

# 5

## Human Development

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### **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.

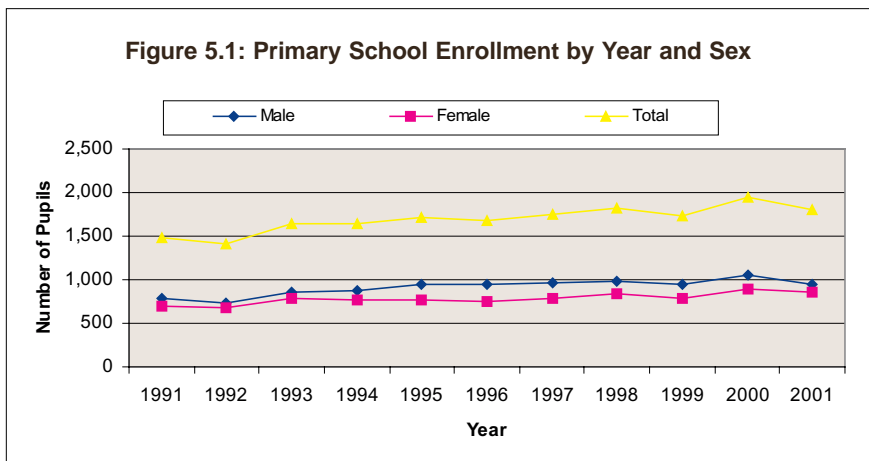
The basic education system in Tuvalu consists of 2 years of preschool, 8 years of primary, and 4 years of secondary schooling. There are 17 registered preschools in Tuvalu, which are voluntary managed by parent associations that employ teachers from their own resources. Historically, the Government has 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

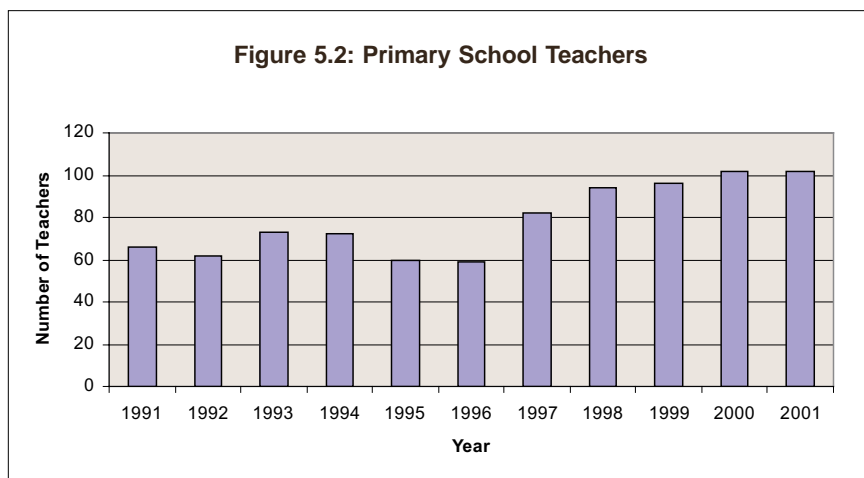
emphasizes language, mathematics, science, and the social sciences. Total national primary student enrollment increased by 21% between 1991 and 2001 (Figure 5.1). The rise reflects a change to the educational system brought about by EFL: specifically, the addition of extra years of primary schooling (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 MESOC data show that in 2001 92% of teachers held at least a primary teacher's diploma qualification, while six teachers held



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 8<sup>th</sup> European Development Fund (EDF). In the same period, new

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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.

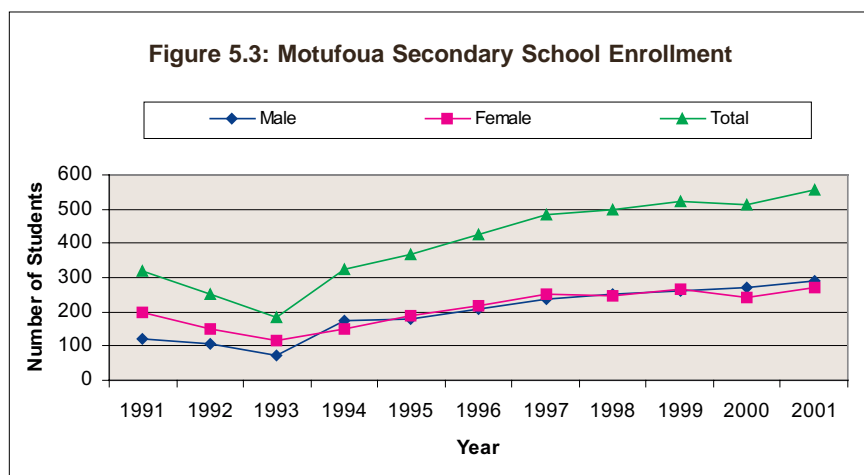
Under EFL the CTCs on each island were closed, the Motufoua entrance exam was abolished, and primary schooling on each island was extended by 2 years (forms 1 and 2). All children now proceed to secondary school after 8 years of compulsory primary schooling.

