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Abbreviations

AAP	Annual Action Plans
ASYCUDA	Automated System for Customs Data
CBM	Community Based Maintenance
CEP	Community Empowerment Project
CFET	Consolidated Fund for East Timor
CPV	Commitment and Payment Voucher
DAF	Department of Administration and Finance
DEM	Directorate of Equipment and Materials
DCR	Development Corporation Report
DRBFC	Directorate of Roads, Bridges and Flood Control
EDTL	Electricidade de Timor-Leste
EIRP	Emergency Infrastructure Rehabilitation Project
FDTL	Defense Force of Timor-Leste
FTP	First Tranche Petroleum
FY	Fiscal Year
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GER	Gross Enrolment Ratio
HIPC	Highly Indebted Poor Countries
HIV/AIDS	Human Immunodeficiency Virus/Adquired Immunodeficiency Syndrome
HPF	Health Policy Framework
JEG	Japanese Engineering Group
MDG	Millennium Development Goals
MICS	Multi-Indicator Cluster Service
MECYS	Ministry of Education, Culture, Youth and Sports
MoH	Ministry of Health
MPF	Ministry of Planning and Finance
MSA	Ministry of State Administration
MTCPW	Ministry of Transport, Communication and Public Works
MTEF	Medium-Term Expenditure Framework
MTFF	Medium Term Fiscal Framework
MYBU	Mid-Year Budget Update
NDP	National Development Plan
NDPS	National Directorate of Public Service
NET	Net Enrolment Ratio
NGO	Non-Governmental Organization
OIG	Office of the Inspector General
QRM	Quarterly Reporting Matrices
PEAMD	Planning and External Assistance Management Division
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Surveys
PKF	Peacekeeping Forces
PNTL	Timor Leste National Police
P&S	Prioritization and Sequencing
PSAS	Primary School Achievement Study
PTA	Parent Teacher Association
RAMS	Road Asset Management System
REA	Register of External Assistance
SIP	Sector Investment Program
STR	Student-Teacher Ratio
TFET	Trust Fund for East Timor
TLSS	Timor Living Standard Survey
TSP	Transition Support Program
TVET	Technical and Vocational Education and Training
UNCDF	United Nations
UNPKF	United Nations Peacekeeping Force
UNPOL	United Nations Police Forces
UNMISET	United Nations Mission of Support in East Timor
UNTAET	United Nations Transitional Administration in East Timor
UNTL	University of Timor-Leste
WDI	World Development Indicator

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EXECUTIVE SUMMARY

A. INTRODUCTION

1. **Timor-Leste became independent on May 20, 2002, following 25 years of conflict, a violent transition from Indonesian rule in September 1999 and two and half years of United Nations administration.** The country now faces all the challenges of nation-building with limited human resources, embryonic institutions, a stagnant economy, and high levels of poverty and unemployment. The Government's National Development Plan (NDP), prepared through a broad participatory process before Independence, has two overriding goals: to promote rapid, equitable and sustainable economic growth and to reduce poverty. Alongside an ambitious program of state institutional development, priority is given to the provision of basic services education, health, jobs, security and basic infrastructure. Through the FY2004 budget cycle, the first to take place after transition to Independence, the Government has had the opportunity to translate its development vision into a national expenditure plan.

2. **This Public Expenditure Review represents the culmination of a year-long process of World Bank support to the Government's work on policy development and budget formulation.** The specific objectives of the Public Expenditure Review (PER) were to: increase the poverty reduction impact of the expenditure program through an emphasis on service delivery and accountability at all levels; and stimulate transparency and enhance accountability through improved availability and dissemination of information on expenditure issues. The PER also serves as an analytical foundation for the design of the annual Transition Support Program, a multi-donor mechanism for budget support to the Government's development program during the lean-years before substantial oil and gas revenues come on stream. Starting from background papers in four key areas—fiscal policy and resource allocation, expenditure management and accountability, public sector pay and employment, and sector expenditure reviews in education, health, law and order, and roads—the PER exercise developed into an extended process of dissemination, discussion, and policy development. Through this process the PER exercise has served as an input to the preparation of the FY2004 and FY2005 budgets, the preparation of Sector Investment Programs in education, transport and health, and the formulation of sector policies, as well the annual action matrix supporting the Second and Third Transition Support Programs. The PER exercise has also served to promote the use of public expenditure analysis in the policy and decision-making process. To build on this interactive process, the present report advocates integration of stand-alone sector expenditure reviews as part of the sector policy and expenditure planning exercise, and the implementation of the next cross-sectoral PER in FY2007, to support preparation of the successor to the National Development Plan. Given the Government's strong anticorruption stance and the need to develop strong institutions, a governance focus is envisaged in the next Transition Support Strategy. This will build on the Governance Issues Paper recently prepared by the Bank at the Government's request.

B. TOWARDS A SUSTAINABLE PRO-POOR EXPENDITURE POLICY

3. **Following the broad objectives laid out in the NDP, the Government has sought to restrain expenditures at sustainable levels and ensure that expenditure allocations are consistent with the NDP's development priorities, giving particular priority to basic**

education and health services. However, NDP priorities have had to be adjusted to take account of the slower than expected mobilization of Timor Sea revenues and a continuing reduction in external assistance inflows. The NDP's fiscal projections were based on the expectation that Timor Sea oil and gas revenues would be sufficient to cover programmed expenditures by FY2006. Timor Sea revenue estimates were revised downwards in the FY2003 and FY2004 budget exercises, with corresponding reductions in forward expenditure estimates and increases in financing requirements. Mid-way through the FY2005 budget process, Timor Sea estimates were revised again, to take account of acceleration of the production schedule and increases in oil prices. Changes in projected revenues have yet to be reflected in expenditure estimates, which are now significantly lower than programmed at Independence for the period to FY2008. On the basis of revised Timor Sea revenues and FY2005 expenditure estimates, the financing gap for the period FY2006 to FY2007 is now estimated at US$30 million.

4. **Since Independence, the Government has also been faced with a declining trend in external assistance from around US$300 per capita in FY2002 to US$175 per capita in FY2004.** Rehabilitation projects financed by the Trust Fund for East Timor (TFET) are coming to a close, and bilateral assistance is declining as donors shift from high-volume rehabilitation and humanitarian assistance to lower-volume development support. While this trend is inevitable, there is some concern regarding the speed of adjustment. If the reduction in external assistance is too abrupt it will have a significant impact on the quantity and quality of public services and, given the weight of the public sector, on the performance of the economy.

5. **Faced with continued uncertainty regarding Timor Sea revenues, the Government has adopted a prudent fiscal policy, with continued efforts to mobilize additional domestic revenues and a modest expenditure program, but even so additional financing measures may be needed.** Following the cuts in forward estimates during the FY2005 budget process, there is little scope for further reductions in Consolidated Fund expenditures. The scope for further increases in *domestic revenues* is also limited in the short term due to a narrow revenue base and limited capacity, but there is some room to boost funding through the one-off sale of assets, such as excess vehicles and other project-related equipment. Consequently, any further adjustment would need to be addressed through financing measures. There are three options for mobilization of *additional financing* in the case of delays in Timor Sea revenues: (preferably) extending grant-financed budget support provided by development partners; (cautiously and temporarily) allowing for concessional borrowing, perhaps to finance projects that have been identified in the Sector Investment Programs but not yet reflected in the CFET investment program; and (provided that a savings strategy has been outlined and appropriate fund management arrangements put in place) amending the policy on savings from Timor Sea royalties to allow a portion of the savings to be drawn down in the near term.

6. **Functional expenditure patterns are broadly in line with poverty reduction and development objectives.** However, the current allocation of 32 percent of total Consolidated Fund spending to education and health is significantly lower than the ambitious targets set in the NDP. Conversely, spending on police and defense, currently at 20 percent of total Consolidated Fund spending, is higher than originally anticipated. Allocations for general public services, including governance bodies and core administrative institutions, which represent a significant fixed cost for a small public sector, are also significantly higher than programmed at Independence. Allocations for economic services, in contrast, are extremely low and insufficient to meet the Government's development objectives. Of particular concern are the low levels of programmed expenditures for road maintenance. The composition of Combined Sources funding is somewhat different, with greater focus on general public services, agriculture, economic support services and the social

sectors. The high level of external dependence in priority sectors is a matter of concern given the anticipated decline in external financing.

7. **The economic composition of expenditure shows a much lower level of capital spending than originally intended and worrying growth of spending on administrative overheads.** Faced with successive reductions in Timor Sea revenue projections, the Government has postponed the significant increase in capital expenditures programmed at Independence. Nevertheless, expansion of the Consolidated Fund capital program remains a valid objective in view of the pressing need for investment in road rehabilitation, to support implementation of the Sector Investment Programs, and to offset the impact of reduction in external assistance. Programmed personnel expenditures, at 35 percent of Consolidated Fund spending, are similar to other low-income countries but are expected to decline as a share of spending. Goods and services spending, in contrast, has been expanding fast. This is of concern where a large part of the increase is allocated to administrative overheads, including the cost of maintaining the large number of vehicles, computers and other equipment transferred upon the departure of UNTAET.

8. **The Government acted promptly to curtail the trend in administrative overheads during its FY2004 Mid-Year Budget Update and in setting limits for the FY2005 budget process**. Goods and services allocations were cut and specific measures announced to contain expenditures on vehicles, including sale of part of the vehicle fleet. A number of additional control measures are suggested including: reporting on high risk line items in budget execution and closer monitoring of these items so that managers are held accountable for spending decisions; disconnection of utilities upon exhaustion of administrative overhead allocations; and elimination of central allocations for sensitive expenditures such as official travel.

9. **There are a number of risks to the programmed expenditure framework, particularly from increases in administrative overheads and additional charges arising from the reduction of external financing**. These include: continuing pressure to increase staffing levels beyond the limit of 17,200 permanent public sector employees; implementation of local administration reforms, potentially leading to an expansion of the number of institutions and employees; further transfers of equipment and installations as UNMISET winds down; and inadequate budgeting of expenditures, notably those related to the operating expenditures of the police, currently covered by UNPOL. Recent improvements in power sector cost recovery suggest that this risk to the expenditure framework is now being brought under control. The appointment of the Management Contractor and progress in the installation of pre-payment meters have provided a sound mechanism for cost recovery, progress has also been made in putting in place appropriate fuel contracting arrangements and in the identification of investments that will reduce operating costs.

C. Improving Accountability and Effectiveness in Public Spending

10. **The core financial management system compares favorably with that of other low-income countries and fiduciary arrangements are basically sound, if still incomplete, but agency level financial management systems are often rudimentary and the viability of the system as a whole is threatened by the scheduled departure of key expatriate personnel.** The budget documents are comprehensive, include most external financing, and present information by agency and program, following GFS classifications, together with forward estimates. The budget is approved by Parliament. Comprehensive quarterly budget execution reports are published within fifteen days of end of period, financial statements are prepared within three months of the end of year and an external audit undertaken within six months of end of year. Further work is needed on the development of a government-wide, integrated financial management information system, which would facilitate tracking of expenditure execution and transactions at agency level.

Parliamentary oversight and engagement in the budget process could be strengthened by adopting a two stage budget process, allowing for parliamentary review of expenditure limits at the start of the budget process before these are communicated to agencies. The establishment of an independent audit authority under the judiciary, as foreseen under the Constitution, even if the audit function continues to be exercised by a commercial external auditor, would put in place the remaining element of the core financial management system. Two areas of risk are identified. First, the rudimentary financial management and control systems at agency level. Development of these systems and the cadre of financial managers needed to implement and oversee them is a key challenge for the future. Second, the Ministry of Planning and Finance will need to resolve the skills gap created by the scheduled departure of technical assistance, as the remaining UN funded posts are withdrawn after FY2005. This will require significant investments in training of national personnel to take over the responsibilities of expatriate staff and alternative arrangements to fill senior management posts before national personnel are sufficiently qualified and experienced.

11. **Improvements in agency level expenditure and procurement planning, together with improvements in procurement administration, will be needed if the Government is to bring budget execution in line with appropriations and improve service delivery.** Budget execution tends to be slow during the first half of the year, followed by an end-of-year surge as agencies try to expend their budget balances. The underlying problem is poor planning. Solutions lie in early procurement planning for capital and major goods and services spending, preparation of in-year expenditure plans and monitoring of progress at agency level. MPF can assist agencies by using Expenditure Authorization Notices as a tool for front-loading expenditures in critical sectors and tracking implementation. Further work is also needed to extend standardization and improve the formulation of specifications, so as to avoid delays in procurement processing. The approval of the Public Procurement Decree Law will clarify procurement procedures. It also provides an opportunity for limited delegation of procurement authority, thereby reducing pressures on the central procurement system. Further delegation of authority would ideally follow a hurdle approach, where agencies have first demonstrated capacity to manage procurement according to established procedures.

12. **Even though unit costs are expected to fall gradually as external assistance flows decline, specific measures are needed to improve value-for-money in public spending.** *Fostering competition* is the most effective means of containing prices. Significant savings could be generated by competitively tendering fuel supplies, for instance. This is likely to require relatively low thresholds for international bidding, given the narrow domestic market. In addition, unit costs may be reduced through *contracting out* of appropriate low-level services, which has the additional benefit of supporting private sector growth and increasing flexibility within the public sector. Though direct comparisons may appear to suggest that contracting out is more costly than public sector provision, such direct comparisons do not factor in the public sector's administrative overheads or the long-term cost savings that may arise from contract flexibility. Another cost-saving measure is *standardization*, which can limit overspending by focusing attention on key design considerations and facilitating bulk procurement. Finally, *benchmarking* between contractors and service providers can provide useful information regarding their relative efficiency.

13. **Development of mechanisms to promote the deconcentration of spending merits particular attention if the Government is to support further improvements in service delivery.** Estimates indicate that, in FY2003, only one-third of total Consolidated Fund expenditures and only one-fifth of Consolidated Fund goods and services spending were directed to national programs or districts outside Dili. Further work is needed to determine the constraints in channeling resources to field level. Block grants can be an important mechanism to build local expenditure management capacity relatively quickly and to get resources down to the field level.

Such grant mechanisms often start with funds to support local investment project initiatives. However, block grants can also be used to fund operating and maintenance costs of service delivery units. The Ministry of Education, Culture, Youth and Sports intends to pilot this approach in schools.

14. **Over the next few years, the challenge in expenditure planning will be to move toward a definition of priorities within their agreed expenditure limits.** Without distinct *a priori* expenditure limits, agencies will tend to be overly optimistic in their planning and in defining their resource requirements. By establishing hard limits at the start of the budget process, the Government was able to instill discipline in the FY2005 budget process. This is a considerable achievement. In order to focus attention on service delivery, it will be important for service performance measures to be better integrated into planning and budgeting processes. At the same time, the recent Sector Investment Program exercise has helped formulate sector policies that take account of resource constraints and should help align external financing with Government's policy priorities. Gradually, agencies are expected to take the lead in the development of their sector expenditure programs. The establishment of sector working groups to support this process can assist in achieving consensus on priorities, improving operational coordination, and consolidating disparate donor activities into a coherent sector program.

D. Towards a Lean and Effective Civil Service

15. **Timor-Leste faces three main challenges in developing the civil service in the post-Independence era: controlling the size of the civil service, developing an appropriate pay policy, and establishing basic, but critical, management systems.** Budgeted public service *staffing levels* have already reached the ceilings set out in the NDP, though actual staffing is lower—15,328 permanent public sector employees—owing to recruitment shortfalls. The number of unfilled positions is significantly higher in the senior grades, due to the shortage of adequately qualified candidates. Containment of staffing levels is likely to be difficult in the future as increasing numbers of university graduates enter the workforce, creating political pressures, and as agency mandates expand beyond budgeted staffing levels, creating demands from within the administration. External assistance arrangements tend to exacerbate these pressures by putting in place staff-intensive management systems and financing activities outside agency core functions. Staffing levels are currently contained through approved staffing structures and budget ceilings on personnel expenditures, as well as through aggregate staffing limits negotiated as part of the Transition Support Program. Periodic functional reviews, undertaken as part of the sector policy and expenditure planning exercises, would help assess appropriate staffing levels in light of sector policy and financing constraints.

16. **Pay policy in Timor-Leste will need to be adjusted in order to provide appropriate incentives for performance in the civil service.** The Government is currently considering alternative pay policy arrangements, including grade and within-grade increments to provide room to recognize increased responsibility and complexity and reward merit. A pay and employment modeling exercise indicates that the introduction of within-grade increments into the current grade structure is affordable in Timor-Leste, as long as budgeted staffing levels are maintained and only 20 percent of staff receive increments in each year. Incentives to work at higher levels would entail selective decompression of salaries, particularly those of agency senior managers whose wages are considered to be low in relation to non-government employment alternatives. As a transitional measure, selected allowances could be considered to reward key additional responsibilities. Again, pay and employment modeling shows that decompression at higher levels is fiscally feasible under the current medium-term expenditure framework, but that decompressing the salaries of lower grades begins to incur unrealistic costs. At the lower end of the pay scale, remuneration appears to

be relatively high, and the NDP has recognized the need for some realignment through a gradual erosion of base pay levels in the face of inflation. Another workable solution could be the contracting out of basic service functions to the private sector, thereby removing lower-skilled workers from the public sector payroll.

17. **The improvement of civil service performance incentives also requires a greater focus on the development of human resource management systems.** The recent approval of the Public Service Statute is an important step forward. However, supplementary regulations will need to be put in place disciplinary procedures for the most serious cases and systems for careers, performance assessment and promotion. An up-to-date, comprehensive personnel registry is now a pressing need if these systems are to be developed. The major challenge for the years ahead is to put in place the basic architecture of the personnel management system and then to ensure that the system is applied systematically, without favor, so as to gradually professionalize the civil service.

E. Key Issues and Strategic Directions in Education

18. **Education is considered the top national development priority by the majority of Timor-Leste's population.** Remarkable progress has been made in reconstructing the school system and in expanding enrolment across the system, particularly among the poor. A National Education Policy, approved in March 2004, defines the key objectives of the education sector as expanding access, enhancing internal efficiency, and improving the quality of education, particularly at the primary level.

19. **Improving access, efficiency, and quality will involve a combination of supply-side and demand-side interventions.** Enrolment scenarios suggest that there are currently enough places in the primary school system to meet access targets, but further expansion is needed at the junior secondary and senior secondary levels. The efficiency of basic education is hampered by high levels of repetition and dropout, particularly among poorer students. Currently, only half of children complete a full primary school cycle. For those who do, the average cost of their education is twice that of a regular six-year cycle, owing to the high repetition and dropout rates. Repetition rates are recognized as a priority issue, but there is not yet a clear strategy to address this challenge. Student absenteeism is high, with lack of interest and family labor obligations playing a significant role. The quality of education is affected by high student-teacher ratios, though these have improved significantly in the last three years. In addition, many students are receiving fewer than the required five hours of instruction due to the frequent use of double shifting in schools. Though double shifting may increase access and decrease capital costs, regulation is needed to ensure that students still spend enough time in the classroom. The proportion of qualified teachers is relatively low, underlining the need for in-service training mechanisms. Training programs started in FY2004 with 1,000 teachers enrolled. However, improvements in teacher performance will also require adequate incentives, oversight and adequate support in training materials and methods. A new national curriculum is under development—a crucial step in improving the quality and relevance of education in Timor-Leste. This will need to be accompanied by an appropriate language policy to manage the transition to Portuguese as the official language of instruction.

20. **As the education system shifts from reconstruction to longer-term development, expenditure policy will need to focus on aligning resources toward established policy objectives while accommodating a gradual reduction in external financing.** Given the significant social benefits involved, the Government's current priority focus on primary education expenditures in the Consolidated Fund is appropriate. The Combined Sources budget, however, indicates that substantial resources are directed at tertiary education. Decisions on the allocation of expenditure between levels of education, service providers, component expenditures and levels of

administration should be addressed through the Sector Investment Program. It will be important to define a clear policy on the appropriate level of student contributions to education. There is evidence that fees discourage demand for education and place a disproportionate burden on the poor. A strong case may be made for the elimination of fees for basic education, limiting cost-recovery to secondary and tertiary education.

21. **Basic management systems and mechanisms for channeling resources directly to schools will be critical if budget execution rates are to improve.** Low budget execution in education is a major concern, particularly given the resumption of school charges. The principal concern relates to spending on goods and services, which covers key basic inputs such as school materials and maintenance. These spending bottlenecks seem to arise from a combination of poor expenditure and procurement planning, inadequate processing and follow-up on procurement, and the excessive centralization of expenditures. Low levels of budget execution underline the need for improvement in internal control and management systems. Spending efficiency could be enhanced through the decentralization of Consolidated Fund resources to the school level. With assistance from UNICEF, MECYS is piloting a mechanism for the distribution of small block grants directly to schools.

F. Maintaining a Viable Road Network

22. **The main challenge facing the roads sector in Timor-Leste is to create and implement a strategy for sustainable provision, rehabilitation and maintenance of roads**. The road network is extensive. This has the benefit of enhancing accessibility but also implies the need for greater expenditure on road maintenance in order to keep road quality to acceptable standards. Maintenance costs are increased by the poor condition of the road network and frequent landslips and flooding. Though most of the rural population lives close to passable roads, there are very few vehicles in Timor-Leste and traffic volumes are light.

23. **The cost of fully maintaining the current road network is high, particularly in view of its poor condition and light usage, and is neither financially feasible nor economically viable.** A maintenance strategy is needed that maximizes returns from limited resources while continuing to ensure adequate nation-wide access to roads. Strategic prioritization would entail a primary emphasis on *maintenance and emergency repairs*, as outlined in the Transport Master Plan, with more substantial rehabilitation efforts undertaken where they are most likely to result in future cost reductions. It will also be important to *define the core network according to available funds*, in order to concentrate on the most important and most heavily utilized routes. *Responsibility for road maintenance* is best assigned formally to authorities depending on the function and location of the roads, i.e. to national agencies for the core national network and to communities for rural roads. This arrangement offers the possibility of improving access to and quality of roads beyond the defined core network. Finally, an appropriate maintenance strategy would clearly *define and enforce service standards* for each class of roads, in terms of both access (frequency and duration of road closures) and service (average travel times). Such standards can improve the transparency and accountability of decision making, and thus the quality of service.

24. **The FY2004 budget provided adequate financing for the Government's road maintenance program over the medium-term, but complementary rehabilitation activities will require substantial additional financing**. In the past, road sector expenditures have focused on emergency rehabilitation, but future spending is expected to shift toward routine maintenance. FY2004 budget forecasts increased funding for maintenance of most of the national and district road network, but would leave little funding for lower priority rural roads and were subsequently adjusted downwards during the FY2005 budget process. Formulation of a long-term financing

strategy for the roads sector, ensuring predictable budget allocations, should be a priority. The Transport Sector Investment Program calls for greater levels of spending than currently programmed in the budget, indicating a need to mobilize additional financing and reduce unit costs. Reductions in the unit costs of road maintenance and rehabilitation could derive from enhancing *community responsibility for rural roads* and greater use of *private contractors*. Although some capacity for direct administration is needed for emergency works and routine maintenance, the establishment of a Directorate of Equipment and Materials has shifted resources further toward direct administration than appropriate. Further investments in capacity are needed within the Ministry of Transport, Communications and Public Works (MTCPW), particularly in the area of engineering and, even more so, in policy, planning and management. Capacity building efforts will need to be supplemented by improvements in the availability of up-to-date information on sector performance. Updating and institutionalizing the Road Asset Management System (RAMS) database will be critical steps in this direction.

G. Ensuring Access to Quality Health Services

25. **The Government of Timor-Leste has made significant progress in re-establishing health services and can now turn its attention to operationalizing health sector strategies.** A Health Policy Framework (HPF) lays out the primary objective of ensuring access to basic curative and primary health care services, particularly for the poor. Public health facilities have been rebuilt, staff recruited, and pharmaceuticals made available. Health outcomes have improved, but further progress is needed in expanding immunization coverage, improving pre-natal care, mitigating the spread of HIV/AIDS, and addressing cross-sectoral and systemic issues that affect health service delivery. Utilization of public health services is low, leading to inefficient levels of outpatient coverage per staff member.

26. **A revised service configuration recognizes financial and human resource constraints while maximizing the percentage of the population with access to primary health care.** However, defining access in terms of travel time (within two hours' walking distance) could lead to the operation of more health facilities in remote areas than can realistically be staffed or resourced, and it is worthwhile to consider access in terms of service volumes as well. More work is needed to determine the cost effectiveness of expanding the services of mobile clinics as compared to stationary health posts. The Ministry of Health has made good progress in recruiting staff up to established ceilings, but workers continue to be clustered in the middle levels of the salary scale. MOH has taken some initial steps to contract out lower-level services, following upon a policy commitment to strengthen ties with the private sector and non-government health service providers, which play a significant role in health service delivery in Timor-Leste. Given severe capacity limitations, the health system continues to depend on international doctors and specialists whose salaries are largely funded from external sources but will soon be integrated into the Consolidated Fund. This, along with an expected decline in the level of external assistance as major infrastructure rehabilitation efforts wind down, will is likely to place a squeeze on Consolidated Fund resources.

27. **Health sector expenditures are generally in line with sector priorities, with hospital and specialized services spending capped at around 40 percent of Consolidated Fund expenditures,** but there are pressures to increase spending on administrative overheads and hospital services. Estimates indicate that the cost of the currently planned health sector configuration will exceed projected Consolidated Fund allocations. Cost containment efforts will need to focus on hospital services, salaries for internationally recruited doctors and specialists, and medical supplies, including pharmaceuticals. External assistance, which plays a significant role in health sector financing, is relatively well aligned with health policy priorities, but is currently

directed to a broader set of activities than can be sustained by programmed funding for recurrent costs. The Government has endorsed the development of a Sector Investment Program and sector wide approach to coordinate donor inputs. Health expenditure management has improved significantly with the introduction of a new program budget structure, but further work can be done to ensure successful coordination among various components of the health system. Improvements could also be made in mechanisms for transparency and bottom-up accountability for performance, through publication of sector monitoring reports, improved posting of information on available services, prominent display of medical stock registries to discourage inappropriate use of drugs and equipment, and the establishment of community oversight mechanisms at the facility level.

1. INTRODUCTION

A. BACKGROUND

1.1 **Timor-Leste became independent on May 20, 2002, following twenty-five years of conflict, a violent transition from Indonesian rule in September 1999 and two and half years of United Nations administration.** The country now faces all the challenges of nation building with limited human resources, embryonic institutions, and high levels of unemployment and poverty.

1.2 **The Government's response to Timor-Leste's development and poverty reduction challenges is laid out in its National Development Plan, approved by the National Parliament shortly after Independence.** Prepared following widespread consultations, the Plan presents a clear development vision for Timor-Leste in 2020 and articulates the people's development priorities: access to education and health services, jobs, security and basic infrastructure. The plan goes on to outline the policy principles, strategies and specific programs the Government intends to pursue to achieve its ambitious development goals in FY2007, together with a medium-term expenditure framework allocating resources between the key sectors. Immediately following Independence, attention turned to operationalizing the plan: transforming the strategies into agency action plans, the expenditure framework into agency budgets, and the plans and budgets into improved services at the field level. Notwithstanding the immensity of this task for a new administration, the FY2004 budget cycle—prepared from January to May 2003, and so the first budget prepared after Independence—was seen as the opportunity to transform the plan into action.

1.3 **A significant part of the external assistance in support of the NDP is provided as budgetary support under the Transition Support Program.** The Transition Support Program (TSP) was conceived as bridging finance, allowing the Government to implement a modest development program in the years before substantial oil and gas revenues came on stream. TSP financing for FY2003 through FY2005 amounts to about US$96 million—covering over 40 percent of Consolidated Fund expenditure—of which US$12 million is financed by the World Bank and US$75 million by Bank administered Trust Funds on behalf of nine bilateral donors. By channeling funds through the Government's expenditure management system, the program seeks to strengthen capacity to manage future revenue streams and allow the Government to allocate resources in support of its NDP priorities.

1.4 **The Bank supported formulation of the NDP with a program of analytical work in the run-up to Independence.** Household and suco (village) surveys were undertaken in 2001. A preliminary *Poverty Assessment*, based on these surveys, was presented in May 2002, and subsequently finalized in December of that year. A *Country Economic Memorandum*, released in May 2002, provides an assessment of development options and priorities. The Memorandum included an assessment of expenditure policy options, focusing on the implications of future oil and gas revenue streams, and an overview of the expenditure management system and its development challenges. These issues were examined in greater detail in a *Public Expenditure Management and Accountability Note*, released in April 2002. The Note includes a review of aggregate expenditure trends, resource allocation issues, the impact of public spending on the poor (including benefit

incidence analysis for the education, health and power sectors using household survey data), and a detailed assessment of public expenditure management systems and fiduciary risks. Following extensive discussion with the authorities, some of the Note's key recommendations were included in the Government's FY2003 Action Plan and their implementation monitored under the first Transition Support Program.

