. Following this, medical authorities undertook a limited program of chloranphenicil inoculation. A second outbreak was reported two months later, this time affecting three more school children. World Health Organization (WHO) assistance could not be mobilized in time. Instead, a Tuvalu team inoculated every person in contact with the school, strengthened sanitary regimes, and disinfected likely areas of infection. The health team's report indicated the likely causes to be overcrowding within the school, poor hygiene and sanitation, and well water used for cooking. In early 2002, the health authorities believed the disease might still be at the school, possibly through a carrier, and were awaiting WHO assistance and test kits.

The last case of leprosy was diagnosed in 1996. Tests have indicated that the incidence of blood microfilaria is rising. Prevalence is thought to be as high as 50% on some islands. This has prompted health authorities to undertake a mass drug administration program, which commenced in 2000 and should end in 2005 (MOH 1999a). Sexually transmitted diseases as recorded in official statistics have declined since 1997. Only two cases of HIV/AIDS were recorded up to 2001. Underreporting is likely; and the low numbers should not be reason for downplaying the potential devastating effect HIV/AIDS could have in a small community that has extensive contacts with the rest of the world. In April 2002, a further seven cases were reported: six were commercial seamen working overseas, and the seventh was the wife of one of the seamen.

The control of infectious and communicable diseases can be attributed to an effective primary health-care system and a health-care service (including essential drugs) accessible to all Tuvaluans. The Health Department reports 100% immunization coverage for tuberculosis (BCG) and hepatitis B (HBV), and 75% coverage for polio and diptheria pertussis tetanus (DPT). Figure 5.16 shows the changes in immunization rates during the 1990s.



Source: MOH 2002.

There are no recent morbidity data related to noncommunicable diseases, but medical staff report increasing cases of hypertension, diabetes, heart disease, cancer, and obesity. This trend is now widespread in the Pacific. As infectious and communicable diseases have been brought under control, noncommunicable diseases have increased and now constitute a major public health issue, both in impacts on personal health and health-care costs. The rising incidence of these so-called lifestyle diseases continues to be attributable to the consumption of excess quantities of food; a shift from traditional diets of fish, taro, breadfruit and bananas toward diets including imported food that is low

Table 5.1: Notifiable Diseases, 1990-2000

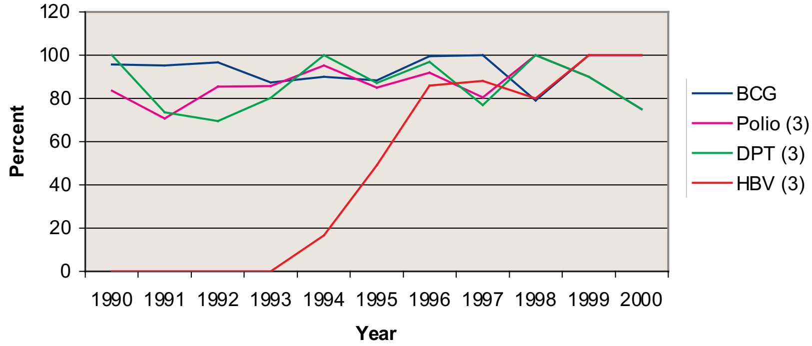
Item	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Acute Respiratory Infection	4342	3650	4189	5083	2926	1209	1633	1756	1383	1242	1898
Diarrhea	1917	1543	1013	1735	1321	1274	1354	1314	1426	1246	1365
Conjunctivitis	675	402	526	614	237	418	536	756	125	275	403
Fish poisoning	164	215	153	174	112	20	22	40	35	31	38
Filarial fever	5	7	16	2	0	0	0	0	0	0	0
Malnutrition	2	0	0	0	0	0	0	0	0	0	0
Whooping cough	19	0	0	0	0	0	0	20	0	0	0
Hepatitis	8	0	1	6	13	0	2	1	6	5	9
Dengue	1	0	590	0	0	0	0	0	2	0	0
Gonorrhea	1	0	0	4	3	6	2	1	0	2	2
Syphilis	0	0	0	0	3	1	0	0	0	0	0
PTB	20	23	26	26	8	9	7	10	9	11	7
TB, other forms	3	7	9	9	7	13	1	1	1	1	7
Cholera	50	0	0	0	0	0	0	0	0	0	0
Meningitis	0	2	1	0	0	0	1	0	3	0	0
Rheumatic fever	0	2	0	0	0	0	0	0	0	0	0
Tetanus	0	1	0	0	0	0	0	0	0	0	0
Leprosy	0	1	0	0	0	0	2	0	0	0	0
Chickenpox	0	0	1	16	53	60	0	0	0	0	0
Dysentery	0	0	0	0	4	11	0	0	0	0	0

Source: MOH 2002.

in fiber and high in refined carbohydrates, fat and salt (sugar, white rice, mutton flaps, canned beef); greater consumption of alcohol and tobacco; and insufficient physical exercise.

Changing dietary habits, and perhaps increasing awareness of dental hygiene, have led to increased dental cases (Figure 5.17). Since

Figure 5.16: Immunization Coverage, 1990-2000



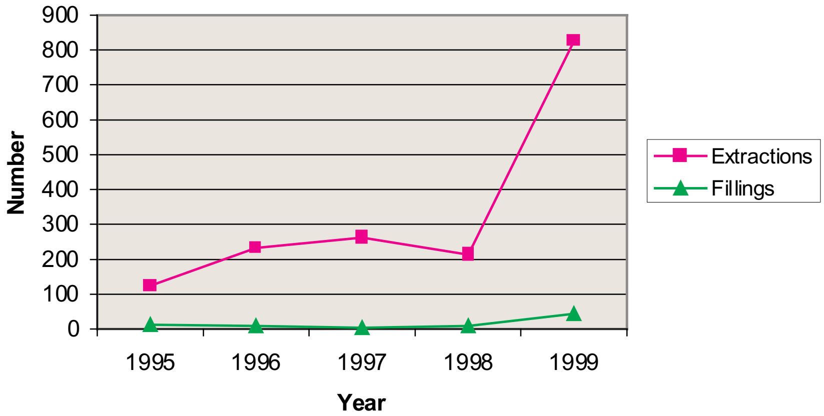
Source: MOH 2002.

1996 there has been an eight-fold increase in extractions among school children, while the number of fillings has increased only marginally. This disparity may reflect the acute shortage of dental fillings and other materials. As a result, parents increasingly send their children to Suva for dental treatment.

Another lifestyle-related impact on the health system results from the increasing number of injuries, especially those caused by vehicle accidents. The upgrading and tar sealing of Funafuti's road network is likely to add substantially to these statistics. The police have introduced traffic patrols, and speed bumps, but accidents are still likely to increase.

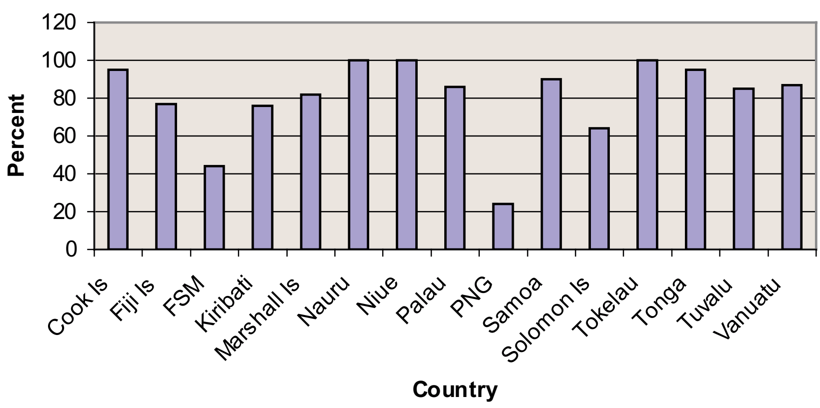
Environmental health indicators are mixed. According to the United Nations Development Programme (UNDP) (1999), 85% of Tuvalu's population has access to safe water and ranks at the high end of the regional scale (Figure 5.18). However, most water needs boiling. Access to sanitation is reportedly lower at 49% and compares less favorably with regional norms (Figure 5.19). In addition, some sanitation facilities are reported to be poorly constructed, particularly on the outer islands, and

Figure 5.17: School Dental Records, 1995-1999



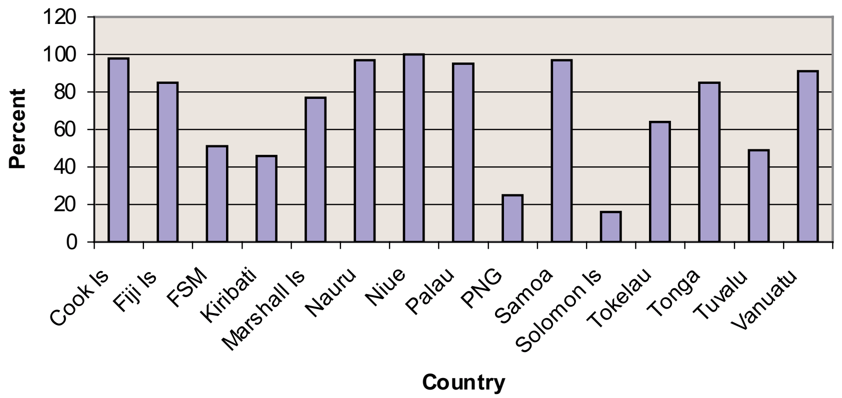
Source: MOH 2002.

Figure 5.18: Access to Safe Water



Source: UNDP 1999.

Figure 5.19: Access to Sanitation



Source: UNDP 1999.

this may contaminate water supplies. Solid waste could be better collected, disposed of, and recycled, especially in Funafuti (Chapter 6).

The Health System

The Ministry of Health, headquartered in Funafuti, is responsible for health planning and policy. A director of health oversees operations of health provision on Tuvalu and is supported by a public health doctor, two general practitioners, a medical superintendent, and a dentist. A nursing service coordinates both hospital and rural nursing services. Tuvaluans hold all senior positions under the Government's staffing and training policy. In 2002, a further four Tuvaluan doctors were overseas completing internships or postgraduate studies.

Since independence Tuvalu has had one hospital, the Princess Margaret Hospital (PMH), in Funafuti. PMH has 45 beds and provides referral and general health services. There is one clinic on each of Tuvalu's outer islands. A midwife, general nurse, nurse aide, and a sanitary aide are also provided, although on Nukulaelae there are only two staff. Some outer-island clinics have up to four beds for patients. PMH acts as a referral hospital for outer-island patients requiring basic surgery or specialized care. Surgery for peptic ulcers, appendicitis, hernias, removal of lesions, and various other minor procedures can be performed at PMH, but more complex surgery is limited due to the absence of a specialist surgeon and anaesthetist. The Government plans to recruit two such professionals from overseas in 2002. Serious cases are referred to the Colonial War Memorial Hospital in Suva or to New Zealand under the NZ Medical Assistance Scheme. Additional assistance is provided through biennial visits of specialist eye and plastic surgeon teams from Australia.

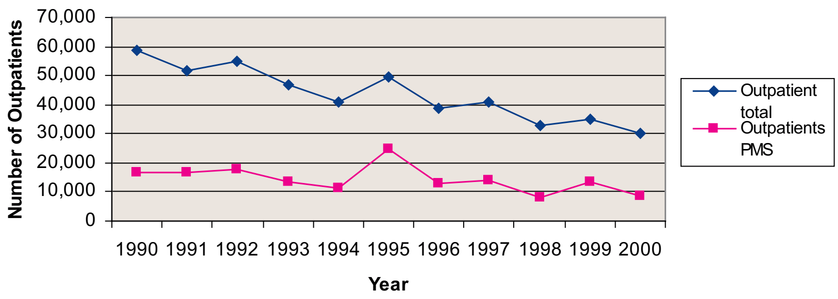
Outpatient numbers have fallen dramatically from 58,847 in 1990 to 30,395 in 2000 (Figure 5.20). In the same period, inpatient numbers dropped marginally from 898 to 820 (Figure 5.21). Data on referrals from outer islands to Funafuti and from Funafuti to overseas are not available, but it is believed these figures have increased. Fiji referrals are at government expense, which underlines the need to secure in-country surgical capability. Similarly, data on bed nights are not available. For reasons, including cost analysis, it is important that the Department of Health collects this information regularly.

The Ministry of Health is the third largest employer of civil servants after MESC and the Ministry of Works, Communications and Transport. In December 2001 the established staff stood at 106 compared with 117 in 1999. Nurses accounted for 36% of the total staff; support staff 29%; technical 15%; medical 10%; administration 5%; accounts & clerical 4%; and dental 1% (Table 5.2). Tuvalu's population/nurse ratio is low by regional standards at about 225:1 (Figure 5.22).

There are no private formal medical services now operating in Tuvalu, but there are traditional healers, whose services augment public medical services. In the past, PMH has employed traditional healers, particularly for physiotherapy, but the practice has declined. Several nongovernment organizations provide health services, most notably the

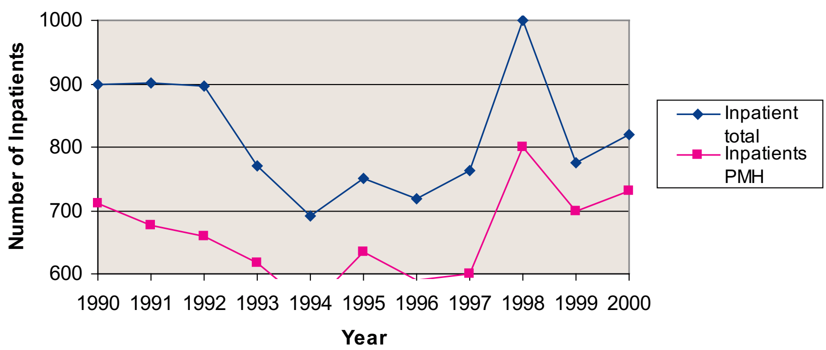
Tuvalu Red Cross Society, which is responsible for the care and rehabilitation of disabled children. The Society has also trained PMH medical staff in early intervention programs, especially early diagnosis of disabilities at birth and low vision training and primary eye care. The Tuvalu Family Health Association actively provides training and support on sexual and reproductive health. The Tuvalu Diabetics Association is a relatively new NGO but is increasingly active in supporting education on diabetes, especially in Funafuti (Tappin 2000; TANGO 2001a, 2001b).

Figure 5.20: Outpatients, 1990-2000



Source: MOH 2002.

Figure 5.21: Inpatients, 1990-2000



Source: UNDP 1999.

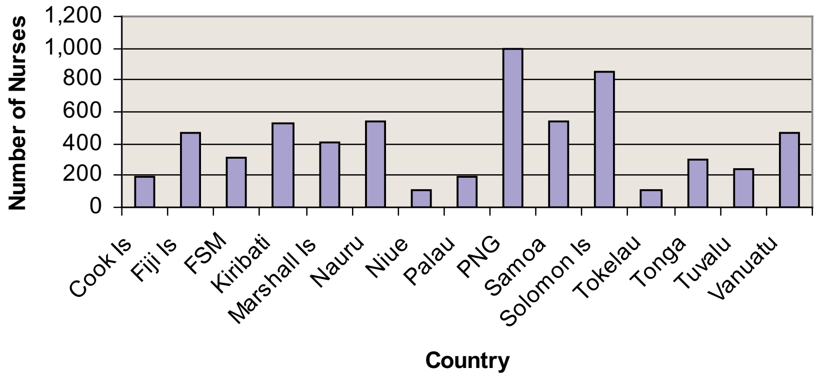
Table 5.2: Ministry of Health Workforce, December 2001

Cadre	Establishment
Administration	5
Medical*	11
Dental	1
Nursing	38
Technical	16
Accounting & Clerical	4
Support Staff	31
Total	**106**

* Includes five doctor positions currently vacant.

Source: Tuvalu National Budget 2001.

Figure 5.22: Population Per Nurse



Source: UNDP 1999.

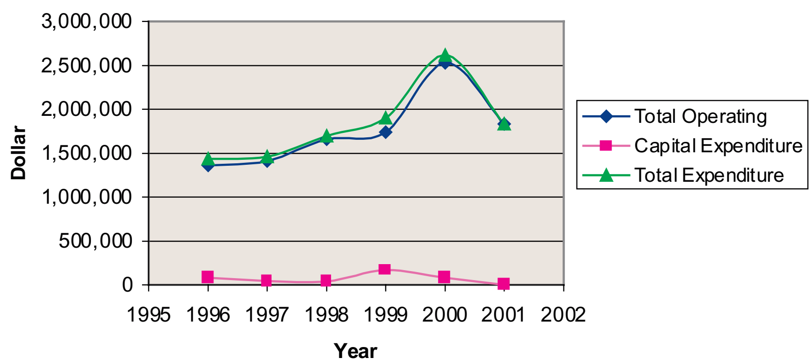
Health Expenditure and Financing

The share of health expenditure in total public expenditure has fluctuated between 5.5% and 8.5% from 1996 to 2001 (Table 2.6). Nominal spending on health grew annually at 9.2%, or about 6.6% in real terms. This growth reflects growth in operating, rather than capital expenditure, although it should be noted that the construction of a new hospital in 2002 will involve substantial growth in capital spending (Figure 5.23).

Growth in operating expenditure primarily reflected increased staff costs (Figure 5.24). In 2001, staff costs absorbed 53% of the health operating budget, compared with 29% in 1996. Expenditure on travel grew steadily until a sudden drop in 2001, while goods and services expenditure jumped considerably in 2000 before dropping back in 2001. Maintenance expenditure also increased in 2000 but remained below $36,000 in other years.