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.

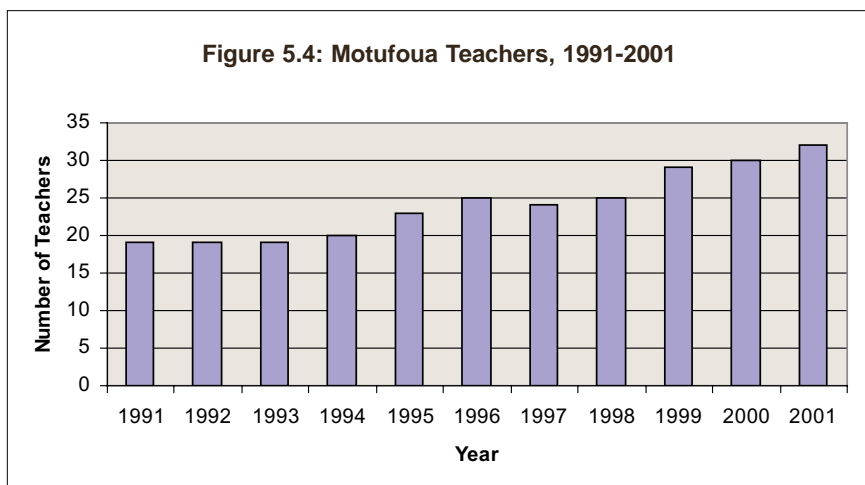
Currently, Motufoua High School, a coeducational government-run boarding school, is Tuvalu's only secondary school. Before 1999, education fees were levied at \$100 per student per term. Fees were

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.



Source: CSD database.



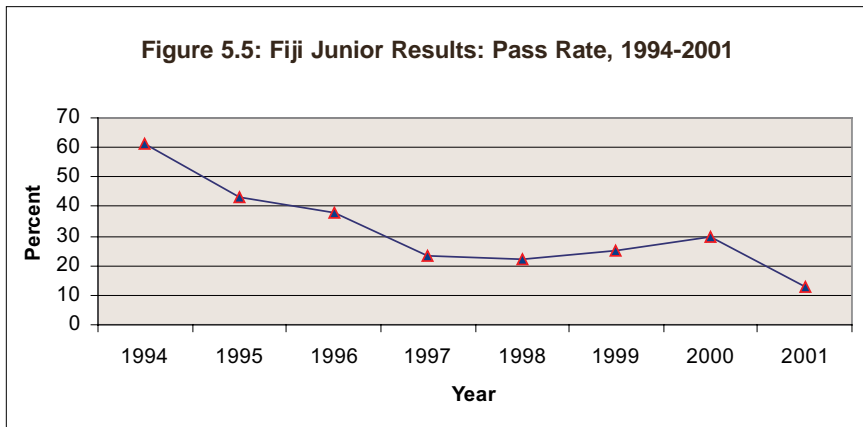
Source: CSD database.

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).

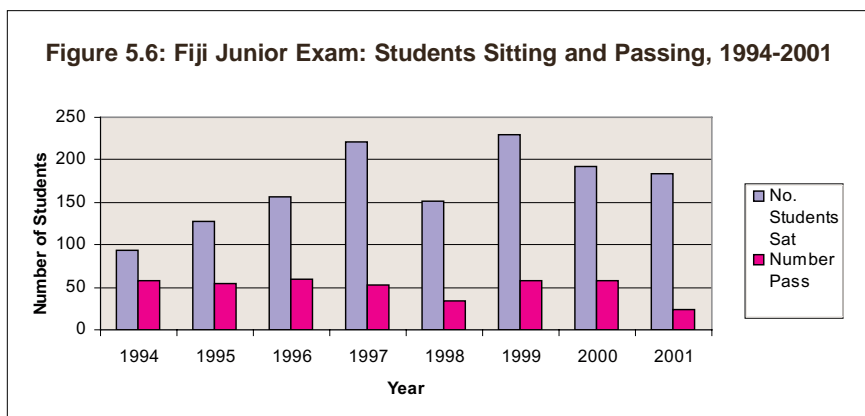


Source: CSD database.