B. Process, Outputs and Outcomes

1.5 **Building on prior Bank analytic work, the present Public Expenditure Review was conceived as a means of providing support to the FY2004 budget process, the Government's on-going sector policy work and the design of the Transition Support Program.** The Concept Note identified two objectives for the Review exercise:

(a) To increase the poverty reduction impact of the expenditure program by improving its service delivery orientation and strengthening accountability at all levels of the expenditure management system. The outcomes of this analysis were expected to facilitate the planning and budget process and, in particular, inform the formulation of the FY2004 Medium Term Fiscal Framework, budget and key sectoral programs.

(b) To provide parliament, civil society, external partners, the media and the public with information on public expenditure policy and management issues, thereby stimulating debate and improving transparency and accountability.

1.6 **The PER team was fielded at the start of the FY2004 budget process to provide technical support to Government agencies, contributing to the preparation of agency budget submissions and sector programs as well as preparing analytical background papers.** Key activities, outputs and outcomes at this stage included:

(a) a *Fiscal Policy and Resource Allocation Study*, providing an assessment of financing and expenditure options, used as the basis for setting the FY2004 budget limits. The study contributed to the moderation of the expenditure growth path and some realignment in expenditure composition, including significant increases in shares for infrastructure spending over the medium term.

(b) an *Expenditure Management and Accountability Study*, primarily intended to monitor progress in implementing Government's program for strengthening expenditure management, focusing attention on delays in budget execution and procurement, and generating a number of system performance indicators that allowed performance in these areas to be tracked under TSP II.

(c) a review of *Public Sector Pay and Employment* was undertaken to support the definition of pay policy options for the medium term. A preliminary model for assessing the financial implications of decompression scenarios and the introduction of within-grade increments was developed for the Budget Office. Although no policy decisions were taken, forward estimates were revised to allow for possible changes in pay policy.

(d) *Sector Expenditure Reviews* were conducted for the NDP priority sectors of education, health, law and order and roads. These reviews focused on: the modeling of sector expenditure policy to facilitate the preparation of sector budget submissions and MTEFs; and the proposal of measures to streamline sector expenditure management and channel a larger proportion of resources to service delivery units. Faced with a fragmented institutional structure and an inadequate policy framework, the law and order review made little progress. In contrast, detailed expenditure models were

prepared as part of the education, health and roads reviews and used to support agency budget submissions.

Table 1.1: Timing of PER Outputs and Policy Process

PER Component	FY04 Budget Process	TSP II Appraisal	SIPs & Policy Reviews	TSP II Review	FY04 Mid-Year Budget Update	Development Partners Meeting	TSP III Appraisal	Final Report
	Feb-Apr 03	Apr-May 03	Sep-Nov. 03	Oct. 03	Nov. 03	Dec. 03	Apr. 04	May 04
Fiscal Policy and Resource Allocation Study	Background Paper			Updated Report		Updated Report		
Expenditure Management and Accountability Study	Background Paper			Updated Report		Updated Report		Updated Report
Civil Service Pay and Employment Study	Background Paper			Updated Report		Updated Report		
Education Sector Expenditure Review	Background Paper		Updated Report					Updated Report
Roads Sector Expenditure Review	Background Paper		Updated Report					
Health Sector Expenditure Review	Background Paper							Updated Report
Law and Order Sector Expenditure Review	Background Paper							

1.7 **Following on from the initial work in support of the FY2004 budget process, PER studies have been revised and updated to support Government's on-going policy development and Bank monitoring of the Transition Support Program.** The timing of PER outputs and their relation to the on-going policy process are outlined in Table 1.1. Updated sector expenditure reviews were issued to support the preparation of the education and roads sector expenditure programs, and as an input to the education sector policy congress, from September through November 2003. The expenditure policy, expenditure management and civil service pay and employment studies were extensively revised as an input to the TSP II progress mission in October 2003. The review highlighted expenditure control issues, which were extensively discussed with authorities, and contributed to the presentation of expenditure control measures in Government's mid-year budget review. An updated version of these sections was presented as the Bank's background paper at the December 2003 Development Partners' Meeting. In early 2004, the Government requested the Bank to prepare a Governance Issues Paper to pave the way for an increased emphasis on transparency and accountability in the next stages of the Transition Support Program. The finalization of the review as a Bank Grey Cover report, therefore, is one milestone in an extended process of dissemination, discussion and policy development rather than the beginning.

C. Following Up

1.8 **Expenditure policy and management issues will continue to figure prominently in the development discourse in Timor-Leste, creating demand for a regular expenditure analysis.** This is partly because the Bank and bilateral donors need fiduciary and policy assessments when providing budget support. The more fundamental concern, however, relates to Timor-Leste's prospects as an oil and gas producer. Reflecting on the track record of low-income oil producing countries, the Bank and other development partners consider the establishment of a sound revenue and expenditure policy and management framework a prerequisite for the effective use of additional resources and thus a matter of urgency. Policy dialogue and monitoring of program

implementation will continue within the framework of the Transition Support Program. If such expenditure analysis is to have an impact, however, it will need to be tied to key decision making instruments and their timetables, rather than implemented as a stand-alone exercise. A framework for expenditure analysis is proposed below.

1.9 **Sector expenditure reviews need to be integrated into the sector policy process.** Policies have to be formulated within the framework of resource constraints, so that the merits of alternative applications of public funds can be assessed. This requires rough costing of policy alternatives and the formulation of expenditure packages, based on agreed cost structures, to guide the budget process. Costing could build on the expenditure modeling work initiated under this PER. While the formulation of sector expenditure programs has been timed to coincide with the FY2005 budget process, policy development and budgeting are unlikely to be synchronized in future years. Sector expenditure reviews are likely to be more helpful if they are integrated into the policy process. This will mean a stronger line agency role in the design and implementation of expenditure reviews than is currently the case. In this context, it is noteworthy that the Ministry of Agriculture, Forestry and Fisheries has recently launched an expenditure review process, independently of the Ministry of Planning and Finance, to support the design of its sector policies. These reviews should focus on the costing of policy alternatives, alignment of external assistance with policy objectives, and assessment of the trade-offs between alternative applications of public funds.

1.10 **Cross-sectoral expenditure reviews need to be linked to major planning events, such as the preparation of the next National Development Plan**. Sector expenditure reviews can contribute to this kind of exercise, as an input to the preparation of sector plans and supporting resource allocations. Cross-sectoral allocations should also be addressed, so as to provide a framework for the formulation of subsequent budget exercises. Preparation of major plans provides an opportunity to realign resource allocations rolled over through the forward estimates prepared in annual budget exercises. Again, such analysis should focus on the Combined Sources budget, covering both Consolidated Fund expenditures and external financing. While forward estimates will inevitably have to be adjusted during implementation, the initial allocations do provide a reference point to assess implementation against the benchmark of the plan's expenditure policy objectives, in much the same way as the NDP has served as a point of reference for this PER.

1.11 **There is also need for timely, focused analysis to guide the budget process and monitor budget implementation.** Ideally, this routine analysis should be undertaken as part of the Government's internal budget process, in order to assess the policy consistency of spending and identify corrective measures where expenditure outcomes are deviating from plan. This kind of analysis should be timed to feed into the mid-year budget update and the guidelines for the following year's budget process, generating short policy-oriented briefs. If these are focused exercises, additional reviews can take place as necessary: in February 2004, the Bank and MPF conducted a brief review of progress in implementing the expenditure control measures announced

Box 1.1 Key Recommendations – Expenditure Reviews

- ***Integration of sector expenditure reviews into the policy process,*** *led by the sector agencies, focusing on the costing of policy alternatives, alignment of external assistance with policy objectives, and assessment of the trade-offs between alternative applications of public funds.*
- ***Linking of cross-sector expenditure reviews with major planning events,*** *such as the update of the National Development Plan, focusing on key resource allocation issues.*
- ***Implementation of timely, focused studies on budget execution*** *and the alignment of expenditure with policy priorities in support of the annual budget exercise.*

in the Mid-Year Budget Update. In this context, the timeliness of the analysis is likely to be more important than the scope of the review.

2. TOWARDS A SUSTAINABLE PRO-POOR EXPENDITURE POLICY

A. INTRODUCTION

2.1 **The National Development Plan highlighted two expenditure policy goals: firstly, "restraining total expenditure to levels that are sustainable" and, secondly, "ensuring that expenditure allocations between Agencies/Functions are consistent with plan objectives and particularly that the high levels of central administration expenditures fall to the benefit of health, education, agriculture and infrastructure"** (NDP, 2002, page 68). The NDP's fiscal strategy was predicated on early inflow of substantial Timor Sea oil and gas revenues which were expected to cover programmed expenditures from FY2006. In the intervening "lean years", the financing gap would be covered by external grant financing. At the same time, the NDP and forward estimates presented in the FY2003 budget proposed a significant increase in social expenditure, rising to nearly half of total recurrent spending by the end of the plan period. Some reduction in the level of external assistance was anticipated, though the NDP "hoped that [bilateral assistance] can be maintained over the medium-term to levels of at least US$85 million a year", noting that "this is the minimum level needed over a long period of time to sustain the growth and development projections" (NDP, 2002, page 92).

2.2 **While the broad goals of Government's expenditure policy remain unchanged, the programmed expenditure path has been undermined by delays in the mobilization of Timor Sea revenues, slower than anticipated reallocation of resources from unproductive sectors and increases in spending on administrative overheads.** The present chapter reviews recent expenditure trends and their implications for expenditure policy. Section B stresses the importance of avoiding a sharp reduction in external assistance as Timor-Leste emerges from post-conflict status. Section C examines the Government's options in response to continued uncertainty regarding the level of Timor Sea revenues in the period to FY2008, arguing that changes in financing policies will be needed to complement revenue and expenditure measures, and stressing the importance of establishing appropriate fund management arrangements and a savings strategy before using Timor Sea royalties. Section D demonstrates that the functional allocation is broadly in line with NDP priorities, though the growth of spending on social services is much slower than anticipated and spending on agriculture and infrastructure continues to be extremely limited, largely due to slower than programmed reductions in spending on core administration, power subsidies and security. Section E highlights the recent increases in administrative overheads and the need for improved expenditure monitoring, particularly at agency level, to ensure that priority is given to service delivery. The chapter concludes with a brief overview of policy recommendations arising from the expenditure review.

B. COMBINED SOURCES EXPENDITURE FRAMEWORK

2.3 **Combined Sources public expenditures have dropped sharply in the immediate post-conflict period due to reductions in external assistance inflows.** Figures 2.1 and 2.2 present estimates of Combined Sources expenditures and financing in US$ million and as percent of GDP, comprising programmed Consolidated Fund expenditures, United Nations sponsored technical

assistance, Trust Fund for East Timor (TFET) expenditures and bilateral assistance, based on data from the Ministry of Planning and Finance's Register of External Assistance.[1] Combined Sources expenditures peaked at around US$280 million in FY2001, equivalent to about US$340 per capita and 77 percent of GDP. There has been a sharp decline in the post-Independence period, to about US$196 million in FY2004 (US$225 per capita, 52 percent of GDP), owing to: a gradual winding down of TFET rehabilitation projects; reductions in the number of United Nations technical assistance posts; and, most importantly, the closure of most humanitarian assistance programs and gradual termination of many bilaterally financed rehabilitation and technical assistance programs approved before Independence.

Figure 2.1: Actual and Programmed Combined Sources Expenditures US$ m

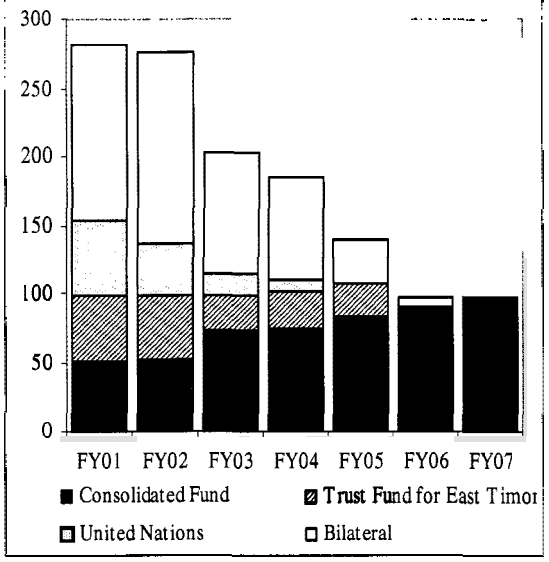
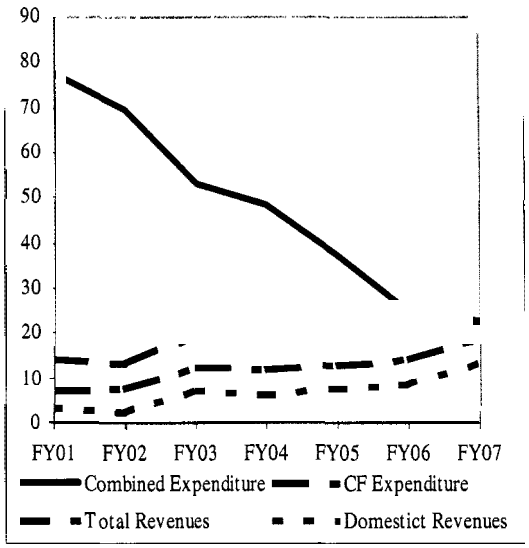


Figure 2.2: Actual and Programmed Expendiure and Revenues, % GDP



2.4 **As Combined Sources expenditures declined, Consolidated Fund expenditures increased from US$51.3 million in FY2001 to a budget of US$74.1 million in FY2004.** This corresponds to an increase in the Consolidated Fund's share of Combined Sources expenditures from 18 percent in FY2001 to 39 percent in FY2004, and its share of GDP from 14 percent to 22 percent. This level of public expenditure is slightly higher than the average of 18 percent of GDP for low-income countries in 1998 (WDI, 2001), but slightly lower than the average of 24 percent for post-conflict countries, where low levels of private sector activity tend to boost the public sector share. The share of Consolidated Fund expenditures financed from revenues (excluding Timor Sea revenues assigned to savings) has gradually increased from 47 percent in FY2001 to 60 percent FY2003, and was programmed to remain at around this level in FY2004 (see para 2.10). Budgetary support has covered the financing gap, first from United Nations assessed contributions and since FY2003 from the multi-donor Transition Support Program. While domestic revenue mobilization is increasing, from 4 percent of GDP in FY2001 to around 8 percent in FY2004, it

[1] The Register of External Assistance (REA) includes humanitarian assistance and bilaterally financed NGO programs. The data set has been cleaned to eliminate obvious double counting. However, the data set is still likely to overestimate external assistance inflows. REA estimates for actual external inflows are about 20 percent higher than the values reported by Government agencies through the budget process.

remains significantly lower than the average of 14 percent for low-income countries (WDI 2001).[2] In this context, high levels of budgetary support are justified by the need to increase Consolidated Fund expenditures to their medium-to-long term sustainable level, taking into account future inflows of Timor-Sea revenues (see para 2.9).

Figure 2.3: US$ ODA per Capita to Low & Lower-Middle Income Small States (Points for Marshall Islands & Micronesia not shown)

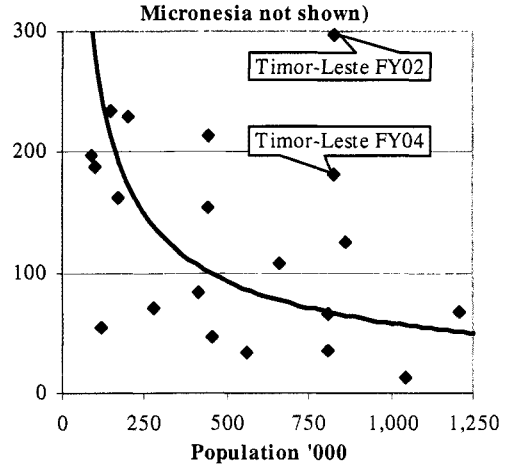
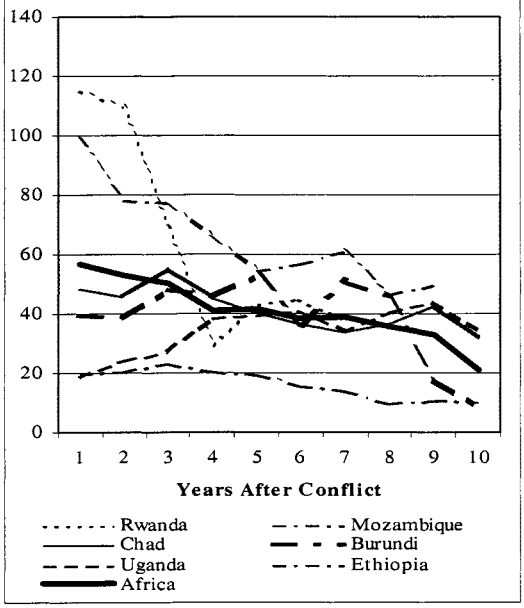


Figure 2.4: Trends in Aid Flows to African Post Conflict Countries (US$ per capita)



2.5 **Combined Sources expenditures will decline over the next three to four years as external assistance inflows continue to fall.** On-going TFET projects are expected to close in FY2005 and FY2006. United Nations sponsored technical assistance will continue on a much-reduced scale in FY2005 and is scheduled to terminate in FY2006. However, the key determinant of the future Combined Sources expenditure path will be the level of bilateral assistance. Current forward estimates mainly comprise on-going projects and thus show a rapidly declining profile as these projects close. Since most bilateral agencies have not finalized their country programs—MPF requested that agencies postpone preparation of country programs to take into account the results of the on-going Sector Investment Program exercise (see Chapter 3)—the overall level of bilateral financing for the next three to four years has yet to be defined. During the immediate post-conflict period, levels of external assistance to Timor-Leste have been higher than comparable low and low- to middle-income small countries (see Figure 2.3) and significantly higher than the average for low-income countries (at just US$11 per capita, US$21 per capita for Africa). However, the experience of African post-conflict countries suggests that the peace dividend is short-lived (see Figure 2.4). Bilateral assistance tends to decline as donors' country programs shift from high-volume rehabilitation and humanitarian assistance to low-volume development assistance. It should be noted that, while external assistance to Timor-Leste has been significantly higher than seen in most small and post-conflict countries, substantial adjustment has already taken place, with MPF-reported per capita aid flows dropping from a peak of around US$300 per capita in FY2002 to US$175 per capita in FY2004.

2.6 **Although further adjustment in Combined Sources public expenditures is inevitable, sharp reductions from current levels**

[2] See World Bank, *East Timor: Public Expenditure Management and Accountability Note* (April 2002) pages 3-6 for an overview of domestic revenue trends and prospects.

would have a significant impact on the economy. Recent World Bank comparative studies have shown that external assistance to post-conflict countries often drops off prematurely, before their economies have reached a sustainable growth path. The economic impact of significant reductions in external assistance is likely to be particularly severe in Timor-Leste where public expenditure still amounts to around 50 percent of GDP, external assistance directly or indirectly finances the bulk of imports (the deficit on external account before official transfers amounted to US$235 million in 2002, with exports covering just US$7 million of a US$185 million import bill), and the commercial and construction sectors are geared almost entirely to servicing the public sector. Although agricultural production has recovered to pre-conflict levels, further growth is likely to be slow and depend on deepening commercialization, which in turn depends on growth in other economic sectors. Reductions in public spending have already led to a contraction in the economy of around 2 percent a year in both FY2003 and FY2004, as evidenced by the closure of some larger service enterprises and sale of others. Further reductions in public expenditure, owing to reduced external assistance flows, will deepen and prolong this downturn, thereby reducing domestic revenues from imports and businesses, leading to further compression of the Consolidated Fund.

2.7 **Sharp reductions in external assistance would also lead to a reduction in the volume and quality of public services**. External assistance finances a substantial part of the Government's programs in priority sectors with a direct impact at the field level, such as agriculture, health and education (see para 2.29). Ironically, external assistance to post-conflict countries tends to drop off just as absorptive capacity is increasing, when agencies are learning the skills that enable them to use resources more effectively.

2.8 **Governments that adjust spending to sustainable levels and engage external partners in priority-setting tend to use external assistance more effectively and are more successful in mobilizing external assistance.** Expenditure adjustment is critical, since external partners are reluctant to finance programs that have little prospect of sustainability. Adjustment requires priority setting, so that resources are aligned with poverty reduction and development programs that external partners are willing to finance (see paras 2.29). External resources are best aligned with these priorities through joint programming based on a sector policies and strategies that reflect a consensus between stakeholders. Recent moves towards sector approaches in countries with substantial external assistance inflows have helped achieve these goals. A number of agencies in Timor-Leste are gradually moving towards a sector approach, notably in health, but also in education, agriculture and police. The development of Sector Investment Programs provides an opportunity for agencies to move towards this approach systematically in future planning and budgeting cycles (see Chapter 2, Section F).

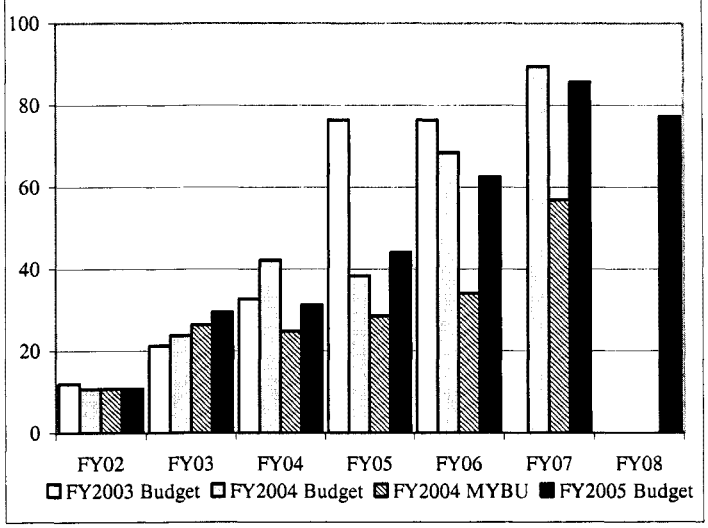
C. CONSOLIDATED FUND MEDIUM-TERM EXPENDITURE FRAMEWORK

2.9 **The Medium Term Expenditure Framework presented in the FY2002 budget anticipated substantial increases in Timor Sea oil and gas revenues from FY2005 and, on that basis, provided for rapid growth in expenditures and early accumulation of Timor Sea savings during the lean years immediately after Independence.** Following this initial scenario, Consolidated Fund expenditures were programmed as increasing to US$96 million in FY2005, around 25 percent of GDP, a level broadly consistent with the medium- to long-term sustainable level of draw-down on Timor Sea revenues. Forward expenditure estimates included significant allocations for capital and development spending, which were seen as essential to support growth and create capacity for the use of Timor Sea revenues when these came on stream. The Government planned to use Timor Sea tax revenues for budgetary purposes but invest royalties (First Tranche Petroleum) and investment income, pending the implementation of institutional arrangements and articulation of a longer-term savings policy that would take into account the

much larger volumes of tax revenues and royalties to be generated over the medium- to long-term. Budgetary support was to be provided to close the financing gap in the period through FY2005, with sufficient grant funding being available to make it unnecessary for Government to borrow, even on concessional terms. The early accumulation of savings was considered a prudent measure, firstly to establish the principle that Timor Sea revenues should be saved, laying the foundations of an investment fund that would generate income in perpetuity, and secondly to provide a cushion against possible changes in the revenue profile.

2.10 **Recent budget scenarios have highlighted the uncertainties around forward estimates of Timor Sea revenues, with successive postponements of revenues leading to cuts in expenditures** (see Figure 2.5). Adjustments were made in the timing of Timor Sea revenues during preparation of FY2004 budget, resulting in a financing gap of US$71 million in FY2005 and FY2007, whereas before the Consolidated Fund was expected to be self-financing over this period.

Figure 2.5: Timor-Sea Central Case Revenue Scenarios May 2002 to May 2004 (US$ mn)



Revenue estimates presented in the FY2004 Mid-Year Budget Update (MYBU) pointed to further reductions in Timor Sea revenues in FY2004 through FY2007, widening the financing gap. On the basis of these estimates the Government cut FY2004 expenditures by US$5.1 million (about 6 percent of the original budget) and reduced forward estimates for FY2005 through FY2007 by US$30 million. At the same time, the Government requested an extension of budget support beyond FY2005 for an extended "lean period" in FY2006 and FY2007. Revenue estimates were revised once again in April 2004, half way through the FY2005 budget process. This time estimates pointed to a significant increase in Timor Sea revenues in FY2005 through FY2007, as a result of increases in oil prices, the acceleration of the production schedule and postponement of tax depreciation allowances. These changes in the Timor Sea revenue estimates, combined with reductions in forward estimates for expenditures and increases in domestic revenues, led to a significant reduction in the projected financing gap, now estimated at US$30 million for the period through FY2008 (see Table 2.1).

2.11 **Continued uncertainty over the level of Timor Sea revenues and, consequently, financing requirements will remain a feature of fiscal planning over the next two to three years.** This is partly due to production risks, with revenues depending on the output of one major project, Bayu Undan, as the existing Elang Kakatua Kakatua North (EKKN) project gradually winds down over the next few years. At the time of the FY2004 budget, the 2004 liquids production was projected at 22 million barrels (bbl): this was revised downwards to 12 million bbl at the time of the FY2004 MYBU and has subsequently been revised upwards to 15 million bbl. During the start-up phase, with the pipeline expected to open in 2006, further revisions in production schedules can be expected. There are also price uncertainties. The Government has

Table 2.1: Consolidated Fund Financing based on FY2004 MYBU (Following Current Savings Policy)

Component	FY01 Actual	FY02 Actual	FY03 Actual	FY04 Est.	FY05 Budget	FY06	FY07 MTEF	FY08	Total FY05-08
Revenue	**27.2**	**31.3**	**48.8**	**57.4**	**67.1**	**86.4**	**110.7**	**103.9**	**368.1**
Domestic Revenues	14.1	20.5	19.3	26.1	23.0	23.8	25.0	26.6	98.4
Timor Sea Revenues	13.1	10.8	29.5	31.3	44.1	62.6	85.7	77.3	269.7
Consolidated Fund Expenditures	**51.3**	**52.6**	**70.8**	**74.6**	**75.1**	**78.9**	**81.9**	**84.2**	**320.1**
Overall Balance (-deficit)	**-24.1**	**-21.3**	**-22.0**	**-17.2**	**-8.0**	**7.5**	**28.8**	**19.7**	**48.0**
Net Financing:	**24.2**	**21.3**	**22.0**	**17.2**	**8.0**	**-27.4**	**-29.3**	**-29.6**	**-78.3**
External Financing (Grants)	31.6	22.7	33.8	35.7	30.8				30.8
Consolidated Fund Reserves (- increase)	-4.3	2.8	-8.7	-13.9	2.9				2.9
Timor-Sea Account (- increase)	-3.1	-4.3	-3.1	-4.6	-25.7	-27.4	-29.3	-29.6	-112.0
Financing "Gap"	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**-19.9**	**-0.5**	**-9.9**	**-30.3**
Memorandum: Balances end of period									
Timor Sea Account	3.1	7.4	10.5	15.1	40.8	68.2	97.5	127.1	

Source: Ministry of Planning and Finance and Bank estimates.

projected oil revenues on the basis of a two year moving average of market expectations, with central case scenarios at US$25.41 per bbl in 2004 falling gradually to US$23.26 in 2008. These prices are well below current market prices, but are broadly in line with World Bank forecasts prepared in April 2004 and higher than the market average of US$21 since 1986. There are also uncertainties about taxation, with increases in the cost of the LNG plant compounded by appreciation of the Australian dollar, leading to increased depreciation charges. Scenarios prepared by the Ministry of Planning and Finance demonstrate the impact of changes in production and prices. Under the Ministry's high case scenario (prices at US$28 per bbl, closure of the EKKN field in 2006 and reserves 18 percent higher than under the central scenario), revenues in FY2005 through FY2008 are estimated at US$120 million higher than the central case, eliminating the financing gap from FY2006. Under a low case scenario (prices at US$22 per bbl, early closure of EKKN and production reserves 16 percent lower than the central case), revenues in FY2005 through FY2008 are US$110 million lower than the central case, creating a financing gap of around US$130 million for the period.