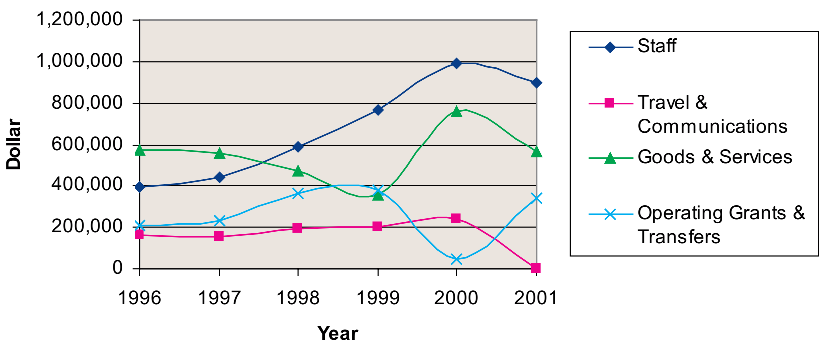
A rise in the share of salaries in total costs is often associated with a shift in resource allocation from primary and preventative health

Figure 5.23: Health Expenditure, 1996-2001



Source: Table A5.3.

Figure 5.24: Health Operating Expenditure, 1996-2001

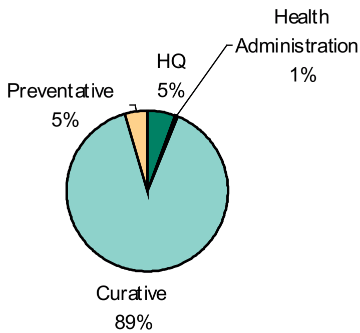


Source: Table A5.3.

care to hospital-based curative care. Historical analysis of allocations is hampered by the lack of a consistent data series, but Figure 5.25 presents budget outcomes by "institution" for 2002. Curative services account for an extremely large share of the health budget when the $9 million hospital is classified more appropriately as a curative rather than a headquarters expenditure, and would account for an even bigger share if the overseas medical treatment scheme (classified under the HQ budget) and hospital maintenance (classified under the health administration budget) are included as curative expenditures. Staff costs identified under the curative services category constitute 47% of staff costs. In 2001, when allocations were not as distorted by the impact of one large project, the share of curative services in the total budget allocation for health was 45% (with adjustments referred to above). This is below the share of curative services in other Pacific island countries such as Tonga (ADB 2002).

Medical, dental, and surgical services are free. Health charges were introduced, only to be dropped under different governments. However, charges were being reconsidered in early 2002 to ease budget constraints from revenue.

Figure 5.25: Health Budget Estimates by Institution, 2002



Source: Tuvalu National Budget 2001.

Health Policy and Issues

The Ministry of Health's (MOH) goals and strategies were presented in draft national action and corporate plans in 1999 (MOH 1999b, 1999c), and then incorporated in the 2000 budget. Ministry goals can be summarized as being to prevent, cure, and eradicate disease with a high-quality customer-focused health service. These goals are set in an environment that provides health service access to all, irrespective of age, sex, ethnicity, religion, personal wealth, or geographic location in Tuvalu.

A new policy framework for health is to be established in 2002. This is likely to include improving curative services to reduce reliance on overseas referrals. Other policy elements may include, as noted, introducing user-pay systems, particularly for self-inflicted injuries, including motor vehicle accidents.

Any shift in policy emphasis towards curative service provision will have budgetary implications that need careful assessment. Public and preventative health measures are universally more cost-effective than curative medicine, and for Tuvalu would appropriately focus on lifestyle diseases. It is also true that curative services are in demand. If this demand is to be better satisfied, the consequent burden on the Government budget needs to be lightened through greater cost recovery and encouragement of membership of voluntary health insurance schemes, while providing for those unable to pay.

Included in the list of program activities for 2001 is establishing a health information system and upgrading the health filing system. In this, the Government has correctly identified that without such basic information systems in place, patient treatment is at risk and the Health Department's ability to plan is severely limited. A comprehensive computerized information system is preferable, but given the history of power failures and surges, and the remoteness of outer-island clinics, systematic back-up will be crucial. The absence of basic management information systems is prevalent throughout public administration and it is commendable that MOH has identified this as a key result area.

In January 2002, the Government signed a financing agreement with the Japanese Government for upgrading PMH. The cost is estimated at $10 million-11 million to be provided as a grant. Construction is scheduled to commence in late 2002 and finish in 12 months. New buildings will be constructed including new wards, an administration block, and theaters. The financing package also provides for much needed new equipment. However, there is no provision in the project plan for a high-temperature incinerator for disposal of hospital waste; and no estimates for recurrent costs associated with running a new hospital.

Social Policy

Tuvalu developed and adopted its first formal Social Development Policy in 2001 (MLGWY 2001a). The policy specifies four core philosophies to follow:

(i) Help people in times of need.
(ii) Contribute to the building of a friendly society that delivers equity for all in transparent and participatory ways.
(iii) Provide a variety of opportunities for the future development of every Tuvaluan.
(iv) Explore and encompass those elements of both traditional and modern social support structures and methods that are applicable and feasible for Tuvalu for the implementation of services that are promoting and sustaining the social development and social security of every Tuvaluan.

Social development objectives are specified for 12 distinct groups, issues, or sectors (Box 5.2). The Ministry of Local Government, Women & Youth acknowledges that the policy document lacks detail on strategies, but it is intended as an overall framework through which all activities affecting the "social fabric" are systematically integrated. This will require developing a better quantitative database. Meantime, policy formulation relies on qualitative information from surveying individuals, expert groups, and stakeholder meetings. Other Pacific countries' experiences are also considered.

It is intended that the Policy be reviewed regularly with a major revision every 5 years, the first being planned for the end of 2004. Policy implementation is the responsibility of all stakeholders, the Government, traditional decision-making bodies (falekaupule), NGOs, the private sector, and church groups. All are expected to incorporate the Policy's contents into their respective policies and plans. The Government will provide technical support to these groups in formulating such plans and adopting delivery methods.

A key feature of the Policy is expecting families and NGOs to deliver most social support services, with the Government supporting where such resources are inadequate. The financial cost of implementing the policy is planned not to exceed the current budget of the Department of Community Affairs. If and when the results of further

Box 5.2 Social Development Policy Objectives

1. **DISABLED:** define 'disability' in its various forms and gauge its extent in Tuvalu so that specific plans and policies might be developed. Ensure that the disabled are provided with education and recreation services, reducing barriers and constraints to their wellbeing.
2. **POVERTY:** define poverty in Tuvalu's context, identify the needs of the poor and design safety net programs and services.
3. **CHILDREN:** adhere to the Convention of Rights of the Child. Provide support to children in the event of family trauma.
4. **GENDER:** improve statistical data collection ensuring disaggregation by gender. Improve gender awareness through training and information services.
5. **YOUTH:** recommend the establishment of support institutions for the general well being of youth in Tuvalu, including those that help youths deal with the changes affecting society.
6. **ELDERLY:** ensure that services are provided to the elderly, including their domestic requirements, so that they may manage their own lives as long as possible.
7. **EDUCATION:** improve the quality of all forms of education in an equitable manner that complements family and community development.
8. **HEALTH:** promote good health for Tuvaluans on all islands. Encourage traditional health service providers (tufaga) and mainstream in the National Health Service.
9. **SAFETY:** promote, strengthen and coordinate improvements in occupational and environmental safety. Monitor and support victims of domestic violence. Adopt a national building code. Monitor and report on the compatibility of social safety programs, including the TNPF and various forms of insurance along with other safety nets.
10. **LAW & JUSTICE:** encourage transparency in government, including information dissemination by government, kaupule and in churches so to help Tuvaluans be aware of, learn from, and understand their social and legal rights. Develop legislation for the professional practice of social work. Clarify and strengthen traditional regulations.
11. **PROVISION OF SOCIAL SECURITY:** strengthen existing social support mechanisms. Identify [affordable] complementary mechanisms for government intervention, taking care to avoid creating dependency.
12. **ARTS & RECREATION:** promote programs that enhance Tuvaluan mores and distinct Tuvaluan culture.

Source: MLGWY 2001a.

analysis indicate a shift in policy the Government will consider the cost of such policy change.

A major purpose of a social development policy is to provide adequate services and support to the poor and disadvantaged. The first task is to assess the nature and extent of poverty before formulating a national poverty reduction strategy. This normally consists of five basic components:

(i) having adequate budgetary allocations for human capital accumulation;
(ii) targeting basic social services to the poor;
(iii) removing gender discrimination;
(iv) having an effective population policy; and
(v) offering social protection (ADB 1999).

In Tuvalu there is a low incidence of poverty as measured by the Human Poverty Index (Chapter 1). There is no malnutrition from inadequate food intake, health and basic education services are free and universal, and a traditional land tenure system operated through extended family groups and backed by legislation ensures access to subsistence resources. Poverty is identified in Tuvalu by "poverty of opportunity" due to limited natural resources and remoteness from markets. This lack of opportunity applies particularly to the outer islands and is examined in Chapter 7.

6

Natural Resource Development

Agriculture

The Government of Tuvalu's (the Government) main role in agriculture is to maintain and, where feasible, increase productivity in the subsistence subsector which accounts for 6.2% of GDP compared with a market production contribution of 1.7% (Table 6.1).

Table 6.1: Contributions to GDP of Crops and Livestock, 1998
(1988 prices)

	Market Production		Nonmarket Production	
	$'000	**% of GDP**	**$'000**	**% of GDP**
Crops	17.7	0.3	548.4	3.5
Livestock	82.0	1.4	430.3	2.7

Source: CSD 1999.

Maintaining productivity depends on excluding pests and diseases, while increased productivity is achieved by extending improved methods of cultivation and testing and multiplying improved plant and animal varieties. The Department of Agriculture focuses its efforts on the outer islands, where most people rely on subsistence production. In Funafuti the population is more often in wage employment, and purchased food-stuffs are consumed at a rate two and a half times greater than on the outer islands (CSD 1998), although coconut production is common and indigenous landowners still cultivate giant swamp taro (pulaka).

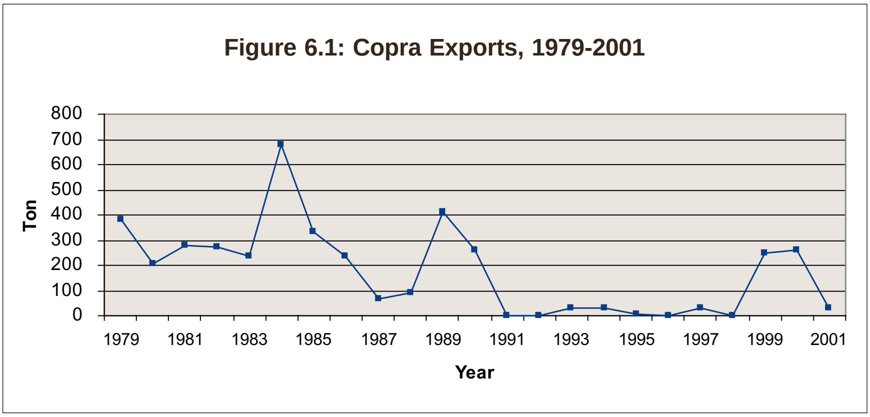
Neighboring island countries harbor damaging pests and diseases that easily could be introduced to Tuvalu in imported produce. For example, Kiribati harbors the taro beetle and Samoa has experienced the devastating taro blight. The Department of Agriculture conducts awareness programs on the quarantine and mandatory declaration of imported agricultural produce. The Secretariat of the Pacific Community's (SPC) Pacific Plant Protection Service provides technical assistance and training support to Tuvalu.

A full-time agricultural extension officer is based on each of Tuvalu's outer islands to disseminate information on the advantages of improved varieties that are multiplied at the agricultural station on Vaitupu. The stations also conserve traditional plant varieties such as breadfruit and pandanus for their potentially valuable characteristics; and promote livestock production through pig and poultry breeding programs and by selling improved breeding stock to the other islands.

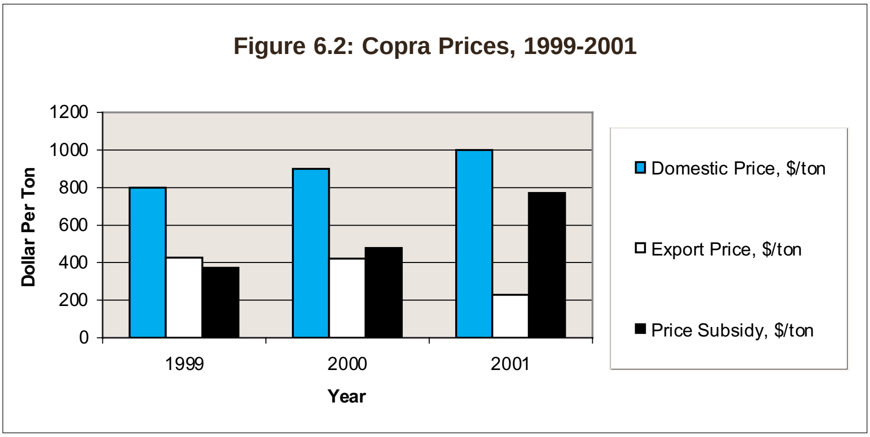
In the outer islands, the cash economy is limited. Nevertheless, food surpluses are marketed through island cooperative stores, while taro, coconuts, and bananas are transported to Funafuti. Further development of the tiny commercial agriculture sector is constrained by limited land availability, poor soil quality, and infrequent interisland transport.

Copra is easily grown, stored, and transported, and continues as Tuvalu's principal agricultural product. About 70%, or 2,100 hectares of the cultivatable land, mainly on the outer islands, is estimated to be under coconuts (ADB 1998). The Department of Agriculture's role has been to increase copra production for export through research, for example, on dwarfs and hybrids, and through development and extension. However, world prices for copra have fluctuated and resulted in variable production, trending downwards (Figure 6.1). In the early 1990s, copra production was virtually abandoned after cyclone damage to trees and island infrastructure; but copra subsidies were introduced, and production picked up in 1999 and 2000.

Subsidies have had the twin objectives of maintaining production and effecting an income transfer to the outer islands. From 1999 to 2001,



Source: Tuvalu Coconut Traders' Cooperative.



Source: Tuvalu Coconut Traders' Cooperative.

the copra price subsidy rose rapidly from just under $400 a ton to almost $800 a ton (Figure 6.2). Despite the high subsidy, production fell to a historic low in 2001.

The large disparity between free on board (FOB) export prices obtained by the Tuvalu Coconut Traders' Cooperative (TCTC) and the prices paid to the grower are reflected in TCTC's total income broken into trading income, Stabex transfers, and government subsidies (Table 6.2).

Table 6.2: Financial Summary TCTC, 1990-2000
$'(000)

Year	Trading Income	Stabex Transfers	Government Subsidy	Total Income	Expenses	Net Revenue
1990	101	39		140	246	(106)
1991	27		144	171	131	40
1992	6			6	29	(23)
1993	2	44		46	102	(56)
1994	139,909	25,570		165,479	160,012	5,467
1995	60,277			60,277	97,159	(36,882)
1996	18,966	16,574		35,540	40,144	(4,604)
1997	35,980		72,000	107,980	64,406	43,574
1998	14,823			14,823	23,928	(9,105)
1999	39,944		135,660	175,604	168,318	7,286
2000	117,526		367,050	484,576	453,214	31,362

Sources: ADB 1998; Tuvalu Coconut Traders' Cooperative.
Note: 2000 is provisional.

Injecting outside funds has been necessary to maintain TCTC's financial viability although trading income has been exceeded by expenditure in each of the last 11 years. In 1999 and 2000, the disparity between income and expenses was exacerbated by the high domestic price paid for copra relative to export prices received (Appendix 3, Table A6.1).

Between 1997 and 2000, the government subsidy paid a total of $575,000 to copra growers, and in 2000 subsidies reached an annual level of $367,050. The subsidy is failing to promote a volume of production sufficient to justify TCTC infrastructure and administration, while the income transfer to the islands is uneven. The subsidy granted is based on the amount of copra cut, so that Nanumaga and Nanumea together have received 37% of the subsidy, while Nui and Nukufetau together have received only 5%. Moreover, agricultural activities contribute only about 1% of household cash income in outer islands (CSD 1998).

While the future of copra export and TCTC is doubtful, coconuts are still important for drinking, food, and livestock feed. In the early

1980s a coconut oil extraction and soap-making factory was established at Vaimoana Cooperative, Vaitupu. Import duties on oil and soap were raised to protect this domestic production. Despite the failure of this venture, there is still interest in oil extraction for consumption. It is unlikely, however, that the economics of substituting imported vegetable oils for the outer islands with in-situ coconut oil has changed since the 1980s. In addition, anecdotal evidence suggests that people prefer the imported product.

Opportunities for developing agriculture and forestry are constrained by limited land area and poor soils.

The Development Bank of Tuvalu

The role of credit in private sector development in agriculture and in other small business is important, and the Government has attempted to boost credit provision through its Development Bank of Tuvalu (DBT). However, in 1998, DBT's board stopped new lending because of mismanagement and poor performance, as reflected in the volume of nonperforming assets. Policy then focused on recovering loans. Lending was confined to approved existing clients and was made possible by injecting government funds: $250,000 in 1998, $295,000 in 1999, and $81,000 in 2000 (Table 6.3). The more aggressive loan recovery policies include court actions by DBT, with the Attorney General's Department helping to recover nonperforming loans from the personal guarantors of defaulting borrowers. However, the effectiveness of court action is limited by lower courts being confined to dealing with outstanding loans of less than $5,000. Larger cases are forced to the High Court.