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



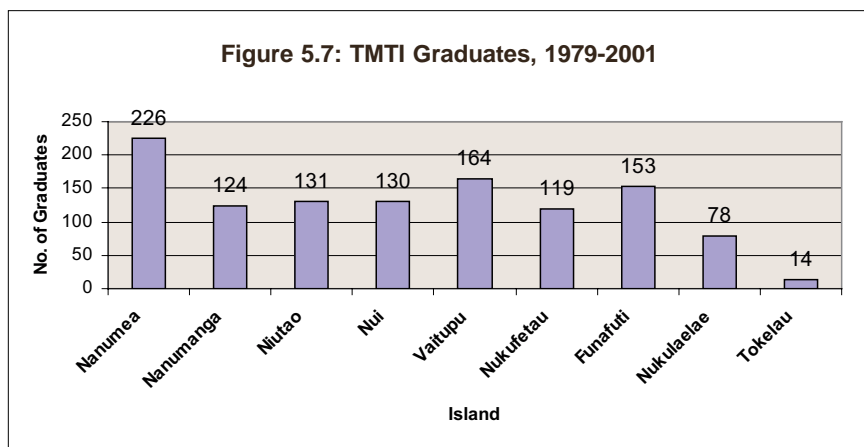
Source: CSD database.

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.

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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.

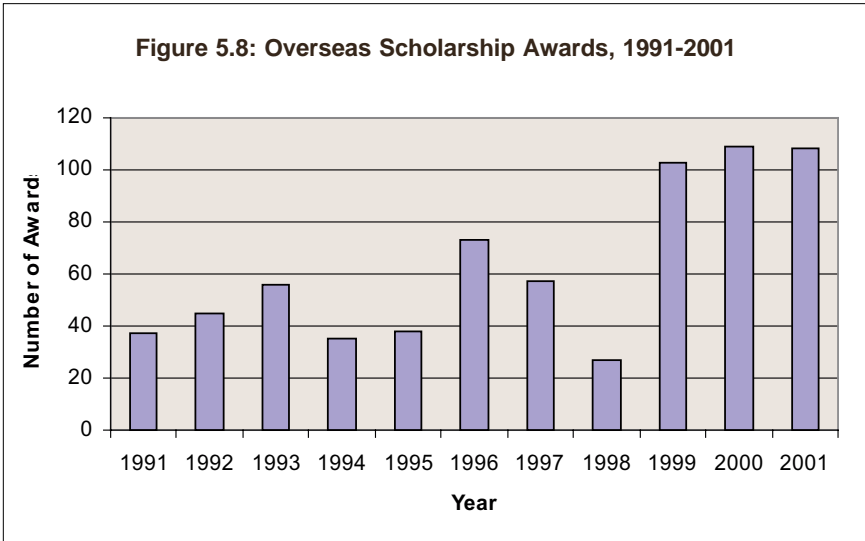
In 1997, Tuvalu formalized its policy for scholarships and training awards by introducing an operations manual to guide MPSC members (OPM 1997). The manual stipulates that all scholarship awards are to be based on merit and are to be nondiscriminatory between male and female. Prior to the policy, female 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

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- (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.

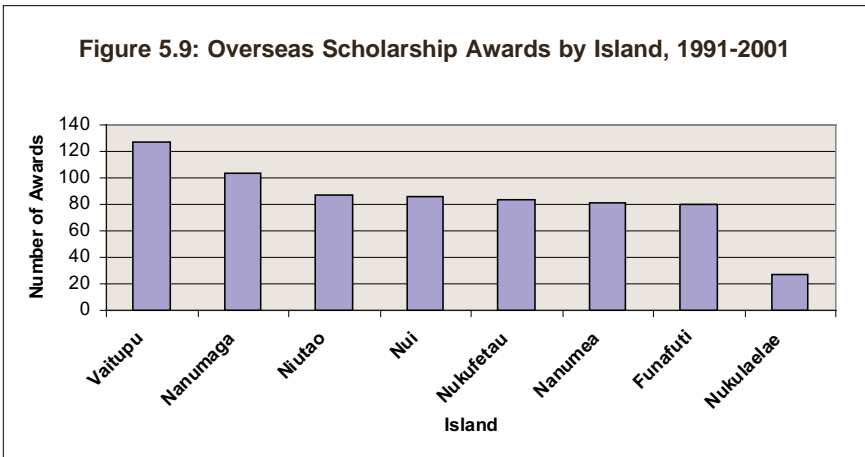
To ensure impartiality, MPSC considers preservice awards unaware of the name or island of the nominee. This is achieved through a coding system that disguises the candidates' identities. For in-service awards identities are known. Once selection is complete, the Prime Minister approves in-service awards, 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 nongovernment 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).



Source: CSD database.



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%.