2.12 **Notwithstanding the short-term uncertainties, the medium- to long-term fundamentals remain sound.** The overall volume of Timor Sea revenues is unchanged—with a net present value estimated at US$1,770 million, based on the current central production and price scenario—the revenues have merely been postponed. In this context, the remainder of this section addresses the policy challenges for Government and development partners in dealing with uncertainty and possible shortfalls in revenues during the period before FY2009, when Timor Sea revenues are expected to approach US$200 million. Box 2.1 examines some of the fiscal policy challenges to be addressed in preparing for a significant increase in oil and gas revenues.

2.13 **The downward adjustments to the forward expenditure estimates during the FY2005 budget process have brought expenditures in line with a sustainable financing scenario but leave no room for further cuts.** Forward estimates now provide for modest increases in Consolidated Fund expenditures from US$75 million in FY2005 to US$84 million in FY2008. This gives little scope for the expansion of services or public investment. From a poverty reduction and development perspective, savings should be identified from unproductive sectors and administrative overheads before cutting priority programs and service delivery. Sections D and E, which examine the functional and economic composition of expenditures, demonstrate that FY2005 budget adjustments have been broadly in line with these principles. Education and health have maintained their expenditure shares, albeit within a lower level of aggregate expenditure, and across all sectors most of the cuts have come from goods and services and minor capital in an effort

to curtail wasteful expenditures on administrative overheads. There is no slack for further cuts should forward revenue estimates fail to materialize. This rebasing of expenditures provides a sound basis for managed increases in expenditures, guided by the cross-governmental and sector expenditure priorities laid out in the Sector Investment Programs. The challenge will be to ensure that increases in sector expenditures are kept within financing limits and avoid excessive expenditure growth. At the same time, Government will have to take into account alternative sources of financing by programming resource allocations on a Combined Sources basis. If these objectives are to be achieved, the Government will have to revise its Medium-Term Expenditure Framework fairly early in FY2005, so as to establish revised budget limits for the FY2006 budget process and guide bilateral partners allocations of funds as new country programs are negotiated (see Chapter 3, Section F).

2.14 **Whilst there is some scope for redirecting external assistance to cover priority recurrent expenditures, thereby reducing expenditure pressures, continued underreporting of externally financed expenditures increases risks to the expenditure scenario.** Several external assistance projects currently finance recurrent expenditures that would otherwise be financed from the Consolidated Fund. These include: medicines and medical supplies, road maintenance, veterinary supplies, school books, operation of the Oecussi ferry, and police operating costs. There may be scope for extending external financing to other recurrent expenditure items. However, these expenditures need to be identified separately so that provision can be made for on-going financing in forward estimates. This would also help to improve transparency, by providing a more accurate picture of total expenditures. Lack of information on the recurrent costs covered by external assistance programs and projects—particularly those in the police services—constitutes a significant risk to the expenditure program, since this prevents a planned adjustment in service or financing levels as external assistance winds down. These risks are particularly acute if projected revenue flows fail to materialize over the short-term, since there will be little slack to absorb unprogrammed increases in expenditures and the burden will have to fall on reductions in service levels. Solutions lie in improved financial reporting by external partners, so as to ensure that external financing of both recurrent and non-recurrent expenditures is taken into account in the preparation of Sector Investment Programs and the sectors' forward expenditure estimates.

2.15 **The FY2005 budget projects further increases in domestic revenues, but these will have limited impact on the overall level of financing and expenditure.** Domestic revenues in FY2003, at US$19.3 million, were about 10 percent higher than programmed, with further unprogrammed increases in domestic revenues in FY2004, to around US$26 million. This was largely due to improvements in tax and customs administration, notably as a result of the introduction of a new customs information system, ASYCUDA. Domestic revenues are expected to fall to US$23 million in FY2005, owing to further contraction in the economy. Thereafter, MPF projections point to modest revenue growth to just over US$26.6 million by FY2008. The scope for additional resource mobilization from domestic sources over the short term is limited given current capacity and the narrow revenue base. Much will depend on the strength of the economy over the next few years. Nevertheless, the Government may be able to introduce some new revenue measures over the next few years by, for instance, procuring fuel competitively and introducing a fuel levy over part of the reduction in unit costs (see Chapter 3, Section C).

2.16 **Modest funding could be raised from one-off asset sales, though the real benefit of asset disposal is most likely to come from reduced pressures on expenditures.** As the UNMISET mission winds down, vehicles, generators, office equipment and installations will be transferred to Government. Although the inventory is yet to be finalized, the residual value of equipment is estimated at about US$11 million. A potentially larger number of assets could be transferred by departing Peacekeeping Forces (PKF). One departing PKF unit has already begun

the transfer of a large inventory of PKF construction equipment, prefabricated houses, and field equipment, with a residual value of around US$20 million. Asset transfers are difficult to refuse, but the budget may not be able to cover operating costs without severely distorting the expenditure program. The Government is currently reviewing options for asset disposal, including sale and leasing of equipment to private contractors through transparent and competitive mechanisms. Although the funds mobilized through these measures may be much less than the book value of assets, disposal will avoid unproductive expenditures. Bilateral partners will need to adopt a flexible approach to asset disposal if they are to ensure that Timor-Leste benefits from asset transfers.

2.17 **Clearly, there is limited scope to accommodate any shortfall in Timor Sea revenues from additional expenditure and revenue measures and so adjustment would have to be managed by mobilizing additional financing**. Here the Government is faced with three options: firstly and preferentially, an extension of grant financed budget support; secondly, limited concessional borrowing; and thirdly, changes in Timor Sea savings policy.

2.18 **A strong case can be made for extended grant-financed budgetary support where the Government implements a pro-poor expenditure program, has effective expenditure controls in place and where there is adequate dialogue on expenditure priorities.** The Government has maintained its request for an extension of TSP arrangements through to FY2007 in the FY2005 budget, albeit at US$30 million rather than the US$70 million as proposed following the FY2004 MYBU. This would be sufficient to close the projected financing gap through to FY2007, allowing the Government to maintain its current savings policy for Timor Sea revenues and maintain some Consolidated Fund reserves as a precautionary measure against fiscal shocks. Recognizing that Timor Sea revenues may be higher than projected, the Government has indicated that if programmed budgetary support is not needed to cover a financing gap, budgetary support would be used to increase capital and development expenditures on projects and programs agreed with the financing partners. This follows the rationale of the expenditure program agreed with external partners at Independence and which served as the basis for the first TSP, where a quarter of outer-year forward expenditures were allocated to capital and development spending in order to build capacity for project management prior to significant increases in Timor Sea revenues (see para 2.9). For some external partners the allocation of external assistance as budgetary support over the coming two to three years may be preferable to project assistance regardless of the level of Timor Sea revenues. Government may also wish to explore options for sector budgetary support, whereby external financing is targeted to specific programs, since this may be feasible for external partners that are not able to provide general budget support. However, if grant financed budgetary support is to be sustained close to present levels, mechanisms will need to be in place to involve external partners in the policy process and the programming of expenditures. Building on the TSP experience and the recent work on Sector Investment Programs, the introduction of stakeholder working groups, including external partners, could provide a framework for extended general and sector budget support over the medium term (see Chapter 3, Section F).

2.19 **The Government has prudently avoided borrowing to date and would only need to undertake concessional borrowing for budgetary support if there are significant shortfalls in Timor Sea revenues.** Decisions regarding the appropriate financing policy should follow an assessment of debt management and policy requirements. They should also take account of the opportunity cost of alternative financing strategies: the cost of concessional borrowing may be significantly lower than the income forgone on savings. However, from an economic perspective it is preferable to use borrowing to finance investments. In this context, concessional borrowing would be most appropriate in financing projects identified in the Sector Investment Programs which are not yet reflected in the Consolidated Fund investment program.

Box 2.1 Developing Fiscal Policies to manage Timor Sea windfalls

The experience of the few oil rich countries that have been able to make effective use of their revenue windfalls underlines the importance of establishing a sound, transparent and widely understood governance framework for the management of Timor Sea resources (see Box 3.1). Equally important is the rigorous application of prudent fiscal policies. Key considerations in the formulation of these policies include:

- ***Establishment of mechanisms to ensure that expenditure decisions are subject to appraisal, monitoring and periodic evaluation, thereby promoting policy consistency, efficiency and effectiveness in the application of public funds.*** *The recent rebasing of forward estimates during the FY2005 budget process will stand the Government in good stead, providing an opportunity to realign expenditures with the policy priorities defined in the Sector Investment Programs as the resource envelope expands. The institutional capacity to use financing to support service delivery efficiently and effectively will need to be tested through periodic expenditure reviews, since excess financing is likely to be wasted on administrative overheads. At the same time, agencies will need to put in place mechanisms to appraise individual projects and spending decisions to ensure that these are consistent with policy priorities. This expenditure review focuses on the institutional and policy measures needed to achieve this objective.*
- ***Definition of the sustainable level of draw-down against Timor Sea revenues consistent with long-term savings objectives.*** *This is a function of the structure of the revenue stream, assumptions regarding discounting of revenues and investment income, and policy decisions regarding the target level of assets assigned to the perpetual fund. On the basis of fairly conservative assumptions (a long-term interest rate of 2.25 percent and a 5 percent discount rate), a draw down of around one-third of Timor Sea revenues would leave sufficient savings to fund income in perpetuity of US$65 million a year in real terms. This is broadly in line with current levels of recurrent spending. Clarity regarding the savings objectives and their implications for draw-downs on Timor Sea revenues is essential. At the same time, some flexibility is needed. Price and production scenarios will change and the target level of assets and sustainable draw down will need to be adjusted accordingly. Specific rules may be needed to control the use of Timor Sea savings for the purposes of short-term fiscal stabilization, to limit on year-on-year increases in expenditures, so as to smooth the expenditure path, and to prevent borrowing against future Timor Sea revenues.*
- ***Use of Timor Sea revenues primarily to finance investment rather than consumption.*** *Spending on infrastructure and human capital will provide a foundation for economic growth, excessive spending on consumption will bring limited returns and could be destabilizing. Ideally, expenditures should aim to improve the competitiveness of the non-oil sector by providing access to roads, communication, energy and water, as well as developing education and health services, particularly outside the capital. The availability of funding for operation and maintenance of infrastructure and priority services will be an factor in determining the sustainable level of investment.*
- ***Development of the domestic revenue base.*** *Reductions in tax rates may be an alternative to expenditures, where they help to improve the competitiveness of the non-oil sectors. However, the costs and benefits of changes in tax policy should be carefully assessed. Tax policy is best applied evenly, rather than through widespread exemptions. Furthermore, it is important to maintain an adequate domestic revenue base. Once the sustainable draw-down has been determined, domestic revenue mobilization will drive the level of incremental financing. Indeed, over the project lifetime, the contribution of Timor Sea revenues to total revenues should gradually decline as the economy grows and domestic tax revenues increase from their current low base of 8 percent of GDP to levels comparable in other low income countries.*

2.20 **While the Government could also draw down on Timor Sea royalties and savings if there are significant shortfalls in Timor Sea revenues, this should only be considered once a savings policy and the institutional framework for management of these savings are in place.** The Government's current savings policy provides for the retention of FTP (royalties) and investment income, whilst Timor Sea taxes are applied to the budget. Application of savings or FTP revenues in closing a financing gap would imply a change in savings policy. While technically

there is little difference between components of the revenue stream, the policy implications are profound: used once, the royalties will no longer be viewed as the sacrosanct foundations of the perpetual fund. In this context, it is critical that changes in the savings policy are integrated into the legal framework for management of Timor Sea revenues, incorporating appropriate governance structures. Both the savings policy and the institutional arrangements should be defined through a transparent and consultative process, ensuring that there is broad understanding among all stakeholders, including the wider public, of how Timor Sea revenues will be managed (see Box 3.2). A broad consensus and public understanding of these rules is perhaps the most effective safeguard in protecting the perpetual fund. In this context, it is important to ensure that alternative financing mechanisms are available to cover the financing gap until the perpetual fund is put in place.

2.21 **In order to avoid recourse to Timor Sea account savings to cover fiscal shocks, such as unprogrammed reductions in Timor Sea revenues, the Government will need to build up adequate Consolidated Fund reserves.** This is particularly important given the risks associated with revenues derived from a single project on the Bayu-Undan field. Some allowance for these risks has been made in the Timor Sea revenue forecasts by discounting the revenue stream by 15 percent. Nevertheless, prudential savings are essential to cushion against unforeseen project delays or other external shocks. Ideally, these savings should be sufficient to cover, with domestic revenues, recurrent expenditures for at least one year, allowing Government sufficient time to make expenditure adjustments and arrange financing. This points to an appropriate level of prudential savings of around US$50 million. Forward estimates presented in the FY2005 budget indicate that the Government intends to retain some Consolidated Fund reserves, albeit at a lower level of around US$27 million. Once the savings policy is in place, with clear rules regarding the draw-down on Timor Sea savings for the purposes of fiscal stabilization, the appropriate level of Consolidated Fund reserves can be reassessed.

D. Functional Composition of Expenditure

2.22 **The broad structure of Consolidated Fund programmed expenditure remains consistent with the Government's poverty reduction and development objectives.** However, it is unlikely that the Government will be able to achieve the ambitious targets for growth in the social sectors' expenditure shares presented in the National Development Plan (NDP) at Independence. Expenditures on general public services remain much higher than originally anticipated, largely because the costs of establishment of governance structures were not reflected in earlier budgets. Furthermore, there is continuing concern that the level of expenditure on key economic infrastructure, particularly roads, is insufficient to meet Timor-Leste's development needs. The remainder of this section reviews the changing functional composition of expenditures in light of Government's stated policy objectives. In this context it should be stressed that the most recent allocations, presented in the FY2005 budget, are provisional. Once the Sector Investment Programs are finalized in the lead up to the FY2006 budget, the overall composition of expenditures will be adjusted to take account of revised revenue and external financing estimates.

2.23 **The FY2004 and FY2005 budgets kept education and health's share of total spending at about one third of total spending.** Education spending is programmed as falling in FY2004, in part due to poor execution at the time of budget preparation, particularly as regards capital expenditure (see Table 2.2). The education sector's share of total spending stabilizes thereafter. The health sector's share of total spending increases gradually to 14 percent by FY2007. Although it is recognized that complementary external financing—particularly for basic inputs such as medical supplies and education materials—may reduce the need for increased Consolidated Fund spending over the medium-term, these trends are discouraging in view of the high priority given to

these sectors by citizens during NDP consultations and their poverty reduction impact. In the education sector, increases in allocations are warranted to support improvements in the quality of education throughout the system and further expansion of junior and senior secondary schools.

Table 2.2: Structure of Consolidated Fund Spending by Function, %

Function	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
	Act	Act	Act	MYBU	Budget		MTEF	
General Public Services	38	21	16	16	17	17	17	17
Defence	1	8	7	8	8	8	8	8
Public Order and Safety, of which	11	13	15	14	13	13	13	13
Police Services	*7*	*10*	*12*	*12*	*11*	*11*	*11*	*10*
Judicial Services	*3*	*2*	*2*	*1*	*1*	*1*	*1*	*1*
Economic Affairs, of which	21	22	22	22	21	20	19	20
Agriculture, Forestry, Fisheries	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
Fuel and Energy	*16*	*13*	*12*	*9*	*8*	*5*	*4*	*4*
Transport	*2*	*6*	*5*	*8*	*9*	*10*	*10*	*10*
Environmental Protection	-	-	-	-	-	-	-	-
Housing and Community Development	3	4	3	3	3	4	4	4
Health	6	10	11	11	13	13	14	14
Recreation, Culture, Religion	-	-	1	1	1	1	1	1
Education	20	22	23	21	22	22	22	22
Social Protection	-	-	-	-	0	0	0	0
Unclassified	-	-	2	2	1	1	1	1
Total Appropriations	100	100	100	98	100	100	100	100

Source: FY01, FY02 and FY03 from Financial Statements; FY04 MYBU; FY2005 to FY2008 from draft Budget Papers of May 2004. Functional based on one-to-one pairing at program level

2.24 **Programmed expenditure shares for defense and public order and safety are expected to stabilize at 18 percent of Consolidated Fund expenditures to FY2008.** Recent increases in spending on public order have been directed towards PDTL, mainly to support higher staffing levels (which have increased by almost 20 percent since FY2002) and increased operating expenditures. The FY2005 MTEF caps future police spending. However, there are significant risks to this scenario because the substantial—though still unquantified—subsidization of operations by UNPOL has not been factored into forward estimates. This may give rise to pressure for increases in police spending in the FY2006 and subsequent budget exercises in order to avoid reductions in police operating expenditures. Improvements in information on total expenditures on police operations should continue to be a priority. Spending on the judiciary, at just 1 percent of Consolidated Fund spending, is modest in relation to the level of spending on policing. It also provides limited resources for newly created independent institutions—notably the Superior Councils for Public Prosecutors and Public Defenders—and the scheduled expansion of services with the reopening of district courts in Suai and Oecussi. Again, there are likely to be pressures to increase allocations in FY2006.

2.25 **Allocations for general public services declined sharply in the period before Independence, but have now leveled off at around 17 percent of programmed expenditures.** General public services—including Parliament, the Presidency, Ombudsman, the central bodies and support services of the executive including the Ministries of State Administration, the Ministry of Planning and Finance, the Ministry of Foreign Affairs and foreign representation—represent a substantial fixed cost on a relatively small public sector. Previous budgets anticipated a reduction in the sector's expenditure shares during the outer years of the expenditure plan in order to free resources for service delivery functions. Instead, expenditure shares have had to be revised upwards to provide adequate resources for new governance agencies and provide stable allocations for independent institutions. In this context, the Government has indicated its intention to ring-fence these allocations so as to protect the independent institutions from in-year adjustments in

spending. While the general public services allocations merit continued review to ensure efficiency and effectiveness, there is little scope for savings and so future reductions in the share of general public services will depend on growth in the expenditure base. Pressures for increases in expenditures on administration remain, notably for local government. The Government is currently reviewing an options paper on local government reform. Rough estimates of the annualized costs of the various options are presented in the study. The key cost drivers will be the number of levels and units of local administration, final staffing levels and their functional responsibilities. In view of capacity and financing constraints, the Government has opted for a gradual establishment of municipal administrations at the District and possibly sub-district levels. This is only likely to have an impact on expenditures at the outer years of the plan.

2.26 **The economic sectors, notably transport infrastructure, but also agriculture and private sector support services, have consistently been under-funded, a situation aggravated by cuts in forward estimates during the FY2005 budget process.** At Independence, attention focused on the need for reductions in subsidies to the power sector, which accounted for 13 percent of Consolidated Fund expenditures in FY2002, in order release funds for productive and poverty reduction spending. The power sector's financial position now appears to stabilized and reduced allocations are anticipated (see Box 2.2). The FY2004 budget and MTEF provided for significant increases in spending on transport, from 5 percent of outturns in FY2003 to 12 percent of programmed expenditure in FY2007, mainly for road maintenance, and modest increases in the expenditure shares for agriculture and other economic services. According to the PER Roads Sector expenditure model, these increases would have been sufficient to cover the routine and periodic maintenance costs for a core network of about 1,400 km of roads over the medium-term. During preparation of the FY2005 budget, transport sector allocations were cut back to 10 percent of Consolidated Fund expenditures—a reduction in allocations for FY2007 in forward estimates from US$11.2 million to US$7.9 million—largely owing to reductions in capital spending, pending the completion of the Sector Investment Programs. Given that an effective road transport network

Box 2.2: Controlling Power Sector Subsidies

At Independence, reduction in power sector subsidies through improved cost-recovery was seen as critical to the release of resources for poverty reduction and development expenditures. Power subsidies absorbed 13 percent of Consolidated Fund expenditures in FY2002, more than spending on the health sector. Power sector cost recovery improved in FY2003, largely due to settlement of public sector and commercial arrears late in the year. Further improvement in cost recovery during FY2004, notably in the third quarter, together with external financing of fuel purchases amounting to US$1.1 million, has allowed a reduction in subsidies to an estimated 9 percent of Consolidated Fund expenditures.

The mechanisms needed to improve revenue collections have now been put in place. A management team took over responsibility for Timor Leste Electricity (EDTL) in March 2004. The management contract incorporates incentives for improved commercial performance, through a flat fee and a bonus linked to reductions in sector subsidies. The installation of pre-payment meters, which started in 2003, has been stepped up: by the end of the third quarter about 7,000 meters had been installed against a target of 10,000 units. A further 17,000 pre-payment meters have been ordered. Disconnections for non-payment are now enforced and mechanisms put in place for the collection of arrears. At the same time, efforts are being taken to reduce operating costs. Perhaps the most significant of these is the contracting of fuel supplies, which are significantly higher than regional rates: a 20 percent reduction in fuel prices would reduce EDTL's operating costs by about US$1.6 million. The draft Sector Investment Program identifies further investments to reduce costs (investments in the network to reduce distribution losses, a pipeline to reduce fuel transport costs from the terminal) and demand (proposed distribution of compact fluorescent lamps), which would result in further savings. These developments are reflected in the FY2005 budget, which anticipates a gradual reduction in subsidies from 7.5 percent of Consolidated Fund expenditures in FY2005 to just 3.6 percent in FY2008.

is critical to the achievement of development objectives across all sectors, further increases in spending merit high priority. While rehabilitation expenditures may be covered by external project financing, the recurrent costs of road maintenance will have to be programmed in Consolidated Fund forward estimates. In order to ensure an adequate basis for forward planning, since the viable road network will depend on the availability of maintenance funding, some consideration should be given to protecting the road maintenance budget from any future expenditure adjustment.

2.27 **Changes in the functional composition of Consolidated Fund expenditures are highlighted when expenditure estimates presented in the FY2004 MYBU and FY2005 budget are compared with those of the National Development Plan of May 2002** (see Table 2.3). NDP forecasts only covered recurrent spending, since the capital and development budget was held in reserve, and so for the purpose of comparison only MTEF recurrent expenditures are used, resulting in a slightly different structure to that shown in Table 2.2 above. Nevertheless, it is worth noting that: health and, most notably, education's shares of recurrent spending are now programmed to grow at a much slower pace than originally anticipated; general public services' share (broadly core state functions) is expected to increase rather than decline; and allocations for economic affairs are significantly higher than originally anticipated, largely due to the continued subsidies for the power sector and increases in transport sector allocations relative to those presented in 2002.

Table 2.3: Comparison of NDP and FY2005 Budget and MTEF Recurrent Expenditure Allocations, %

Function	NDP		MYBU MTEF	
	FY04	FY07	FY04	FY07
General Public Services	14	11	15	19
Defence	8	6	9	9
Public Order and Safety	15	12	16	15
Economic Affairs	14	9	19	13
Water, Environment, Community	5	6	3	3
Health	13	17	12	16
Education	31	39	24	23
Unallocated	-	-	2	2
Total Appropriations	100	100	100	100

Source: NDP, May 2002; FY04 MYBU; draft FY2005 budget papers.

2.28 **There are marked differences in the pattern of Combined Sources expenditures to that seen for the Consolidated Fund.** Table 2.4 presents Combined Sources expenditures up to FY2004 (thereafter the limited portfolio of approved projects provides an unreliable picture of the future structure of expenditure). General public services accounted for about a quarter of Combined Sources spending during this period. This was partly due to the large number of United Nations technical assistance assigned to core government institutions, such as the Ministries of Planning and Finance, State Administration and Government Structures. These allocations drop sharply in FY2004 and beyond as the UN program winds down. Allocations to economic affairs are comparable to those for the Consolidated Fund, though a substantial share of the external assistance is allocated to agriculture and economic support services—contrasting with the low levels of Consolidated Fund spending in these sectors. Allocations for community development are also significantly higher than those for the Consolidated Fund, largely due to the high level of bilateral and TFET assistance in water supply, community and area development programs. In the social sectors, Combined Sources allocations to social protection were substantial in FY2001, primarily for humanitarian assistance activities that have now largely phased out. Surprisingly, health Combined Sources expenditures are now equivalent to those for the education sector, underlining the extent to which the health sector has benefited preferentially from external financing.

Table 2.4: Structure of Combined Sources Budget by Function, %

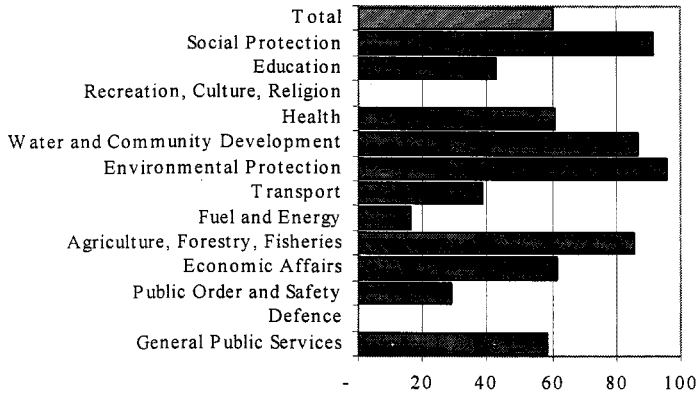
Function	FY01	FY02	FY03	FY04
	Estimates			Budget
General Public Services	27	25	24	16
Defense	0	2	2	3
Public Order and Safety	6	5	7	8
Economic Affairs, of which	26	26	21	23
Agriculture, Forestry, Fisheries	*6*	*7*	*7*	*6*
Fuel and Energy	*6*	*6*	*6*	*4*
Transport	*8*	*7*	*5*	*5*
Environmental Protection	1	1	1	1
Water and Community Development	9	11	12	11
Health	7	8	14	15
Recreation, Culture, Religion	0	0	0	0
Education	12	13	15	15
Social Protection	10	8	3	2
Unclassified	1	2	1	6
Total Expenditure	**100**	**100**	**100**	**100**

Source: Consolidated Fund FY01, FY02 and FY03 from Financial Statements; FY04 to FY07 from Budget Papers. External Assistance from REA database estimates. Functional based on one-to-one pairing at program level for CF and project for REA.

2.29 **There is a high degree of dependence on external financing in most sectors, but particularly so in key poverty reduction sectors including agriculture, water and community development, and health, where external assistance accounts for more than 70 percent of Combined Sources expenditure** (see Figure 2.6). Such high levels of external dependence are of particular concern in light of the impact of the likely reduction in levels of external assistance, since external financing supports programs with a direct impact on service delivery and key inputs such as medicines, school books and veterinary supplies. Unfortunately, no assessment has been made of the induced costs of this external assistance, in terms of operational expenditures that would have to be transferred to the Consolidated Fund to sustain externally financed activities in the longer term. However, even assuming that induced costs are just 20 percent of the external assistance, the implications for aggregate and sector expenditures are significant: on this basis Consolidated Fund expenditures would have to double to sustain externally financed agricultural programs under implementation in FY2004.

2.30 **The recurrent budget implications of external assistance projects and programs should be clarified during the preparation of Sector Investment Programs and revised during each budget exercise**. This requires collaboration from external partners in providing information on the recurrent budget goods and services they finance. MPF has set up a Registry of External Assistance and regularly requests updated information on external assistance by project. However, the poor quality of information provided by external partners makes it difficult to integrate projects into the Government's budget framework. Furthermore there are often substantial discrepancies between the value of assistance provided by external partners and the records of recipient agencies. Lack of detailed information on external financing increases the risk of expenditure drift, since insufficient budgetary provision is made for programs with approved external financing leading to unprogrammed increases in allocations during implementation.

Figure 2.6: External Assistance as Share of Combined Sources Programmed Expenditure FY2004, %



2.31 **One way of ensuring that expenditures are aligned with policy priorities is to define prioritization criteria in budget documentation, identify priority programs and protect these programs from cuts in expenditure.** From a poverty reduction and developmental perspective, the key priorities are those identified in the NDP: delivery of social services, maintenance of basic infrastructure, such as roads, and services that contribute to production, particularly in agriculture and support to small-scale businesses. Mobilization of Consolidated Fund resources for these sectors requires tight control over non-productive expenditures (such as agency administrative overheads and core state functions such as defense, security, foreign affairs, public administration) and willingness to cut non-productive expenditures when the resource profile is compressed. Some countries have sought to target resources by treating high priority poverty reduction programs (such as primary education, primary health care, and road maintenance) as a virtual poverty fund for the purposes of expenditure planning. High priority programs are clearly flagged in budget documentation, gaining preferential access to funding when the resource envelope increases, but are ring-fenced when the resource envelope contracts. A similar approach might help Timor-Leste ensure that priority programs receive preferential financing during future budget exercises. However, care must be taken to ensure that the criteria for determining which programs are priority are clearly defined and agreed across Government. Criteria might include, for instance, the extent to which the services provided are used by the poor and the proportion of funding allocated to service delivery.