DBT's provision for bad debts or unrecoverable loans in 2000 and 2001 was not available, but was $950,000 at the end of 1999. Bad debts therefore probably represent about 50% of outstanding loans. The interest and principal foregone from almost $1 million of bad debts is considerable. It is income that could have been lent to new clients and may have made government contributions to DBT unnecessary.

Table 6.3: Development Bank of Tuvalu: New Lending and Outstanding Loans, 1997-2001

Year	New Lending ($)	Outstanding Loans at End of Year ($)
1997	150,269	1,338,025
1998	281,420	1,377,878
1999	5,000	1,596,272
2000	—	1,480,159
2001	321,944	1,740,490

Source: Development Bank of Tuvalu.

In 2000, better management of nonperforming loans generated some liquidity, and in 2001 almost $300,000 of new lending was possible to 50 new clients, in addition to $40,000 of lending to existing approved clients. To avoid the high levels of default that previously characterized DBT's portfolio, new lending proposals are scrutinized under strict criteria. Approvals by the general manager are limited to loans of less than $5000, the DBT board approving larger loans.

Small businesses that have benefited from loans in 2001 include book retailing, white goods importing, audio-visual production, commercial photography, and small-scale fishing. Vehicle loans are limited to trucks and taxis, the latter being limited to around three a year to maintain the taxi industry's commercial viability.

There are three portfolios with separate lending policies:

(i) one is DBT's, which accounts for about $344,000 of outstanding loans;

(ii) one is associated with a European Investment Bank (EIB) loan, which accounts for $344,000; and

(iii) one is associated with New Zealand Government grants, of which $34,000 is outstanding.

While DBT and EIB portfolios include small business generally, the latter precludes housing. The New Zealand portfolio favors small loans to the outer islands.

Although external assistance exists to help revive DBT as a viable contributor to private sector development, the prospects are gloomy. In 1998, an external assessment concluded that DBT should merge with NBT. This recommendation was rejected by an incoming administration, but should now be revisited, to create an appropriate development banking and microfinance division within NBT.

Marine Resources

Tuvalu's fish stock is its most valuable resource and is renewable if managed correctly. There are two main ways in which the resource is exploited. The first is by Tuvaluans fishing mainly inshore waters for subsistence or sale locally. The second is by allowing other nations' fishing fleets to exploit the oceanic fish stocks in the country's 900,000 square kilometre (km^2) Exclusive Economic Zone (EEZ). The Government should control the exploitation and ensure that benefits from the resource are maximized.

Subsistence fishing involves many outer islanders. Nonmarket fish production contributed 5.5% to GDP in 1998, compared with 0.2% from market production of fish (CSD 1999).

The introduction of fishing nets and outboard motors has increased fishing pressure on lagoons, and made maintaining lagoon fish stocks an important issue. Establishing closed areas in lagoons or regulating fishing methods would allow island communities to ensure the health of local fish stocks. The Government, through the Fisheries Department, advises communities on conservation strategies. Conserving lagoon stocks is dealt with in more detail below.

The National Fishing Corporation Of Tuvalu (NAFICOT), the Government's commercial fisheries arm, makes fresh fish available to

Funafutians through two retail outlets it leases. The retail fish sales inject cash into the economies of the outer islands and Funafuti. Fish prices NAFICOT pays vary with species but average $2 per kilogram (kg). Retail prices at NAFICOT outlets are about $0.80 per kg more than buying prices. The fresh fish retail price competes well with retail prices of canned fish at $4.80 per kg, and corned beef at $9-12 per kg. On Funafuti purchasing fresh fish is practical with 75% of households with refrigerators (Nimmo-Bell 2001). Such purchases comprise about 10% of household food expenditure, although household expenditure on meat is more than twice that on fish (CSD 1998).

NAFICOT has received donor support, predominantly from the Japanese Overseas Fishery Corporation Foundation, to operate three nine-meter fishing vessels and to refurbish and maintain cold storage, a blast freezer, and ice-making equipment. It also operates a boat motor repair workshop and sells ice and fishing gear. Ventures such as exporting fish to the Marshall Islands in the mid-1990s were undertaken, but developing commercial operations is constrained by the lack of freight capacity in Air Fiji aircraft that operate the Funafuti-Suva service.

From the early 1980s to the mid-1990s, NAFICOT operated a longliner vessel, the *Tautai*, in the waters of Tuvalu, the Fiji Islands, and the Solomon Islands. The catch was sold to canneries at Levuka in Fiji and Noro in the Solomons. After years of unprofitable operation, the ship was anchored in Funafuti lagoon and eventually sank in 1997. Also in the 1980s attempts to backload freezer containers with fish cargo for Australia proved commercially unsuccessful because of erratic production and irregular shipping.

Leasing NAFICOT facilities to private operators and selling its fishing vessels has been recommended (ADB 1998). This recommendation is reiterated as private individuals can fish, repair motors, and sell gear. NAFICOT should continue supporting private fishers with ice making, cold storage, and marketing services.

Funafuti Lagoon is NAFICOT's and Funafuti's main source of fish. Maintaining the Lagoon's productivity may be helped by excluding fishing from the 33 km^2 Funafuti Conservation Area, which includes the islands and reefs on the lagoon's western side. If public awareness, surveillance, and prosecutions are sufficient to exclude fishing in the conservation area, it will act as a breeding sanctuary, particularly for the targeted commercial species. Stocks in the conserved area will build up and eventually spill over into adjacent fished areas. Area closures are a traditional method of managing inshore fish stocks, common throughout the Pacific, and there seems to be strong support among private fishers and in the Fisheries Department. Traditional, self-regulated methods of conserving fish stocks are practised on all islands, usually by bans on catching specific species at certain times of the year.

The increase in catch in Funafuti Lagoon in 2000 cannot be attributed to its closure in mid-1997 (Table 6.4). Fish production in 2001 was the lowest recorded in 5 years and, as Kaly (1999) has emphasized, it will take years for the effects of conservation to become apparent even within the conservation area. Future data from continually monitoring catches is likely to justify the closure.

Increased fish production is not the only potential benefit from the Funafuti Conservation Area. A modest ecotourism industry, based on the conservation values of reefs and islands, is a possibility discussed below. The local councils (kaupule) of Nukufetau, Nukulaelae, and Nui are interested in developing marine conservation areas on their islands. Expert advice on the size and location of the reserves and their administration would probably be welcomed.

Table 6.4: Fish Production, Funafuti Lagoon, 1997-2001
(kg)

Year	Weight
1997	44723
1998	44858
1999	44474
2000	58168
2001	44262

Source: NAFICOT.

Community fisheries centers (CFCs) have been established with donor assistance. They are equipped with fish processing, cold storage, and sun drying facilities on each outer island. Much of the centers' production is purchased and consumed by islanders themselves, but 7.1 tons of fresh fish and 1 ton of dried fish were supplied to NAFICOT in Funafuti in 2001 via the fisheries vessel Manaui. CFC managers appointed by the Fisheries Department draw salaries and between three and five other staff are employed during periods of fish supply.

All the centers operated at loss in 2001 (Table 6.5). The small margin between fish purchases and fish sales is inadequate to cover the costs of operations, of which wages is the largest component. In five of the seven centers, wage costs exceeded fish sales. For CFCs to operate, the Government makes losses: $79,443 in 2001. There are also substantial hidden costs to consider when assessing CFC performance. For example, the cost of the *Manaui* would be considerable, and the salary costs of fisheries extension and development officers engaged in overseeing the centers from Funafuti should also be considered.

CFCs cannot be justified as meeting fish demand on Funafuti when Funafuti Lagoon generates between 40 and 50 tons of fish annually through NAFICOT (Table 6.4), or about six times the centers' combined contribution to NAFICOT. Additionally, fish are sold directly to consumers. Presently the *Manaui* collects fish from the centers for NAFICOT, making around four to eight calls a year to each island (Nimmo-Bell 2001). A new interisland vessel to be commissioned in 2002 will have a fish storage capacity of 40 tons. However, it is unlikely that more frequent visits by this vessel will induce very much higher fish production by the islands, because surpluses can already be stored at the centers to await collection. It is also doubtful whether the centers can be justified as generating fish supplies on the islands. The centers' cold storage facilities certainly make fish accessible to islanders all year round, but about half of all island households now have refrigerators (Nimmo-Bell 2001). In any case, it is reasonable to assume that selling and storing fish would be taken up by private retailers if the centers closed. Fishers would be paid by retailers instead of by the centers and the price of fish would be more likely to reflect supply and demand. Higher prices would stimulate production. Moreover, the argument that the subsidy to CFCs is necessary to transfer income to the outer islands is weak, because a large proportion of the subsidy pays a few individuals' wages.

Table 6.5: The Financial Performance of Community Fisheries Centers, 2001
($)

Item	Nanumea	Nanumaga	Niutao	Nukulaelae	Vaitupu	Nui	Nukufetau
Income							
Fish sales	7,234	7,046	4,886	16,092	42,701	3,955	10,188
Other	6,704	326	689	439	1,512	65	1,129
Total income	13,938	7,372	5,575	16,531	44,213	4,020	11,317
Expenditure							
Fish purchases	7,666	7,844	6,106	10,091	29,313	6,275	9,263
Wages	13,555	8,574	9,558	9,381	14,156	8,754	11,144
Total expenditure	29,941	21,169	19,832	25,150	50,743	18,744	16,830
Operating profit (loss)	(16,003)	(13,797)	(14,257)	(8,619)	(6,530)	(14,724)	(5,513)

Source: Fisheries Department.

To end government subsidies that do not appear to perform a compelling social function, it is recommended that the councils take over the CFCs or they be leased to private operators. However, it is clear that achieving profitability in the centers by reducing wage costs and increasing margins will be difficult.

Tuna fishing offers revenue to Tuvalu through its jurisdiction over its EEZ conferred by the ratification of the United Nations Convention of the Law of the Sea of 1994. The Government licenses Distant Water Fishing Nations' (DWFN) tuna fishing vessels that operate within its EEZ and, as a condition of licences, extracts resource rent as an access fee or as a royalty based on the value of foreign fishing fleets' catches.

The Western Central Pacific Ocean (WCPO) accounts for almost half of the purse seine fleets' global catch, most of which is canned in Asia or, for the catch of the United States fleet, at Pago Pago, American Samoa. Longliners take a smaller but equally valuable proportion of the tuna catch from WCPO for the fresh or frozen markets of Japan, Korea, Hawaii, and the United States. With its EEZ situated in WCPO and blessed with substantial tuna stocks, Tuvalu benefits considerably from licensing distant water fleets and neighboring countries' fleets.

Traditionally, each Pacific island government with substantial tuna stocks negotiates a 1-year fishing agreement directly with DWFN fleets. For Tuvalu the Government charges a licence fee per vessel. The arrangement varies slightly between Korea's and Japan's fleets, but for purse seine vessels it may be US$10,000 per trip, paid in advance. The licence fee is later deducted from the royalty payments due from the distant water fleets. The royalty is based on the weight of the previous year's tuna catch by that fleet or vessel and on canning tuna prices advised by the Forum Fisheries Agency in Honiara.

This arrangement is varied for the US purse seine fleet, which operates under the only multilateral agreement in force in the Pacific. An agreed percentage of the value of the US fleet catch is apportioned to Pacific island countries by weight and value of catch. Smaller islands or those of higher latitudes that may not benefit from actual visits by the US fleet also receive supplementary financial benefits from the agreement. In 2001 the Government licensed 75 purse seine vessels, of which 30 were under the US treaty, and 83 were longliners. Tuvalu received $9.7 million in licence fees under the US treaty in 2001, or 82% of $11.8 million in total license fees received.

The formula for the overall licence fee (initial fee plus royalty) stipulated by the Government is 5% of the actual US dollar value of the catch, or a minimum initial fee of US$10,000 if 5% of the value of the catch is less than this amount. The rate of 5% reflects the rate charged by other countries in the region. Except for US and Japanese purse seine fleets, the value of catch of distant water vessels in 2001 was not greater than the initial payment of US$10,000 per entry to Tuvalu's EEZ. The initial payment thus stood as the license fee.

The value of licensing revenue has increased in absolute and relative terms, reaching a historic high in 2001 (Table 6.6). The rise reflects a more favourable US treaty, together with depreciation of the Australian dollar against the US dollar, in which all licence fees are paid. World tuna prices recently fell to historically low levels at which it was uneconomical for the US fleet to operate. There is no guarantee that tuna fishing by the US fleet will remain profitable, even with the large US government subsidy that it enjoys (and which may be removed under World Trade Organization rules). This suggests the Government should conservatively assess the sustainability of recent licence fee levels from that source.

Table 6.6: Revenue from Licensing Distant Water Fishing Nations, 1990-2001
($'000)

Year	Licensing Revenue	Government Recurrent Revenue	Licenses as % of Revenue
1990	438.6	5,300.5	8.3
1991	482.3	5,454.7	8.8
1992	428.8	8,620.2	5.0
1993	3,460.6	8,002.7	43.0
1994	1,038.3	8,617.9	12.0
1995	2,141.4	8,318.8	12.0
1996	921.5	9,190.0	10.0
1997	3,567.6	15,528.6	23.0
1998	6,516.0	27,351.5	23.8
1999	9,690.9	22,245.8	43.6
2000	9,480.1	47,949.3	19.8
2001	11,795.4	23,440.1	50.3

Sources: ADB 1998;Treasury Division; Fisheries Department.

Where major benefits from tuna stocks are in licence fees from distant water fleets, there is bound to be interest in how the Government might help establish domestic tuna fishing enterprises to earn foreign exchange and create employment. The Government has tested involvement in pole and line and purse seine fishing but found the economics unfavourable because of the large capital investment for such ventures, their high risk, and the difficulty of managing them in Tuvalu's remoteness.

The Government is continuing to explore how to foster domestic development based on tuna and advances some options in its *Draft National Tuna Development and Management Plan* (Government of Tuvalu, 2001). The options include

- (i) improving infrastructure;
- (ii) encouraging the use of new fishing methods;
- (iii) developing export markets;
- (iv) enhancing the skills of Tuvaluans;
- (v) improving the domestic development benefits from foreign vessels; and
- (vi) other methods.

For options (i) and (ii) the need for improved wharfage, anchorage, and backup facilities for small private vessels depends on developing an export market, which in turn is subject to transport constraints. The success of new fishing methods (longlining for tuna to supply fresh fish markets is envisaged) also depends on developing transport links.

Successful chilled tuna export ventures in the Pacific require regular flights of large aircraft to Japan and other northern markets. The most successful exporter in the region has been Fiji Fish Ltd of Suva, which has had the benefit of being able to freight chilled fish on Air Pacific flights direct to Japan or via ports to the north. For Tuvalu, an airfield capable of taking at least a Boeing 737 is a precondition for chilled exports. The common denominator is developing a tourism market large enough to warrant larger aircraft. However, this type of operation deteriorates significantly if aircraft must be chartered. Investing in infrastructure that would promote longlining or even new small-scale fishing on fish aggregating devices for export must be questioned.

The same transport constraint applies to option (iii): export market development. The Draft Plan acknowledges the need for improved air freight services, and a study is proposed of the feasibility of upgrading airstrips at Funafuti, Nukufetau, or Nanumea. However, the study should not just be on the feasibility of upgrading the airstrips, but on the economics of upgrading the airstrips together with the economics of exporting fresh fish in chartered aircraft.

Under export market development, larger scale value-added processing is suggested as a strategy. However, the economic track record of canneries in Melanesia does not encourage the economic viability of a cannery in Tuvalu. Asian competition in the canned tuna market is fierce, and even the future of the large and profitable canneries on American Samoa are uncertain. Semiprocessed tuna loins, unlike canned tuna, can enter the US duty free and may therefore be more profitable. (The PAFCO cannery in the Fiji Islands is now mainly dedicated to loining under management of Bumble Bee.) An advantage of loins is that they can be frozen and transported by sea. This option for domestic tuna development warrants a feasibility study.

Under 'other methods' there is a proposal to increase licence fees on foreign vessels by US$1,000 per vessel to support a Domestic Development Trust Fund. Once again the Government's first priority is to establish the economic feasibility of domestic development. Only then can necessary infrastructure investment by Government, that will attract private enterprise, be justified. It is proposed to move CFCs towards financial sustainability by reducing contracted staff and seeking more community involvement. However, given the large losses sustained by CFCs and a lack of obvious social benefits, it is recommended that the centers be leased to private operators or transferred to councils.

The government subsidy would be better spent on observers and port sampling as part of a tuna management program.

Tuna management of the vast migratory tuna stocks in WCPO needs to be coordinated by Pacific island governments through the Forum Fisheries Agency (FFA) and SPC. FFA mainly coordinates and advises Forum member countries on exploitation and management of tuna stocks. SPC, a complementary organization, researches the sustainability of the level of catches of the principal commercial species: skipjack, big eye and yellowfin tunas, and albacore. It also assesses stocks and total allowable catches (TACs) for EEZs at the request of countries in the region.

Overlaying regional arrangements for management are the UN Fish Stocks Agreement and the Western Central Pacific Tuna Convention. The importance of the former is that it establishes a regime to control fishing on the high seas as well as in waters under national jurisdiction. The latter Convention is aimed at

(i) achieving compatibility between management measures in the high seas and in EEZs;
(ii) setting limits to TACs or fishing effort; and
(iii) allocating catch or effort quotas.

A new commission will be established for tuna management, and Tuvalu aims to be an active member.