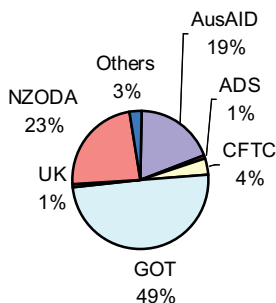
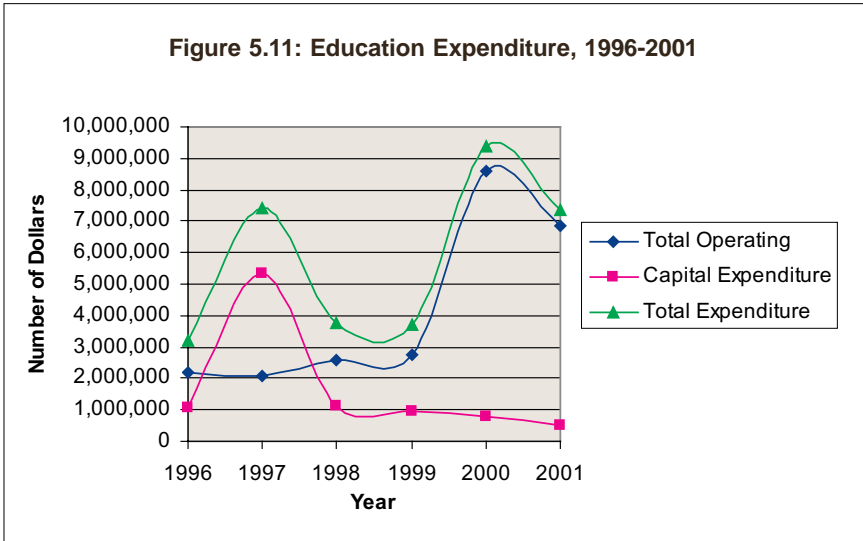
**Figure 5.10: Overseas Training: Source of Funds, 1991-2001**

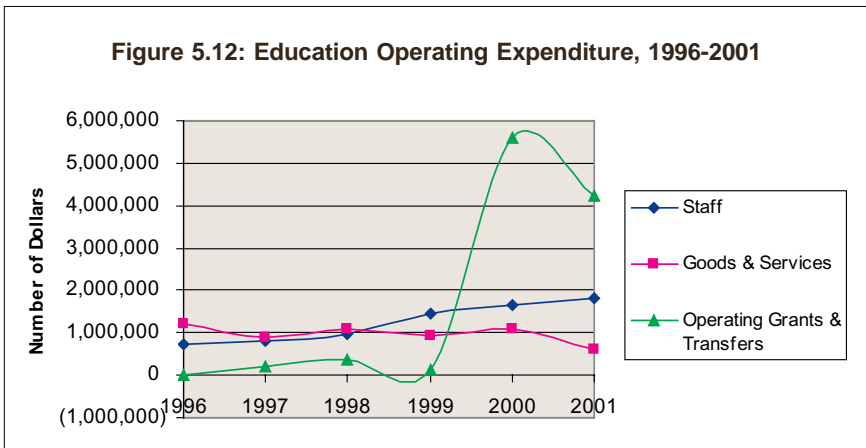
Figure 5.11 shows the breakdown of total expenditure on education into its operating and capital components. The rise in expenditure in 1997 was attributable to Japanese-funded capital expenditure on Motufoua School, whereas the 2000 expenditure increase reflected growth in operating expenditure. The 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.



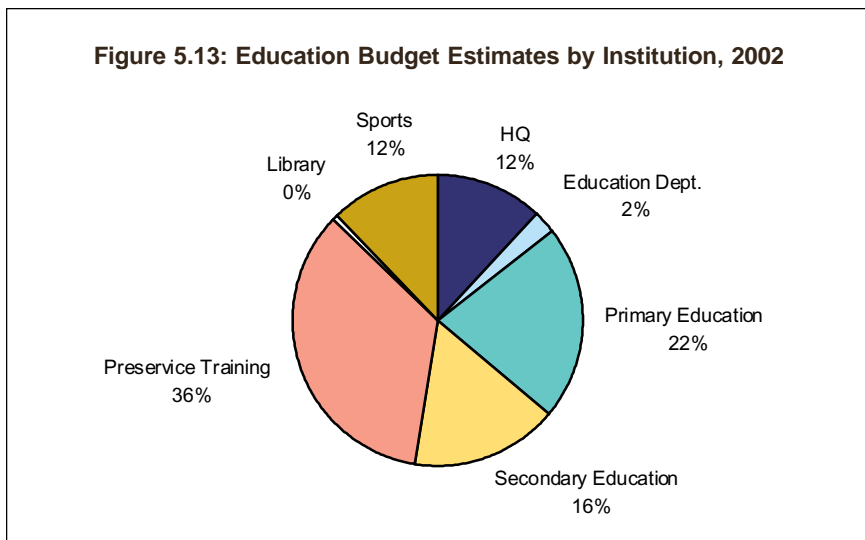
Source: Table A5.3.