2.32 **Prioritization also requires adequate costing of expenditure programs, based on clearly defined sector policies**. Poor costing leads to foot-in-the-door expenditures, where agencies present policy proposals with low initial costs that subsequently require supplementary funding. In this context, the agencies' creation of new departments and embassies and new functions present particular risks. These risks are best addressed by the agencies themselves, within the context of hard budget constraints applied throughout the budget process. A start has been made on this process through the preparation of Sector Investment Programs. However, given the continuing development of sector policies and limited information of key program cost drivers further work on the development of sector expenditure programs will be needed in the coming years.

E. Economic Composition of Expenditure

2.33 **Forward estimates point to much lower levels of capital spending than programmed at Independence.** The FY2002 budget proposed significant Consolidated Fund capital and development expenditures to support investments in infrastructure, with capital spending amounting to about US$25 million a year in the outer years of the plan. The intention was to build up capacity in investment management through Government systems after Independence so that institutions would be better equipped to manage Timor Sea revenues when these came on stream. These capacity building objectives remain valid, particularly in view of the proposed expansion of capital programs in infrastructure under the Sector Investment Programs and the gradual winding down of TFET projects. However, faced with successive reductions in the medium-term resource envelope, the proposed capital program has been cut back drastically, amounting to less than US$40 million for the period FY2004 to FY2008, as compared with the US$90 million originally proposed. Programmed capital and development expenditures amount to just 9 percent of spending in FY2004, increasing slightly to 13 percent by FY2008. Once the Sector Investment Programs have been finalized, providing a portfolio of investment projects reflecting the Government's development policies and priorities, there will be a strong case for increasing capital spending from Consolidated Fund resources.

Table 2.5: Economic Structure of Consolidated Fund Expenditure (US$ million)

Component	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08
		Actual		MYBU		MTFF		
Recurrent	29.6	41.1	56.1	67.1	66.7	69.6	71.8	73.3
Salaries & Wages	13.9	18.8	21.9	25.8	28.2	28.9	29.5	30.0
Goods & Services	15.7	22.2	34.2	38	36.8	37.8	39.6	40.4
Minor Capital	-	-	-	3.2	1.7	2.9	2.7	2.8
Capital	21.7	11.5	14.6	7	8.4	9.3	10.1	10.9
Total Expenditure US$	**51.3**	**52.6**	**70.8**	**74.1**	**75.1**	**78.9**	**81.9**	**84.2**
Recurrent %	*57.7*	*78.1*	*79.3*	*90.6*	*88.9*	*88.2*	*87.7*	*87.0*
Salaries & Wages	*27*	*35.8*	*30.9*	*34.9*	*37.5*	*36.6*	*36.0*	*35.6*
Goods & Services	*30.7*	*42.3*	*48.4*	*51.3*	*49.0*	*47.9*	*48.3*	*48.0*
Minor Capital	-	-	-	*4.4*	*2.3*	*3.7*	*3.3*	*3.4*
Capital %	*42.3*	*21.9*	*20.7*	*9.4*	*11.1*	*11.8*	*12.3*	*13.0*

Source: FY01, FY02 and FY03 from Financial Statements; FY05 to FY08 from Draft Budget/Background Paper, May 2004.

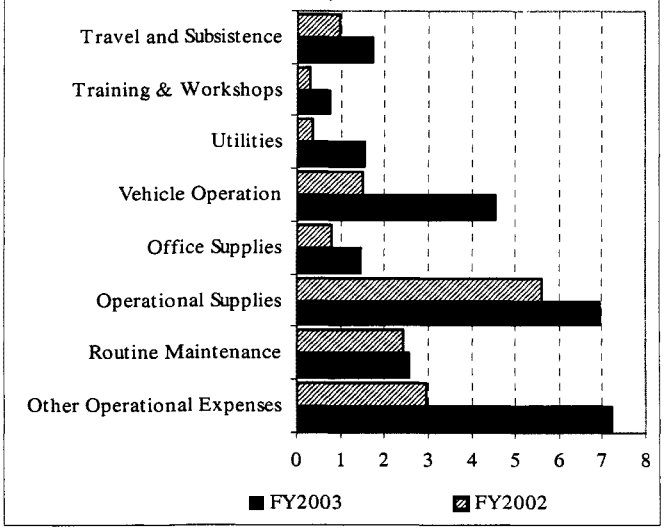
2.34 **During the FY2005 budget exercise forward estimates for recurrent spending were revised downwards, providing for minimal growth over the period to FY2008.** Previous budgets were broadly in line with NDP forward estimates: the FY2004 MTEF provided an increase in recurrent spending from US$67 million in FY2004 to US$83 million in FY2007, as compared with the NDP estimates of US$86 million for FY2007. The FY2005 MTEF provides for just US$73 million in recurrent spending by FY2007. There has been a slight reduction in programmed spending on wages and salaries. However, most of the cuts in recurrent spending are against allocations for goods and services and minor capital. This reflects Government's response to the reduced financing levels following the FY2004 MYBU and evidence of rapid growth administrative overhead expenditures. The Government has effectively re-based expenditures, so as to focus attention on priority service delivery activities. This decision was a sound policy decision. By cutting expenditures in early FY2005, when projected revenues indicated a need for significant budgetary compression, the Government has created an opportunity to realign the structure of forward estimates during FY2006 on the basis of an expanded expenditure profile. By this time, the Sector Investment Programs should provide a sounder basis for assessing the relative priority between sectors and programs.

2.35 **Personnel costs, at 35 percent of recurrent expenditures in FY2004, are comparable to other low-income countries.** So too are staffing levels, with permanent civil servants amounting to about 3 percent of the working-age population (public sector employees about 4.4 percent). MTEF estimates provide for a 16 percent increase in personnel costs to FY2008, primarily for the implementation of a revised public sector pay policy (see Chapter 4, Section C). Staffing limits agreed with budget support partners, through the TSP process, cap the number of permanent public sector employees at 17,200 (see Chapter 4, Section B). Preliminary estimates suggest that no provision has been made for increases in staffing beyond the present budgeted levels. Nevertheless, there is still pressure from agencies to increase staffing levels. Recent proposals have included increases in FDTL staffing and numbers of health workers, which would bring the total number of public employees over their TSP limits. If increases in staffing levels for specific programs were to proceed, cuts in budgeted posts would be required elsewhere in the staffing profile.

2.36 **Goods and services constituted over 50 percent of total Consolidated Fund expenditure in FY2004, with a substantial and growing share of these expenditures used to**

cover administrative overheads. Goods and services spending increased from US$22.2 million in FY2002 to US$34.2 in FY2003. Four categories of expenditure account for half this increase and one-third of total goods and services spending in FY2003: travel and subsistence, utilities, vehicle operation and office supplies (see Figure 2.7). Of these categories, expenditure on utilities has grown fastest, largely because agencies have assumed telephone and electricity charges that were previously covered by UNTAET. Over the last two years, spending on vehicle operation tripled and now accounts for an extraordinary six percent of *total* Consolidated Fund expenditure, while travel and subsistence doubled, with a large part of these funds going to international travel. Preliminary results for FY2004 suggest that these categories continue to grow rapidly: by the end of the first quarter, for instance, many agencies had nearly exhausted their *annual* vehicle operations allocations, and around three-quarters of the *annual* allocation for official travel had already been spent. Also of concern is the increase in "Other Operational Expenses", a catch-all category that includes some off-payroll personnel payments to contractors. This item more than doubled from FY2002 to FY2003, when it accounted for nearly 10 percent of *total* Consolidated Fund expenditure. These trends all point to a high degree of administrative capture, with charges that benefit central agencies and their staff crowding out funding for service delivery.

Figure 2.7: Actual Spending on Goods & Services US$ m, FY2002 and FY2003



2.37 **Increases in some administrative overhead costs have been driven by the proliferation of vehicles, computers, mobile phones, air conditioners and other equipment.** Growth of the vehicle inventory is largely due to UNTAET transfers, but there have also been some transfers from projects and direct acquisitions. At the end of FY2003, the Government asset register included 1,969 operational vehicles (1,037 cars and trucks and 932 motorbikes). This corresponds to one vehicle for every eight public sector employees, or one for every eleven permanent budgeted posts. If defense and autonomous agency staff, teachers, and health workers are excluded, then there is one vehicle for every four civil servants. Further transfers of 459 cars and 200 trucks from UNMISET are scheduled over during FY2004 and FY2005. The cost of this large number of vehicles is compounded by the age and poor condition of many of the vehicles transferred to Government.

2.38 **Administrative measures are being taken to curtail agency administrative costs, but these will have to be backed up by close monitoring of the budget at a line item level.** The Government announced a number of expenditure control measures, prior to and as part of the FY2004 MYBU process, summarized in Box 2.3. Goods and services allocations were subsequently singled out for cuts in the FY2005 budget and MTEF, with goods and services allocations cut back to 48 percent of expenditures in estimates for FY2008. However, these measures are unlikely to be sufficient on their own. Tight line item control is also needed, so that managers are held responsible for their operational spending: Commitment and Payment Vouchers (CPVs) should be returned when line items for overhead items are exhausted and utilities

Box 2.3 Recent Expenditure Control Measures

Measures prior to November 2003

- *Clarified roles and responsibilities of Ministers, Vice-Ministers and Secretaries of State regarding expenditure management, procurement and disciplinary issues. Several disciplinary investigations have already been launched.*
- *Established joint UN/Government committee to assess implications and determine management of handover of UNMISET assets.*
- *Review of options for rationalizing fleet, including selling excess vehicles. Ceased vehicle purchases in FY04 budget and sequestered funds.*
- *Established review of current contract for vehicle maintenance given high cost and poor output.*
- *Implemented vehicle access and usage policy resulting in decline in abuse of vehicles for personal purposes.*

Measures presented in the FY2004 Mid-Year Budget Update

- *Sequestration of first quarter salary savings.*
- *Capping of power sector subsidies at budgeted level—though additional fuel purchases anticipated using bilateral grant funds.*
- *Freeze in overseas travel expenditures pending reassessment of travel priorities.*
- *Cutting of goods and services allocations between 5 and 10 percent with the exception of service delivery (non-administrative) expenditures in health and education.*
- *Tightening of control on procurement and petty cash.*

Measures to be implemented through FY05 budget and subsequent budget exercises

- *Setting of agency budget ceilings at the outset of the budget process.*
- *Safeguard of priority poverty reduction expenditures from cuts while enhancing tracking of effectiveness and efficiency of spending for priority programs.*
- *Institution of bottom-up mechanisms for using and overseeing use of public funds.*
- *Organization of asset sales.*
- *Issuing of a policy curtailing recruitment of temporary personnel.*

disconnected until agencies redistribute funds. Although Treasury can play a role in monitoring budgetary compliance against line items, ultimately, responsibility for the composition of agency expenditures lies with the spending agency. Agency managers should be held accountable for the economic and effective use of public funds. The practice of holding centralized allocations, such as those for official travel, should be discouraged because there is little incentive for agencies and managers to restrict use of line items for which they are not directly responsible. Close monitoring of the level and structure of spending will be needed to ensure that these expenditure control measures have the desired impact. Information on high-risk expenditure lines should be included in the Treasury's budget execution reports so that progress in controlling overhead costs can be followed by stakeholders, including Parliament and external partners. However, it should be stressed that tight line item control does not necessarily entail centralization of each spending decision, which can impact on budget execution. Line item control is best achieved by routine monitoring of the composition of spending at agency level to verify whether the allocations are consistent with a service delivery focus in public spending. Rapid increases in spending against specific line items may signal the need for internal administrative controls to ensure that goods and services are used appropriately.

2.39 **Ultimately, vehicle operation costs and utilities can only be curtailed by reducing the amount of equipment used by agencies.** Agency capital procurement plans provide a useful control. Ideally, only proposals for increases in vehicles and other equipment that will be directly employed in service delivery would merit consideration. Since transfers of assets from projects and UNTAET are now managed centrally, the Government might consider introducing a capital charge,

deducting the value of assets from the agencies capital budget, since this will force managers to assess the opportunity cost of additional equipment. Government should also consider sale of transferred assets surplus to immediate service delivery requirements rather than further increases in inventory (see para 2.16). This would be particularly important for assets procured by externally financed projects that do not meet Government-wide procurement specifications, such as vehicles and office equipment procured from tied sources.

2.40 **At the same time, expenditures on service delivery and maintenance should be encouraged.** Maintenance spending showed little increase from FY2002 to FY2004. As a rule of thumb, expenditure on maintenance should be above 5 percent of the capital stock: current levels of maintenance spending are less than 2 percent of annual capital spending, and are insignificant in relation to total public sector assets. Because maintenance requires many small, timely interventions, management of maintenance is best delegated to individual service delivery units, backed up by a system of block grant transfers to facilitate access to funds. Further deconcentration of spending is also likely to significantly increase the share of funds spent on service delivery (see para Chapter 3, Section D).

Table 2.6: Composition of Trust Fund for East Timor (TFET) Disbursements by broad component to end-October 2003 (percent)

Component	Agri-culture	Infra-structure	CEP	PSD	Education	Health	Other	Total
Civil Works	23	77	5	17	14	27	-	37
Equipment, Goods & Services	29	-	12	3	48	20	-	16
Operating Costs	3	1	2	1	2	2	-	2
Consultants & Training	37	14	32	10	22	42	80	24
Sub-Grants / Lending	1	-	45	56	6	-	-	13
Unallocated	6	8	4	14	8	9	20	8
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: World Bank. Note: CEP Community Empowerment Project: PSD Private Sector Development (including Microfinance and the Small Enterprise Development Projects). Unallocated mainly comprises advances to special accounts.

2.41 **Rough estimates of the composition of externally financed project expenditures suggest that more than half of total funding has been provided as technical assistance.** Detailed assessments are hampered by the lack of consolidated information on the structure of bilateral programs, which accounted for about half of reported Combined Sources expenditures over the period FY2001 to FY2004. Comprehensive data are only available for the United Nations programs and TFET projects. Technical assistance provided through the United Nations amounted to about US$110 million over the four-year period (about 12 percent of reported Combined Sources expenditures). In the case of TFET projects, technical assistance and training inputs amounted to about one-quarter of total disbursements to end-October 2003, around US$37 million. However, there are significant differences in the composition of inputs between programs: with technical assistance accounting for more than one-third of total disbursements in the case of agriculture, community empowerment and health programs (see Table 2.6). Expenditure on technical assistance from these two sources alone, TFET and United Nations, is about twice the level of CFET spending on the wage bill over the same period. At the same time, the TFET data suggest that more than a third of the funding has been used for investment in civil works and the total fixed investment is higher still, at around 50 percent of disbursements, if small grant and lending allocations are included. A review of a small sample of bilaterally funded projects suggests that the proportion of funding allocated to technical assistance is somewhat higher, generally between fifty and sixty percent of total project costs.

2.42 **One of the key issues to be determined as development partners prepare their country programs will be the appropriate balance between expenditure on technical assistance, investment and operational costs.** Substantial allocations to technical assistance can be justified in terms of the development program's institutional development objectives. Over the next few years, the share of technical assistance in externally financed projects and programs can be expected to decline. This trend is already apparent in the TFET portfolio. However, agencies have proved reluctant to forego technical assistance personnel where this is provided from a central pool—as under the current 100 and 200 posts arrangements—with the final selection of posts being determined centrally, in line with financing availability. As the United Nations stability posts are wound down, agencies will increasingly rely on posts funded by bilateral partners. In this context, the appropriate composition of external financing can best be determined through the sector planning process, the Sector Investment Programs, where agencies and financing partners can assess the trade-offs between inputs and their contribution to the agencies' development objectives (see para Chapter 3, Section F).

Box 2.4 Key Recommendations – Expenditure Policy

- ***Frequent monitoring of high-risk line item expenditures*** *by: a) including information on high-risk expenditure lines (such as travel, vehicle maintenance and other administrative overheads) in Treasury's budget execution reports; b) eliminating centralized allocations, such as those for official travel, so that agencies have to plan for the use of such funds.*
- ***Formulation of a policy for disposal of excess assets****, including sale and leasing of vehicles, through transparent and competitive mechanisms.*
- ***Definition of criteria for priority programs*** *(such as contribution to poverty reduction and delivery of services direct to the public) and specific programs in budget documentation together with informal rules regarding the rules preferential financing of these programs.*
- ***Clarification of the recurrent budget implications of external assistance projects and programs*** *in the lead-up to each budget exercise, focusing on those programs where external assistance covers a large share of recurrent expenditures, such as the police.*
- ***Establishment of a Petroleum Fund****, supported by a savings policy, through a consultative and transparent process.*
- ***Review of agency organic laws and staffing levels****, taking into account medium-term expenditure constraints.*

3. IMPROVING ACCOUNTABILITY AND EFFECTIVENESS IN PUBLIC SPENDING

A. INTRODUCTION

3.1 **The NDP's Vision 2020 stresses the importance of sound financial management: "The economy and finances of the State will be managed efficiently, transparently and will be free from corruption" (NDP, 2002, xviii).** Underlying this vision is the expectation that Timor-Leste will use its future oil and gas revenues prudently and productively, safeguarding a stock of assets that will generate income in perpetuity for future generations. The NDP stresses that the flow of revenues will be "a blessing to the people of Timor [allowing] them to more fully address their development needs and priorities" (NDP, 2002, p. 30). The experience of other oil and gas rich countries suggests that these benefits are unlikely to materialize unless sound governance arrangements are put in place. Sound governance arrangements include a public expenditure management system that enforces regulatory compliance, promotes the effective use of resources and is open to independent and public scrutiny. Appropriate legislation provides the blueprint for such a system, but legislation itself cannot make the system work. The transformation of legislation into practice requires an organizational culture that rewards compliance and performance, and personnel inspired by these values and armed with the requisite technical and management skills.

Table 3.1: Timor-Leste's Performance against HIPC Public Expenditure Management Indicators

Indicator	Bench-Mark	Timor-Leste	HIPC Average
Fiscal information associated with the budget match the GFS	A	B	B
Government activities not significantly funded through extra-budgetary sources	A	A	A
Budget outturn relatively close to the original budget's appropriation	B	B	B
Identification of poverty reduction spending	A	B	B
Donor funds included in governments' budgets	A	A	B
Budget classified on an administrative, economic and functional basis	B	B	B
Integration of medium term forecasts in budget cycle	A	A	C
Small stock of expenditure arrears at the end of the last financial year	A	A	A
Internal audit function active	A	A	B
Internal control supplemented by public expenditure tracking surveys	B	C	C
Government bank accounts reconciled with the accounting records	A	A	B
Budget tracking reports from line ministries & treasury received within 4 weeks	B	A	B
In-year budget reports present spending on a functional basis	A	A	C
Accounts closed within two months after the end of the fiscal year	A	A	B
Audited accounts presented to the legislature within 12 months	B	A	C

3.2 **The core expenditure management system compares favorably with that of other low-income countries on most criteria, but performance in terms of timely expenditures to support service delivery is poor.** Table 3.1 compares Timor-Leste's expenditure management system against HIPC Public Expenditure Management benchmarks.[3] The key elements of budget preparation and coverage, quality and timeliness of reporting meet HIPC benchmarks.

[3] Thirteen public expenditure management indicators are monitored for all Highly Indebted Poor Countries (HIPC), to assess the transparency and effectiveness of systems in delivering expenditures for poverty reduction purposes. This is the most systematic and comprehensive assessment of public expenditure management system performance available for low-income country comparators.

Qualifications relate to: the classification of expenditures, notably priority poverty reduction programs, which are not yet clearly flagged in the overall expenditure framework and given specific priority in the budget process; and the lack of Public Expenditure Tracking surveys to identify public spending actually applied in service delivery. However, the fundamental problem facing the system is poor budget execution, with significant and consistent under-spending in priority sectors such as roads and education. Section B focuses on the control and oversight environment. Section C identifies the measures needed to improve budgetary execution, without sacrificing the quality of public spending. Section C identifies measures needed to reduce unit costs and improve the efficiency of spending. Section D examines how to get resources down closer to the field level, to the service delivery units where resources are needed. Section E reviews the recent developments in the planning and budgeting system, advocates a period of consolidation and suggests how the existing instruments can be used to the improve policy alignment of public spending without over-burdening scarce management capacity.

3.3 **Notwithstanding this ambitious agenda, the immediate concern of Government and external partners relates not so much to system development as to how to sustain the system over the short to medium term, as the international presence gradually winds down.**

Box 3.1: Towards a Capacity Building Strategy for Financial Management Functions

Key considerations in the design of a capacity building strategy for financial management functions include:

- ***Adoption of a long-term, system-wide approach.*** *External support to capacity building has been fragmented: provided as critical posts through the UN system, standalone projects for budgeting and tax administration, and line Ministry project implementation units. Inadequate attention has been to ensuring consistency in approach between the various interventions and follow-up with line agencies. A program approach, with all external assistance under unified management led by MPF and long-term commitments to funding would provide a more coherent framework for capacity building.*
- ***Addressing systems development requirements as well as skills transfer.*** *Legitimate concerns have been raised regarding the complexity and viability of current budgeting, planning and reporting requirements in a low-capacity environment. Capacity constraints are best addressed through a system-wide approach, integrating systems development advice (based on practical experience rather than international models) with investments in information systems and capacity building interventions.*
- ***Putting in place qualified and experienced staff.*** *Senior financial management personnel need to have an understanding of the principles of financial management as well as procedures, and the authority and confidence to enforce controls regardless of political pressures. Development of a cadre of national personnel with these characteristics takes time and requires investments in basic training, often in specialist institutions overseas. In the meantime, some senior posts may have to be filled by expatriates, with a transition to advisory posts as capacity develops. This requires long-term funding and continuity of staffing. To reduce costs, long-term expatriate staff could be recruited directly in the region rather than through multi-lateral agencies, or through institutional twinning arrangements.*
- ***Monitoring of performance.*** *This requires monitoring of systems, by tracking indicators such as agency budget execution, as well as of personnel. Monitoring of capacity building performance indicators at the level of individual departments and in reviews of international personnel's contracts will make it more likely that capacity building will be given attention alongside routine functions.*
- ***Putting in place basic personnel planning and record keeping routines.*** *Capacity building has to be managed. Basic tools include a capacity building strategy, group training schedules, individual training plans, succession plans for international and senior personnel, routine personnel and institutional evaluations. These basic tools have yet to be put in place. Recruitment of suitably qualified personnel to fulfill these functions is perhaps the most urgent priority. In the absence of these management systems, capacity building will continue to be ad hoc and supply-driven.*

Significant improvements in national capacity in financial management have been achieved in a relatively short-time. This is particularly true of the Ministry of Planning and Finance, where national personnel have assumed responsibility for most routine budget, treasury and procurement procedures. However, progress at line agency level has been much slower and there is still an acute shortage of personnel sufficiently qualified, experienced to occupy senior management posts with oversight responsibility. Given the scheduled departure of expatriate personnel currently occupying senior posts, significant investments in capacity building are needed now to avoid a deterioration in performance and increase in fiduciary risk just as Timor Sea revenues come on stream. At the end of 2003, there were some 90 full-time international personnel employed in the Ministry, as compared with 450 national staff. The UN mission is to be scaled back after May 2004 to 58 posts, with fifteen of these post in the Ministry of Planning and Finance. Further reductions are likely over the medium term. This raises two concerns. Firstly, how to develop and sustain the technical and management capacity of national personnel so that they can assume additional responsibilities and functions as expatriate staff leave. Secondly, how to fill critical senior management posts when national personnel are not yet adequately qualified and experienced. While the means of addressing these capacity development concerns goes beyond the scope of this PER, they are just as critical to the future performance of the system as the technical and management system developments highlighted here. Box 3.1 highlights key elements of a successful strategy.

B. Strengthening the Fiduciary and Governance Framework

3.4 **The core public expenditure management system's fiduciary arrangements are basically sound.** The Financial Management Law (UNTAET Regulation 2001/13) provides for comprehensive and timely reporting on expenditures and lays out the budget and expenditure process. Further improvements are to be introduced by a revised Law currently in preparation.[4] The Budget is submitted to Parliament in May of each year for approval before the start of the fiscal year in July. Budget execution is controlled through Expenditure Authorization Notices and transaction commitment approval by Treasury, with Treasury making payments to suppliers on confirmation of receipt of goods and services by the respective agency. A specialist MPF Procurement Unit oversees procurement. Quarterly budget execution reports, disaggregated by all budget classifiers, are available within fifteen days of each period, and spot reports can be generated easily from Treasury's computerized financial management system. There is an active internal audit department within MPF, complemented by an Inspector General reporting directly to the Prime Minister. External audits are undertaken by a commercial auditor and the audited financial statements and management report are presented to the executive and Parliament, through MPF, within six months of every year. Specific governance arrangements will have to be made to deal with Timor Sea revenues (see Box 3.2) and, as noted below, independent audit arrangements will need to be put in place, but otherwise the basic architecture of the core system is robust and will serve Timor-Leste's needs for the foreseeable future.

3.5 **At agency level, however, expenditure management systems are often rudimentary.** Spending agencies should establish adequate internal controls to ensure compliance with procedures and achieve value-for-money in the use of public funds. Simple control mechanisms include: internal authorization procedures for Commitment and Payments Vouchers (CPVs), with clear delegation of authority for commitments up to agreed limits; simple records of those CPVs submitted to the Ministry of Planning and Finance; and regular reconciliation of these records against the budget execution reports generated from Treasury's computerized financial

[4] For a comprehensive review of public expenditure management systems, readers are referred to: World Bank, *East Timor: Public Expenditure Management and Accountability Note*, April 2002; and Chapter 8 of World Bank, *East Timor: Policy Challenges for a New Nation* (Country Economic Memorandum), March 2002.

Box 3.2 Safeguarding Timor Sea Revenues and Savings

Specific governance arrangements will be needed to address the fiduciary risks associated with the mobilization, investment and draw-down of Timor Sea oil and gas revenues. The NDP favors a statutory fund, leaving the executive with limited discretion over the volume of financial flows, providing for clearly defined investment policies, implemented by offshore fund managers, and overseen by independent auditors (NDP, 2002, page 90). These arrangements, currently being developed with technical advice from Norway and the IMF, should provide a sound framework for fund management. Additional governance safeguards should ensure:

- ***Widespread consultation on and understanding of fund management arrangements.*** *Perhaps the most effective safeguard is widespread understanding of the rules of the game: how the Timor Sea funds should and can be used. Investments in consultation and information are likely to pay dividends by facilitating on-going public scrutiny and reducing the appeal of populist, high-spending policies.*
- ***Broad representation of stakeholders amongst trustees.*** *Public confidence will be enhanced by broad representation of stakeholders amongst trustees, including civil society organizations as well as political appointees, possibly complemented by representatives of suitably qualified international bodies.*
- ***Disclosure of financial information by trustees and concessionaires.*** *Publication of fund financial statements, including investment performance records, is essential. Publication of concessionaires' transactions with Government is highly desirable—"publish what you pay"—since this provides a means of verifying the accuracy of trustees' reporting. The Government's decision to participate in the Extractive Industries Transparency Initiative is particularly encouraging in this regard.*
- ***Use of the budget and public expenditure system as the channel for disbursing funds.*** *Channeling funds through the budget—as opposed to parallel mechanisms—promotes policy consistency and ensures that funds are subject to adequate oversight and fiduciary arrangements.*

While attention will, inevitably, focus on the arrangements for the statutory fund, it should be stressed that the existence of a statutory fund is not in itself a solution to the management and governance problems arising from Timor Sea revenue streams. The best safeguard is a well functioning public expenditure management system that enforces budget discipline, compliance with expenditure procedures and rigorous appraisal of proposed applications of public funds.

management information system. However, recent increases in expenditures on travel and vehicle operations, together with the significant arrears in utility bills and the late response to slow budget execution, demonstrate that these basic controls are not used systematically. Weak agency internal control systems constitute a fiduciary risk, particularly where agencies undertake unauthorized direct procurement, bypassing the central Procurement Division, or through the use of petty cash. In this context it is encouraging to note that the Government has indicated in its FY2004 MYBU that it intends to tighten-up the use of petty cash and compliance with procurement procedures. The Government has also sought to enforce internal control by requiring that CPVs are authorized by the spending Minister. While this may strengthen control and Ministerial accountability, it has contributed to delays in budget execution. The fundamental problem remains the lack of basic financial management systems, compounded by a shortage of experienced financial management officers. Clearly, investments in financial management systems and training at the agency must be the priority for the future since this is the system's weakest link.