The level of tuna catches in the EEZs of all WCPO countries is of course important in determining the sustainable level of catches in a particular EEZ, and therefore the need for regional management arrangements. The SPC has nevertheless estimated that the sustainable annual yield of tuna from Tuvalu waters is about 45,000 to 50,000 tons. Total catch levels have been approaching this limit; over 45,000 tons being caught in 1999. In future it is likely that TACs for Pacific countries will be predicated for individual tuna species rather than tuna as a whole. How such limits will be organized and enforced is something for the new

Convention to ponder. Associated with such arrangements, Tuvalu will need to decide how it will allocate its limited tuna resources between competing users. The *Draft National Tuna Development and Management Plan* flags some of the allocative strategies that may be adopted.

A key issue raised in the Draft Plan is distant water vessels underreporting tuna catches. The reported tuna catch levels, along with price, determine the amount of licence fees the Government receives. The plan foreshadows introducing national observer and port sampling programs, which together would complement the FFA and SPC programs and strengthen disincentives for underreporting. These initiatives could well generate a high economic rate of return and should attract government funding.

Tourism Development

The Government recognized the potential economic importance of tourism to the economy by endorsing the Tuvalu Tourism Development Plan of 1992 (Tourism Council of the South Pacific 1992). Subsequent to the Schuller Pearsum Review (1995) it took responsibility for tourism development by incorporating tourism in the Ministry of Tourism, Trade and Commerce. The later Dawson Report (Dawson and Brown 1997) analyzed the constraints on tourism, the principal ones being

(i) high air fares and poor air services;
(ii) low quality hotel accommodation and standards;
(iii) undeveloped ecotourism operations;
(iv) insufficient visitor information;
(v) poor urban environmental management; and
(vi) poorly staffed and situated Ministry offices.

The Dawson Report also detailed recommendations to overcome some of these constraints, including

(i) revamping the hotel to make the most of its attractive situation;
(ii) locating a tourist information office adjacent to the airport terminal;
(iii) developing reef ecotourism; and
(iv) strengthening and developing human resources.

Many of the constraints remain. Tuvalu does not possess any special attractions not present in other parts of the region, except that it is one of the smallest nations in the world. Tourists have no special reason to pay the costly fare to reach Funafuti on the twice-weekly Air Fiji service from Suva. On arrival, visitors are not readily informed of options and prices for activities or accommodation. Most tourists initially gravitate to the relatively expensive Government-owned Vaiaku Lagi Hotel, which has problems and potential that governments have not addressed.

Visitor numbers seem to have been severely affected by the difficulties experienced with the air link in 1999. However, total nonresident arrivals increased quite dramatically in 2000 and 2001 (Table 6.7). Large Japanese contingents boosted nontourist numbers (in transit) in 2000 and 2001, and tourist numbers from all destinations were up in 2001 (Appendix 3, Table A6.2). However, the number of actual holidaying visitors fell well short of targets set in the Dawson and Brown 1997 Report. This is not surprising given the continuation of the constraints summarized above.

While the tourism sector is small, it nevertheless can stimulate the economy. The Tuvalu visitor survey of 1994 suggested that average expenditure per visit of holidaymakers was $409, compared with $572 for business visitors and $232 for those visiting friends and relatives (Schuller tot Persum, 1995).

Funafuti Lagoon is the natural attraction that could stimulate modest growth in tourism. The Funafuti Conservation Area became operational in June 1997 assisted by South Pacific Regional Environment

Table 6.7: Nonresident Arrivals, 1997-2001

Year	Holiday Vacation	Business Official	Friends Relatives	Transit Stopover	Other Purpose	Total
1997	164	483	218	101	72	1038
1998	213	475	192	36	90	1006
1999	83	252	159	9	26	529
2000	139	460	178	354	147	1278
2001	435	1187	529	399	263	2813

Source: CSD database.

Program (SPREP) funding. The Funafuti Town Council (Kaupule) administers the Area jointly with the traditional owners through the Conservation Coordinating Committee and conducts boat tours on request. Fishing, hunting, and the cutting or burning of trees are prohibited in the 33 km^2 zone. Attractions of the Area are the small islands ringed with sandy beaches and harboring abundant bird life. Snorkelling the reefs, and swimming in the clear waters are also assets.

The current rate of tourist visits to the conservation area is only about 30 a year. SPREP's (2001) *Ecotourism for the Funafuti Conservation Area* assessment recommended

(i) purchasing a new boat for management and for tourism trips to the area (it has been purchased);
(ii) carrying life jackets and a first aid kit on board at all times;
(iii) establishing professional half-day tours on set days and at regular times;
(iv) training conservation area staff and selected community members in tour guiding, first aid, safety, and small business management;
(v) clarifying which organization (community, Conservation Coordinating Committee, or kaupule) is to manage the ecotourism operation; and

(vi) providing information on the conservation area and tours at the airport, Vaiaku Lagi Hotel, and Tourist Office.

To this list could be added using boat patrols to ensure that the conservation area regulations are not being breached.

Developing ecotourism in the Conservation Area is contingent upon protecting and developing the area's conservation values. However, there is no indication of such protection. Kaly (1999) reported that it was likely that heavy fishing was still occurring. The boundary of the conservation area on the lagoon side needs to be marked by buoys to deter fishing and aid policing. The western or ocean boundary of the area is the second reef (tafalua). This boundary would be difficult to mark by buoys, but is apparently well recognized by local fishers.

The SPREP project that funded setting up and administering the Conservation Area ceased in 2002, and Funafuti Council is seeking further financial assistance and advice on managing and developing the Area.

Environmental Management

The National Environmental Management Strategy (NEMS), endorsed by Cabinet in 1997, is the basis for the Government's environmental policy and legislative development (SPREP 1997). The main environmental risks identified in NEMS were

(i) sea level rise as a result of climate change;
(ii) high human population growth and densities;
(iii) decline in traditional resource management;
(iv) unsustainable use of natural resources; and
(v) waste management and pollution control.

Kaly and Pratt (2000) also reviewed Tuvalu's vulnerability to environmental risk by comparing Tuvalu, Fiji Islands, Samoa, and Vanuatu for environmental risk. They ranked Tuvalu as the most vulnerable, largely because of its low relief and small land area.

In response to the concerns raised in the above reports, the Government increased the Environment Unit's staffing within the Ministry of Natural Resources, Environment and Energy (MNREE) from two positions in 1999 to four positions in 2000. Kaly (1999) developed a detailed plan to address the major issues in NEMS by assigning the unit the tasks of

(i) integrating environmental concerns into economic development;
(ii) improving environmental awareness and education;
(iii) assessing issues and taking precautionary steps related to climate change and sea level rise;
(iv) developing a population policy of balanced development and planned urbanization;
(v) improving waste management and pollution control;
(vi) developing and protecting natural resources;
(vii) monitoring and reporting on the environment; and
(viii) ratifying international agreements.

While waste management, climate change, and environmental impact assessment are being addressed by dedicated staff, capacity building and institutional strengthening are urgently needed. Training is a vital component of this strengthening and should be in two parts: intensive in-country training, to enable priority tasks to be undertaken, and overseas training to degree level. This human resource development and staffing will be a long-term project that underpins the February 2002 creation of a new Ministry of Environment, Energy and Tourism (MEET) and increases the Environment Unit to five positions.

Waste management has direct implications for Funafuti's environment and for the population's health. Waste is often nonbiodegradable, and may be dangerous to human and ecosystem health unless collected and disposed of systematically. Change that relies on voluntary compliance tends to be slow, while the opportunities for generating income from recycling waste are limited because of the small quantities of recyclable material generated and high freight costs. However, aluminium cans and green waste (compost) are exceptions. User-pay services for water can encourage conservation and at the same time generate income for administering supply. However, care is needed in imposing user fees for waste services as they can lead to illegal waste disposal unless backed by appropriate preventive legislation (Hunt 1998).

As population density increases on Funafuti, waste management will become even more important, but it is not just a matter of collecting waste and burying it in borrow pits or inserting more septic tanks and flush toilets. An unmanaged approach to waste disposal will lead to

(i) pollution of lagoon waters, making them potentially hazardous to human health and fresh water lenses;
(ii) accumulation of waste that encourages vermin and is a latent source of disease; and
(iii) incineration of waste that itself poses a health risk.

A comprehensive, AusAID-supported Tuvalu Waste Management Project was begun in 1999 and based in MNREE. A mid-term review of the Project (AusAID 2001) identified the most serious problem for implementation as the uncertainty surrounding future institutional responsibility for waste management. The Funafuti Town Council was formerly responsible for waste management and expects it to return to its jurisdiction. Meanwhile, MEET's waste collection service that caters for half the households (250) in Funafuti, has gone ahead with establishing a dedicated waste depository at the northern end of the island. It has begun composting household green waste, and intends to implement projects including regulating pig farming and treating hospital waste.

The Government, while accepting most of the recommendations of the mid-term review, would prefer the Project to stay within its jurisdiction. Its grounds are that

(i) the Funafuti Town Council has inadequate financial resources to undertake the Project;
(ii) the managing of waste now encompasses a wide range of activities beyond traditional household rubbish collection and dumping (dealing with industrial and hazardous wastes for example); and
(iii) the Council lacks specialist advice that is readily available from the expanded Environment Unit within the Ministry.

The Waste Management Project is innovative and comprehensive and could become a model for other Pacific atolls. Its implementation and successful operation need the issue of institutional responsibility resolved.

In association with the dedication of a waste disposal site at the northern end of Funafuti, adjacent lagoon waters are being monitored for pollution. However, more extensive monitoring of the Lagoon, which is vital both economically and socially, is crucial to a comprehensive strategy to develop environmental indicators. The inventory of indicators would come under Kaly's plan, above, for pollution control. Once again, upgrading the Environment Unit must be accompanied by increased resources to enable it to tackle such priorities.

7

Outer-Island Development

Introduction

The aim of the Government of Tuvalu's (the Government) decentralization program adopted in the *Kakeega* is to "obtain a more even balance of incomes and living standards across all island communities, and to relieve population and environment pressures on Funafuti" (GOT 1995). This is to be achieved by transferring government infrastructure and services to the outer islands, and by augmenting outer-island community resources. This Chapter examines

(i) the inequality between Funafuti and the outer islands;
(ii) the provision of public services; and
(iii) the Island Development Program and Falekaupule Trust Fund.

A final section briefly discusses current government thinking on decentralization and other initiatives that might stimulate outer-island development.

Interisland Inequality

The 1994 household income and expenditure survey provides the most robust data on inequality between islands (CSD 1998), while a 2001 socioeconomic survey provides some more recent information

(Nimmo-Bell 2001). The household survey was conducted from July to September 1994 and involved 331 households in Funafuti and four outer islands (Vaitupu, Nanumea, Niutao, and Nukufetau). The sample was about 22% of the total number of Tuvaluan households, and population estimates were made using data from the 1991 Census adjusted for internal migration to Funafuti and Vaitupu. Information was collected on the quantity and value of home produced food and the exchange of goods between households, as well as on cash income and expenditure.

Data generated by the 1994 survey describe income inequality by geography, that is, for households resident on Funafuti and on outer islands as a group. The data do not enable a description of income inequality between households by island of origin, which is likely to be less severe than spatial inequality because many outer islanders have migrated to Funafuti and are employed in the civil service. Funafutian households accounted for 43% of the estimated population in 1994 (Table 7.1). However, data from the pilot census of Funafuti in November 2001 (Figure 7.1) show that indigenous Funafutians constituted just 22% of the population resident on the main island (discussed further in the Falekaupule section below). Comparison of the age distribution of the two island groupings shows a smaller percentage of the outer-island population is in the age group of 15 to 29 years and a larger percentage is aged over 50 (Table 7.1). This is a pattern to be expected when there is significant internal migration.

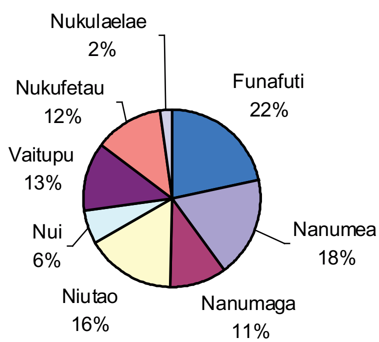
Data on the labor force status of the population groupings underline that the Tuvaluan economy is dualistic with a public sector-dominated monetary economy on Funafuti and a subsistence sector-dominated economy in the outer islands (Table 7.2). The participation rates for males and females in Funafuti are 78.3% and 49.6%, respectively, while the corresponding rates in the outer islands are 70.8% and 24.7% (although women fulfilling home duties are inappropriately classified as not in the labor force). The key statistics are that 59% of male and 27% of female Funafuti residents in the labor force are employed as wage earners, compared with 26% and 8% in the outer islands. Only 4% of men in Funafuti are subsistence farmers, although it must be

Table 7.1: Usually Resident Tuvalu Population: Age Distribution By Island Estimate for the survey period – October 1994

Five-Year Age Groups	Funafuti		Outer Islands		Tuvalu	
	Number	Percent	Number	Percent	Number	Percent
0-4 years … …	516	11.9	833	14.6	1349	13.5
05-09 years … …	532	12.3	729	12.8	1261	12.6
10-14 years … …	456	10.5	559	9.8	1015	10.1
15-19 years … …	352	8.1	284	5.0	636	6.4
20-24 years … …	364	8.4	263	4.6	627	6.3
25-29 years … …	408	9.4	374	6.6	782	7.8
30-34 years … …	352	8.1	545	9.6	897	9.0
35-39 years … …	332	7.7	375	6.6	707	7.1
40-44 years … …	236	5.5	360	6.3	596	5.9
45-49 years … …	240	5.6	227	4.0	467	4.7
50-54 years … …	148	3.4	205	3.6	353	3.5
55-59 years … …	116	2.7	208	3.7	324	3.2
60-64 years … …	84	1.9	230	4.0	314	3.1
65-69 years … …	80	1.9	185	3.2	265	2.6
70+ years … …	76	1.8	248	4.4	324	3.2
Not stated … …	32	0.7	67	1.2	99	1.0
Total… … …	4,324	100.0	5,693	100.0	10,017	100.0

Source: CSD 1998.

Figure 7.1: Population of Funafuti by Island of Origin, November 2001



Source: CSD, pilot census of Funafuti 2001.
Note: The Niutao figure includes two people resident on Niulakita.

remembered this figure is for all Funafuti residents, 78% of whom are outer-islanders with no access to land. In the outer islands, 24% of men regard subsistence farming as their primary economic activity. It is likely also that at least some of the outer-island males described as unemployed are absorbed into the subsistence sector part-time.

Table 7.2: Residents Aged 15 Years And Over: Labor Force Status
By Sex By Island Group, 1994

Status	Funafuti		Outer Islands		Tuvalu	
	Males	Females	Males	Females	Males	Females
			Percent			
In Labor Force:						
Wage/salary earners	59.3	27.4	25.5	8.2	40.9	15.9
Self employed	0.7	2.1	2.3	1	1.6	1.5
Employer	1.8	1.2	2.2	1.1	2	1.1
Subsistence farmers	4.2	1.2	23.5	1.7	14.7	1.5
Unpaid helper	2.1	1.8	1.1	0.9	1.6	1.3
Unemployed	10.2	15.9	16.2	11.8	13.5	13.4
Not in Labor Force	21.7	50.4	29.2	75.3	25.7	65.3
Total	100	100	100	100	100	100
Number of Persons	1,140	1,312	1,368	1,973	2,508	3,285

Source: CSD 1998.

The type of employment is reflected in the sources of income (Table 7.3). Almost six in 10 households in Funafuti earn over half their average weekly income from wage employment, compared with 28% of outer-island households. Overseas remittances account for almost a third of outer-island households' net incomes. The average gross weekly income of a Funafutian household is 3.4 times that of an outer-island household; but the average size of the former household is seven as against almost six for the latter. Thus the extent of inequality on a per person basis is less: average weekly income per person on Funafuti is $33, compared with $11.65 in the outer islands. This is a ratio of 2.8.

Table 7.3: Selected Household Characteristics By Island Group, 1994

Selected Characteristics	Funafuti	Outer Islands	Tuvalu
Average Weekly Income:		$	
Wages/salaries (net) [1] … … … … …	103.62	19.25	49.95
Overseas remittances … … … … …	28.31	19.33	22.60
All other sources … … … … …	55.08	21.53	33.74
Total (net income[1]) … … … … …	187.01	60.11	106.29
Total (gross income) … … … … …	230.74	67.59	126.96
Percent of households with Percent of households **wage/salary income representing > 50% of total net income**	59.5	28.3	39.7
Proportion of households in each island group net income quartile group[1]		Percent of households	
Lowest quartile … … … … …	10.4	89.6	100.0
Second quartile … … … … …	20.9	79.1	100.0
Third quartile … … … … …	36.6	63.4	100.0
Highest quartile … … … … …	77.9	22.1	100.0
Total … … … … …	36.4	63.6	100.0
Household size Percent of households			
1-4 persons … … … … …	22.3	36.0	31.0
5-8 persons … … … … …	48.2	49.0	48.7
9-12 persons … … … … …	21.6	13.8	16.6
More than 12 … … … … …	7.9	2.0	3.7
Total … … … … …	100.0	100.0	100.0
Average number of persons … … … …	7.0	5.8	6.2
Household type		Percent of households	
Single family … … … … …	44.6	51.2	48.8
Multiple family … … … … …	51.8	43.0	46.2
Total[2] … … … … …	100.0	100.0	100.0
Number of households (estimate)… … …	556	972	1528

[1] Net income is after the deduction of PAYE income tax and compulsory contributions to the Tuvalu National Provident Fund.
[2] Includes single person and group households.

Source: CSD 1998.