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.



Source: Tuvalu National Budget 2002.

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## 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

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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

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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 disenchanting 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.

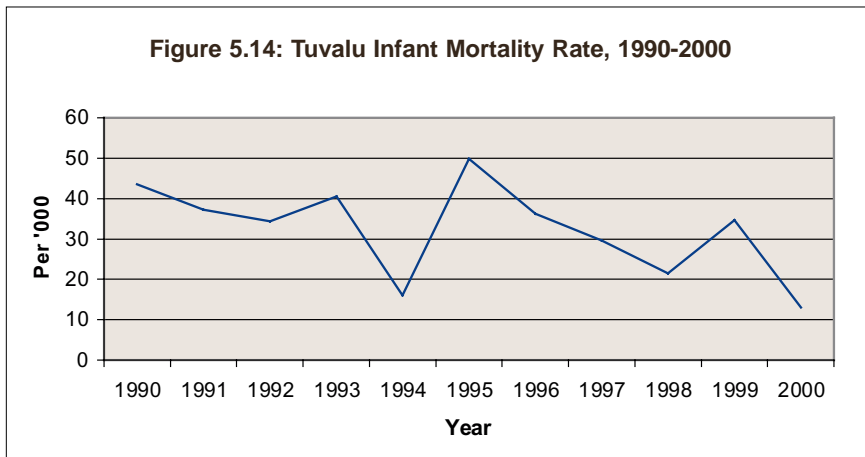
Promoting the role of civil society in providing nonformal skills training.

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.

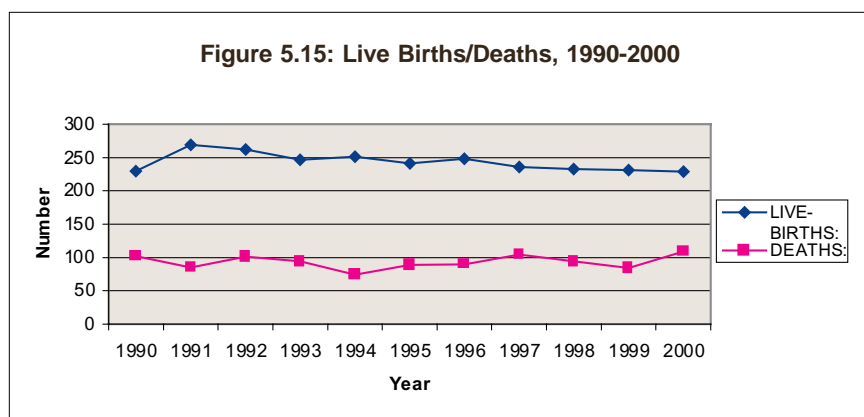
Acute respiratory infection was the most commonly notified illness in 2000, accounting for over half of all complaints (Table 5.1). This was followed by diarrhea (36%), conjunctivitis (10%), and fish poisoning (1%).

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 chloranphenicol 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 diphtheria 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

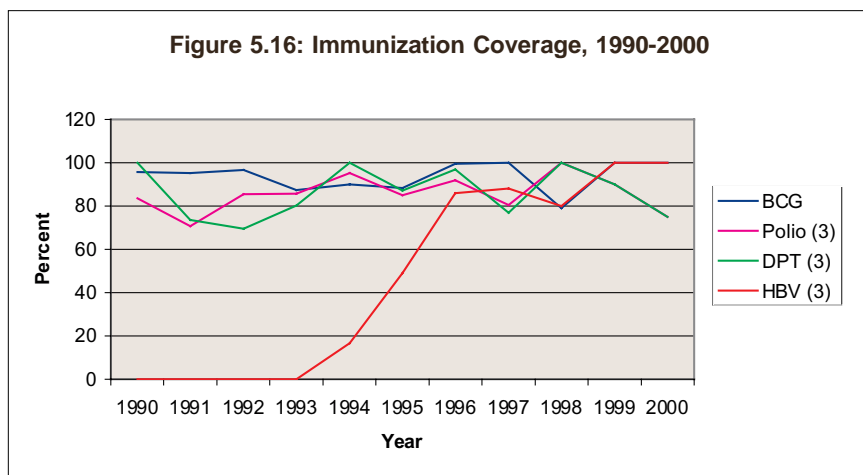
Table 5.1: Notifiable Diseases, 1990-2000