3.6 **Further work is needed on the development of a strategy for integration and roll-out of financial management information systems in order to ensure that agencies have access to timely financial information and to reduce transactions costs.** MPF's financial management information system (FMIS) was installed under UNTAET. The core module provided for a treasury cash and budget management system. Subsequently, commitment control, procurement and asset management modules were introduced to support MPF management functions. These systems are

not yet functionally integrated, requiring the hard copy transfer of transaction information and re-keying of transactions as they pass from treasury, to procurement and then on to asset management. This causes delays and increases the risks of error. While modules for read-only access at the agency level were planned, these have yet to be installed. Future development of the system will have to be planned, taking into account future information requirements. Basic functionality would include a fully integrated system for MPF, supporting information management, transaction tracking and reporting, while at the same time providing for the gradual roll-out of the system to the line agencies. While read-only access to the FMIS may be the first step, allowing agency management to track budget execution and individual transactions, the eventual goal should be for transaction information to be entered at agency level.

3.7 **Parliamentary oversight and engagement in the budget process could be strengthened by introducing a two-step budget process.** Although parliamentary intervention in the budget process may not always result in desirable fiscal and expenditure outcomes—Parliaments may, for instance, be more inclined to spend than the executive, particularly where this brings benefits to constituents – there is growing awareness that effective parliamentary oversight and engagement in the budget process is a critical safeguard. Parliament's role is twofold: first, approval of appropriations—the authority for the executive to spend—provides an opportunity for Parliament to make amendments to fiscal policies; second, Parliament holds the Government to account for its stewardship of public funds, verifying compliance with the approved appropriations schedule and the review of financial and audit statements. Effective parliamentary engagement requires access to information, through the presentation of timely, clearly presented budget documents, budget execution reports and financial statements, together with opportunities to question officials regarding the expenditure policy and spending decisions. It also requires adequate time for review and consultation. In Timor-Leste this has proved problematic. Budget preparation schedules are relatively compressed, with the budget process launched in January, presentation to Parliament in May for approval and presidential ratification prior to the start of the fiscal year in July. This compares with an average of four months for parliamentary consultation in OECD countries. Extension of time frame at the end of the budget process would require an earlier start to the budget process. This is probably unrealistic at the present time, when forward revenue estimates are subject to significant changes and slow budget execution means that significant adjustments to the budget are needed mid-year. One solution to this problem adopted in South Africa is to put in place a two-step budget process. The Government discusses a policy statement at the start of the budget process with parliamentary committees. The policy statements lays out the macro-economic framework and defines broad expenditure allocations. Following consultations, the policy statement is used as the basis for setting expenditure limits in the annual Budget Circular. Parliament is then able to verify whether the final appropriations schedule is consistent with the policy framework discussed and seek clarification regarding changes. A similar process in Timor-Leste would considerably improve the quality of parliamentary engagement in the budget process, without significant changes to budget preparation schedules or additional work for hard-pressed MPF officials.

3.8 **A transition from the current external audit to an independent audit is needed to complete the fiduciary arrangements.** Under UNTAET the head of the executive appointed an external auditor through a competitive procurement process. The executive continues to appoint the external auditor, though the auditor's report on the financial statement and the management report are now submitted to Parliament as well as the Minister of Planning and Finance. These arrangements are not consistent with the Constitution which provides for the creation of a High Administrative, Tax and Audit Court, as part of the judiciary, and so independent of both the executive and the legislature. Given the limited capacity in the judiciary, establishment of a fully fledged Audit Court is likely to take decades. In the meantime, alternative arrangements may be

feasible, such as nomination and supervision of a commercial auditor by a judge of the Court of Appeal. A clear strategy for transition to an independent audit institution is needed, so as to establish the basic framework for independent oversight foreseen under the Constitution and start building oversight capacity.

C. Improving Budget Execution

3.9 **Budget execution tends to be slow during the first half of the year, followed by an end-of-year surge in spending as agencies tried to exhaust budget balances.** Final budget outcomes, against the mid-year budget update, increased from 82 percent in FY2002 to 96 percent in FY2003 on a commitment basis (see Table 3.2). However, expenditures on a commitment basis at the end of FY2003 were US$15 million higher than liquidated payments, with execution on a cash basis at only 77 percent. This raises concerns regarding the quality of spending—it is much easier to accelerate sending on administrative functions in central agencies than on service delivery at the field level—which are confirmed by the high level of administrative overheads in Consolidated Fund expenditures. It also generates a considerable budget overhang at the end of the fiscal year, with a substantial number of commitments from the budget accounts payable after the end of the fiscal year.

Table 3.2 Budget Execution FY2002 and FY2003

Function	FY2002		FY2003		FY2004 Estimate	
	Actual	Cash	Actual	Cash	Actual	Cash
General Public Services	80	76	92	87	85	75
Defence	126	124	97	75	94	73
Public Order and Safety	88	86	98	80	83	66
Police Services	*99*	*98*	*100*	*81*	*86*	*69*
Judicial Services	*63*	*59*	*91*	*70*	*55*	*43*
Economic Affairs, of which	93	91	97	77	88	56
Agriculture, Forestry, Fisheries	*87*	*87*	*95*	*75*	*93*	*62*
Fuel and Energy	*99*	*98*	*100*	*77*	*113*	*83*
Transport	*90*	*87*	*98*	*86*	*69*	*38*
Environmental Protection	61	60	97	95	62	62
Water and Community Development	83	79	99	60	93	28
Health	85	80	94	77	90	59
Recreation, Culture, Religion	39	37	83	32	56	39
Education	75	74	95	78	87	73
Social Protection	87	84	92	61	82	49
Total Expenditure	84	82	96	77	87	65

Source: FY02 Financial Statements compared with MYBU update revised appropriations; FY03 Financial Statements compared with MYBU revised appropriations; and FY2004 mid-year budget execution report data, annualized and compared with original appropriations.

3.10 **Preliminary data suggest that key sectors could follow a similar pattern of delayed start and end-of-year surge in the FY2004 budget.** Annualized data for FY2004 point to a relatively slow start in committing funds across the board, but a particularly slow start in road maintenance and the judiciary. In the education sector there are significant delays on goods and services spending, where annualized execution of 56 percent on commitment basis and 24 percent on a cash basis compare with averages of 90 percent and 66 percent for all sectors. Execution is particularly slow against the capital and development budget, with commitments trailing cash allotments (authorized expenditure) by nearly 60 percent, annualized commitments standing at just

50 percent, and no payments liquidated by mid-year. This analysis points to continuing problems in budget execution.

3.11 **The underlying problem in budget execution is inadequate expenditure and procurement planning and follow-up at agency level.** At present, budget execution seems to be addressed on an *ad hoc* basis, with individual requisitions processed as they are received from spending departments. This leads to a gradual build up in the number of requisitions through the year, rather than a planned structure of spending that reflects requirements such as the school year or seasonal changes. Again, the solution is to put in place basic management systems. Key elements of such a system would include: preparation of agency procurement plans for capital and goods and services and quarterly expenditure plans before the start of the fiscal year to guide budget execution; regular reporting on budget execution against these plans to agency management; and periodic updating of expenditure plans. Agency management could support these systems by establishing routine, perhaps monthly, meeting of budget management committees comprising heads of all departments to review progress in budget execution. The Ministry of Planning and Finance can play an important role too, by using the Expenditure Authorization Notices to guide and track progress in budget execution. Negotiation of the Expenditure Authorization Notices provides an opportunity to front-load expenditures in key programs and serves as a benchmark for assessing execution. The recent creation of a cross-agency committee by the Prime Minister to oversee budget execution will provide a mechanism for identifying bottlenecks in budget execution so that they can be resolved well before the last quarter of the year.

3.12 **Procurement processing has contributed to slow budget execution, though this often seems to be due to poor understanding of procurement requirements at the agency level.** Under current arrangements, procurement is administered by the Ministry of Planning and Finance's Procurement Unit, other than in those cases where the Unit has delegated authority to the spending agency. Agencies frequently complain that the centralized system is a source of delays. Data provided by the Procurement Office for the first three quarters of FY2003 indicate that about 70 percent of procurement requests were processed in fewer than thirty days and 80 percent in fewer than forty-five days. Delays appear to be longest for lower value requisitions, which in principle have less time consuming market consultation requirements. Efforts to rationalize the procurement process by batching the procurement of common items—thereby allowing the administration as a whole to achieve better terms through standardization and bulk purchases—are likely to have slowed down procurement processing times in FY2004. However, the main cause of delays appears to be the poor specification of agency requisitions, which prevents further processing as the Procurement Unit seeks clarification. Solutions lie in greater standardization by the Procurement Office and agencies, complemented by training for agency personnel in drawing up specifications and improved quality control by agency managers. A draft standard specifications manual was prepared in FY2004, but has yet to be distributed. MPF is currently preparing a training program on procurement for agency personnel. Ministries have also been encouraged to place personnel in the Procurement Unit to learn procurement procedures and oversee their agency's procurement activities.

Table 3.3: Procurement Processing Times, Q1-Q3 FY2003 (% of CPVs)

US$'000	<30 days	<45 days
>500<5,000	83	83
>200<500	50	50
>25<200	71	82
>10<25	45	48
<10	75	84
All	**72**	**80**

Source: MPF.

3.13 **Some delegation of procurement administration is foreseen under forthcoming legislation.** The draft Public Procurement Decree Law provides for delegation of authority for purchases up to US$10,000 to line agencies. This should reduce the pressures on the MPF

Procurement Unit. However, the delegation of authority will only work effectively if agencies put in place adequate management controls to ensure that procurement procedures are followed. Further delegation may be appropriate where agencies have demonstrated compliance with government-wide procedures. A "hurdle approach" to delegation is an effective way to gain the benefits of devolved controls without running excessive fiduciary risk. This involves delegating higher control thresholds to agencies that have demonstrated a consistent capacity to spend and procure in line with rules and regulations. Both Treasury and the Procurement Office are using this approach informally: the Ministry of Health's Autonomous Medical Stores now handles all procurement and distribution of medical supplies; and the Ministry of Defense has been given higher thresholds for petty cash, CPV clearances, procurement and line item transfers after demonstrating its ability to comply with procedures. A formal "hurdle approach", with clearly defined standards and a communication strategy to demonstrate the benefits of compliance, would create some incentive for agencies to improve public expenditure management practices.

D. Reducing Costs

3.14 **Unit costs are significantly higher in Timor-Leste than regional and low-income country averages.** Data from World Bank projects during the reconstruction phase suggest that construction costs are between thirty and seventy-five percent higher than in neighboring provinces of Indonesia, with comparable disparities for supervision costs. This is, in part, a "Dutch disease" effect, with substantial inflows of external assistance driving up real price and wage levels. The "Dutch disease" effect was compounded in a post-conflict setting, where virtually all construction materials, equipment and skilled labor were imported, there were few local contractors, and extensive use of emergency procurement procedures meant that there was little competition between suppliers and contractors. While unit prices are expected to settle as external assistance inflows decline, active measures are needed to bring costs down and thereby improve the efficiency of spending. Key interventions will include: promotion of competition through the procurement process and through contracting out; standardization of government purchases and construction; and benchmarking across projects and service providers.

3.15 **Competition is the most effective means of reducing unit costs.** Timor-Leste's fuel supply system provides a salutary example. There is one bulk import terminal for oil products, operated by Pertamina, the Indonesian national oil and gas company. Other companies are not allowed to use the bulk import terminal, leaving Pertamina with about 80 percent of the market for imported oil products. The tax-free price of diesel oil in Timor Leste is about 60 percent higher than the non-subsidized price that Pertamina customers pay in Indonesia for the same product. Shipping and terminal costs cover only a small part of the difference. Retail oil prices in APEC countries are around 30 c/l with the lowest at 28 c/l in Samoa, which procures oil through long-term contracts awarded through a competitive bidding process. These retail prices would translate into wholesale prices of about 25 c/l and 23 c/l respectively. Clearly, competitive tendering for oil supplies could significantly reduce costs to Government and the private sector. In Timor-Leste's narrow domestic market, with as yet limited domestic production, effective competition is likely to require relatively low thresholds for international bidding.

3.16 **Contracting out of services may also help reduce costs, but also brings additional benefits by supporting the private sector and making the public sector more flexible.** By far the largest contracting program is that for routine road maintenance, with contracts let to local private sector contractors and to communities (see Chapter 6). This is consistent with the guiding principle laid out in the NDP, which indicates that Government will "utilize the private sector to the maximum extent possible in the cost effective delivery of projects" (NDP, 2002, page 265). Contracting out helps foster the small-business sector, providing a foundation from which larger

enterprises can grow. The unit costs for contracting out may appear to be higher than the cost of implementation by direct administration. However, such direct comparisons may be inaccurate—they are unlikely to factor in the public sector's administrative overheads—and fail to capture the longer-term cost savings that contract flexibility offers. Public institutions and staff have to be paid whether or not they are working productively during slack periods; contractors are only paid for work done and can be more easily held to account for performance. There is considerable scope for contracting out of services in the public sector. Progress has been made in the health sector, where cleaning and laundry services are now contracted out in some facilities. Other services that might be better contracted out include, for instance, security. Where agencies can encourage competition between providers and reap the benefits of cost savings, management are generally quick to identify opportunities for contracting out.

3.17 **Standardization discourages extravagance and over design and facilitates bulk procurement, thereby helping to keep costs down**. The setting and enforcement of appropriate service standards is a critical policy decision, which will determine future cost structures. Standards generally address working conditions, equipment and service charges, such as travel subsistence rates. There has always been a concern that the working conditions under UNTAET would create expectations that could not be met after Independence. Early on, it was announced that most Government offices would not be air-conditioned. By setting standards, the Government may determine how many vehicles and what kind of vehicles are appropriate for Government departments. In construction, the setting of appropriate design standards can avoid the problem of over-design that caused high construction costs in World Bank education projects. More appropriate design standards not only help to reduce materials costs, they can also open up opportunities for smaller, national construction companies and community-based initiatives. Standardization also facilitates bulk procurement and allows the Government to reduce parts inventories. Progress in these areas has been slow. However, it is encouraging to note that MPF is now proceeding with the preparation of standards in key areas, and MECYS has begun preparation of standard specifications for commonly used office and field equipment.

3.18 **Lastly, benchmarking between contractors and service providers may provide a guide as to their relative efficiency**. Comparison of the unit costs offered by contractors provides a good guide as to the actual costs. Comparison between agencies and service providers can be used in a similar way. Comparisons of the costs of providing a standardized package of health, education, and road maintenance services can provide some indication of whether it would be better to outsource to NGOs or the private sector. Such analysis is best undertaken in the context of periodic sector policy and expenditure reviews.

E. Getting Resources Down to the Field Level

3.19 **Rough estimates based on MPF data for FY2003 suggest that only one-third of total Consolidated Fund expenditure and one-fifth of Consolidated Fund goods and services expenditure, on a cash basis, is allocated to national programs or districts other than Dili** (see Table 3.4). The proportion of Consolidated Fund expenditure channeled through district imprest accounts—and thus used for purchases of goods and services in the district—is even lower, at around 5 percent of total expenditure. There are significant variations in the degree of deconcentration between sectors. Road maintenance is already highly deconcentrated, with about half of total spending and goods and services spending undertaken through local contractors and communities. Health, too, has made progress in deconcentrating funding to hospitals and clinics, largely through imprest account mechanisms. In education, deconcentration is largely for personnel, and deconcentrated spending on goods and services is negligible.

Table 3.4: Expenditure Deconcentration Estimates (Expenditure on National Programs and outside Dili, Cash Basis), FY2003

Function	Total	G&S
General Public Services	14	27
Defense	20	26
Public Order and Safety	33	13
Economic Affairs, of which	19	19
Agriculture, Forestry, Fisheries	19	13
Fuel and Energy	11	11
Transport	50	57
Environmental Protection	-	-
Housing and Community Development	15	11
Health	35	18
Recreation, Culture, Religion	2	2
Education	69	5
Social Protection	0	0
Total	**34**	**18**

Source: MPF.

3.20 **Greater attention needs to be given to tracking the deconcentration of resources.** This requires improved coding of CPVs to indicate whether expenditures are intended for national programs or specific districts, and the preparation of indicative budget allocations for agency spending at the district level. Although time consuming, the preparation of district allocations is perhaps the most effective means of getting agencies to focus on service delivery rather than institutional requirements. Certainly, the feasibility of such district allocations in key service delivery sectors merits review. The Government intends to undertake a review of budget execution constraints. This could usefully address constraints faced in channeling resources to the field level.

3.21 **Block grants for investment projects are a good way to get resources down to the field level and build up local management capacity fairly quickly.** Small-scale works—such as schools, water supplies, feeder roads and bridges, and small irrigation systems—can be identified and implemented by communities. They are relatively low risk, since funding for project implementation can be isolated within the public expenditure management system. Many countries—including Mozambique, Zambia, Malawi, Uganda, and Cambodia—have used small-scale project funds to channel resources directly to communities and local authorities. The UNCDF Local Development Fund is one of the most successful models for this kind of program. The Community Empowerment Project in Timor-Leste demonstrates the potential of this approach, with a substantial and diverse portfolio of small-scale sub-projects implemented at community level (see Table 3.5)—though this has been supported by substantial technical assistance and local staffing costing about 58 cents for every dollar disbursed to sub-projects. A strong case may be made for following up the CEP with community block grants implemented through a more streamlined process, better integrated into Government systems: with grants transferred directly to

Table 3.5: Community Empowerment Project, Sub-Projects by Cycle

	Cycle 1 04/00 to 09/00		Cycle 2 11/00 to 06/02		Cycle 3 07/02 to 12/03	
Project Type	**Projects**	**US$'000**	**Projects**	**US$'000**	**Projects**	**US$'000**
Roads	45	90	88	456	91	484
Bridges			8	30	13	52
Water & Sanitation	56	89	166	986	190	1,194
Irrigation		9	33	115	50	291
Social Housing			50	232	137	783
Village Buildings	235	726				
Clinics			1	2	2	5
Schools			2	7	6	28
Markets Buildings			-	-	2	19
Household Equipment	99	297	28	99		
Agricultural Equipment	61	159	38	126		
Electrification			-	43		47
Women's Group Activities			55	134		
Other Activities		11		32		
Training					32	66
Credit Activities			545	1,047	45	47
Awaiting Proposals						151
Total Sub Projects	**496**	**1,381**	**1,014**	**3,311**	**568**	**3,165**

Source: Community Empowerment Project.

community accounts by Treasury, overseen by and with technical support from the Ministry of State Administration and line agencies.

3.22 **Block grants can also be used to channel resources to field level service delivery units.** The MECYS intends to pilot this approach for schools, with Parents and Teachers Associations and School Councils assuming a role in the management of resources. Such funding mechanisms have a significant impact at relatively low cost. Block grants can provide a framework for bottom-up accountability. Evidence from other countries suggests that resources tend to be better used where the beneficiaries are directly involved in their management and have information about the funds available and how they can be used. There is scope for exploring this approach in other sectors.

3.23 **Further work is needed to address the constraints on the deconcentration of resources**. These include low petty cash limits, transportation difficulties, and lack of sub-district banking facilities. Training and close supervision of district level financial management personnel is critical. Recent cases of fraud in district treasuries highlight the risks inherent in a system that relies on districts holding large sums in cash. Lack of banking facilities could be addressed using alternative financial intermediaries, such as micro-finance offices and post offices, to provide financial services to government agencies in the districts. Alternatively, MPF and MSA could identify district and sub-district Government suppliers, who can be paid through the centralized CPV system, until a larger share of resources can be executed by districts.

F. ALIGNING RESOURCES WITH POLICIES AND STRATEGIES

3.24 **Planning instruments introduced since Independence have sought to translate the broad guidelines provided by National Development Plan into more operational tools.** Some of these instruments, notably the Prioritization and Sequencing (P&S) exercise to map out implementation of the NDP up to FY2007 and the Road Map, are best seen as complementing the NDP. The key elements of the planning system now comprise both medium-term strategic planning instruments and operational plans. Annual Action Plans (AAP) and Quarterly Reporting Matrices (QRM), introduced in August 2002 and now in their second year, provide a framework for agency level operational planning and progress monitoring. Summary reports are prepared by MPF on a quarterly basis and submitted to the Council of Ministers. MPF is currently developing a computerized information system to facilitate compilation of AAPs and tracking of QRMs. A Medium-Term Expenditure Framework (MTEF) provides estimates of rolling expenditure allocations at program and aggregate component level over a five-year planning horizon. Sector policies, developed as agency initiatives, are now being followed up with Sector Investment Programs, which seek to identify priority interventions for external financing over the medium term, and agency organic laws.

3.25 **The challenge over the next few years is to move towards a planning approach where priorities are defined within agreed expenditure limits, defined at a cross-governmental level, rather than on the basis of needs**. In the absence of hard expenditure limits, agency planners will tend to present over-optimistic plans and resource requirements. The Prioritizing and Sequencing and the Road Map exercises followed a needs-based approach. During the subsequent budget exercise, agency submissions for the Consolidated Fund totaled US$127 million (US$93.8 million for recurrent expenditures and US$32.6 million for major capital works), around double the Budget Guidelines' expenditure limits. Proposals were subsequently trimmed to US$74.3 million by the Council of Ministers, involving an inordinate amount of time for the Budget Office, creating considerable frustration at the agency level, and leading to last-minute changes in the structure of expenditure. In the FY2005 budget process these problems were avoided by reaching broad agreement on the expenditure limits at the level of the Council of Ministers *before* budget and

planning guidelines were circulated. As a result agency submissions were largely in line with limits. This is a significant achievement. If subsequent budget exercises can impose a similar level of discipline, the Government will be well placed to ensure that expenditures are aligned with priorities both at the agency and cross-governmental levels.

3.26 **Greater attention needs to be given to the needs of service delivery**. Agency planning is currently focused on project identification, to define priorities for externally financed investment, and detailed activity planning, through the Annual Action Plan process, which tends to focus on the work of agencies' head offices. These tools do not provide a sound basis for expenditure planning across service networks, where the key issues are affordable service volumes and standards, based on an assessment of unit costings (such as the appropriate level of spending per student or per school) and the corresponding cost drivers (such as pupil-teacher ratios, numbers of books, quality of schools). During the public expenditure review exercise, simple cost estimation models were prepared for the education, health and roads sectors, to help agencies understand the financial implications of alternative service volumes and standards. This approach can be followed through into budget execution through the use of formula-based block grants to allocate resources to service delivery facilities, on the basis of agreed standards of service.

3.27 **An essential support to a service delivery focus in expenditure management is the integration of performance measures during the planning and budget process.** Some progress has been made in this direction, notably in the FY2003 budget, which presented some quantitative output indicators at program level. For the most part, however, attention has focused on AAPs, which are primarily geared to the presentation and monitoring of process indicators and milestones—performance indicators were dropped in the FY2004 budget. The notable exception here is the Ministry of Health, which has identified a small number of output indicators for the purpose of monitoring budget and AAP implementation. However, it is unclear to what extent these cascade down through the administrative structures, and serve as the basis for internal agency management. The focus on Millennium Development Goals (MDGs) provides an opportunity to focus on quantitative performance indicators more systematically across the administration. In this context, the creation of agency Budget Committees, again a Ministry of Health initiative, provides an opportunity to link service delivery planning with the formulation of agency budgets. Ideally, information on performance indicators and targets should be presented in Budget Papers so that it is readily available to the Council of Ministers and National Parliament when budget allocations are reviewed.

3.28 **Now that the basic framework of the planning system has been put in place, there is scope for greater flexibility and line agency leadership through a rolling process of sector policy development.** The health sector's experience in developing a sector policy, on-going work in education and agriculture, together with the recent introduction of Sector Investment Programs provide the nucleus for sector/agency level strategic planning. The development of Sector Investment Programs has been driven by the imperative of identifying government priorities at the sector level to guide the formulation of external partners' country assistance strategies. Following this initial push, it is likely that each sector will adopt its own timeframe for strategic and policy reviews. This is consistent with the consultative approach adopted by the health and education sectors in the formulation of their sector policies. MPF may be able to provide some structure to this process by implementing a rolling program of sector expenditure reviews, which would highlight issues of policy consistency and expenditure effectiveness and provide a starting point for strategic reviews. Preliminary sector expenditure reviews were used to support the FY2004 budgeting exercise and the formulation of education, health and roads sector strategic planning exercises. A rolling program of reviews every three years for key sectors would allow agency staff to take a much more active role in this process.

Box 3.3 Key Recommendations – Managing Public Spending

- ***Development of a system-wide capacity building program for financial management,*** *under unified management led by MPF and with long-term, multi-donor funding.*
- ***Development of simple expenditure control mechanisms at agency level,*** *including: internal authorization procedures for Commitment and Payments Vouchers (CPVs), with clear delegation of authority for commitments up to agreed limits; simple records of those CPVs submitted to the Ministry of Planning and Finance; and regular reconciliation of these records against the budget execution reports generated from Treasury's computerized financial management information system.*
- ***Formulation of a clear strategy for transition to an independent audit institution,*** *so as to establish the basic framework for independent oversight foreseen under the Constitution and start building oversight capacity.*
- ***Preparation of agency procurement plans and quarterly expenditure plans*** *before the start of the fiscal year to guide budget execution, regular reporting on budget execution against these plans to agency management.*
- ***MPF negotiation of Expenditure Authorization Notices*** *to guide and track progress in budget execution, with front-loading of expenditures in key programs.*
- ***Further standardization of commonly procured items*** *by the Procurement Office and agencies, and extended training for agency personnel in drawing up specifications.*
- ***Adoption of a formal "hurdle approach" to delegation of procurement authority,*** *for agencies that demonstrate capacity to spend and procure in line with rules and regulations.*
- ***Contracting out of a wider range of services,*** *to promote private sector and improve flexibility in services, and benchmarking of costs between service providers to identify areas where services can be outsourced to NGOs and the private sector.*
- ***Review of feasibility of setting district allocations through the budget*** *to guide to budget execution, thereby promoting deconcentration of spending and facilitating tracking.*
- ***Establishment of a Local Development Fund*** *to channel resources to locally identified small-scale public investment projects.*
- ***Review of options for use of banking facilities in districts,*** *including use of micro-finance institutions and post offices.*
- ***Application of hard budget constraints,*** *set by the Budget Circular, throughout the budget process.*
- ***Integration of program level performance information in budget documentation,*** *to reinforce the link between expenditures and service delivery.*
- ***Implementation a rolling program of sector expenditure reviews,*** *highlighting issues of policy consistency and expenditure effectiveness, as a starting point for strategic reviews and the sector policy process.*
- ***Creation of formal sector working groups*** *to support the development of sector policies and align external financing with sector expenditure priorities.*

3.29 **The problem of expenditure drift can be addressed by setting limits on external financing that reflect Government priorities**. This signals priorities to external partners, complementing the identification of priority programs and projects through the SIPs. More importantly, by putting in place limits on external financing at agency or sector level, agency management is forced to assess the opportunity cost of alternative applications of external financing—the trade-offs between spending on different programs. In order to enforce such discipline, all external financing agreements would have to be approved by the Ministry of Planning and Finance and formally gazetted before integration into the budget.

3.30 **Engagement of external partners in sector strategic planning will be critical to sustaining external assistance and improving the effectiveness of externally financed projects and programs.** Considerable progress has been made in involving agency managers through successive planning exercises—first the NDP, then Prioritizing and Sequencing, and annual planning exercises. Empowerment of Government agencies through the policy and planning

process should remain the priority. External assistance has supported this objective by providing considerable technical input through consultants. However, external partners have sometimes been brought in at a very late stage, when key decisions have already been taken. This is in marked contrast to the approach followed in other countries with substantial external assistance flows, such as Uganda, Tanzania and Mozambique. Here sector working groups, led by the responsible Government agencies, engage external partners in an on-going dialogue on policy issues, priorities and financing requirements, as well as operational issues. This approach brings benefits—a consensus on priorities, improved operational coordination, opportunities to consolidate donor programs through co-financing and harmonization of procedures—that cannot be realized by dealing with donors individually, even though that may appear to increase Government's leverage. A number of agencies in Timor-Leste are gradually moving towards this sector approach to external management, notably in health, but also in education, agriculture and police. The introduction of the Sector Investment Programs provides an opportunity for agencies to adopt a sector approach to external assistance management on a more systematic basis.