Table 7.4 details sources of average weekly income per person aged over 15. It is notable that the only source of cash income absolutely greater for outer-islanders is handicraft production by women's associations. Even internal and overseas remittances are reportedly greater for Funafutian households than for outer-island households.

Table 7.4: Residents Aged 15 Years And Over: Average Weekly Income
By Source By Island Group, 1994

Selected Characteristics	Funafuti	Outer Islands	Tuvalu
		($)	
Earned income			
Wage/salary (Gross)	33.41	7.79	18.65
Wage/salary (Net [1])	23.5	5.63	13.21
Business	3.32	1.55	2.3
Agricultural activities	0.27	0.23	0.25
Fishing	1.17	0.39	0.72
Small activities	2.37	0.58	1.34
Handicrafts	0.62	1.29	1.01
Remittances			
From overseas	6.42	5.63	5.96
Within Tuvalu	1.69	1.16	1.38
All other sources	3.05	1.06	1.90
Total Average Weekly Income (Gross)	52.32	19.70	33.53
Total Average Weekly Income(Net [1])	42.4	17.50	28.11

Source: CSD 1998.

1. Net figures are after the deduction of PAYE income tax and compulsory Tuvalu National Provident Fund contributions.

Educational attainment is a major determinant of income-earning prospects. Table 7.5 shows that Funafutians over 15 years of age had higher attainment levels than residents of the sampled outer islands.

Table 7.5: Education Attainment By Island Group For Persons Aged 15 and Over 1994

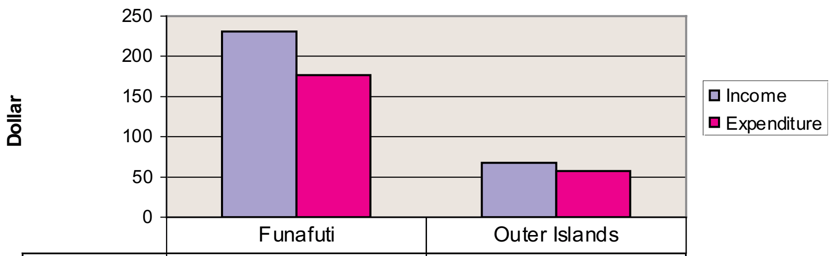
Education Attainment	Funafuti	Vaitupu	Other Outer Islands
		Percent	
Did not go to school	0.8	0.0	0.6
Primary school	49.0	72.5	81.8
Secondary school	46.6	25.6	17.4
Not stated	3.6	2.0	0.2
Total	100.0	100.0	100.0
Education completed			
Degree	2.9	0.7	0.4
Diploma, Certificate	18.6	5.4	5.0
Apprentice, trade	2.6	0.7	0.4
Secretarial training	0.7	0.0	0.2
Other	2.8	0.7	0.4
None completed	71.7	92.6	93.1
Not stated...	0.8	0.0	0.4
Total	100.0	100.0	100.0

Source: CSD 1998.

This was indicated by those completing secondary school and by those completing postsecondary qualifications.

Figure 7.2 compares average weekly household income and expenditure in Funafuti and the outer islands, and Table 7.6 breaks down expenditure. Expenditure on food and nonalcoholic beverages is the largest item of expenditure for both sets of households but is relatively larger for outer-island households (54%) than for Funafutian households (46%). Current housing costs, fuel and power, tobacco, and personal care also account for higher shares of expenditure in the outer islands than in Funafuti. But Funafutian households spend relatively more on all other items, particularly alcohol and recreation (notably holidays over-

Figure 7.2: Average Weekly Household Income and Expenditure, 1994



	Funafuti	Outer Islands
Income	230.74	67.59
Expenditure	176.60	57.46

Source: CSD 1998.

seas). Appendix 4, Table A7.1 details the breakdown of the expenditure categories in Table 7.6.

The differences in housing stock in Funafuti and the outer islands are shown in Table 7.7. Funafutian homes are larger, but so are the households. These homes and those in Vaitupu are mostly metal-roofed with concrete walls and floors, whereas homes on the other islands are commonly thatch-roofed with rib or coconut screen walls and crushed coral floors. Kitchens are usually outside the house, although less so in Funafuti. Open fires are the predominant cooking method in the outer islands and kerosene is used in Funafuti. Sanitation is mostly by flush toilets in Funafuti and water seal latrines in the outer islands. Outside tanks are the primary source of water everywhere, especially in the outer islands.

At the time of the 1994 survey, only Funafuti was electrified and outer islands had some power supply from solar units and lighting from kerosene lamps. Following Tuvalu Electricity Corporation's (TEC) successful rural electrification scheme in 2000 this is no longer the case. All main settlement areas on the outer islands have access to a diesel-fuelled electricity supply.

Table 7.6: Household Expenditure By Island Group, 1994: Summary

Expenditure Item	Funafuti	Outer Islands	Tuvalu
Average weekly expenditure ($)			
Current housing costs	14.13	5.08	8.37
Fuel and power	12.27	7.10	8.98
Food and nonalcoholic beverages	80.57	31.06	49.08
Alcoholic beverages...	4.62	0.47	1.98
Tobacco...	4.47	1.91	2.85
Clothing and footwear...	2.97	0.98	1.71
Household furnishings and equipment ...	9.48	1.36	4.32
Household services and operation...	5.97	1.65	3.22
Medical care and health services...	0.11	0	0.04
Transport...	15.64	4.10	8.30
Recreation...	14.49	0.88	5.83
Personal care	2.16	1.07	1.47
Miscellaneous commodities and services...	9.72	1.80	4.68
Total commodity and service expenditure	**176.60**	**57.46**	**100.83**
Number of households (estimated)	556	972	1,528

Source: CSD 1998.

The differences in household amenities between Funafuti and outer-island households are detailed in Appendix 4, Table A7.2. Funafutian households have more electric appliances (refrigerators, fans, TVs, washing machines, and so on) and more motorcycles and vehicles than outer-island households. The percentage of households with sewing machines is the same.

The extent of inequality between Funafuti and the outer islands is exaggerated if the focus is only on inequality in cash income and expenditure and differences in housing and household amenities. Nonmarket production per head is higher in the outer islands.

The *Social and Economic Wellbeing Survey, Tuvalu 2001* (Nimmo-Bell 2001) surveyed 505 households in Funafuti and the outer islands,

Table 7.7: Dwelling Characteristics By Island/Island Group, 1994

Dwelling Characteristics	Funafuti	Vaitupu	Other Surveyed Islands
Average Number of Rooms Per Dwelling	3	2	2
	Percent of households		
Floor materials			
Stones	0.0	4.5	38.5
Midribs	0.7	11.4	8.8
Wood	20.1	2.3	2.0
Concrete	77.0	77.3	48.6
Other	2.2	4.5	1.4
Not recorded	0.0	0.0	0.7
	100.0	100.0	100.0
Roof materials			
Thatch (pandanus)	5.8	15.9	62.8
Thatch (coconut)	1.4	2.3	2.7
Metal	90.6	81.8	34.5
Other	2.2	0.0	0.0
	100.0	100.0	100.0
Separate kitchen			
Yes, inside dwelling...	36.0	20.5	16.9
Yes, outside dwelling	48.9	77.3	78.4
Not separate	15.1	2.3	4.7
	100.0	100.0	100.0
Materials of outer-walls			
Screen (coconut)	0.0	4.5	25.0
Midribs	2.9	6.8	20.3
Masonite	24.5	25.0	3.4
Cement block	43.9	38.6	26.4
Other	28.8	25.0	25.0
	100.0	100.0	100.0
Type of toilet			
Flush septic tank	54.7	22.7	0.7
Water seal	38.8	40.9	71.6
Reef latrine	3.6	25.0	27.7
Other	2.9	11.4	0.0
	100.0	100.0	100.0
Source of water			
Direct supply from cistern/tank ...	30.2	11.4	0.7
Outside tank	62.6	84.1	87.8

Table 7.7 - *Continued*

Dwelling Characteristics	Funafuti	Vaitupu	Other Surveyed Islands
Average Number of Rooms Per Dwelling	3	2	2
	Percent of households		
Communal tap	3.6	0.0	6.1
Other	3.6	4.5	2.0
Not recorded	0.0	0.0	3.4
	100.0	100.0	100.0
Type of electricity supply			
Town electric supply	86.3	2.3	0.0
Own solar power unit	2.2	27.3	44.6
Own generator	0.0	4.5	2.7
None	11.5	65.9	52.7
	100.0	100.0	100.0
Main method used for cooking			
Electric plate	0.7	0.0	0.0
Electric stove	0.7	0.0	0.0
Gas burner – with oven...	18.0	0.0	0.0
Gas burner – without oven	10.1	0.0	0.0
Kerosene burner	62.6	38.6	51.4
Wood stove	0.0	0.0	2.0
Open fire	7.9	61.4	46.6
	100.0	100.0	100.0
Alternate methods used for cooking			
Kerosene burner	27.3	0.0	0.0
Wood stove	3.6	0.0	0.7
Open fire	30.9	25.0	49.3
Other	0.7	0.0	0.0
Only one method of cooking	37.4	75.0	50.0
	100.0	100.0	100.0
Type of lighting usually used			
Electric - town electric supply	86.3	2.3	0.0
Electric - own solar power unit ...	2.2	27.3	45.3
Electric - own generator	0.0	4.5	1.4
Kerosene, spirit lamp	11.5	56.8	53.4
Oil lamp (incl. coconut oil or fat) ...	0.0	9.1	0.0
	100.0	100.0	100.0

Source: CSD 1998.

and was to generate baseline information against which social and economic progress could be measured in the following 3 years. The Survey's author warns that the figures "should be treated with some caution" because of difficulties in implementing the survey and analyzing the data. "What is important in the data is the relative order of responses rather than precise figures" (Nimmo-Bell 2001, p.7). It is unclear what meaningful and measurable development indicators are to be used for monitoring. Nonetheless, the Survey presents responses to the request to list the three most important things needed to improve the quality of island life.

In the two Funafuti villages surveyed, the ranking was the water supply, health system, and housing; in Nanumea, it was the health system, water supply, and education; in Nanumaga, housing, the water supply, and health system; in Niutao, the water supply, agriculture, and roads; in Vaitupu, the health system, education, and private sector development; in Nui, education, housing, and the health system; in Nukufetau, the health system, education, and a jetty plus improvement of the reef passage; and in Nukulaelae, agriculture, the water supply, and education.

Although the general emphasis is on education, health, and water supply, there is some variation between islands in priority issues and their ranking. Increased autonomy for outer islands, supported by the Falekaupule Trust Fund (FTF) discussed below, potentially permits island communities to pursue their specific development objectives.

Services Provision

For much of the period following independence, services to the outer islands, were relatively basic. With the exception of Niulakita (with no history of permanent settlement), the normal range of services consisted of a preschool and a primary school; a medical dispensary maintained by island councils and staffed by two or more nurses; a cooperative (fusi) that was a branch of the Tuvalu Cooperative Society; a copra shed provided by the Tuvalu Copra Cooperative Society; a solar electricity cooperative; a police post; an agricultural officer; and a church. For health care, emergency cases were handled by radio or telephone contact with Funati's hospital and, if required, by evacuation on the Government vessel *Nivaga II*, the fisheries vessel *Manaui*, or the patrol boat *Mataili* (usually about 10 evacuations per year). Women were, and still are, transported to Funafuti for the birth of a first child.

Additional service providers in Vaitupu were the Motufoua School; the agricultural research station at Elisefou (closed in 1991 following the withdrawal of British aid); Vaimoana Cooperative (oil extraction and soap making); and Oita Cooperative (vegetable growing and marketing). Little private business existed as cooperative structures better suited the communal island life style.

Transport was, and remains, a major constraint on economic development and service delivery. There is no interisland air service, although there are two unused military airstrips on Nukufetau and Nanumea and a seaplane service once operated.[1] The *Nivaga II*, provides the only scheduled passenger and freight service, but rescheduling, delays, and passenger overcrowding are problems. Conditions for transferring goods and people are difficult with sheltered harbors only at Vaitupu and Nukufetau. Otherwise, landings are made on the ocean side by the *Nivaga II* surf boat through cut reef channels. Civil servants can plan to be away from their island for 2 weeks, but may find themselves away for 5, while students awaiting transport may be forced to stay with relatives for weeks. As noted in Townland Consultants (1997) "Interisland transport is not

[1] In the early 1980s a seaplane service based on Funafuti made weekly trips to those outer islands with lagoons, namely Vaitupu, Nukufetau, Nanumea, Niulakita, and Nui. This service, heavily subsidized by New Zealand aid, was withdrawn in 1984. That prompted the Government to commission a study on the feasibility of establishing airstrips on each outer island. For economic reasons, and because in some cases the proposed airstrips would have resulted in the loss of a third of an island's landmass, the scheme was never implemented.

adequate to complement the national policy objective of decentralization to Vaitupu (and other outer islands)." Previous relocations of the agriculture and education ministries to Vaitupu have been reversed because of transport and communications difficulties.

During the last decade, the pace of outer-island development has accelerated. Telephonic communication has improved with the introduction of satellite substations. Community fishing centers, first established on Nukufetau and Nanumea, have been constructed on each island (Chapter 6). A harbor has been built at Vaitupu, and electricity power supply has been extended to all islands. Additionally, a second interisland vessel was received in early 2002 through Japanese aid. The net impact of these developments on the livelihoods of outer-island populations will be more easily assessed following analysis of the results of the 2002 national census.

In 1999, the Government began implementing an Island Development Program to

(i) increase outer-island autonomy;
(ii) improve outer-island governance and administration;
(iii) deliver sustainable financial resources to support island autonomy (primarily through the Falekaupule Trust Fund discussed in the next section);
(iv) improve delivery of public sector services to the outer islands (primarily through better electricity supplies, shipping services, and extension services); and
(v) promote business development (mainly by increasing maritime training and employment, greater availability of business advisory services and microfinance, and contracting out government services).

As noted, the rural electrification project was completed in 2000. The International Maritime Organization accredited the Tuvalu Maritime Training Institute (TMTI), but the Institute's facilities need upgrading to ensure continuity of accreditation. The new multipurpose interisland vessel will supplement the services of *Nivaga II.* The next section discusses the major initiative to increase outer-island autonomy and supporting financial resources.

Falekaupule

The concept of decentralization and local autonomy requires that local governments have sufficient devolved powers and authority, and are allowed a larger measure of independence to manage and plan their own administrative, financial, and developmental affairs.

Achieving this national goal began on 12 December 1997 with Parliament's Falekaupule Act. It allows local government (kaupule), through the traditional decision-making body (falekaupule), and with nongovernment and sectoral organizations, to design and implement island programs and projects. Effectively, the Act extends statutory recognition to the falekaupule as the primary social institutions and sovereign power in the islands for overseeing local affairs – with the kaupule as an executive arm.

The new Act encourages wider participation in government by providing a framework for regular consultation between the falekaupule and kaupule, on the one hand, and with the nongovernment organizations, community groups, and the private sector on the other. Ultimately, the Act is expected to transform the kaupule from being simply providers of services such as law and order, roads, health, and sanitation, into being development planners, managers and, to some extent, financiers of all aspects of island development. Through the annual Falekaupule Assembly, the Act allows all community residents over the age of 18 to participate in community planning and decision-making.

A kaupule has six elected local officials who between them choose a chief executive (pule o kaupule) and deputy chief executive (tokolua pule o kaupule). There are five appointed officials: secretary, treasurer, community planning and development officer, clerk, and women's community worker. If necessary, and with falekaupule's approval, the kaupule may combine official functions or create new positions.

To finance decentralization, the Falekaupule Trust Fund (FTF) was created in July 1999 to

(i) increase the ability to generate revenue within the community for its common good;
(ii) fund community projects that improve communities' living conditions;
(iii) assist in developing skills and self-reliance in communities through local training; and
(iv) enable the communities to acquire, maintain, and improve community assets and resources to boost education and self-reliance.

FTF is governed through a trust fund deed. Its legislative framework is outlined in the Tupe Fakanaa A Falekaupule Act 1999. The Fund is made up of contributions from the Government, an Asian Development Bank (ADB) loan, and contributions from island communities (MLGWY 2001b). To encourage outer-island contributions, the Government offered to match each island's contribution, dollar for dollar, for a time. The Fund was consolidated on 4th February 2000 when the Government paid its matching contributions in full. FTF, managed in Australia by three independent investment groups, follows investment and distribution principles similar to the Tuvalu Trust Fund (ADB 2001c). At the end of each financial period, a board declares an amount available for distribution based on interest earned. To protect the real value of the capital, FTF is maintained according to Tuvalu's inflation rate. As of 4 February 2000 FTF's value was $11.3 million (Table 7.8).

Table 7.9 shows the original island contributions and the total island contributions including matching Government funds plus interest earned up to 4 February 2000. FTF shares were calculated from these figures.

Table 7.8: Composition of the Falekaupule Trust Fund at 4 February 2000

Source	Amount ($)
Total island contributions	1,351,303
Government matching of island contributions	1,351,303
ADB 1st tranche (including interest)	4,275,104
Government matching of 1st tranche of ADB loan (including interest)	4,275,104
Less:TT charges	201
Total fund capital	11,252,613

Source: ADB 2001d.