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

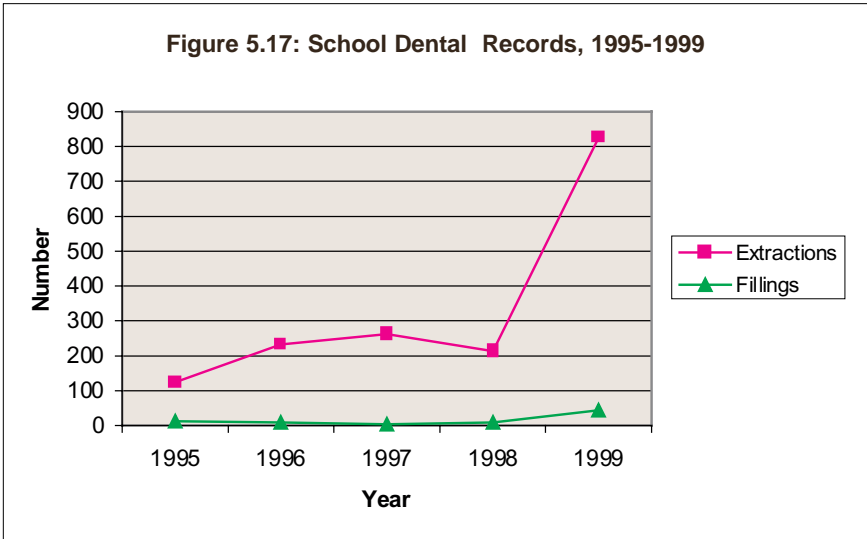


Source: MOH 2002.

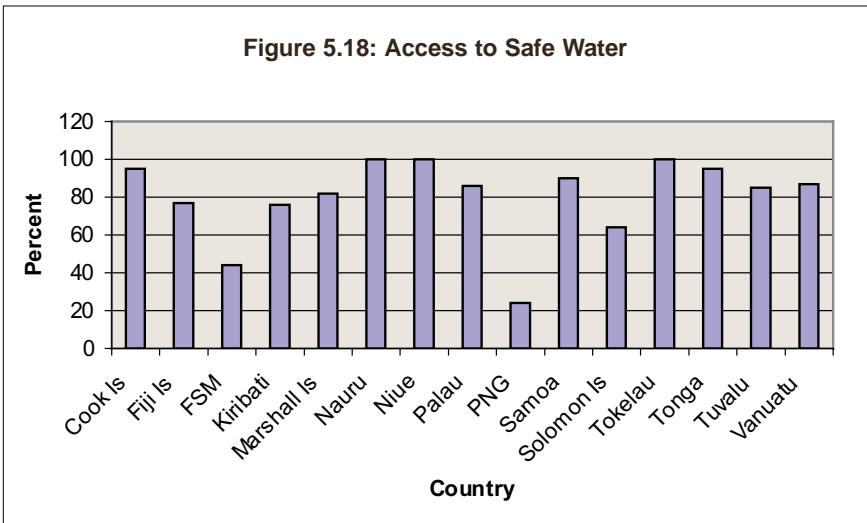
1996 there has been an eight-fold increase in extractions among school children, while the number of fillings has increased only marginally. This disparity may reflect the acute shortage of dental fillings and other materials. As a result, parents increasingly send their children to Suva for dental treatment.

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.

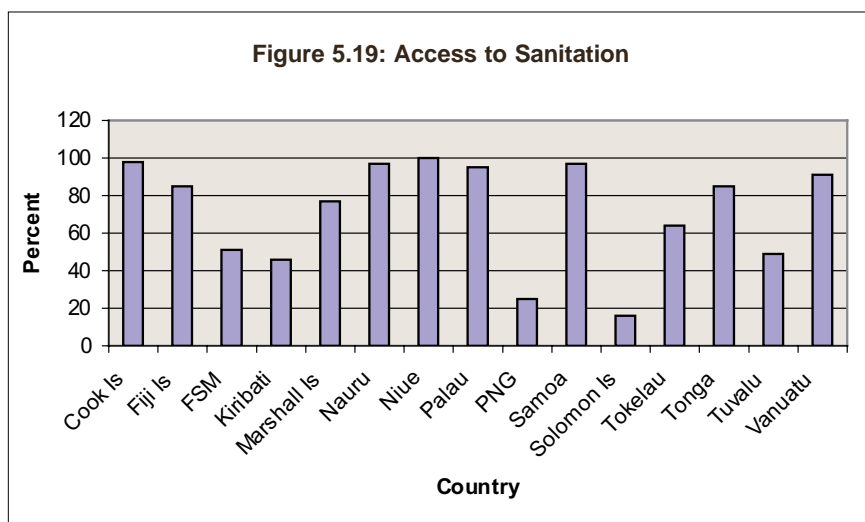
Environmental health indicators are mixed. According to the United Nations Development Programme (UNDP) (1999), 85% of Tuvalu's population has access to safe water and ranks at the high end of the regional scale (Figure 5.18). However, most water needs boiling. Access to sanitation is reportedly lower 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



Source: MOH 2002.