4. TOWARDS A LEAN AND EFFECTIVE CIVIL SERVICE

A. INTRODUCTION

4.1 **Creation of a "lean, efficient, effective, accountable and transparent civil service" figured prominently in the NDP's development goals as a means of achieving good governance and improvements in public services** (NDP, 2002, page 21). The NDP goes on to stress the importance of creating "a culture of public service, establishing professionalism in service provision" and "internal mechanisms to control and avoid corruption and nepotism" (NDP, 2002, page 108). In order achieve these goals, the Government will have to address the legacy not just of Indonesian occupation, but also decisions taken under UN administration.

4.2 **Although the broad structure of the administration was already established by Independence, key management systems were still not in place.** The Transitional Administration used staffing levels as an indicator of the readiness of the civil service, police and defense forces, and so gave priority to recruitment numbers. By April 2002, in little over two years, staff had been recruited for 11,000 out of a total of 15,000 approved posts.[5] Most of the staff were appointed to institutions using fairly generic terms of reference: the rationale of specific posts in relation to institutional mandates and policies was often ill defined. The public sector pay scale was simple to administer but compromised regional competitiveness and did not provide for progression or performance incentives. Beyond the recruitment process, there were scant regulations to guide basic personnel management functions or disciplinary procedures. Beyond the payroll and recruitment, there was no systematic record keeping on public employees. The post-Independence administration now faces three challenges: first, to contain civil service numbers; second, to put in place an appropriate pay policy; and last and most important, to put in place basic personnel management systems. These challenges are reviewed in turn in the present chapter.

B. CONTAINING CIVIL SERVICE NUMBERS

4.3 **The NDP capped civil service staffing levels at around 12,000** (NDP, 2002, pages 29 and 76). This limit was based on a proposal by a Joint Assessment Mission of November 1999 for a light central administration of around 2,000 staff, with 80 percent of civil servants directly engaged in service delivery in the education and health sectors.[6] The proposed staffing levels were

Table 4.1: Budgeted Staffing Profile, FY2004

Agency	Permanent		Temporary		Total	
	No.	%	No.	%	No.	%
Civil Service, of which	11,988	68	447	3	12,435	70
Education	*6,965*	*39*	*251*	*1*	*7,216*	*41*
Health	*1,760*	*10*	*7*	*0*	*1,767*	*10*
Other agencies	*3,263*	*18*	*189*	*1*	*3,452*	*19*
Defense	1,346	8	-	-	1,346	8
Police	3,362	19	-	-	3,362	19
Autonomous Agencies	454	3	159	1	613	3
Total Budgeted Posts	**17,150**	**97**	**606**	**3**	**17,756**	**100**

Source: MPF, FY2004 Budget Books.

[5] United Nations Security Council, *Report of the Secretary-General on the United Nations Transitional Administration in East Timor*, 17 April 2002, S/2002/432, page 2.

[6] Joint Assessment Mission, *Governance Background Paper*, for *East Timor: Building a Nation*, November 1999, page 2 and Annex 3.

significantly lower than the estimated 28,000 civil servants employed under the Indonesian administration. However, at an aggregate level, the target of 12,000 civil servants was broadly in line with staffing levels for low-income countries, amounting to about 3 percent of the population of working age (4.4 percent of the working population in the case of total budgeted posts).

4.4 **Budgeted staffing levels have already reached their NDP ceilings, with 11,988 civil service posts and 17,150 permanent public employees. Actual budgeted staffing levels, at 17,756, are somewhat higher than those for permanent staff, when temporary posts are included** (see Table 4.1). The majority of these "temporary" posts are for permanent staff of institutions that lie outside the administration, such as the University of Timor-Leste, judges, and 206 political appointees (including ministerial support staff). The FY2004 budgeted staffing levels represent a slight increase (around 5 percent, 763 permanent posts) in relation to staffing limits set in the initial FY2003 budget, approved in June 2002.

4.5 **There remains a shortfall on recruitment, with a total payroll of 15,328 employees in September 2003, amounting to 86 percent of budgeted posts** (Figure 4.1). Of current employees, 14,289 are permanent employees and 1,039 are temporary employees. About one-third of the temporary employees are appointed against permanent posts. There may be additional temporary employees financed from agencies' goods and services appropriations who are not captured by payroll data. The proportion of budgeted posts filled is lowest in Government structures and the Ministry of Justice and highest for the ministries of Interior, Health and Education.

Figure 4.1: Filled Civil Service Posts by Agency, September 2003 %

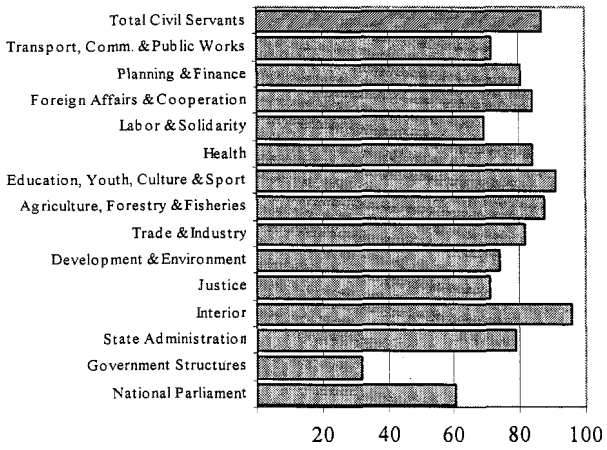
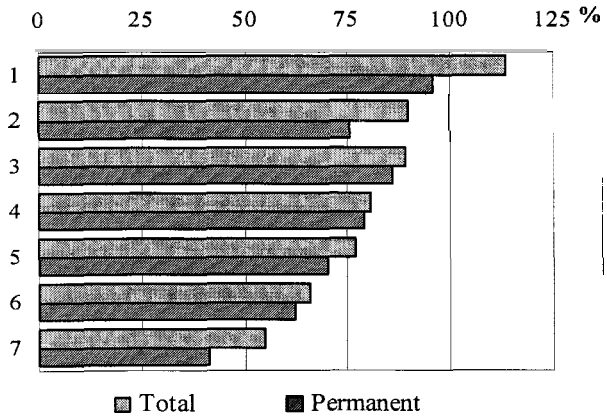


Figure 4.2: Filled Posts by Grade, Sept. 2003



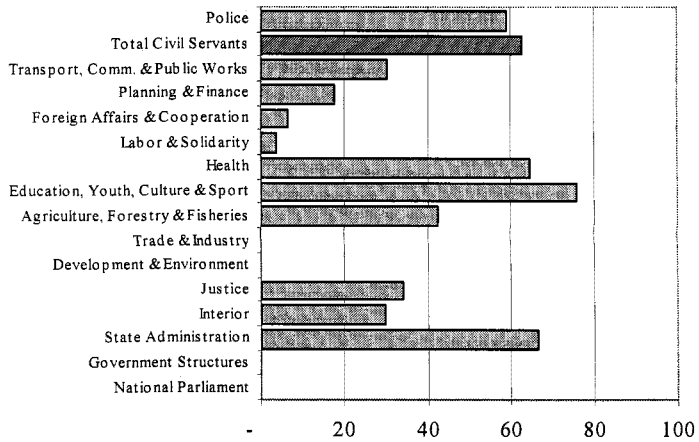
4.6 **Shortfalls against budgeted posts are much higher for senior grades** (see Figure 4.2). This is largely due to an acute shortage of Timorese with relevant university qualifications and work experience, compounded by the fact that Government salaries for senior staff are much lower than those offered by aid agencies and the financial sector. Where agencies have been unable to find suitably qualified personnel, they have occasionally been authorized to fill posts with staff at a lower level. As a result, temporary employees fill a large proportion of the highest-grade posts.

4.7 **Most public sector employees are engaged in service delivery, though numbers engaged in central administrative functions**

are higher than originally envisaged. About 70 percent of public sector posts are civil servants, and about half of all public sector employees work in education and health. There are over three thousand employees of central agencies, about 50 percent more than envisaged at the time of the Joint Assessment Mission. The largest public sector employer outside the civil service is the police force, which accounts for nearly one in five budgeted public sector posts. Budgeted police numbers have increased by nearly 20 percent since Independence.

4.8 **Around 60 percent of civil service staff are stationed in Dili**. Staffing levels outside Dili are somewhat higher in the education, health and state administration sectors (see Figure 4.3). This suggests a preponderance of staffing in central agencies. Further work is needed to assess the proportion of staff directly involved in service delivery and those engaged in support functions. In order to promote a stronger service delivery focus, MPF and MSA might consider restricting new appointments for core agencies and for agency administrative functions, thereby giving priority to service delivery activities. Opportunities for redeployment to field level should also be explored. Over the longer-term, a process of functional reviews would help integrate assessments of appropriate staffing levels into the sector policy process and formulation of agency organic laws.

Figure 4.3: Civil Service and Police Posted Outside of Dili, September 2003 %



4.9 **As civil service staffing approaches budgeted limits, the pool of potential recruits is expected to increase rapidly in the next few years, putting considerable pressure on public sector employment policies.** Over the next few years approximately 2,000 students a year will graduate from the University of Timor-Leste and more still from private colleges. There is some scope for recruiting from this pool into the middle grades over the next few years, but thereafter the recruitment needs are likely to drop back to the standard replacement rate of 5 percent a year, amounting to about 900 staff per year across all grades, but only 50 staff in grades that require university education. Since the public sector is by far the largest employer (data from the 2001 household survey indicate that the public sector employed about 40 percent of salaried employees), opportunities for these graduates will be extremely limited. In these circumstances, strong political commitment to a lean civil service will be needed to resist pressures to multiply the number of public sector posts.

4.10 **There are also demands for higher levels of staffing from within the administration to fulfill expanding agency mandates.** The continuing process of preparing agency organic laws in part fuels these demands. In the absence of staffing and financial constraints, this process has encouraged agencies to adopt ambitious mandates, leading to a multiplication of functions and departments, all of which have to be staffed. There is a risk that some of these departments may end up with minimal staffing and resources, with functions filled on paper but with little or no impact in reality. External assistance has played a part too, by implementing management systems

that require relatively high levels of manpower relative to local capacity constraints, and financing a wide range of activities outside agencies' core functions.

4.11 **Agency staffing levels are best contained by setting hard staffing limits through the budget process and carrying out periodic functional reviews to assess appropriate staffing levels in the light of sector policy and financing limits.** Under current practice, staffing levels are determined during the budget process through approved staffing structures and limits for personnel expenditures. These limits have been complemented by aggregate limits on permanent staffing levels negotiated as part of the Transition Support Program. Now that these limits have been reached, Government has instructed agencies to redeploy staff rather than request new appointments as part of their FY2005 budget proposals. Over the coming years, however, a more thorough assessment of appropriate staffing levels will be needed, with a view to reducing the numbers of staff in central administration functions and, where necessary, increasing numbers of personnel in service delivery functions. Functional reviews—linking agency internal structure to core functions and identifying staffing requirements to deliver these functions—are best undertaken as part of a periodic policy and expenditure review process. This allows policy makers to assess the trade-offs between alternative service delivery models; between spending on personnel, goods and services and investment; and between administrative and service delivery functions. Such assessments can only be made where the functional review takes into account a hard budget constraint, reflecting the medium- to long-term recurrent spending levels. In this context, the appropriate framework for carrying out functional reviews is as part of the on-going sector expenditure program exercise. It is likely that the functional review process will require agency organic laws to be revised periodically so as to ensure that they reflect policy, agency mandates, functions and organizational structure. In this way agency organic laws can be used as an instrument of policy, rather than a policy constraint.

C. Reforming Public Sector Pay

4.12 **The present pay scale structure does not adequately differentiate between personnel on the basis of experience, responsibility and performance.** Staff are appointed, primarily on the basis of qualifications, to a seven-grade pay scale rising from US$85 per month in grade one, to US$361 at Grade seven, without any within-grade increments. The internal compression rate of 4.25 is low by international standards, usually ranging between 7.5 and 10, though in low income countries compression rates in excess of 10 are not uncommon. Under current arrangements, there are no incentives for improved performance or for assuming additional responsibilities: all primary school teachers are classified in grade three, for instance, with school directors and teachers paid the same salary.

4.13 **Over the next few years, the salary scale will have to be adjusted to provide an appropriate incentive regime.** The Government is currently reviewing alternative models of public sector pay. This will entail the introduction of within-grade increments, and, possibly, a strictly limited number of allowances. A model prepared as part of the PER process helps assess the financial implications of changing the internal compression rate and introducing within-grade increments. Preliminary estimates suggest that the introduction of within-grade increments based on the current grade structure is affordable, if budgeted staffing levels are maintained (see Table 4.2). Estimates are based on the assumption that only 20 percent of staff receive increments in each year. This is compatible with an incentive regime, where increments are linked to performance rather than seniority and the proportion of staff receiving increments each year is capped. On this basis, after three years, the total costs for the civil service would be about three percent higher than the current payroll bill for budgeted posts, rising to six percent above current payroll by year five. These costs could be absorbed within the *current* MTEF estimates for personnel costs. Further

work is needed to determine the costs of alternative remuneration systems geared to providing appropriate incentives within the administration. A pre-condition of such schemes, however, is the establishment of an effective performance appraisal regime, supported by a personnel registry.

Table 4.2: Estimates of Budgetary Impact of Within Grade Increments

Scenarios	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Current Grade Structure (DCR 4.25)						
Annual Payroll US$'000	25,631	25,842	26,095	26,398	26,762	27,199
% Increase on FY2004 Payroll	100	101	102	103	104	106
Revised Grade Structure (DCR 7)						
Annual Payroll US$'000	26,062	26,284	26,594	26,966	27,413	27,948
% Increase on FY2004 Payroll	102	103	104	105	107	109

Source: World Bank estimates.

4.14 **A case may also be made for decompressing the salary grade structure, so as to provide more competitive salaries for higher-level civil servants.** This relates mainly to grades six and seven, agency senior management, where remuneration is considered low in relation to competitors—primarily aid organizations and financial institutions. This partly explains the significant recruitment shortfalls for these grades (see para 4.6). Decompression is viable, as long as it is limited to the higher grades. The introduction of within grade increments and increases in grade six base pay to US$380 (DCR 4.5) and US$595 (DCR 7), would result in an immediate two percent increase in payroll for budgeted posts and a nine percent increase over five years, which could be financed under the *current* MTEF (see Table 4.2). Proportional decompression lower down the pay scale significantly increases costs, rising to about 17 percent of payroll for budgeted posts over five years. In order to significantly improve the prospects of recruiting and retaining highly skilled staff, much higher levels of decompression may be needed. In an interim phase it may be worth considering the hire of senior managers on a contract basis, with clear performance criteria and more flexible employment terms.

4.15 **At the bottom of the pay scale there are concerns that public sector pay is uncompetitive relative to countries in the region, exerts upward pressure on the labor market, and so acts as a deterrent to foreign investment.** While current pay scales are comparatively high (US$85 month for primary school graduates, US$100 for secondary school), their impact is difficult to assess in the absence of labor market data (anecdotal evidence suggests that downward adjustments in private sector pay have occurred in recent months). Nevertheless, the NDP recognized that some realignment would be needed and—given the difficulty in imposing reductions in base pay—proposed that base pay should be gradually eroded by ensuring that "growth in public wage levels [is] below price inflation throughout the Plan period" (NDP, 2002, page 77).

4.16 **Although base pay for civil servants has not been changed, recent increases in pay for contract workers are a matter for concern.** The Ministry of Transport, Communications and Public Works increased pay for contract labor from US$3.00 a day to US$3.50, a seventeen percent increase, following negotiations with community leaders. Although this was explained as a response to inflation, the award was significantly above the prevailing inflation rate. What is more, there does not appear to have been any assessment of the financial and economic implications of the change in pay policy before the new pay rates were announced. Clearly, if further unilateral changes in pay policy are to be avoided, a formal review process involving core ministries including MPF and the Ministry of State Administration will need to be put in place.

4.17 **Perhaps the most effective way to allow base pay to settle to more competitive levels would be to outsource basic service functions, thereby taking most of the staff with limited academic qualifications and technical skills off payroll.** The health sector has already made

progress in this direction and there is scope for outsourcing other functions, such as low level ancillary services to public institutions and the defense forces. While this may not necessarily reduce the cost of services, it is does allow wage levels to be set by contractors, who will have to follow market rates. This helps reduce distortions created by the relatively high base pay in the public sector wage scale. Further adjustments can be made through recruitment policies, by increasing the level of qualifications for new recruits in grades one to five. Further studies are needed to assess the likely impact of these policy options on the labor market, public sector recruitment and retention, and public finances. In parallel, it will be important to develop contract design, procurement and monitoring skills.

4.18 **Whilst recognizing the importance of pay policies in improving public sector performance, reforms should proceed cautiously.** Public sector employment and pay should be linked to merit and performance. Government-wide pay reforms can only proceed once transparent procedures for performance assessment and an effective, up-to-date personnel registry have been put in place. Until then, a temporary system of allowances for exceptional cases could address the discrepancies between grade levels and levels of responsibility by, for instance, introducing allowances for school directors who are currently paid at the same level as teachers. But this anomaly, and other cases for complementary allowances, such as for risk or rural postings, will ultimately have to be addressed in the context of broader pay reform and definition of the grading structure.

D. Managing the Civil Service

4.19 **Personnel management has been given much lower priority than financial management in Timor-Leste's development agenda, even though lack of human resources is Timor-Leste's binding development constraint, and the effective use and development of human resources will be critical in determining Timor-Leste's development trajectory**. The parlous state of Timor-Leste's public administration system was made apparent soon after Independence. Routine personnel management transactions—such as transfer, promotion, and disciplinary action—and record keeping were paralyzed in the absence of a regulatory framework and clearly assigned institutional responsibilities. In the rush to staff institutions, staffs' responsibilities and functions were ill defined and postings occasionally ill-suited to their assignments. Training was generally *ad-hoc* and supply driven—geared to the transfer of skills from expatriate Advisers—with little attention given to the NDP's goal of professionalizing the civil service (NDP, 2002, page 63). Discipline proved difficult to enforce, in part because the accountability structure and disciplinary procedures were ill defined. The Government is now beginning to take the necessary steps to address these development challenges.

4.20 **The recent approval of the Public Service Statute will provide a framework for the personnel management systems, but implementing regulations and procedures are still needed.** Although a draft civil service statute was prepared under the Transitional Administration—following a consultative process in line agencies and districts—it was only approved by Parliament in May 2004. While the proposed statute provides a broad framework for civil service management and an outline of disciplinary mechanisms, supplementary regulations covering disciplinary procedures, recruitment, procedures, gifts, reporting requirements and the role of the Public Service Directorate will be needed to implement the Statute. Particular attention needs to be given to ensuring that the most serious disciplinary measures, and recruitment and promotion of senior personnel are overseen by panels rather than civil servants hierarchical superiors. The Ministry of State Administration has already advanced with the preparation of a manual covering basic human resource transactions. Further work is needed to define policies before implementing regulations can be drawn up. Particular attention is needed to clarify the

Government's objectives and personnel policies regarding: recruitment (for example, appropriate practice where suitably qualified personnel cannot be identified), remuneration, performance assessment, promotion and career development. Development of regulations and guidelines on these issues will be critical if agencies are to assume responsibility for personnel management.

4.21 **Responsibility for routine personnel management functions will have to be delegated to the line agencies, with the Ministry of State Administration providing a supporting and oversight role.** Even in a small country such as Timor-Leste, with a modest civil service, excessive centralization is likely to result in the central agencies being overwhelmed by the sheer volume of routine personnel management transactions. This would tend to disempower agency managers and distract attention from critical oversight functions. Under UN Transitional Administration, although a Public Service Directorate was established as a central civil service agency, responsibility for recruitment and personnel management was delegated to the larger specialized line agencies (education and health) and the police and security forces. However, neither the roles nor responsibilities of agencies in personnel management, nor their relationship with the Ministry of State Administration, have been clearly defined. Moreover, most of the smaller agencies did not put in place comparable structures. The Ministry of State Administration is currently trying to establish a more systematic personnel management structure at agency level by requiring each Ministry to include a Department of Administration and Finance (DAF), with staff holding the functions of the National Directorate of Public Service (NDPS), in the agency Organic Statute. Establishment of these units and training of their staff is a prerequisite of a functioning civil service management system. This will also imply a gradual transformation of the NDPS's function, from direct involvement in routine personnel management transactions to one of providing support and oversight over agency personnel management units. NDPS oversight responsibilities still have to be defined. This may entail, for instance, participation in the recruitment, performance review and promotion of all senior personnel, and periodic personnel registry audits. The NDPS is, at present, ill equipped to fulfill this oversight function. Clearly, given the scale and importance of the task, the appointment of an adequately qualified and well-motivated NDPS team will be critical.

4.22 **An up-to-date, comprehensive personnel registry needs to be put in place if there is to be effective personnel management**. In early 2001, the NDPS set-up a centralized personnel registry and database to keep track of appointments. Although this covered only part of the civil service (excluding health workers, teachers, police and defense force personnel), the registry was incomplete and already out-of-date at Independence. Some agencies maintained personnel records; others did not. Payroll provided the only comprehensive, up-to-date record of government personnel, though this contained only basic identification and contract information. In the absence of an up-to-date registry, it is impossible to record basic personnel administration transactions (such as recruitment, appointment, transfer, promotion, leave, retirement, and disciplinary action), let alone develop more advanced human resource management functions (such as staff appraisal, training and personnel management policies and strategies). As the first step towards a comprehensive registry, MSA recently sent NDPS teams to review the status of agency personnel records. While this may be helpful in assessing the current status, the only realistic way of maintaining up-to-date records is by delegating responsibility for record keeping to the employing agency. If this is to happen, responsibility for personnel record keeping will have to be clearly assigned, documentation requirements clarified and staff trained in personnel management transactions. Development of a computerized record keeping system would help NDPS keep track of personnel transactions and facilitate a linkage to the computerized payroll system managed by Treasury. However, computerization can only proceed if the agencies have up-to-date personnel records to enter into the database. Given the urgency of establishing a registry, and the scale of the task in some of the larger agencies, notably education, additional support staff may need to be

contracted to establish the requisite personnel records and thereby allow agency personnel to concentrate on routine record keeping.

4.23 **Flexibility in appointments is critical if staff are to be deployed where their skills can be used most effectively.** Unfortunately, in the rush to staff Government agencies in the run-up to Independence, it proved difficult to match candidates to the appropriate posting. A Government-wide skills assessment conducted by the MPF-PEAMD has highlighted some obvious mis-matches of skills and assignments. Furthermore, eighteen months after Independence, differences in staffs' motivation, management and technical skills are also becoming apparent. Some flexibility in posting staff, so that they can be moved between agencies and functions, is needed. Given the size of the Timor-Leste civil service, the scope of career advancement is likely to be limited without flexibility in assignments. This requires clear procedures on redeployment, with an exchange of information on staff performance supported by a well-staffed and qualified civil service agency. NDPS could usefully assume this clearinghouse function, particularly where re-assignment is pursued actively to support staffs' career development.

4.24 **Structures for career progression and transparent procedures for performance review will need to be put in place if the NDP goal of professionalizing the civil service is to be achieved.** These structures have yet to be defined in Timor-Leste. Again, the options are for a centralized system, a delegated system or some hybrid of the two. Delegated systems require line agencies to assume broader personnel management functions for personnel cadres in their area of professional competence. Thus the Ministry of Finance assigns accountants throughout the public sector, and the Ministry oversees professional standards, provides training and participates in promotions and rotations between institutions. To be effective, a cadre system has to be properly managed, with an anchor team coordinating administrative and technical support in the sector agency. The alternative, centralized system would prove difficult for NDPS to manage, unless it is limited to only the highest ranks of the civil service.

4.25 **Professionalization of the system will also require adequate systems for enforcing discipline and accountability**. Recent surveys have pointed to problems of poor attendance at schools and other government services in the field. The Prime Minister has highlighted poor

Box 4.1 Key Recommendations – Civil Service

- ***Implementation of periodic functional reviews as part of any future sector policy and expenditure review process.*** *Such reviews would assess appropriate staffing levels, establish limits on new appointments for core agencies and for agency administrative functions, and assess the feasibility of redeployment of staff to the field level*
- ***Preparation of regulations to support implementation of the Public Service Statute,*** *starting with procedures for disciplinary measures, promotion and recruitment. Regulations should include provision for panels to review the most serious disciplinary offences, and recruitment and promotion of senior personnel, so that these measures are not determined solely by the civil servant's hierarchical superior.*
- ***Establishment of a formal pay policy review process,*** *leading to decompression, involving core ministries including MPF and MSA, so that the expenditure impact of changes in policy is assessed. Interim measures to increase pay flexibility include: at the top of the salary scale, hiring senior managers on a contract basis, with clear performance criteria and flexible employment terms; and at the bottom of the scale, outsourcing of support functions and adjustments in minimum qualifications of clerical grade staff.*
- ***Formal delegation of responsibility for routine personnel management*** *to line agencies' personnel units, with MSA providing support and oversight.*
- ***Establishment of an up-to-date, comprehensive personnel registry*** *with a view to the development of a computerized record keeping system.*

attendance as a problem in central agencies too. More serious disciplinary infractions have been identified in Inspector General reports. Identification of disciplinary infractions has not always been followed promptly by disciplinary action. This may be due in part to lack of clear disciplinary procedures. These will soon be in place. The Public Service Statute defines infractions (including abuse of authority, abuse of privileged information, use of public office for personal benefit and other corrupt practices), provides for graduated disciplinary measures and outlines disciplinary procedures to be followed. Further regulation is needed to establish procedures for the most serious cases, including the establishment of review panels. A draft supporting "Manual" provides examples of the documentation to be used in documenting and processing disciplinary cases. The Ministry has recently launched a disciplinary process using these procedures. The next step is to ensure dissemination of the disciplinary procedures throughout the public service, possibly through an agency-level training of trainers program, with more comprehensive training of senior management. It is critical that disciplinary procedures are not only applied, but also seen to be applied through prompt action, with dismissal in the most egregious cases. This is true both in the central agencies and at the field level, where agencies have to demonstrate commitment to investigate complaints by service users and follow-up with disciplinary action. Such accountability is likely to be most effective where it is supported by representative oversight bodies close to the field level, such as Parent Teachers Associations.

5. IMPROVING ACCESS AND QUALITY IN BASIC EDUCATION

A. INTRODUCTION

5.1 **Seven out of ten people cited education as the top national priority when the government consulted with the people on their aspirations for the new nation in 2002.** The National Development Plan mirrored these preferences, giving priority to the delivery of quality primary junior secondary and senior secondary education (see NDP, 2002, page 38). Broad policy goals included a commitment to primary education for all and to partnerships with parents and civil society in the delivery of education services. At the same time, the Plan recognized that a period of consolidation was needed, to rationalize the system and build institutional capacity following the massive reconstruction effort in the immediate post-conflict period. The NDP also set ambitious targets for increases in public spending on education, rising from around one-fifth to one-third of total spending in the period to FY2007.

5.2 **Reconstruction was a remarkable success, with a functioning education system of over 900 schools and nearly a quarter of a million students put in place in just four years.** The education system was literally in ruins in late 1999, most schools were destroyed, virtually all Indonesian personnel left causing an acute shortage of qualified teachers and other professional staff, particularly at the post-primary level, there was no national curriculum or instructional materials, both gross and net enrolment rates fell sharply. Pragmatic policy decisions had to be taken so that services could be restored. Most schools have now been rehabilitated, teaching places are filled and instructional materials are distributed and used. Enrolment rates have more than recovered, in part due to the late enrolment of children whose schooling was disrupted and in part due to the enrolment of children who had not previously participated in schooling.

5.3 **The Ministry of Education, Culture, Youth and Sports (MECYS) is now turning its attention to longer term development challenges for the education sector.** An Education Policy was approved by the Council of Ministers in March 2004. This lays out the broad framework for development of the sector. The present chapter highlights some of the key expenditure policy and management issues to be addressed in support of this policy framework. Section B reviews the structure of education services, highlighting the success of the reconstruction program and the significant role played by the non-government sector. Section C identifies some of the challenges in improving internal efficiency, by reducing repetition and dropouts, and their implications for improved access. Section D examines some of the measures needed to improve the quality of education, particularly in primary education, including staffing issues, curriculum development and the transition to teaching in the official languages of Tetun and Portuguese. Section E reviews education financing and expenditure in the light of these policy considerations, focusing on allocation of resources to the policy priority, basic education, funding on non-personnel costs and the need for specific policies as regards parental contributions and public funding of private education. Finally, the Section F underlines the importance of improvements in management information systems and expenditure management systems to address slow budget execution, and proposes the establishment of a system of school block grants to cover operational and maintenance costs.