Table 7.9: FTF Island Contributions at 4 February 2000

Island	Island Contribution	Total Island Contribution Including Government Matching Funds & Interest	Share (%)	Amount ($)
Nanumea	132,229	269,260	9.96	1,121,094
Nanumanga	120,000	244,029	9.03	1,016,044
Niutao	200,000	406,723	15.05	1,693,437
Nui	100,000	204,275	7.56	850,524
Vaitupu	250,000	508,348	18.81	2,116,564
Nukufetau	165,000	336,970	12.47	1,403,015
Funafuti	260,000	528,793	19.57	2,201,691
Nukulaelae	100,000	204,208	7.56	850,245
Total	1,327,229	2,702,606	100.00	11,252,614

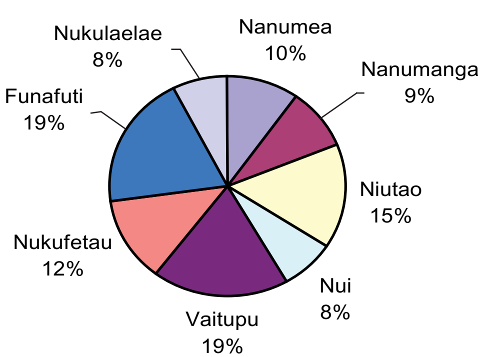
Source: ADB 2001d.

The fund size for each island is relative to the initial contributions made by each community. Therefore, those islands that were in better cash positions at fund consolidation were able to secure proportionately larger government matching funds. Recognizing the importance of maximizing initial deposits, some island communities sought loans from the National Bank of Tuvalu (NBT), using existing deposits and assets as collateral. However, only one or two of these islands, arguably the better off communities, were successful. Thus, the resulting shares in FTF are not directly proportional to the population size of each island community. For example, Vaitupu accounted for 13.3% of Tuvalu's 1991 population but received over 19% of FTF shares. Noting the many outer islanders resident in Funafuti, the islands that appear to be underrepresented in FTF shares relative to population size are Nanumea, Nanumaga, and Nui (Figure 7.3).

Following receipt of the second tranche of ADB's loan, matching funds by the Government, and additional deposits by three island communities, FTF contributions grew to $15.9 million by November 2001 (Table 7.10).

The Fund's first distribution occurred in June 2001 when the board agreed that $813,579 could be distributed to the kaupule for financing development projects, maintaining community assets, and developing capacity building. The board retained $25,000 from each of the eight islands to establish a buffer account to be used for lack of any drawdown in future years. Subsequently, $613,579 was distributed to island communities proportional to their share-holding in FTF.

Figure 7.3: Share of FTF per Island Feb. 2000



Source: ADB 2001d.

Table 7.10: Contributions to the Falekaupule Trust Fund at November 2001

Source	Amount ($)
Total island contributions	1,351,303
GOT matching of island contributions	1,351,303
Additional island contributions	158,458
ADB loan (1st tranche) incl. interest	4,275,104
GOT matching 1st tranche of ADB loan	4,275,104
ADB loan 2nd tranche	2,228,828
GOT matching of 2nd tranche of ADB loan	2,228,828
Total contributions to FTF	15,870,928

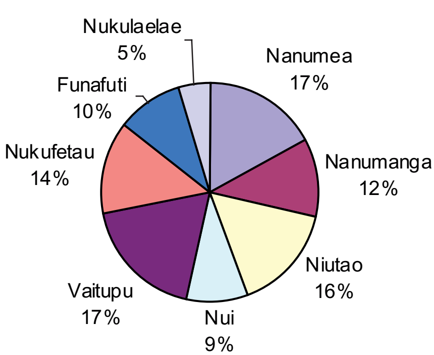
Source: ADB 2001d.

The simple distribution formula, although equitable in relation to the level of investment, has been criticized by the outer-island communities. The principal objection is that other criteria, including population, should be considered in the distribution. Early distribution models involved a flat 25% allocation to all islands, an allocation of 50% based on island contributions, and a 25% allocation based on indigenous populations. However, in June 1999 Cabinet decided that the distribution of Fund proceeds should be based only on the amount of contributions. Following this decision, the Government consulted with island communities and five of the eight communities agreed to the "contributions only" distribution formula. Despite this consultative process, which involved numerous outer-island visits by technical advisers and government officials, serious concerns over the formula only surfaced after the first distribution had been effected. This raises the question of whether the consultation process was adequate, especially after the distribution formula had been fundamentally changed.

An alternative distribution model would have been to limit the per capita contribution from island communities (defined by the electoral role) within a global limit set by the maximum contributions from the Government and the ADB loan. Islands would then be given a longer timeframe for paying their share capital. Tying contributions to the electoral role would remove the existing anomaly in Funafuti with its large outer-island community who invariably vote on their home island and who do not involve themselves with the Funafuti Falekaupule. Using the 1991 Census figures for each island, and adjusting them to account for outer-island communities resident on Funafuti shows a significantly different population profile (Figure 7.4).

The adjusted population for each island group combines the Nuilakita population with Niutao's, which is customary, but does not consider the distribution of communities between outer islands, although this is likely to be small. Nor does it include individual island communities residing overseas. Nonetheless, in the absence of electoral role figures, which would provide more accurate data, it does illustrate the relative size of each of Tuvalu's eight island communities. Comparing these figures against contributions to FTF at 4 February 2000, helps

Figure 7.4: Population by Indigenous Island Group, 2001

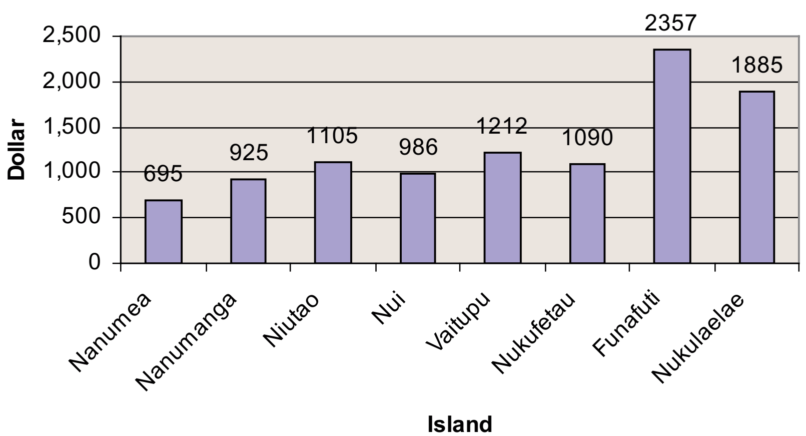


Source: CSD 1992 and 2001 Funafuti pilot census.

explain outer-island concerns about the distribution formula (Figure 7.5). The adjusted figures indicate that the per capita shares are Funafuti ($2,357), Nukulaelae ($1,885), Vaitupu ($1,212), Niutao ($1,105), Nukufetau ($1,090), Nui ($986), Nanumaga ($925), and Nanumea ($695). Therefore, FTF does not appear to have assisted the national goal of obtaining a balance of incomes and living standards across all island communities.

Another matter to clarify is the Government's future role in financing outer-island development. Introducing FTF precipitated replacing conditional grants with block grants to support local governments' recurrent needs. Tied grants are still provided for maintaining primary schools and medical dispensaries, and for agreed subsidies for land rent. Indications are that the Government is considering phasing out recurrent support as the value of FTF funds rises, although the purpose of FTF is to support development, rather than recurrent spending. To resolve these issues, especially those about the distribution

Figure 7.5: FTF Per Capita Share, Feb. 2000



Source: ADB IDP PCR 2001.

formula, the Government intended to hold an Islands Forum in the first half of 2002. Several meetings were held by late June, and the Government decided to leave the distribution formula unchanged until 2005, while in the interim matching dollar for dollar all additional contributions from outer-island communities up to the level of the existing Funafuti per capita contribution.

The impact of development projects funded through FTF is difficult to assess due to the lack of reports received by the Government. The fullest account from the Funafuti Kaupule records that 13 of the 14 projects scheduled for 2000 were completed. All these were for capital purchase of office equipment, building renovation, or new construction. On the other hand, no projects are listed for Nui. A full list of projects for each island can be seen in Appendix 4, Table A7.2. In general, the types of projects kaupules select appear unlikely to require the level of financial or economic analysis prescribed in the Government's project profile guidelines. The complexity of this analysis relative to skills available in the outer islands may partly explain the absence of project reports. Increasing local capacity to generate project reports is a key objective of external technical assistance provided in support of FTF.

Current Issues and Prospects

Despite the failed attempt to shift education and agriculture to Vaitupu in the 1990s, current government thinking is to revisit the notion of decentralizing core government departments to the outer islands, particularly to Nukufetau and Vaitupu. The impetus for such change reflects increasing pressure from landowners on Funafuti to raise land rents. In 1992 discussions between the Government and landowners resulted in a reduction of land leases from 99 years to 25 years, with rent revisions every 5 years. As noted in Chapter 3, landowners have indicated to the Government that not all land leases will be renewed at the end of the 25 years. Such concerns have prompted the Government to reconsider the location of future infrastructure projects.

Land is clearly a significant and sensitive issue in Tuvalu. As one senior civil servant once remarked "it is the thing every Tuvaluan thinks about everyday." The Government is acutely aware of these sensitivities and will not, presumably, commit to any major decentralization plan until a long-term solution to land lease or purchase is agreed. A gradual and well-planned approach to any decentralization is required.

A possible first step towards more services for outer islands is clearing the airstrips on Nukufetau and Nanumea. Studies have shown that both of these World War II airstrips, could be made serviceable at minimal cost. Now that the Government is a major shareholder in Air Fiji it is conceivable that a monthly or fortnightly service to these islands could be organized. Such flights could be augmented by improved shipping between northern islands into Nanumea and between the central belt islands to Nukufetau. Apart from improving communication between the islands, increased benefits to outer-island communities would include improved medical evacuation services, increased interisland trade, ecotourism development, and more effective emergency provisioning.

Appendix Tables

Table A2.1: GDP by Industry
(current prices, $'000)

Industry	1996	1997	1998	1999 (est.)	2000 (est.)	2001 (est.)	2002 (proj.)
Agriculture, Forestry, Fishing	3,087.6	3,352.4	3,484.2	N.A.	N.A.	N.A.	N.A.
Mining, Quarrying	447.4	466.8	638.3	N.A.	N.A.	N.A.	N.A.
Manufacturing	533.9	710.6	881.0	N.A.	N.A.	N.A.	N.A.
Electricity, Gas, Water	577.9	532.0	574.4	N.A.	N.A.	N.A.	N.A.
Construction	2,076.4	2,206.7	2,951.7	N.A.	N.A.	N.A.	N.A.
Trade, Hotels, Restaurants	2,857.5	2,625.1	2,971.8	N.A.	N.A.	N.A.	N.A.
Transport, Communications	1,274.1	1,620.4	1,379.9	N.A.	N.A.	N.A.	N.A.
Finance, Real Estate	1,730.7	1,936.3	2,376.0	N.A.	N.A.	N.A.	N.A.
General Government	3,248.2	3,315.1	4,805.7	N.A.	N.A.	N.A.	N.A.
Community, Personal Services	1,167.2	1,188.6	1,207.4	N.A.	N.A.	N.A.	N.A.
Less imputed bank service charge	555.2	511.6	501.0	N.A.	N.A.	N.A.	N.A.
GDP at Factor Cost*	**16,445.7**	**17,442.4**	**20,769.4**	**21,606.4**	**23,434.1**	**24,810.1**	**26,065.2**
Exchange rate $US/$A (period average)	0.7846	0.7374	0.6285	0.6440	0.5814	0.5181	N.A.
GDP - US$	12,903.3	12,862.0	13,053.6	13,914.5	13,624.6	12,854.1	N.A.
Population (persons)	9,634	9,759	9,886	10,014	10,144	10,276	N.A.
GDP per capita - $A	1,707	1,787	2,100	2,158	2,310	2,414	N.A.
GDP per capita - $US	1,339	1,318	1,320	1,390	1,343	1,251	N.A.

N.A. = Not Available.
* = estimates using ADB database.
Sources: CSD 1999; ADB database.

Table A2.2: GDP by Industry
(constant 1988 prices, $'000)

Industry	1996	1997	1998	1999 (est.)	2000 (est.)	2001 (est.)	2002 (proj.)
Agriculture, Forestry, Fishing	1,974.3	2,088.4	2,103.8	N.A.	N.A.	N.A.	N.A.
- market production	114.4	135.2	135.7	N.A.	N.A.	N.A.	N.A.
- nonmarket production	1,860.0	1,953.2	1,968.1	N.A.	N.A.	N.A.	N.A.
Mining, Quarrying	398.9	410.7	524.0	N.A.	N.A.	N.A.	N.A.
- market production	386.5	396.8	507.1	N.A.	N.A.	N.A.	N.A.
- nonmarket production	12.4	13.9	16.8	N.A.	N.A.	N.A.	N.A.
Manufacturing	281.3	364.5	414.3	N.A.	N.A.	N.A.	N.A.
- market production	191.1	247.9	286.1	N.A.	N.A.	N.A.	N.A.
- nonmarket production	90.2	116.6	128.1	N.A.	N.A.	N.A.	N.A.
Electricity, Gas, Water	512.9	450.6	486.6	N.A.	N.A.	N.A.	N.A.
Construction	1,851.4	1,941.6	2,423.1	N.A.	N.A.	N.A.	N.A.
- market production	1,633.6	1,698.1	2,127.3	N.A.	N.A.	N.A.	N.A.
- nonmarket production	217.8	243.4	295.8	N.A.	N.A.	N.A.	N.A.
Trade, Hotels, Restaurants	2,227.9	2,014.4	2,284.7	N.A.	N.A.	N.A.	N.A.
Transport, Communications	993.3	1,251.5	1,039.1	N.A.	N.A.	N.A.	N.A.
Finance, Real Estate	1,443.0	1,588.3	1,877.0	N.A.	N.A.	N.A.	N.A.
- market production	786.4	890.9	1,159.1	N.A.	N.A.	N.A.	N.A.
- nonmarket production	656.5	697.4	717.9	N.A.	N.A.	N.A.	N.A.
General Government	3,002.6	2,988.3	3,962.9	N.A.	N.A.	N.A.	N.A.
Community, Personal Services	921.4	924.2	931.3	N.A.	N.A.	N.A.	N.A.
- market production	582.6	586.7	594.4	N.A.	N.A.	N.A.	N.A.
- nonmarket production	338.8	337.5	336.9	N.A.	N.A.	N.A.	N.A.
Less imputed bank service charge	438.4	397.9	386.5	N.A.	N.A.	N.A.	N.A.
GDP at Factor Cost*	**13,168.6**	**13,624.5**	**15,660.1**	**16,129.9**	**16,613.8**	**17,278.4**	**17,796.7**
Total Household Nonmarket Production	3,175.7	3,362.0	3,463.6	N.A.	N.A.	N.A.	N.A.
Exchange rate $US/$A (period average)	0.7846	0.7374	0.6285	0.6440	0.5814	0.5181	N.A.
GDP - US$	10,332.1	10,046.7	9,842.4	10,387.7	9,659.3	8,951.9	N.A.
Population (persons)	9,634	9,759	9,886	10,014	10,144	10,276	
Real GDP per capita - $A	1,367	1,396	1,584	1,611	1,638	1,681	N.A.
Real GDP per capita - $US	1,073	1029	996	1,038	952	871	N.A.

N.A. = Not Available.
* = estimates using ADB database.
Sources: CSD 1999; ADB database.

Table A2.3: Capital Formation by Type of Asset by Sector
($'000, 1988 prices)

Type of Asset	1996	1997	1998
Public Sector	8.041.0	6,717.1	2,366.2
- capital construction	5,150.8	5,658.4	1,063.3
- capital purchases	2,890.2	1,058.8	1,302.9
Private Sector	2,082.2	2,213.7	1,882.4
Gross Capital Formation	10,123.2	8,930.8	4,248.7

Source: CSD 1999.

Note: Figures are exclusive of changes in stocks.

Table A2.4: National Bank of Tuvalu Statistics, 1990-2000

($'000)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Company tax	200.4	185.1	259.1	272.0	212.6	151.0	205.6	231.5	259.4	317.3	393.7
Dividends	93.0	84.0	117.0	340.8	95.4	533.6	201.1	273.2	327.3	370.2	
Total contribution to Government	293.4	269.1	376.1	612.8	308.0	684.6	406.7	504.7	586.7	687.5	853.1
Profit before tax	502.0	464.0	649.3	679.9	532.0	440.1	607.7	777.9	914.0	1,057.6	1,312.4
Profit after tax	302.1	279.1	390.2	407.9	318.9	289.1	402.1	546.4	654.6	740.3	918.7
Net assets	1,357.0	1,496.0	1,690.9	695.9	855.8	611.3	812.3	1,256.5	1,583.8	1,954.0	2,413.3
Return on capital before tax (%)	37.0	31.0	38.4	97.7	62.2	72.0	74.8	61.9	57.7	54.1	54.4
Return on capital after tax (%)	22.3	18.7	23.1	58.6	37.3	47.3	49.5	43.5	41.3	37.9	38.1
Savings deposits	3,274.0	2,932.0	4,469.0	2,940.0	3,883.0	2,419.0	2,331.0	3,829.0	3,311.0	8,066.0	5,534.0
Term deposits	7,139.0	7,656.0	9,772.0	6,330.0	5,300.0	5,468.0	3,005.0	5,247.0	5,782.0	7,776.0	4,866.0
Current accounts	920.0	852.0	776.0	1,337.0	2,214.0	4,215.0	5,039.0	4,618.0	8,539.0	7,943.0	8,967.0
Total deposits	11,333.0	11,440.0	15,017.0	10,607.0	11,397.0	12,102.0	10,375.0	13,694.0	17,632.0	23,785.0	19,367.0
Loans and advances	3,721.0	4,246.0	3,446.0	2,927.0	3,185.0	3,343.0	2,573.0	2,914.0	4,598.0	5,257.0	6,643.0
Investments	8,604.0	8,377.0	13,102.0	8,442.0	8,666.0	9,024.0	7,491.0	12,365.0	15,630.0	20,260.0	8,942.0
Total assets	13,140.0	13,420.0	17,469.0	11,936.0	12,707.0	13,216.0	11,849.0	15,730.0	20,821.0	27,553.0	23,420.0
Loans & advances, deposits	0.3	0.4	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3

Source: National Bank of Tuvalu Annual Reports 1993-2000.