Source: UNDP 1999.



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

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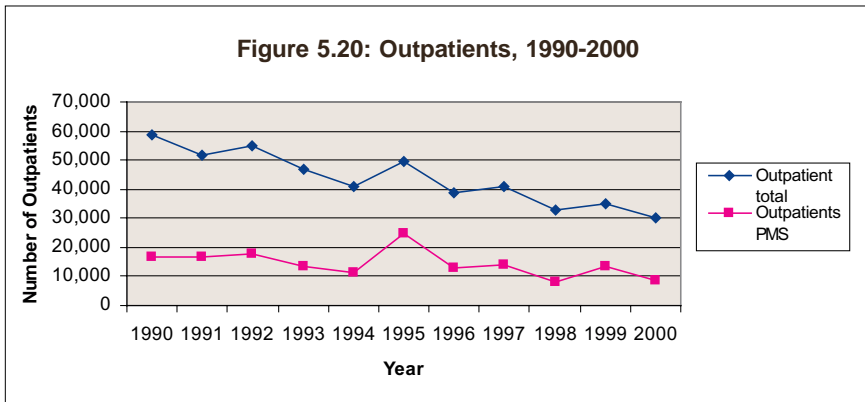
sanitary aide are also provided, although on Nukulaelae there are only two staff. Some outer-island clinics have up to four beds for patients. PMH acts as a referral hospital for outer-island patients requiring basic surgery or specialized care. Surgery for peptic ulcers, appendicitis, hernias, removal 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.

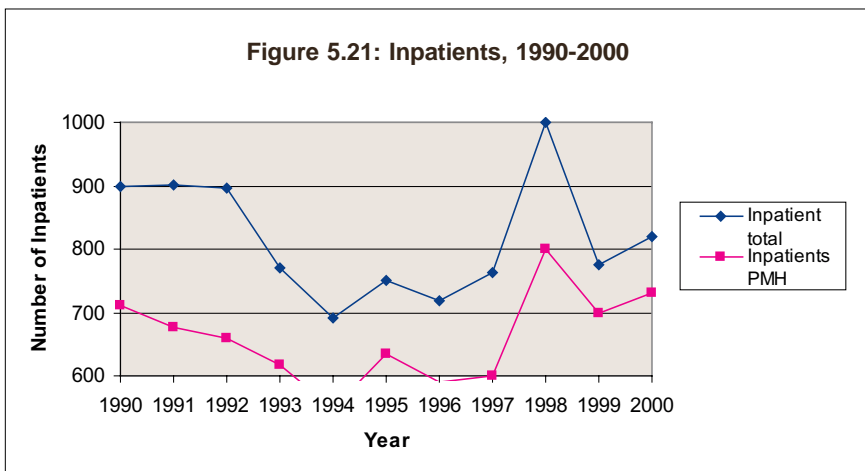
The Ministry of Health is the third largest employer of civil servants after MESC and the Ministry of Works, Communications and Transport. In December 2001 the established staff stood at 106 compared with 117 in 1999. Nurses accounted for 36% of the total staff; support staff 29%; technical 15%; medical 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).



Source: MOH 2002.



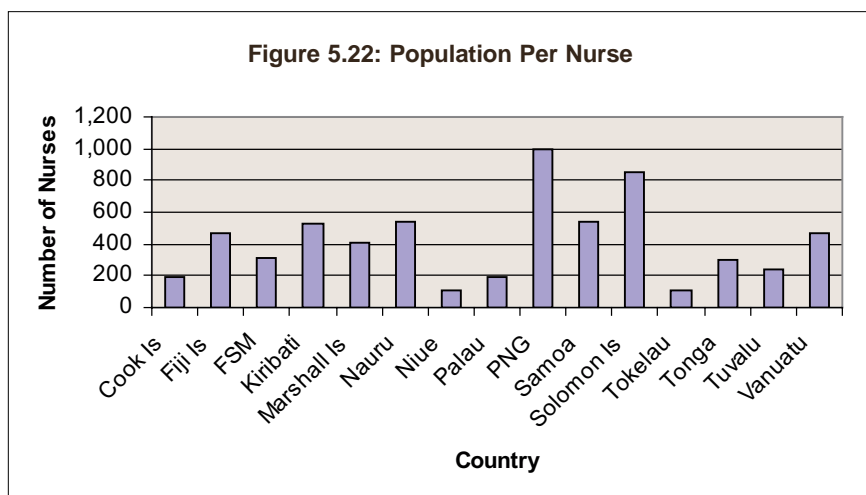
Source: UNDP 1999.