B. THE EDUCATION SYSTEM

5.4 **Literacy and school attendance indicators reveal a legacy of under-investment in the education sector in the period to 1999.** Overall, less than sixty percent of adults are literate. Gender differences are substantial: 65 percent of males and 52 percent of females are literate. While there is little regional variation, literacy is much higher in the lowlands (65 percent) than the highlands (46 percent), and much higher in urban (73 percent) than in rural areas (53 percent) (see Table 3). There is also fairly wide variation in literacy by wealth quintile, ranging from 40 percent among females in the poorest quintile to 90 percent among males in the richest quintile. Educational attainment follows a similar pattern. For example, among adults aged 35-44 (prime ages in terms of workforce participation) two-thirds of males and nine out of ten females have less than a full primary school education. In rural areas, only 11 percent of those aged 15 and over have progressed beyond lower secondary school, and this figure falls below 10 percent in highland areas (Table 5.1). Surveys suggest that about five percent of people speak Portuguese and about eighty percent speak Tetun. Measures to raise agricultural productivity or improve maternal and child health must take into account the low levels of literacy and education, as well as language constraints. The low levels of educational achievement amongst adults also underline the huge challenge facing Government in achieving its education policy objectives.

Table 5.1: Educational Attainment of Adults (15 and Over) Percent

Area	Level of Completed Education					
	Never Enrolled in School	Some Primary School	Completed Primary School	Lower Secondary School	Upper Secondary or Higher	Total
Eastern Region	54	16	6	11	13	100
Central Region	51	14	6	11	18	100
Western Region	61	13	8	8	10	100
Highland	64	15	4	8	9	100
Lowland	49	14	7	11	17	100
Urban	39	15	7	13	27	100
Rural	59	14	6	10	11	100
Total	**54**	**14**	6	**10**	**15**	**100**

Source: UNICEF, *Multiple Indicator Cluster Survey*, 2003.

5.5 **The education system is characterized by a relatively wide-based pyramid.** Most recent estimates suggest that about 240,000 students are enrolled in primary and secondary education. Of these, 75 percent are enrolled in primary grades (one through six), 16 percent in junior secondary (grades seven through nine) and just 9 percent in senior secondary school (ten through twelve). In a move toward nine years of basic education, Government has established an *Escola Basica* providing both primary and junior secondary education, with plans for at least one in each district. Vocational and technical education is also available at secondary level.

5.6 **After strong growth in enrolment during the immediate post-conflict period, the number of primary school students has now stabilized.** There was a surge in primary school enrolment in 2000, from 165,000 students in 1998 to 185,000 when schools reopened, with the intake to grade one increasing by 50 percent over this period. Most new enrollees were girls, the poor and children in rural areas, including a large number of older children who had not previously attended school.[7] This significantly reduced gender, income and rural-urban disparities in school attendance. The surge in enrolment was motivated by post-conflict optimism and facilitated by the temporary abolition of fees, uniforms and parent contributions. Increasing enrolment was reflected in the rise in primary education Gross Enrolment Ratio (GER) from 89 percent to 110 percent,

[7] World Bank, Timor-Leste: Meeting the Challenges of Independence: The Way Forward, February 2004, page 7-8.

Table 5.2: Gross and Net Enrolment , 1998/99 to 2002/03

Level	School Year			2002/03			
				Male		Female	
	1998/99	2000/01	2002/03	Urban	Rural	Urban	Rural
Primary							
Gross Enrolment	89	113	105	115	102	110	103
Net Enrolment	51	67	75	86	73	84	72
Junior secondary							
Gross Enrolment	44	47	65	87	63	89	52
Net Enrolment	24	22	30	42	24	46	25
Senior secondary							
Gross Enrolment	19	26					
Net Enrolment	11	16					

Source: 1998/99 and 2000/01 data based on TLSS. 2002/03 data based on MICS.

Table 5.3: Key Education Indicators, 2000/01 to 2003/4 School Years

	School Year				%
	2000/01	2001/02	2002/03	2003/04	Change
Students	**224,971**	**234,436**	**233,871**	**247,183**	**9.87**
Primary	185,378	183,806	174,822	185,594	0.12
Junior Secondary	29,586	32,862	38,180	40,368	36.44
Senior Secondary	10,007	17,768	20,869	21,221	112.06
Teachers	**4,459**	**5,532**	**5,762**	**5,922**	**32.81**
Primary	2,992	3,926	4,080	4,173	39.47
Junior Secondary	884	1,026	1,103	1,176	33.03
Senior Secondary	583	580	579	573	(1.72)
Schools	**844**	**852**	**890**	**924**	**9.48**
Primary	707	714	735	749	5.94
Junior Secondary	103	102	113	120	16.50
Senior Secondary	34	36	42	55	61.76
STR	**50**	**42**	**41**	**42**	
Primary	62	47	43	44	
Junior Secondary	33	32	35	34	
Senior Secondary	17	31	36	37	

Source: World Bank estimates based on MECYS data.

while Net Enrolment Ratio (NER) increased from 51 to 70 percent in 2001.[8] Since then enrolment has stabilized. There was a drop in student numbers from school year 2001-02 to 2002/03, though this may have been due to underreporting by schools. While gross enrolment fell from 113 percent in 2000/01 to 105 percent in 2002/03, net enrolment increased from 67 percent to 75 percent over the same period. Preliminary data from 2003-04 suggest that primary school student numbers have now recovered. There is some variation between districts, in part due to recent population movements. While enrolment ratios have to be interpreted with caution owing to their basis in sample surveys, data do show significant gender and rural-urban disparities at primary school levels. Primary school teacher numbers have grown at a much faster rate, by 39 percent between 2000-01 and 2003-04, allowing a significant reduction in student-teacher ratios from 62:1 to 44:1 over this period. Currently an average primary school has about 250 students and five teachers. Some districts, such as Dili, have larger schools, giving greater flexibility and the opportunity for single teacher classes and some specialization.

5.7 **There has been a huge increase in junior secondary and senior secondary enrolment since 2000-01**. The number of junior secondary school students has increased by 36 percent and the number of senior secondary students has more than doubled. Increases in the number of junior secondary school teachers have almost kept pace with enrolment. However, the range across districts is much wider than for primary schools: from 20:1 in Viqueque to 49:1 in Ainaro. At senior secondary school level, however, numbers of salaried teachers have actually dropped

[8] Estimates of enrolment ratios are based on population and age group estimates generated by the Timor Living Standard Survey of 2001 (with total population estimated at 828,205).

slightly 2000-01, leading to a significant increase in student-teacher ratios. Low levels of enrolment in 2000-01 were largely due to acute shortages of qualified teachers as Indonesian teaching staff left. Secondary schools addressed this problem by hiring "volunteer" teachers, largely financed from parental contributions, many of which lack the requisite qualifications to be hired by the Ministry. As many as one-third of the teaching staff are volunteers. Further recruitment of secondary school teachers continues to be hampered by a lack of appropriately qualified candidates.

5.8 **The non-governmental sector, mainly church schools, is a major provider of education, especially at secondary level.** Data from the 2002-03 school year indicate that church schools account for about 13 percent of primary school enrolment and 13 percent of primary school teachers. At junior secondary school level, church schools account for 25 percent of enrolment and teachers, with this proportion rising to 32 percent of enrolment and 31 percent of teachers at senior secondary level. Church schools are funded from the Ministry's budget, apparently on the same basis as public schools, including payments for teachers' salaries and provision of school materials.

5.9 **Thousands of tertiary students that had their studies interrupted in 1999, whether in Timor-Leste or in Indonesia, have been able to resume their studies**. The University and colleges in Timor-Leste did not reopen for a year. The former University reopened as the National University of Timor-Leste (UNTL) in October 2000, with about 4,000 former students enrolled together with about 2,000 students who had been studying in Indonesia. A further 2,000 students in their final semesters, requested to return to their former places of study in Indonesia. MECYS established a scholarship system to fund 2,000 students returning to Indonesia, as well as a scholarship program for the 500 students who, for various reasons, had remained in Indonesia.

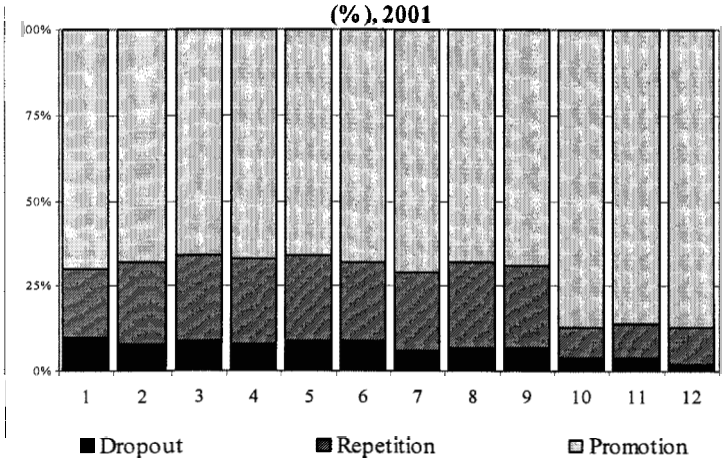
5.10 **There has also been a rapid expansion of post-secondary training institutions.** In addition to UNTL, there are now seven institutions that call themselves universities; eight institutes and colleges; and three academies. In total, these enroll roughly 4,000 students, though half of this number is in the largest of the private universities. Under the Indonesian higher education system, polytechnics and academies were professional institutions training people with a direct orientation towards the world of work in contrast to degree-granting institutions like universities. The presence of eighteen private tertiary institutions in Timor-Leste suggests that there is a large market for private supply—even though the absence of regulation and accreditation means that the quality of these institutions is unknown and the market in Timor-Leste for graduates must be narrow given the size of the country's formal sector. The recent National Consultative Congress on Education recommended that an accreditation system be set up to ensure both quality institutions and courses at this level, and draft regulations have been prepared.

C. Improving Efficiency and Access

5.11 **The NDP argues that the priorities for the education sector over the medium term are to expand access, with a view to achieving universal basic education, and to improve internal efficiency.** These goals are closely related: the feasibility and cost of improving access will depend on the level of efficiency in the system. Improvements in internal efficiency will determine the proportion of children graduating from each grade in primary education, and so determine the rate of expansion of junior and senior secondary education.

5.12 **The late entry of children, high repetition rates and high dropout rates all undermine educational efficiency, particularly in primary education.** While children aged six should enroll in six-year primary education, many parents feel their children are too young at this age to enroll and wait until they are older. Data from the 2001 school mapping exercise revealed that at grade

Figure 5.1: Dropout, Repetition and Promotion by Grade (%), 2001



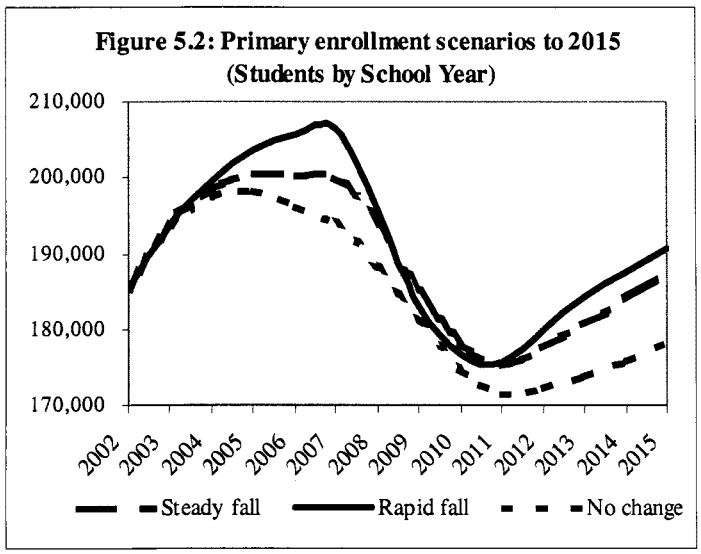
one, only 29 percent of children started school at age seven. Children from poor families tend to start school later: just 10 percent of children from the poorest quintile started grade one at 7 years old. The problem of delayed entry is compounded by the backlog of older children with insufficient primary education. This is in part due to high rates of repetition. Data from the school mapping exercise indicate that about one-quarter of children repeat in each grade of primary and junior secondary education. As a result, the proportion of overage children tends to be greatest in the higher grades: by grade six only 15 percent of children were aged eleven, the appropriate age for the grade. Dropout rates are also high, with around 10 percent of children dropping out in each grade of primary education (see Figure 5.1). Repetition and dropout rates tend to be highest amongst children from poor families. Senior secondary education has lower dropout and repetition rates: students who reach that level tend to come from wealthier families. At all levels, girls have lower repetition and dropout rates and higher promotion rates.

5.13 **At the current level of internal efficiency, only two-thirds of children will reach grade four, and only half will eventually complete a full primary cycle.**[9] Educational attainment for early dropouts is limited and the prospects of sustaining basic literacy skills poor. This has significant cost implications. The cost per student for six years of primary education is about US$300. The cost per graduate is twice that due to high repetition and dropout rates. Every year the Ministry provides teachers, instructional materials, infrastructure, furniture, and operating expenses for more than 40,000 students more than it would need to in a perfectly efficient system. There are enough repeaters in the primary education system today to fill a thousand classrooms.

5.14 **Improvements in efficiency will also be critical in determining future enrolment rates and the prospects of achieving the NDP's goal of universal basic education.** Figure 5.2 presents three enrolment scenarios based on a projection model incorporating estimated initial enrolment, age at enrolment, and various rates of repetition and drop out in grades one to six for the period to 2015. In the first scenario there is a steady improvement in age appropriate enrolment and reductions in repetition and dropout. In the second scenario, these characteristics change rapidly, and in the third scenario they are kept constant at 2002 levels. The highest enrolment levels in 2015 would come from rapidly increasing the efficiency of the system, while the lowest levels would come from doing nothing to change current efficiency levels. All three scenarios peak in the medium term and then begin falling until underlying population growth takes over as the main driver of enrolment in about 2010.

5.15 **Enrolment scenarios suggest that there are currently enough places in the primary school system but further expansion is needed in junior and senior secondary education.** Since short-term expansion of the primary education system to accommodate the bulge in late-

9 World Bank, Timor-Leste. Poverty in a new nation: Analysis for action, 2003, p.70



starters over the coming years is not feasible, current capacity of around 185,000 is likely to be sufficient over the medium term. Consequently, there is no need for further increases in numbers of schools and teachers to meet primary education access targets. This is not to say that further construction of primary schools is not needed. The wide geographical variations in enrolment rates suggest that schools could be better distributed, and there is a continuing need for upgrading of schools and a gradual shift to the *Escola Basica* with complete basic education at one site. However, a significant increase in the number of junior secondary schools will be needed if enrolment is to increase from the 40,000 students today to cover the 70,000 children implied by full transition from Grade Six to Grade Seven. Current plans envisage fourteen basic schools that will provide just 2,000 extra junior secondary places. Over the longer term, further expansion of senior secondary education will be needed to accommodate increases in children graduating from junior secondary school.

5.16 **Although reducing repetition is recognized as a priority by the NDP, the Government has not yet developed a clear strategy to achieve this goal.** Policy options under consideration include: automatic promotion, remedial classes and in-service training of teachers. Automatic promotion reduces classroom overcrowding and enables teachers to focus more on effective teaching of smaller groups of students, thus raising quality. Very little research evidence exists to show that repetition has any positive effects on student achievement. However, in Timor-Leste, where language barriers may hinder effective instruction, this may not be a viable option. For relatively little cost, students who need to repeat can be taught over summer in special classes and then move on with the rest of their class. Providing special training to teachers in diagnosing learning problems early and providing additional help to identify students in need of help. These kinds of interventions are likely to be a cost-effective means of achieving the education-for-all objectives.

5.17 **Greater attention also needs to be given to the demand side if the Government is to succeed in increasing enrolment and reducing absenteeism and dropouts.** According to the Timor-Leste Living Standards Survey (TLSS) of 2001, 32 percent of non-attenders aged seven to twelve from the poorest quintile and 26 percent from the richest quintile cited lack of interest as the reason for never attending school. This finding contrasts with the high priority given to education in NDP consultations. Results of the Primary School Achievement Survey also point to very high absentee rates: 39 percent of students in urban public schools and 43 percent in rural schools reported that they were absent the previous week (attendance is only slightly better at private schools).[10] The average number of days absent was 2.2 days, almost half the school week. Around 55 percent of reported absence was due to illness and 35 percent due to children staying to help their families. Inevitably, absenteeism feeds through into poor performance, repetition and dropout.

[10] World Bank, *Timor-Leste: Meeting the Challenges of Independence. The Way Forward.* February 23, 2004.

In rural areas, where children are involved in farm labor at peak farm activity times, adjusting the school year to avoid those times can help reduce non-attendance. In Timor-Leste the long school holidays occur at one of the lowest labor demand times in the agricultural cycle. Most southern hemisphere countries organize the long school break in December/January. Perhaps the most important policy response, however, would be to eliminate school fees, since this would remove a significant constraint to enrolment among the poor. Supply-side considerations may also impact on demand, enrolment and attendance. Distance to school is one factor, but so too is the quality and reliability of services.

D. Improving Quality of Education

5.18 **Closely linked to the goals of improvement in access and efficiency, the NDP stresses the importance of improving the quality of education throughout the system.** This requires that schools are adequately staffed with trained and motivated teachers working under appropriate management and oversight arrangements. Further work is also needed in the development of a relevant curriculum, transitioning in the language of instruction from students' mother tongues to the official languages of Tetun and Portuguese, and providing adequate teaching and learning materials.

5.19 **High student-teacher ratios, particularly in primary schools, prevent effective teaching and underline the importance of adequate staffing in the education system.** Although primary school student-teacher ratios (STR) have improved significantly, with a current average of 44:1, as compared with 67:1 in 2001, this remains significantly above the level of 40:1 considered as the limit for effective teaching. In contrast, STRs for junior and senior secondary schools are relatively efficient in comparison with other low income countries. Improvements in educational efficiency should help reduce STRs over the medium-term, though this may be offset by increases in enrolment, particularly at secondary school levels. Over the medium term, increases in staffing levels will be needed if the Government is to simultaneously achieve increases in enrolment and improvements in the student-teacher ratios. The financial implications are significant. Table 5.4 presents estimates of annual payroll costs for teaching staff at different STRs and enrolment levels in comparison with FY2004 personnel budgets and STRs (estimates are slightly lower than actual costs for comparable STRs owing to shortfalls on recruitment). These estimates illustrate the hard choices that will have to be made regarding the affordable level of staffing and trade-offs as regards the quality of service.

Table 5.4: Estimated Payroll Costs for Teaching Staff at various STR and enrolment rates against FY2004 Budget in US$ '000

Enrolment	Student Teacher Ratio				FY2004
Primary	**35**	**40**	**45**	**50**	**44**
185,594	7,827	6,848	6,087	5,479	6,461
200,000	8,434	7,380	6,560	5,904	
Junior	**25**	**30**	**35**	**40**	**34**
40,368	3,003	2,503	2,145	1,877	2,382
70,000	5,208	4,340	3,720	3,255	
Senior	**25**	**30**	**35**	**40**	**37**
21,221	1,579	1,316	1,128	987	1,297
50,000	4,464	3,720	3,189	2,790	

Source: World Bank estimates, FY2004 personnel budget and reported STRs.

5.20 **These choices will have to be made alongside decisions regarding the appropriate hours of instruction and nature of the shift system.** Officially schools are to provide five hours of instruction daily for 180 days a year. In practice, about one-third of schools use some form of double shifting, often two hours for grades one to three and three hours for grades four and five. As a result students receive fewer hours of instruction than required to achieve curricular objectives. While use of shifts may resolve access problems and lower capital costs by reducing the need for

additional classrooms, regulation is needed to ensure that students do receive the full five hours of instruction. Changes in weekly schedules may be needed to accommodate morning, afternoon and possibly even weekend sessions. At the same time, decisions will have to be made as to whether shifts should be delivered by two sets of teachers, or by one set of teachers paid additional benefits to teach two sessions. Again, these choices will have significant financial implications for the education system.

5.21 **Significant investments in in-service training are needed to overcome the lack of formal preparation of most teaching staff.** Of the 3,000 teachers recruited through examination in 2000, the vast majority had mixed qualifications. The PSAS suggests that 70 percent of the Grade Three and Four teachers surveyed had secondary or post-secondary qualifications, with an average of over 10 years' teaching experience, but fewer than 10 percent had pre-service teacher training. In-service training is now provided through the Institute of Continuing Education, both in content and in pedagogy. In 2003/04, 65 percent of teachers received some form of in-service training. Currently teachers are trained at D2 and D3 level through half-day courses while teaching. While this approach is preferable to full-release schemes, a better long-term solution may be to introduce distance learning coupled with frequent face-to-face workshops, perhaps using the cluster schools as focal points, so that unqualified teachers could complete the course over perhaps three or four years. Uganda developed a system, since adopted elsewhere in Africa, that used tutors located in cluster schools, with distance leaning modules and weekly meetings, together with vacation residential schools to cover their two year pre-service course in three years. Over the longer term, the MECYS would like to ensure that teachers have a university degree. This objective can be met with current levels of pre-service training in the four institutions currently offering courses, even if there are significant increases in STRs and enrolment.

5.22 **Improvements in teacher performance will also require adequate incentives and supervisory and oversight arrangements**. The fact that all primary school staff are on the same pay point—grade three of a seven point scale—regardless of qualifications, experience, location or position means that there is no effective incentive regime in place. There is no opportunity to reward teachers for long service, postings to difficult areas, qualifications, or taking extra responsibilities in the administration or running of schools. Implementation of an appropriate career structure and associated pay regime, in the context of broader public sector pay reform, would help address these concerns. Improved supervision and accountability mechanisms are also needed. The PSAS highlights the problem of poor attendance. According to teachers interviewed, 14-16 percent of rural teachers were absent from school in the previous week, for an average of three days. Students reported even higher levels of absenteeism, and noted that there are usually no substitute teachers to cover for those who are absent. At present, oversight is provided by district superintendents, who undertake periodic visits to schools to address management issues and monitor teaching. However, the recent PSAS suggests that inspections are infrequent—under half of primary schools reported that they were visited occasionally—and superintendents have played a limited role so far in addressing problems of attendance and administrative matters, such as the supply of teaching materials. This points to the need for oversight arrangements closer to the field level such as school cluster arrangements and involving parents in monitoring school performance.

5.23 **There is a pressing need for a national curriculum, supporting teaching and learning materials which address the educational requirements of Timor-Leste.** The transitional curriculum is still based on the 1994 Indonesian curriculum. While some minor modifications were made under UNTAET, it is no longer suitable for use in Timor-Leste. Steps are being taken to introduce a new national curriculum. Best practice points to the need for a curriculum management system and process within which curriculum reform can take place. This would allow for development support, assessment and review, so that the curriculum can be revised on the basis of

experience. Progress has already been made in developing a national curriculum framework, with individual subjects for each grade at each level of the system, subject syllabuses and associated material for the primary level. The next step is for teachers, teacher educators, parents and students to comment so that the content and approach of the teaching and learning materials are properly fitted to the Timor-Leste context.

5.24 **There is also a need for a pragmatic, fully formulated language policy.** The general policy is clear: instruction is to be in Portuguese and Tetun. Implementation began with Grade One and Two in 2000 and has now progressed to Grade Four. Significant inputs have been provided to support the introduction of Portuguese as a language of study while the transition takes place, including large numbers of language teachers. A well articulated policy must now reflect the significant debate on language at the National Education Congress. The Congress reiterated the need for an approach that takes account of the mother tongue of children in the early grades. It also stressed the need to develop primary instructional materials in both Portuguese and Tetun with bilingual textbooks at primary level. This will raise the level of investment in textbooks, as it effectively doubles the cost of each unit. Replacement texts will cost US$1.4 million per year. If a transition to Portuguese is to be effective, teacher fluency and literacy in that language must be seriously addressed. The recent commencement of tertiary teachers' courses to strengthen language skills is part of the plan to meet this need. Supplementary intensive training could cost well in excess of US$1 million per year over the medium term.

5.25 **Provision of teaching materials, textbooks and school facilities will also have to be improved**. The PSAS indicates that more than half of students have no books and that lack of textbooks is the problem most frequently cited by teachers in both urban and rural schools. Teachers also reported acute shortages of teaching guides for mathematics and Portuguese. Just 13 percent of rural schools had a library. Adequate provision of teaching and reading materials is critical for effective classroom teaching and for setting homework. A start has been made by providing supplementary Tetun materials distributed by an NGO to all primary students, with a separate set of teacher's notes. Plans are underway to expand both the frequency and coverage of this material. This will require adequate funding, but also effective distribution mechanisms. Provision of discretionary funding to schools directly, so that they can purchase supplies, may help address these problems.

E. Financing and Resource Allocation in the Education Sector

5.26 **As the education system shifts from reconstruction to longer-term development, expenditure policy will have to accommodate a gradual reduction in external financing whilst aligning resources with sector policy objectives.** The discussion of policy options for achieving objectives in terms of improving access, internal efficiency and the quality of education illustrates that policy decisions regarding the appropriate means of achieving these objectives will have significant financial implications. Formulation of an Education Policy, clarifying objectives and the broad principles for development of the education sector is an essential first step. Once the policy objectives and broad strategy are defined, the education sector's Sector Investment Program will have to address the appropriate allocation of public resources—both Consolidated Fund spending and external financing—between levels of education, service providers, component expenditures and levels of administration, as well as the appropriate levels of parental contribution (if any) to education.

5.27 **Total public spending on the education sector amounted to about US$106 million over the three year period from FY2001 to FY2003.** Of this amount, 37 percent has been financed from the Consolidated Fund, 21 percent from the Trust Fund for East Timor and 42 from bilateral

Table 5.5: Financing of Public Spending on Education

Source	FY01 Act	FY02 Act	FY03 Est Act	FY04 Budget	FY05 MTFF	FY06 MTFF	FY07 MTFF
CFET	10,295	12,098	17,320	17,042	18,892	20,387	22,219
TFET	9,910	6,210	6,240	10,440	1,700	-	-
Bilateral	13,475	16,860	13,825	12,114	10,358	5,329	5,289
Total	**33,679**	**35,169**	**37,384**	**39,596**	**30,950**	**25,716**	**27,508**
CFET	31	34	46	43	61	79	81
TFET	29	18	17	26	5	-	-
Bilateral	40	48	37	31	33	21	19

Source: FY00-01 and FY01-02 from audited Financial Statements; FY02-03 from draft Financial Statements; FY03-04 to FY06-07 from Budget Papers. External financing from MPF External Assistance database.

sources (see Table 5.5). Programmed financing from FY2004 to FY2007 shows continuing growth in Consolidated Fund allocations for education, though external financing and total spending decline sharply due to the termination of on-going projects. This fails to capture the pipeline of projects pending finalization of bilateral agencies' country programs (see para 2.5).

5.28 **Although some reduction in external financing may be expected as reconstruction programs and emergency funding to support scholarships for students in Indonesia wind down, decisions regarding future external financing should take into account the need to sustain on-going services.** Virtually all reconstruction costs were covered by externally financed projects; Consolidated Fund allocations for capital spending have been negligible. Unfortunately, owing to the poor disaggregation of data on external financing, it is difficult to assess what proportion of total spending has been spent on reconstruction activities. One estimate, based on data presented in MPF's external assistance database, suggests that reconstruction spending peaked at around US$13 million (38 percent of spending) in FY2001, dropping slightly to US$12 million (34 percent of total spending) in FY2002 and then dropping off to under US$6 million (less than 20 percent of total spending) in FY2003. Significant resources have also been allocated to scholarship programs for students in Indonesia, allowing them to complete tertiary studies. Again, financing for these programs will terminate as students graduate. On this basis, the level of external financing of on-going programs is estimated at around US$15 million a year.

5.29 **The Sector Investment Program, currently in preparation, should provide a basis for assessing future external financing requirements.** Sharp reductions in combined sources education spending on on-going programs should be avoided. The challenge is to ensure that future levels of external financing are consistent with a sustainable level of public spending and consistent with Government's allocation priorities.