Table A2.5: Tuvalu National Provident Fund Statistics, 1984-2000
($m)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Membership	1136	1302	1913	2349	2646	2974	3164	3182	3241	3268	3287	3334	3376	3519	3538	3573	3726
Members' fund	1.68	1.85	2.13	2.52	2.84	3.36	4.08	4.30	5.24	6.05	6.90	7.35	8.09	8.83	10.02	10.73	12.92
Net assets	1.68	2.02	2.41	2.97	3.49	4.02	4.76	5.06	6.08	7.07	7.44	7.81	8.23	9.15	10.60	10.82	13.00
Income	0.125	0.258	0.294	0.424	0.526	0.448	0.552	0.718	0.769	1.127	0.57	0.744	0.659	1.561	1.248	0.107	1.049
Expenditure	0.011	0.017	0.025	0.025	0.028	0.033	0.04	0.045	0.062	0.047	0.553	0.179	0.198	0.308	0.332	0.289	0.575
Operating profit before tax	0.114	0.241	0.269	0.399	0.498	0.415	0.512	0.673	0.707	1.080	0.017	0.565	0.461	1.253	0.916	(0.182)	0.474
Return on net assets (%)	6.79	11.93	11.16	13.43	14.27	10.32	10.76	13.30	11.63	15.28	0.23	7.23	5.60	13.69	8.64	(1.68)	3.65

Source: Tuvalu National Provident Fund, Annual Report 2000.

Table A2.6: Government Fiscal Operations, 1996-2002
($'000, current prices)

	1996	1997	1998	1999	2000	2001 (rev.)	2002 (est.)
Revenue							
Taxation							
Income tax	720,724	1,090,811	1,053,191	1,355,878	1,391,563	1,464,110	1,300,000
Company tax	220,154	307,747	413,053	513,951	750,050	937,543	1,000,000
Sales tax	445,294	349,193	510,846	473,283	382,730	342,195	400,000
Import duties	1,085,408	1,286,452	1,842,242	1,659,230	2,443,646	2,689,847	2,400,000
Other direct taxes	96,966	84,461	151,461	163,958	161,212	163,812	241,000
Subtotal	2,568,546	3,118,664	3,970,793	4,166,300	5,129,201	5,597,507	5,341,000
Interest and Dividends	964,467	763,207	873,203	2,781,590	370,170	459,356	855,500
Government Charges							
Fish licenses	921,476	3,567,603	6,516,028	9,690,887	9,480,076	11,795,440	10,000,000
Telecom licenses	1,563,010	2,754,968	2,357,311	881,144	408,373	603,987	170,000
Investment passport scheme	0,000	0,000	30,175	0,000	20,909	0,000	0,000
Other charges	2,306,247	1,401,392	2,088,356	909,378	2,775,050	567,569	3,170,550
DotTV marketing agreement	0,000	0,000	0,000	1,124,491	24,864,175	2,995,398	23,743,328
Subtotal	4,790,733	7,723,963	10,991,870	12,605,900	37,548,583	15,962,394	37,083,878
Grants (current)	866,227	29,495	415,597	38,000	701,332	1,420,798	1,977,873
Grants (capital, XB)	15,092,196	11,707,158	4,725,828	9,880,675	8,207,422	0,000	0,000
Distribution from TTF	0,000	3,893,261	11,100,000	2,654,000	4,200,000	11,500,000	0,000
Total Recurrent Revenue	9,189,973	15,528,590	27,351,463	22,245,790	47,949,286	34,940,055	45,258,251
(Original budget estimate)	8,761,264	13,266,147	22,227,961	17,371,015	26,514,083	27,161,398	45,258,251
Total Revenue	24,282,169	27,235,748	32,077,291	32,126,465	56,156,708	34,940,055	45,258,251
Total Revenue (% of GDP)	148	156	154	149	240	141	174

Continued on next page

Table A2.6 ($, current prices) - ***Continued***

	1996	**1997**	**1998**	**1999**	**2000**	**2001** (rev.)	**2002** (est.)
Expenditure							
Established staff	3,133,769	3,534,081	4,252,794	5,597,937	7,249,765	7,342,498	8,253,491
Unestablished staff	101,522	116,953	191,531	158,568	449,047	633,777	330,400
Travel, communications	879,108	917,168	868,407	1,316,992	1,259,791	1,090,607	1,126,954
Maintenance, operations	1,043,939	774,127	877,927	616,393	1,494,029	1,043,472	1,010,975
Goods, services	7,014,867	4,082,421	5,035,919	4,463,527	7,900,104	3,332,242	5,902,841
Operating grants, transfers	1,129,314	3,312,357	4,695,871	5,031,418	12,758,551	9,730,510	5,681,451
Special expenditures	87,899	174,904	1,169,217	1,661,185	7,084,521	917,594	3,350,000
Total Operating Expenditure	**13,390,418**	**12,912,011**	**17,091,666**	**18,846,020**	**38,195,808**	**24,090,700**	**25,656,112**
Capital construction	5,961,407	7,355,000	1,624,074	3,440,228	5,050,982	8,561,811	5,977,750
Capital purchases	522,693	357,003	625,172	844,809	993,805	402,795	2,076,389
Capital grants, transfers	4,152,000	645,000	570,000	4,129,031	214,951	0,000	1,330,000
Total Capital	**10,636,100**	**8,357,003**	**2,819,246**	**8,414,068**	**6,259,738**	**8,964,606**	**9,384,139**
Total Expenditure	**26,022,518**	**21,269,014**	**19,910,912**	**27,260,088**	**44,455,546**	**33,055,306**	**35,040,251**
Total Expenditure as % of GDP	**158**	**122**	**96**	**126**	**190**	**133**	**134**
Recurrent budget	8,934,322	9,561,856	11,130,373	14,304,288	27,869,501	19,264,013	20,231,852
Development budget (XB)	15,092,196	11,707,158	4,555,828	6,103,186	8,207,422	0	0
Special Development Fund	0	0	3,654,711	2,723,583	8,163,672	13,791,293	11,129,536
Overall Balance	**(1,740,349)**	**5,966,734**	**12,166,379**	**4,866,377**	**11,701,162**	**1,884,749**	**10,218,000**
Balance as % of GDP	(11)	34	59	23	50	8	39
Nominal GDP at factor cost	1,6445,700	1,7442,400	20,769,400	21,606,400	23,434,100	24,810,100	26,065,200

Sources: Tuvalu National Budgets 2000, 2001, 2002.

Note 1: For 1998-2000 and 2002, there are unexplained discrepancies between the figures for total expenditure and the totals for financing from the recurrent, development, and special development fund budgets.

Note 2: The estimates for 2002 are exclusive of extra-budgetary revenue and expenditure. The 2002 budget shows an implausibly high extra-budgetary development expenditure of $24,847,400.

Table A2.7: Government Expenditure by Ministry

($, current prices)

	1996	1997	1998	1999	2000	2001
Office of the Governor General	86,807	64,745	69,712	94,079	81,680	102,672
Office of the Prime Minister	3,088,281	4,039,500	5,103,832	7,148,377	6,790,960	3,062,776
Legal, Judicial Services	89,160	144,232	172,133	249,186	267,559	210,889
Parliament	162,558	172,163	165,169	313,518	304,383	318,403
Office of the Auditor General	62,592	66,584	75,102	86,098	236,123	167,899
Finance, Economic Planning	1,633,274	1,141,436	2,514,368	3,141,283	3,209,714	1,802,796
Works, Communications, Transport	6,343,990	2,100,416	2,452,439	2,696,610	11,313,281	10,470,593
Health	1,436,818	1,457,721	1,695,941	1,902,123	2,614,153	1,834,477
Natural Resources, Energy, Environment	5,983,597	3,131,264	2,155,302	1,999,712	2,686,320	3,091,305
Local Government, Women, Youth	1,215,786	637,611	945,616	4,740,970	5,731,210	3,328,280
Police & Prison Services	710,274	650,367	639,910	826,710	1,036,042	904,997
Tourism, Trade, Commerce	395,197	257,122	165,966	355,297	808,636	413,361
Education, Sports, Culture	3,213,381	7,405,853	3,755,422	3,706,125	9,386,755	7,346,858
Total	**24,421,715**	**21,269,014**	**19,910,912**	**27,260,088**	**44,466,816**	**33,055,306**

Sources: Tuvalu National Budgets 2000, 2001, 2002.

Note: For 1996 and 2000, there are unexplained discrepancies between total expenditure as shown in this Table and expenditure as shown in Table A2.6.

Table A 5.1: Overseas In-Service and Preservice Training
(by Year and Sex)

Year	In-Service			Preservice			Grand Total
	Male	Female	Total	Male	Female	Total	
1991	3	0	3	24	10	34	37
1992	5	1	6	18	21	39	45
1993	9	5	14	26	16	42	56
1994	9	1	10	6	9	15	25
1995	3	4	7	13	18	31	38
1996	16	5	21	22	30	52	73
1997	16	3	19	16	22	38	57
1998	18	4	22	3	2	5	27
1999	21	12	33	34	36	70	103
2000	20	10	30	32	47	79	109
2001	25	11	36	32	38	70	106
Total	145	56	201	226	249	475	676

Source: CSD database.

Table A5.2 Overseas Training
(by Year, Sex, and Course)

Course	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Further studies	13	2	14	15	13	7	3	2	9	6	11	23	10	14	0	0	0	0	2	14	3	6	167
Cadet	0	0	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	4	0	10
Certificate	8	2	3	2	5	8	0	0	1	3	3	0	2	3	1	0	7	10	3	1	11	3	76
Diploma	2	5	2	2	7	5	4	4	2	3	6	8	6	3	4	2	25	24	21	28	18	23	204
Degree	4	1	3	3	6	1	7	4	4	10	13	4	7	4	16	4	16	12	22	13	17	16	187
Postgraduate Certificate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Postgraduate Diploma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Masters	0	0	1	0	3	0	1	0	0	0	1	0	4	1	0	0	6	2	3	0	4	1	27
Ph.D.	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	3
Total	27	10	23	22	35	21	15	10	16	22	38	35	32	25	21	6	55	48	52	57	57	49	676

F = female; M = Male.
Source: CSD database.

Table A5.3: Education and Health Expenditure by Category, 1996-2002

($)

	1996	1997	1998	1999	2000	2001	2002 (est.)
Education Expenditure							
Established staff	711,407	783,473	978,783	1,408,719	1,595,702	1,708,827	1,939,730
Unestablished staff	20,844	8,101	8,597	49,732	68,332	90,877	59,800
Travel, communications	146,567	110,278	101,733	140,905	157,158	125,365	91,930
Maintenance	75,541	33,836	49,336	40,228	59,125	59,650	125,780
Goods, services	1,197,382	907,396	1,097,044	941,783	1,088,904	609,002	461,610
Operating grants, transfers	12,600	222,062	371,536	120,225	5,595,632	4,222,919	3,361,500
Special expenditures	6,000	4,123	4,354	41,432	36,673	25,116	606,700
Total Operating	**2,170,341**	**2,069,269**	**2,611,383**	**2,743,024**	**8,601,526**	**6,841,756**	**6,647,050**
Capital Expenditure	1,043,040	5,336,584	1,144,039	963,101	785,229	505,102	2,962,180
Total Expenditure	**3,213,381**	**7,405,853**	**3,755,422**	**3,706,125**	**9,386,755**	**7,346,858**	**9,609,230**
Health Expenditure							
Established staff	385,360	435,073	580,617	753,374	983,737	886,026	734,442
Unestablished staff	6,538	8,487	9,611	14,393	6,387	12,013	4,000
Travel, communications	159,740	154,586	190,660	202,676	242,266	1,479	154,800
Maintenance	26,767	24,357	35,953	33,080	80,343	23,497	9,800
Goods, services	569,801	557,708	475,244	354,810	758,234	565,620	745,800
Operating grants, transfers	210,701	232,050	366,292	378,324	46,411	343,074	50,000
Special expenditures	0	0	0	0	412,929	0	0
Total Operating	**1,358,907**	**1,412,261**	**1,658,377**	**1,736,657**	**2,530,307**	**1,831,709**	**1,698,842**
Capital Expenditure	77,911	45,460	37,564	165,466	83,846	2,768	9,298,000
Total Expenditure	**1,436,818**	**1,457,721**	**1,695,941**	**1,902,123**	**2,614,153**	**1,834,477**	**10,996,842**

Sources: Tuvalu National Budgets 2000, 2001, 2002.

Table A6.1: Copra Production, Export and Prices

Year	Copra Export (tons)	Domestic Price ($/ton)	Export Price ($/ton)	Price Subsidy ($/ton)
1979	381.14	N.A.	N.A.	N.A.
1980	203.16	219.11	233.30	(14)
1981	276.18	185.41	93.60	92
1982	275.10	121.02	63.10	58
1983	235.59	185.05	304.00	(119)
1984	680.00	222.76	604.90	(382)
1985	333.28	262.45	488.80	(226)
1986	238.97	139.92	127.90	12
1987	63.84	128.51	153.60	(25)
1988	88.31	205.85	N.A.	N.A.
1989	415.06	360.00	188.30	172
1990	259.82	N.A.	111.70	N.A.
1991	N.A.	N.A.	N.A.	N.A.
1992	N.A.	N.A.	N.A.	N.A.
1993	30.15	300	350.00	(50)
1994	31.01	200	350.00	(150)
1995	3.75	200	350.00	(150)
1996	N.A.	N.A.	N.A.	N.A.
1997	30.99	400	430.00	(30)
1998	0.15	400	430.00	(30)
1999	251.37	800	427.00	373
2000	262.58	900	421.00	479
2001	32.35	1,000	228.00	772

N.A. = not available

Source: Tuvalu Coconut Traders' Cooperative.

Table A6.2: Nonresident Arrivals, 1997-2001

Country	Holiday Vacation	Business Official	Friends Relatives	Transit Stopover	Other Purpose	Total
Nonresident Arrivals 2001						
Australia	36	266	68	29	46	445
New Zealand	15	140	38	14	25	232
Fiji/Kiribati	75	360	272	78	76	861
Other Pacific	31	145	94	53	80	403
USA	38	23	16	22	2	101
Canada	3	7	0	9	0	19
UK	16	34	12	2	3	67
Germany	40	16	2	6	4	68
France	8	11	1	3	2	25
Other Europe	30	9	3	6	3	51
Japan	73	63	7	164	10	317
Other Asia	52	94	11	5	7	169
Other Countries	18	19	5	8	5	55
Total	435	1187	529	399	263	2813
Nonresident Arrivals 2000	**Holiday Vacation**	**Business Official**	**Friends Relatives**	**Transit Stopover**	**Other Purpose**	**Total**
Australia	19	106	40	27	22	214
New Zealand	4	53	14	14	11	96
Fiji/Kiribati	39	159	59	62	40	359
Other Pacific	4	58	48	45	54	209
USA	12	5	4	14	1	36
Canada	0	2	0	2	0	4
UK	9	6	0	2	1	18
Germany	8	11	2	5	2	28
France	4	4	0	3	2	13
Other Europe	2	5	0	4	3	14
Japan	12	29	4	164	3	212
Other Asia	13	10	4	4	7	38
Other Countries	13	12	3	8	1	37
Total	139	460	178	354	147	1278
Nonresident Arrivals 1999	**Holiday Vacation**	**Business Official**	**Friends Relatives**	**Transit Stopover**	**Other Purpose**	**Total**
Australia	6	56	7	1	5	75
New Zealand	4	26	10	0	1	41
Fiji/Kiribati	3	56	116	6	5	186
Other Pacific	12	26	11	0	10	59
USA	10	7	4	0	0	21
Canada	0	3	0	1	0	4
UK	1	6	2	0	1	10
Germany	16	2	0	1	0	19
France	2	3	0	0	0	5
Other Europe	4	1	0	0	0	5
Japan	10	8	2	0	0	2

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Table A6.2 - *Continued*

Country	Holiday Vacation	Business Official	Friends Relatives	Transit Stopover	Other Purpose	Total
Other Asia	12	56	5	0	0	73
Other Countries	3	2	2	0	4	11
Total	83	252	159	9	26	529
Nonresident Arrivals 1998						
Australia	11	104	21	1	19	156
New Zealand	7	61	14	0	13	95
Fiji/Kiribati	33	145	97	10	31	316
Other Pacific	15	61	35	8	16	135
USA	16	11	8	8	1	44
Canada	3	2	0	6	0	11
UK	6	22	10	0	1	39
Germany	16	3	0	0	2	21
France	2	4	1	0	0	7
Other Europe	24	3	3	2	0	32
Japan	51	26	1	0	7	85
Other Asia	27	28	2	1	0	58
Other Countries	2	5	0	0	0	7
Total	213	475	192	36	90	1006
Nonresident Arrivals 1997	**Holiday Vacation**	**Business Official**	**Friends Relatives**	**Transit Stopover**	**Other Purpose**	**Total**
Australia	13	91	13	12	19	148
New Zealand	14	45	12	4	2	77
Fiji/Kiribati	10	182	101	37	27	357
Other Pacific	14	68	66	28	9	185
USA	17	9	2	4	2	34
Canada	9	1	1	2	0	13
UK	12	12	6	1	0	31
Germany	21	2	5	0	1	29
France	5	1	0	0	0	6
Other Europe	15	4	8	5	7	39
Japan	17	48	3	2	3	73
Other Asia	15	18	1	6	1	41
Other Countries	2	2	0	0	1	5
Total	164	483	218	101	72	1038

Source: CSD database.