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
<b>Total</b>	<b>106</b>

\* Includes five doctor positions currently vacant.

Source: Tuvalu National Budget 2001.



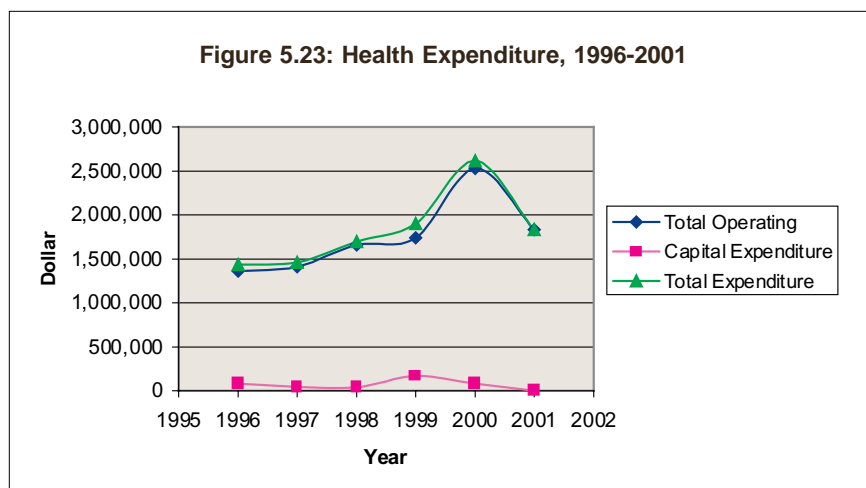
Source: UNDP 1999.

## Health Expenditure and Financing

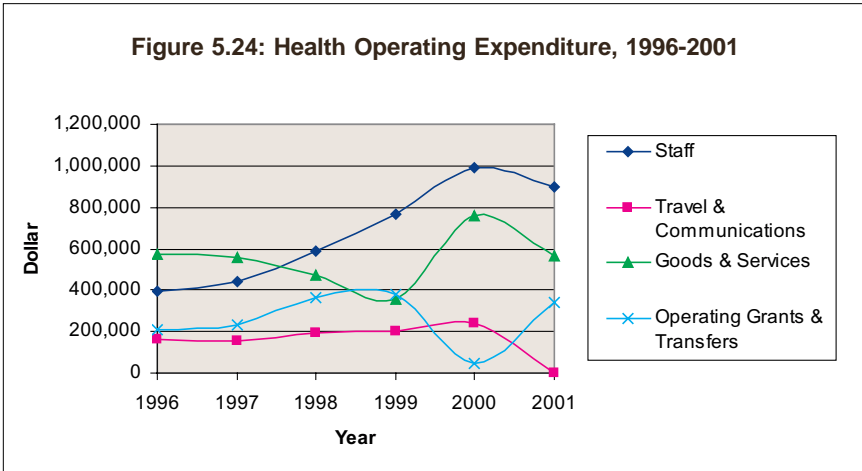
The share of health expenditure in total public expenditure has fluctuated between 5.5% and 8.5% from 1996 to 2001 (Table 2.6). Nominal spending on health grew annually at 9.2%, or about 6.6% in real terms. This growth reflects growth in operating, rather than capital expenditure, although it should 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



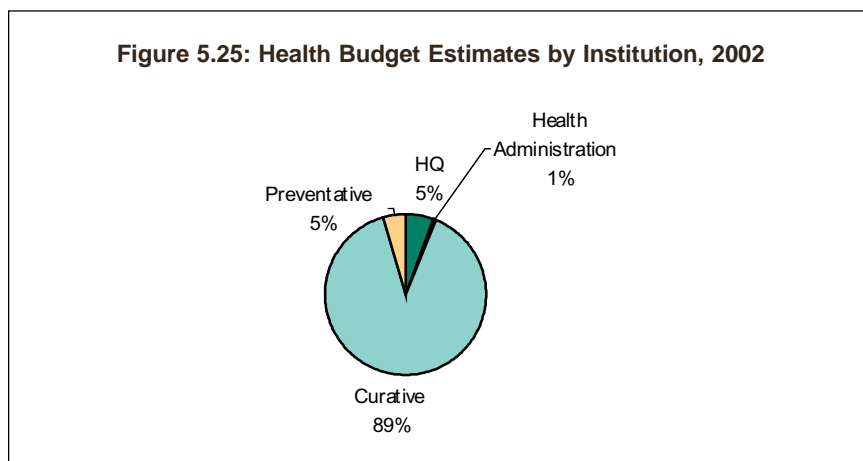
Source: Table A5.3.



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.



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.