Table A7.1 Household Expenditure By Island Group
(Average weekly expenditure ($))

Expenditure Item	Funafuti	Outer Islands	Tuvalu
Current Housing Costs			
Rent	14.05	4.94	8.25
Rates...	0.03	0.00	0.01
Other housing costs	0.05	0.14	0.11
Total	14.13	5.08	8.37
Fuel and Power			
Electricity	7.35	4.09	5.28
Gas	1.39	0.13	0.59
Liquid fuels	3.48	2.79	3.04
Solid fuels	0.06	0.09	0.08
Total	12.27	7.10	8.98
Food and Nonalcoholic Beverages			
Cereals, cereal products	20.25	10.86	14.27
Meat, meat products	20.72	6.00	11.35
Fish, other seafood	9.23	2.67	5.06
Eggs	1.32	0.08	0.53
Milk, milk products	4.34	1.78	2.71
Oils, fats	3.16	1.20	1.91
Fresh fruit	1.58	0.02	0.59
Processed fruits	0.56	0.01	0.21
Root vegetables	0.72	0.05	0.29
Other fresh vegetables	1.79	0.15	0.75
Processed vegetables	0.42	0.03	0.17
Sugar	6.18	4.91	5.37
Syrups, honey, jam, jelly	0.35	0.03	0.15
Confectionery	2.13	0.58	1.14
Tea, coffee, food drinks	2.02	1.52	1.70
Other food, food undefined	2.93	0.78	1.56
Nonalcoholic beverages	2.07	0.28	0.93
Meals out, take-away foods	0.81	0.11	0.37
Total	80.57	31.06	49.08
Alcoholic Beverages			
Total	4.62	0.47	1.98
Tobacco			
Total	4.47	1.91	2.85
Clothing and Footwear			
Men's clothing	0.36	0.10	0.20
Women's clothing	0.31	0.24	0.26
Children's, infants' clothing	0.17	0.11	0.13

Continued on next pages

Table A7.1 - *Continued*

Expenditure Item	Funafuti	Outer	Tuvalu Islands
Miscellaneous clothing, material	1.98	0.50	1.04
Footwear	0.14	0.03	0.07
Clothing, footwear services	0.00	0.00	0.00
Total	2.97	0.98	1.71
Household Furnishings and Equipment			
Furniture, floor coverings	4.32	0.95	2.18
Bed linen, household textiles	1.01	0.06	0.40
Household ornaments	0.37	0.00	0.13
Household appliances	3.23	0.05	1.20
Glassware, tableware, untensils	0.52	0.15	0.28
Tools, other household durables	0.04	0.16	0.11
Total	9.48	1.36	4.32
Household Services and Operation			
Household nondurable	3.94	1.59	2.44
Postal charges	0.03	0.00	0.01
Telephone	1.92	0.00	0.70
Household services	0.02	0.00	0.01
Household repairs	0.06	0.06	0.06
Total	5.97	1.65	3.22
Medical Care and Health Services			
Total	0.11	0.00	0.04
Transport			
Vehicle, boat purchases	11.86	3.28	6.40
Motor vehicle fuels, additives	1.47	0.54	0.88
Vehicle registration, insurance	0.14	0.05	0.08
Other vehicle running expenses	0.53	0.15	0.29
Public transport	0.95	0.08	0.40
Other fare, freight charges	0.68	0.00	0.25
Total	15.64	4.10	8.30
Recreation			
Television, audio visual equipment	3.36	0.05	1.26
Books, magazines	0.04	0.00	0.01
Other recreational equipment	0.51	0.07	0.23
Lottery tickets, bets, card games	0.02	0.00	0.01
Entertainment, recreational services	2.28	0.06	0.87
Animal charges, expenses	0.15	0.20	0.18
Holidays in Tuvalu	0.78	0.21	0.42
Holidays overseas	7.36	0.28	2.86
Total	14.49	0.88	5.83

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Table A7.1 - *Continued*

Expenditure Item	Funafuti	Outer Islands	Tuvalu
Personal Care	2.16	1.07	1.47
Miscellaneous Commodities and Services			
Miscellaneous commodities	1.33	0.08	0.54
Interest on selected credit items	0.29	0.00	0.11
Education fees	5.30	1.51	2.89
Payments for other property	0.00	0.19	0.12
Miscellaneous services	2.35	0.01	0.86
Cash gifts, charities	0.46	0.01	0.17
Total	9.72	1.80	4.68
Total Commodities and Services	176.60	57.49	100.83

Source: CSD 1998.

Table A7.2: Household Amenities By Island, Island Group
(% of households)

Number of Household Amenities	Funafuti	Vaitupu	Other Surveyed Islands
Refrigerators			
0 … … … …	66.2	95.5	99.3
1 … … … …	33.1	4.5	0.7
2 … … … …	0.7	0.0	0.0
	100.0	100.0	100.0
Freezers			
0 … … … …	74.1	97.7	100.0
1 … … … …	25.2	0.0	0.0
2 … … … …	0.7	2.3	0.0
	100.0	100.0	100.0
Air-Conditioners			
0 … … … …	98.6	100.0	100.0
1 … … … …	1.4	0.0	0.0
	100.0	100.0	100.0
Electric Fans			
0 … … … …	53.2	100.0	100.0
1 … … … …	31.7	0.0	0.0
2 … … … …	7.2	0.0	0.0
3 … … … …	3.6	0.0	0.0
4 … … … …	2.9	0.0	0.0
5 … … … …	1.4	0.0	0.0
	100.0	100.0	100.0
Electric Water Pumps			
0 … … … …	79.1	97.7	100.0
1 … … … …	20.9	2.3	0.0
	100.0	100.0	100.0
Washing Machines			
0 … … … …	59.0	93.2	98.6
1 … … … …	39.6	6.8	1.4
2 … … … …	1.4	0.0	0.0
	100.0	100.0	100.0
Sewing Machines			
0 … … … …	33.1	38.6	32.4
1 … … … …	55.4	56.8	61.5
2 … … … …	11.5	4.5	4.7
3 … … … …	0.0	0.0	1.4
	100.0	100.0	100.0
Electric Irons			
0 … … … …	38.8	95.5	98.0
1 … … … …	57.6	4.5	2.0
2 … … … …	3.6	0.0	0.0
	100.0	100.0	100.0

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Table A7.2 - *Continued*

Number of Household Amenities	Funafuti	Vaitupu	Other Surveyed Islands
Electric Jugs			
0	79.9	100.0	100.0
1	19.4	0.0	0.0
2	0.7	0.0	0.0
	100.0	100.0	100.0
Toasters			
0	82.0	100.0	100.0
1	16.5	0.0	0.0
2	0.7	0.0	0.0
4	0.7	0.0	0.0
	100.0	100.0	100.0
Rice Cookers			
0	92.8	100.0	100.0
1	7.2	0.0	0.0
	100.0	100.0	100.0
Radios (Battery Only)			
0	55.4	25.0	14.9
1	38.8	72.7	70.3
2	4.3	2.3	11.5
3	1.4	0.0	2.7
5	0.0	0.0	0.7
Radios (Electric)			
0	44.6	97.7	94.6
1	47.5	2.3	5.4
2	5.8	0.0	0.0
4	1.4	0.0	0.0
5	0.7	0.0	0.0
	100.0	100.0	100.0
Sound Systems			
0	87.1	97.7	96.6
1	12.2	2.3	3.4
2	0.7	0.0	0.0
	100.0	100.0	100.0
Video Players			
0	60.4	81.8	96.6
1	38.1	18.2	3.4
2	1.4	0.0	0.0
	100.0	100.0	100.0
Bicycles			
0	46.0	15.9	29.1
1	36.0	61.4	45.9
2	14.4	13.6	20.3
3	2.9	4.5	4.1
4	0.7	2.3	0.7
5	0.0	2.3	0.0
	100.0	100.0	100.0

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Table A7.2 - *Continued*

Number of Household Amenities		Funafuti	Vaitupu	Other Surveyed Islands
Motorcycles				
0	... ...	72.7	59.1	89.2
1	... ...	20.1	36.4	9.5
2	... ...	4.3	4.5	1.4
3	... ...	2.2	0.0	0.0
4	... ...	0.7	0.0	0.0
Cars, Vans				
0	... ...	95.0	100.0	100.0
1	... ...	5.0	0.0	0.0
		100.0	100.0	100.0
Trucks				
0	... ...	98.6	97.7	100.0
1	... ...	0.0	2.3	0.0
2	... ...	0.7	0.0	0.0
3	... ...	0.7	0.0	0.0
Powered Boats, Canoes				
0	... ...	74.8	77.3	81.8
1	... ...	21.6	22.7	15.5
2	... ...	2.9	0.0	2.0
3	... ...	0.7	0.0	0.7
Unpowered Boats, Canoes				
0	... ...	76.3	88.6	42.6
1	... ...	21.6	9.1	49.3
2	... ...	2.2	2.3	8.1
		100.0	100.0	100.0

Source: CSD 1998.

Table A7.3: List of Island Projects Funded Under the Falekaupule Trust Fund

Island	Projects	Cost (Est.)	Cost (Actual)	Status	Comments
	Year 2000				
Nanumea	1. Civil servant houses	$44,000	N.A.	Unknown	No formal report
	2. Hospital wards renovation	$5,000	N.A.	Unknown	No formal report
	3. Fencing	$3,000	N.A.	Unknown	No formal report
	Total	$52,000			
	Year 2001				
	4. Kaupule staff houses	$30,000	N.A.	Unknown	No formal report
	5. Hospital wards renovation	N.A.	N.A.	Unknown	No formal report
	6. Fencing kaupule area	N.A.	N.A.	Unknown	No formal report
	Total	$30,000			
	Year 2000				
Nanumaga	1. Water tanks & water pumps	$19,000	$18,411.44	Completed	Report received
	2. New preschool center	$25,000	N.A.	Deferred	Report received
	Total	$44,000	$18,411.44		
	Year 2001				
	1. New preschool center	$25,000	N.A.	Approved budget '01	Proposal received
	Total	$25,000			
	Year 2000				
Niutao	1. Road maintenance	$4,000	N.A.	On-going	No formal report
	2. Kaupule staff houses	$41,000	$41,253.00	On-going	Report received
	3. Water cistern repair	$10,000	$9,937.36	On-going	Report received
	4. Preschool renovation	$20,000	$18,670.15	Completed	No formal report
	5. Nogonogo beach ramp	$10,000	$10,000.00	Unknown	No formal report
	6. Upgrading batting pond	$6,500	$4,073.00	Approved budget '00	No formal report
	7. Chicken pens	$3,000	$2,995.50	On-going	Report received
	8. Pastor's house	$30,000	$27,258	Completed	Report received
	Total	$124,500	$114,187.01		
	Year 2001				
	1. Primary school toilet block	$7,050	N.A.	Approved budget '01	Proposal received
	2. Photocopier	$6,000	N.A.	Approved budget '01	Proposal received

N.A. = not available

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Table A7.3 - Continued

Island	Projects	Cost (Est.)	Cost (Actual)	Status	Comments
	3. Water cistern repair	$13,836	N.A.	On-going	Proposal received
	4. Road maintenance	$1,000	N.A.	On-going	Proposal received
	5. Kaupule staff houses	$54,510	N.A.	On-going	Proposal received
	Total	$82,396	N.A.		
	Year 2000				
Nui	Nil				No project listed budget' 00 Also no report
	Year 2001				
	Nil				No project listed budget' 01 Also no report
	Year 2000				
Vaitupu	1. Water cisterns (2)	$30,000	$30,000	Approved budget '00	No formal report
	2. Strong safe (1)	$1,000	$1,000	Approved budget '00	No formal report
	3. Fax machine (1)	$1,000	$1,000	Approved budget '00	No formal report
	4. Air conditioner (1)	$3,000	$2,890	Approved budget '00	No formal report
	5. Desk computer (1)	$3,000	$3,000	Approved budget '00	No formal report
	6. Camera (1)	$300	$300	Approved budget '00	No formal report
	7. Office extension	$20,000	$20,000	Approved budget '00	No formal report
	8. Koloa Talake FTF Share	$6,300	$6,300	Approved budget '00	No formal report
	Total	$64,600	$64,490		
	Year 2001				
	1. Water cistern (1)	$10,000	N.A.	Approved budget '01	No proposal
	2. Seawall maintenance	$5,000	N.A.	Approved budget '01	No proposal
	3. Dot TV	$30,009	N.A.	Approved budget '01	No proposal
	4. FTF	$40,000	N.A.	Approved budget '01	No proposal
	5. Elect. water pump (1)	$1,000	N.A.	Approved budget '01	No proposal
	6. Grass mower (1)	$2,000	N.A.	Approved budget '01	No proposal

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Table A7.3 - Continued

Island	Projects	Cost (Est.)	Cost (Actual)	Status	Comments
	7. Tool spare parts	$5,500	N.A.	Approved budget '01	No proposal
	8. Air conditioner (1)	$2,000	N.A.	Approved budget '01	No proposal
	Total	$95,500	N.A.		
	Year 2000				
Nukufetau	1. Kaupule staff houses	$40,501	N.A.	Approved budget '00	Report received
	2. Water cisterns	$40,000	$31,248.00	Approved budget '00	Report received
	3. Putoko house	$16,000	$17,945.65	Approved budget '00	Report received
	4. Generator	$15,000	N.A.	Approved budget '00	Report received
	5. PVC w/tank, 11 sets d/suite	$13,151.31	N.A.	Completed	Report received
	6. Household electrical items	$25,000.00	N.A.	Completed	Report received
	Total	$111,501	$87,344.96		
	Year 2001				
	1. Kaupule staff houses	$47,492	N.A.	Approved budget '01	Proposal received
	2. Replanting of Funaota	$8,350	N.A.	Approved	Proposal received budget '01
	3. Two Falekaupule fencing	$3,500	N.A.	Approved budget '01	Proposal received
	4. Elect. water pump	$2,500	N.A.	Approved budget '01	Proposal received
	Total	$61,842	N.A.		
	Year 2000				
Funafuti	1. Computer set	$4,000	$7,216.00	Completed	No formal report
	2. Air conditioners (4)	$3,600	$4,843.00	Completed	No formal report
	3. Motor-cycle (2)	$2,800	$5,700.00	Completed	No formal report
	4. Grass cutters (2)	N.A.	$2,900.00	Completed	No formal report
	5. Printer HP Laser	N.A.	$250.00	Completed	No formal report
	6. Office furniture	$2,000	$231.00	Completed	No formal report
	7. Gate entrance (2)	$10,000	N.A.	Unknown	Excluded 2001 budget
	8. Interpretive centre	N.A.	$6,592.00	Completed	No formal report
	9. Preschool	N.A.	$357.00	Completed	No formal report
	10. Material supplies	N.A.	$358.00	On-going	No formal report
	11. Office renovation	$10,000	$2,714.00	Completed	No formal report
	12. Falekaupule at Funafala	N.A.	$2,290.00	Completed	No formal report
	13. Multipurpose court	N.A.	$7,470.00	Completed	No formal report

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Table A7.3 - Continued

Island	Projects	Cost (Est.)	Cost (Actual)	Status	Comments
	14. Lotokava toilet	N.A.	$3,234.00	Completed	No formal report
	Total	$32,400	$44,155.00		
	Year 2001				
	1. Conservation eco-tourism boat	$10,700	N.A.	Approved budget '01	No proposal
	2. Market building renovation	$10,000	N.A.	Approved budget '01	No proposal
	3. Lotokava Falekaupule renov	$6,000	N.A.	Approved budget '01	No proposal
	4. Kaupule waste management	$8,000	N.A.	Approved budget '01	No proposal
	5. Destruction of dogs	$2,152	N.A.	Approved budget '01	No proposal
	6. Funfala Falekaupule renovation	$6,000	N.A.	Approved budget '01	No proposal
	7. Multipurpose court final stage	$5,000	N.A.	Approved budget '01	No proposal
	8. Funafuti women projects	$6,000	N.A.	Approved budget '01	No proposal
	9. Matag Gali bar upgrading	$20,828	N.A.	Approved	No proposal budget '01
	10. Mataniu development projects	$10,000	N.A.	Approved budget '01	No proposal
	11. IDRF projects	$5,150	N.A.	Approved budget '01	No proposal
	12. Tausoa Lima kitchen	$8,000	N.A.	Approved budget '01	No proposal
	Total	$97,830.00	N.A.		
	Year 2000				
Nukulaelae	1. Kaupule staff houses	$20,000	$4,087.00	On-going	No formal report
	2. Pearl farming	$20,000	Unknown	Unknown	No formal report
	3. IRDF	$4,000	$4,000	Completed	No formal report
	4. Electrical requirement	N.A.	$8,741.00	Completed	Report received
	Total	$44,000	$16,828.00		
	Year 2001				
	1. Flush toilet	$20,000	N.A.	Approved budget '01	Proposal received
	2. Garbage bins	$10,000	N.A.	Approved budget '01	Proposal received
	3. Staff houses	$10,000	N.A.	On-going	Report received
	Total	$40,000	N.A.		

Source: Ministry of Local Government, Women and Youth (Home Affairs and Rural Development from 2002).

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