5.30 **Perhaps the most important resource allocation decision to be taken in the education sector is the appropriate balance between spending on different levels of education.** Compelling cases can be put forward for primary, secondary and tertiary education to be funded from the limited resources available to the government. For example, there are arguments that primary education is crucial to developing literacy, improving subsistence agriculture and health, and stabilizing the democratic process; that secondary education is the foundation of a formal labor market; and that technical and vocational education provide skills and jobs. In this high demand–low resource situation, allocation decisions are best made by channeling resources in proportion to the *social* benefits that they generate—reflecting developmental considerations—and the *poverty reduction* impact of services. These considerations point to basic education taking the major share of public resources, with smaller allocations to secondary and post-secondary education.

Table 5.6: Structure of Education Sector Consolidated Fund Spending by Program %

Program	Actual FY2002	Actual FY2003	Budget FY2004	MTEF FY2005	MTEF FY2006	MTEF FY2007
Policy, planning & management	**7**	**9**	**11**	**10**	**10**	**9**
Basic Education	**70**	**66**	**63**	**65**	**66**	**67**
Early childhood education	0	1	1	1	1	1
Primary education	55	49	45	46	46	47
Junior secondary	15	17	18	19	19	19
Post Basic Education	**11**	**14**	**14**	**14**	**14**	**14**
Senior secondary	8	10	10	10	10	11
Technical & vocational training	2	4	4	4	4	3
Tertiary education	**11**	**5**	**5**	**5**	**5**	**5**
Adult education	**2**	**2**	**2**	**2**	**2**	**2**
Teacher training	**-**	**2**	**2**	**2**	**2**	**2**
Culture, Youth & Sports	**0**	**1**	**2**	**2**	**2**	**2**
Total Education	**100**	**100**	**100**	**100**	**100**	**100**

Source: FY2002 and FY2003 from audited Financial Statements; FY2004 to FY2007 from Budget Papers.

5.31 **The allocation of Consolidated Fund resources is consistent with the Government's poverty reduction and developmental objectives, with basic education allocated two-thirds of public spending over the period FY2001 to FY2003.** Data point to a gradual reduction in primary education's share in the period to FY2004, to 45 percent of Consolidated Fund spending, with growth resuming thereafter (see Table 5.6). Forward estimates point to steady growth in the share of spending on junior secondary education, rising to 19 percent of total spending by FY2007, and somewhat slower growth in allocations to senior secondary education, rising to 11 percent. Public spending on tertiary education, in contrast, is effectively capped at around 5 percent of total

Table 5.7: Allocation of Education Expenditures, FY2000 to FY2003

Program	US$ '000 Consolidated Fund	US$ '000 External Finance	US$ '000 Total	% CF	% External	% Total	External Dependence %
Policy, planning & management	**2,558**	**4,645**	**7,203**	**8.4**	**5.7**	**6.4**	**64.5**
Basic Education	**19,992**	**47,062**	**67,054**	**66.0**	**57.6**	**59.9**	**70.2**
Early childhood education	254	649	903	0.8	0.8	0.8	71.9
Primary education	15,410	39,815	55,225	50.9	48.7	49.3	72.1
Junior secondary	4,328	6,598	10,926	14.3	8.1	9.8	60.4
Post Basic Education	**3,653**	**3,809**	**7,462**	**12.1**	**4.7**	**6.7**	**51.0**
Senior secondary	2,937	2,832	5,769	9.7	3.5	5.2	49.1
Technical & vocational training	716	977	1,693	2.4	1.2	1.5	57.7
Tertiary education	**2,301**	**16,692**	**18,993**	**7.6**	**20.4**	**17.0**	**87.9**
Domestic	2,301	8,556	10,857	7.6	10.5	9.7	78.8
Overseas fellowships		8,137	8,137	-	10.0	7.3	100.0
Adult education	**614**	**3,835**	**4,449**	**2.0**	**4.7**	**4.0**	**86.2**
Teacher training	**894**	**1,896**	**2,790**	**3.0**	**2.3**	**2.5**	**68.0**
Culture, sports facilities & equipment	**263**	**86**	**349**	**0.9**	**0.1**	**0.3**	**24.7**
Education unidentified		**3,647**	**3,647**	**-**	**4.5**	**3.3**	**100.0**
Total	**30,275**	**81,672**	**111,947**	**100.0**	**100.0**	**100.0**	**73.0**

Source: Ministry of Planning and Finance, Budget Papers and External Assistance Database.

spending. However, these data do not include financing from student fees, estimated at about US$350,000 a year. The share of supporting programs, such as teacher training, remains extremely—perhaps unrealistically—modest. Allocations to policy, planning and management, on the other hand, are relatively large at around 10 percent of total spending. This may, in part, result from charging of some service delivery functions against the central administration.

5.32 **When external financing is included the pro-poor orientation is obscured owing to a much larger share of resources being allocated to tertiary education.** About 20 percent of external financing in the period FY2000 to FY2003 was allocated to the University and scholarship programs. Relative allocations to secondary education were significantly lower than allocations from the Consolidated Fund. All of the key programs have high levels of external dependence, with external financing accounting for 50 to 80 percent of total spending. While these allocations are expected to change over the medium term, the data point to the importance of integrating external financing into expenditure plans, from the perspective of ensuring sustainability of services and policy consistency of resource allocations.

Table 5.8: Personnel share of Consolidated Fund Education Spending by Program %

Program	Actual FY2002	Actual FY2003	Budget FY2004	MTEF FY2005	MTEF FY2006	MTEF FY2007
Policy, planning & management	**70**	**25**	**22**	**23**	**23**	**24**
Basic Education	**94**	**72**	**85**	**76**	**72**	**68**
Early Childhood Education	-	3	71	74	75	75
Primary Education	94	72	86	78	74	71
Junior Secondary	94	75	82	71	66	62
Post Basic Education	**90**	**64**	**76**	**73**	**70**	**66**
Senior Secondary	91	65	75	71	66	62
Technical & Vocational Training	88	60	80	81	81	81
Tertiary Education	**100**	**100**	**100**	**100**	**100**	**100**
Adult Education	**61**	**2**	**11**	**11**	**10**	**11**
Teacher Training		**-**	**6**	**6**	**6**	**6**
Culture, Youth & Sports	**-**	**-**	**25**	**21**	**21**	**21**
Total Education	**92**	**64**	**73**	**68**	**65**	**62**

Source: FY2002 and FY2003 from audited Financial Statements; FY2004 to FY2007 from FY2004 Budget Papers.

5.33 **The structure of Consolidated Fund spending is skewed towards personnel inputs, though non-personnel allocations are expected to increase over the medium term.** Personnel accounted for about 72 percent of spending on primary education in FY2003, 75 percent of spending on junior secondary and 65 percent of spending on senior secondary education (see Table 5.8). Detailed information on the composition of spending is only available for the Consolidated Fund, and these data should be interpreted with caution because some goods and services allocations for service delivery appear to be programmed under central administration. More detailed information is needed on externally financed inputs, including school books and teaching materials, before the adequacy of Consolidated Fund allocations for non-personnel costs can be assessed. It is critical that forward estimates include sufficient funding to finance school supplies as external financing closes. The modest level of personnel expenditures in teacher training is due to the fact that teacher trainers are currently provided through bilateral assistance. Consolidated Fund allocations for tertiary education cover personnel costs, with goods and services financed from student contributions.

5.34 **The low level of maintenance spending is a matter of concern.** Although some education facilities are not owned by the government and presumably are not maintained from

public funds. Public school infrastructure has a minimum value of US$25 million, and should be allocated a minimum of US$1 million a year (i.e. 4 percent of value), equivalent to as much as six percent of the FY2004 Consolidated Fund budget to cover maintenance costs. Current allocations are around US$500,000 and actual spending is much lower still. Clearly, greater attention needs to be given to the maintenance of assets and implementation of mechanisms to ensure that these funds are actually spent.

5.35 **There is a need for a clear policy regarding the appropriate level of student contributions at different levels of education.** One criterion for such policy decisions is the relative social and private benefits from public spending on education services. As a rule, the *social* returns for public investments tend to be higher relative to *private* returns in basic education; while *private* returns are higher relative to *social* returns in post-secondary education. The implication is that the public sector should bear all or a large part of the burden of basic education, while students should bear a significantly larger share of the burden of post-secondary education financing.

5.36 **The application of fees for basic education raises concerns regarding equity, their impact on education-for-all objectives and the adequacy of oversight arrangements.** Under UNTAET, school fees were abolished, along with requirements for school uniforms and shoes. TLSS data indicate that average monthly household expenditures on public primary school attendance dropped from US$1.55 in 1995 (at 2001 prices and exchange rate) to US$0.56 in 2001, with most of this expenditure on school materials. As a result, there was a much weaker relationship between household income and enrolment in 2001 than seen in previous surveys, suggesting that reductions in parental charges contributed to the surge in enrolment. Although the Constitution clearly states a preference for free basic education, schools soon resumed the practice of applying voluntary charges and in 2002 MECYS formalized the amounts that public schools could charge pupils, at US$0.50 a month for primary, US$1 for junior secondary and US$1.50 for senior secondary education. These funds are used to cover routine operating costs and the hiring of "volunteer" teachers to complement publicly funded staff. There is no evidence that such charges are levied compulsorily, though there is a risk that parental contributions could deter enrolment from poorer families. Such contributions place a significant burden on poor families with several children and limited cash incomes, particularly if associated with additional costs such as school materials and, in some cases, uniforms. Whilst not wishing to discourage parental contributions on a strictly voluntary basis, there is also need for adequate regulation and supervision to ensure that there is no discrimination against the poor who cannot pay, that parental contributions are used transparently, and that such contributions complement rather than substitute for public expenditures. In this context, the difficulties encountered by the Primary School Achievement Survey in collecting information on parental contributions indicate a need for further work on simple management and reporting arrangements. There is, moreover, a need to ensure that public resources are made available to schools to cover routine maintenance, basic operating expenditures and teaching materials. This can sometimes be better achieved through small block grants direct to schools than through centrally administered budgets with their attendant logistical and bureaucratic constraints.

5.37 **Since private sector providers, particularly churches, play a significant role in the delivery of education services, clear policies are also needed to ensure that private schools are effectively integrated into the education system and subject to equitable public funding.** Private religious schools account for about 12 percent of total enrolment and private secular schools about 4 percent. Private education is particularly important at the junior and senior secondary levels, accounting for 25 percent and 33 percent of enrolment respectively. Church secondary schools in particular tend to offer higher standards, in part because teachers tend to be better qualified, in part because they are better resourced with contributions from the state, the

religious community and parents, and in part because their students are drawn from better-off families with literate parents. During the reconstruction of the primary and secondary levels, no distinctions appear to have been made between Church and government schools in terms of public financing: salaries are paid for some teachers in all schools, and instructional materials have been provided to all schools. However, data from the PSAS suggest that the private schools are granted much greater autonomy than those in the public sector, in terms of setting working conditions for teachers, academic standards, setting parental contributions and conditions for exemption and in matters such as discipline. Private schools are subject to less frequent supervision, with around 45 percent reporting only annual visits. Further clarification of the relationship between the public and private sectors is needed, to ensure that private schools are effectively integrated into the national education system, whilst promoting diversity and competition between providers. Ideally, such relationships should be established on a contractual basis. Data from the TLSS indicate that twice as many children from the top quintile attend private schools as do the poor. Overall, the incidence of public spending on public education is progressive, whereas public spending on private education is not. Since public subsidies are largely used to fund teachers' salaries and STRs tend to be lower in private schools, private schools tend to benefit disproportionately from public spending. Use of a capitation grant for funding of private schools would link public funding to enrolment, thereby promoting expansion of enrolment whilst improving equity.

Table 5.9: Budget Execution FY2002 through FY2004 (as % of appropriations)

Component / Program	FY2002		FY2003		FY2004 annualized	
	Commit-ment	Cash	Commit-ment	Cash	Commit-ment	Cash
Salaries & Wages	99	99	93	93	91	91
Minor Capital	70	54	96	21	127	0
Capital & Development			100	0	0	0
Goods & Services	79	78	98	67	57	24
G&S by selected program						
Early Childhood Education	50	44	90	54	99	19
Primary Education	71	71	98	42	84	0
Junior Secondary Education	64	63	100	89	43	2
Senior Secondary Education	78	77	100	94	77	1
Technical Vocational Education	70	59	96	50	66	4
Non- Formal Education	100	100	100	44	85	57
Tertiary Education	93	92	82	42	17	16
Culture	17	14	95	94	69	46
Administration & Management	89	89	99	90	53	49
Youth Welfare & Development			95	38	15	15
Physical Education & Sports			93	19	24	24
Continuing Education			99	75	27	27

Source: FY2002 and FY2003 from Financial Statements; FY2004 annualized execution on basis of second quarter execution report.

5.38 **Whilst Consolidated Fund allocations to the education sector have increased steadily, budget execution has consistently fallen short of appropriations, particularly in the priority basic education programs.** Table 5.9 illustrates the pattern of budget execution in relation to the economic composition of expenditures at year-end on both a cash and commitment basis, with further detail on the structure of goods and services spending by program. Shortfalls on personnel expenditures are related to difficulties in recruitment of staff. Execution has been particularly slow in relation to capital spending, in several instances leading to the sequestration of appropriations during budget execution. However, it is the shortfall on goods and services spending that is of greatest concern, since these appropriations provide basic inputs—such as teaching materials—and services—such as maintenance—that allow schools to function. The fundamental problems appear

to be: poor expenditure planning, with program managers failing to prepare procurement plans for the execution of budget allocations at the start of the fiscal year, leading to an end of year rush; inadequate processing and follow-up on procurement, with procurement often held up because specifications are incomplete; and the excessive centralization of expenditures.

5.39 **Greater attention needs to be given to the decentralization of Consolidated Fund resources to the school level.** This could improve efficiency in spending, by allowing those involved in service delivery greater say in pending decisions and avoiding bureaucratic delays in the delivery of inputs. Overall, 69 percent of education spending was deconcentrated to districts in FY2003, with the highest levels of deconcentration in primary and junior secondary education. However, this is virtually all for salaries. In FY2003, just 2 percent of the goods and services budget was deconcentrated. This issue is addressed in relation to initiatives in support of strengthened expenditure management below.

F. Strengthening Expenditure Management

5.40 **Progress in the development of management systems and capacity is critical if the MECYS is to achieve sector objectives.** Areas where further progress is needed include: development of statistical capacity; expenditure planning; expenditure control and budget execution; development of decentralized funding mechanisms; strengthening of district oversight and supervision; and establishment of complementary school level management arrangements.

5.41 **Availability of up-to-date information on education enrolment and performance is essential for effective education planning and management.** Until recently, even basic data were not readily available or stored in the ministry in electronic form. A school statistical system has now been put in place with assistance from UNICEF. A full set of data for all teachers, students and schools at primary level for 2003/4 is now being compiled. Compilation of information on secondary education will follow. Preliminary reports indicate that coverage and consistency has improved significantly over previous exercises. The challenge is to ensure that reporting routines are established, with adequate follow-up on schools with delayed or inadequate returns. Administrative data should be complemented by analysis of census data and performance surveys. Finalization of the 2004 census will allow the MECYS to identify regional allocations and determine geographic variations in enrolment. Statistical information will also need to feed into planning and policy development, as well as support functions such as deployment of personnel, construction programs and distribution of school books. This will require strengthening of statistical and planning skills, an area that has received little attention. There are still no statistical personnel in post. Planning department and district personnel are now undergoing training on running of routine queries of the database.

5.42 **Medium-term expenditure plans are needed to support implementation of the education sector policy and guide the allocation of the Consolidated Fund and external financing.** The forthcoming Sector Investment Program should address these concerns. The challenge will be to ensure that external financing is aligned with Government priorities. Given the range of stakeholders in education financing and service delivery, a sector-wide approach supported by sector working groups would facilitate coordination and agreement on priorities. Such working groups will need to work at both a policy and operational level, to ensure that externally financed inputs are integrated into expenditure plans and tracked during implementation. Further, closer liaison with private providers is needed at every level. Decisions by the Church to open, close or expand schools could significantly impact on demand for places in government schools, just as expansion or contraction in the provision of TVET or tertiary courses could be influenced by private providers in these areas. If the Ministry is to achieve a rational allocation of its limited

resources it will need to factor in inputs to be provided by external partners and private sector education providers.

5.43 **Further work is needed on the structure of the budget, to ensure that resources are allocated to program managers responsible for service delivery and that allocations for decentralized units are explicit.** Centralization of the allocations for goods and services under the Ministry's administrative budget disempowers program managers. If program managers are to be responsible for prioritizing, sequencing and costing programs, they should also be responsible for management of the resources needed to deliver program outputs. To do this they will need management information—there is an urgent need to introduce computerized financial systems—particularly to assist in planning and executing budgets. Some consideration may also be given to the definition of sub-programs to support critical functions, such as curriculum development and examinations. These do not appear in the budget structure, and so the responsible managers are currently unclear about the resources allocated to support their work. Similarly, district administration is subsumed within central administration in the budget structure. Again, this could be dealt with internally by providing budget sub-programs for districts. This requires a much more sophisticated financial management system than the Ministry currently has in place, supported by a computerized information system.

5.44 **Low levels of budget execution indicate that further work is needed on the development of internal control and management systems.** Much of the difficulty arises from poor understanding of required procedures on the part of program managers and inattention to management systems for control and tracking of expenditures. Significant improvements in budget execution could be made by: a) using the Ministry's internal expenditure proposal form systematically, so that managers are informed about purchase requests; b) tracking Commitment and Payment Vouchers submitted to the Ministry of Planning and Finance, so delays in the authorization of expenditures are followed up; c) requesting monthly budget execution reports from MPF and a monthly internal review of the status of budget execution by a Ministry level management committee, so that program managers are aware of the current budget position and delays in execution; and d) standardizing specifications of commonly procured items, so as to avoid delays from MPF seeking clarification regarding MECYS requirements. Implementation of such measures will require further training in financial management and procurement procedures as well as investments in information systems.

5.45 **Development of a personnel management system deserves particular attention.** In the rush to ensure that staff were in place for the 2000/01 school year, only rudimentary records were kept of the teachers recruited. Establishment of a personnel registry for nearly 6,000 teachers is a daunting task. The recently installed education management information system, includes biographical data on teachers. This, together with payroll, could provide the basis for a personnel register. However, hard copy files will be needed. While the Ministry of State Administration has recently defined the basic requirements for files across government, specific instructions may be needed for teaching personnel. Certainly, internal guidelines will be needed to determine whether such files are to be maintained at the schools, in district education offices and/or in the central Ministry.

5.46 **There is a need to move elements of administration and supervision from the center closer to the point of service delivery.** At present, formal supervision is mainly through district education offices, which have a staff of ten including a superintendent, a deputy superintendent, education specialists and administrative staff with responsibility for logistics and personnel management. The district offices have a small operating budget of around US$550 per month. Much time is spent interacting with the central office, partly because they lack telephone or

electronic communications: the PSAS survey reports that 69 percent of superintendents made one to five school visits in the previous month, while 76 percent had made one to five visits to Dili. The use of school clusters, with a focal school, as an intermediate level of training and support between the district and the school, is being piloted with support from UNICEF. This approach is likely to improve direct supervision at the school level, and facilitate implementation of policies on shift structure, hours of instruction, and language of instruction.

5.47 **Additional resources could be channeled directly to schools to cover maintenance, operating expenses and basic supplies**. While a case may be made for centralization of procurement of commonly used items, such as textbooks and some school materials, and public works requiring technical supervision, spending decisions on operating costs and routine maintenance are best made at the school level. It is simply impossible for the central administration to make these spending decisions on behalf of 900 schools. Inevitably, where the public sector fails to provide the necessary resources, schools have appealed to parents to cover operating and maintenance costs. Solutions lie in the adoption of small block grants—perhaps around US$300—channeled directly to schools. The total cost of such block grants would be in the order of US$230,000 a year. True, there is a risk that these funds would be mismanaged, but these risks can be minimized by ensuring that schools report the receipt and application of these funds on school notice boards, through public announcements and to PTAs. The impact in terms of improved service delivery by far outweigh these risks. One block grant system that worked well in a developing country was pioneered in the education Ministry in Uganda (see Box 5.1).

5.48 **Most of the elements for an effective delegated financial management system now exist in Timor-Leste**. Cash is already disbursed to district offices. Parent Teacher Associations are being set up and the provision of maintenance or other funds to schools with operating PTAs would prove a strong incentive for schools and communities to act to establish their own association. As a further check funds could be disbursed on a quarterly basis with replenishment when accounted for.

Box 5.1 Use of Block Grants in Uganda

Uganda implemented a successful approach to local accountability and transparency in 1998. The process began with a system of notification by Treasury of dispatches of funds to district offices. A national newspaper listed monthly transfers for school operation and health units to the districts for distribution to individual service delivery points such as schools or clinic. While the circulation of newspapers was limited in the country, district administrators found that head teachers soon learned about the publication and began to demand the allocation of funds for their school. This cut back sharply on the previous temptation for district administrators to receive the funds and use them for other purposes, sometimes for several months, before releasing them to the intended beneficiaries.

In turn district and sub-district offices were required to publicly notify the general public of the amounts allocated to each school, by listing the amount for that school for each month. The list was required to be placed on a public notice board outside the district office and to be updated for each distribution. Thus all schools were aware of their allocations and those for every other school in the area.

Similarly, at the school level, notification had to be given to the local community, with details of amounts received and expended on a monthly based placed on a notice board accessible to any parent or community member i.e. not inside an office or room. This information was to be displayed along with the school budget and the names and salaries of all teachers in the school. The notices were to be signed both by the head teacher and the head of the PTA. Even though only a few parents were literate in rural areas, the notice boards were sufficient to provide checks on the actions of those in charge of the funds. In practice in small communities it was evident if any person acquired resources they could not account for and in this way community social patterns could be used to provide an "audit" that was extremely effective.

A further safeguard, used in Uganda, would be to provide for random checks of districts and schools. Each year a sample of schools and each district office could be physically inspected for compliance.

Box 5.2 Key Recommendations - Education

- ***Review policy on parental contributions in basic education,*** *to assess feasibility of eliminating voluntary charges, and if retained, ensuring regular supervision, to prevent discrimination against the poor, verify that parental contributions are used transparently, and that such contributions complement rather than substitute for public expenditures.*
- ***Provision of out-of-term remedial classes, with additional payments to teachers, and training for teachers*** *to diagnose and address learning difficulties to help reduce repetition and dropout.*
- ***Clarification of policy goals as regards target student teacher ratios*** *by level of education as a guide to future recruitment requirements and placement strategies.*
- ***Regulation of school hours, structure of shift-system and payment supplement arrangements*** *for teachers working multiple shifts.*
- ***Institutionalization of on-going curriculum development*** *process with creation of a curriculum management system, to allow for development support, assessment and review, so that the curriculum can be revised on the basis of experience*
- ***Review of Consolidated Fund financing to ensure adequate and sustainable funding for teacher training, particularly in Portuguese, and other support activities****, such as curriculum development, examination, school supplies and teaching supervision.*
- ***Provision of funding for expansion of block grant scheme for schools,*** *to allow schools discretionary funds to cover maintenance, operating expenses and some teaching supplies.*
- ***Regulation of the relationship between the public and private sectors,*** *ideally on the basis of contract, to ensure that private schools are effectively integrated into the national education system, and use of a capitation grant (up to specified STR) as basis for funding so as to promote expansion of enrolment.*
- ***Establishment of basic financial management systems in the MECYS****, including i) register of CPVs submitted to Treasury; ii) monthly review of budget execution status by budget office; iii) standardized specification of all commonly procured items; and iv) establishment of personnel registry system and supporting administrative guidelines for Ministry staff.*
- ***Establishment of clusters of schools****, with a focal school, as an intermediate level of training and support between the district and the school, as currently being piloted, so as to improve direct supervision of staff attendance and teaching at the school level.*

6. MAINTAINING A VIABLE ROAD NETWORK

A. INTRODUCTION

6.1 **"Having an effective system of physical infrastructure and services is crucial for agricultural productivity and poverty reduction, a determinant of business investment, instrumental to human development, and the foundation for private sector development"** (NDP, 2002, p. 263). Roads provide access to rural Timor-Leste, where the majority of the poor live. They link rural communities to markets, to services and to participation in the wider society. Fortunately, Timor-Leste already has an extensive road network. Unfortunately, the extensive road network is both an asset and a burden.

6.2 **Implementation of a strategy that can lead to the sustainable provision of roads is the principal challenge facing the roads sector.** It is the theme of this chapter. Section B demonstrates that the extensive road network is in poor condition, subject to frequent closures, and that traffic volumes are low. Section C demonstrates the high cost of maintaining the current deteriorated infrastructure and argues that a balanced program of rehabilitation, and routine and periodic maintenance is needed to bring the road network to a sustainable condition where life-cycle costs are minimized. A basic framework for prioritization is presented. This gives maintenance and emergency repairs first call on limited resources, with rehabilitation being undertaken where it can lead to a net reduction in road preservation costs; expenditure focused on roads where returns are greatest; ownership and responsibility for various road classes assigned to those best able to manage them; and service standards defined. Section D indicates that resource allocations programmed in the FY2004 budget and forward estimates generally constitute a credible strategy for maintenance financing over the medium term but that additional funding will be required for complementary road rehabilitation. Financing strategies are reviewed in section four, including increased cost recovery from road users. Section E advocates increased use of private sector contractors for implementation of works and highlights the risks of implementing the maintenance and rehabilitation program through increased direct administration capacity. Section F makes a case for further investments in capacity building, particularly in sector policy and planning, and the improvement of information systems, and steps that can lead to be better balance of activities and interaction between the Ministry of Planning and Finance and the Directorate of Roads, Bridges and Flood Control (DRBFC) in the Ministry of Transport, Communications and Public Works (MTCPW).

B. THE ROAD NETWORK

6.3 **Timor-Leste's national and district road network is larger than the average for low income countries with comparable population densities** (see Figure 6.1). The length of the road network is reported at 6,036 km, about half of which is comprised of rural roads, one-third are national and district roads,[11] and the remainder urban roads (see Table 6.1). The "core network" of national and district roads amounts to about 2,400 km. There are 7.2 road-km per 1,000 inhabitants and road density averages 417 km per 1,000 square km. On the basis of pre-1997 information,

[11] The road network has not been formally classified. National roads are considered those linking the district centers, and district roads those linking the larger administrative posts.

Table 6.1: Road Network by Class and Region, 2003

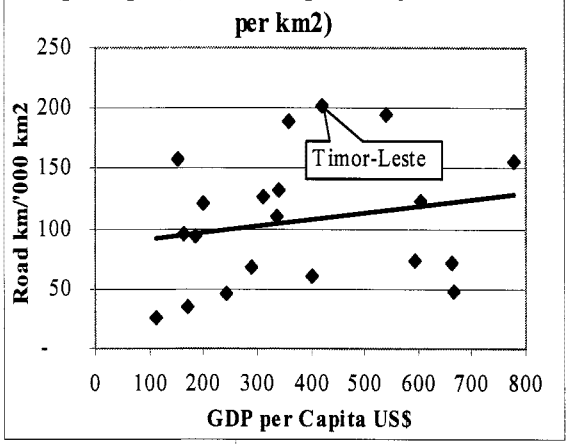
Region	National	District	Urban	Rural	Total	Road Density Km per: 1,000 Km2	Road Density Km per: 1,000 pop.
Baucau	373	270	158	810	1,611	324	7.0
Dili	293	157	316	710	1,475	596	5.5
Same	246	206	97	655	1,204	422	9.7
Maliana	423	164	106	740	1,432	429	8.3
Oecusse	91	73	40	110	314	385	6.7
Total	**1,426**	**869**	**716**	**3,025**	**6,036**	**417**	**7.2**
Structure %	**24**	**14**	**12**	**50**	**100**		

Source: MTCPW

about 2,600 km of the network is bitumen paved, 500 km is gravel and the remainder is earth formed. While this extensive network enhances accessibility, it means that a larger proportion of national income has to be allocated to road maintenance if standards are to be maintained. The costs of maintaining the road network are increased by the poor condition of much of the network and its susceptibility to damage from landslides and flooding. At the same time, the benefits from the network are reduced by low traffic volumes.

6.4 **Much of the national road network is in need of rehabilitation.** The Road Asset Management Survey (RAMS), undertaken in 2001 to 2002, holds data for 1,248 km of the national road network, all but 65 km of which is paved. The network has been built to Indonesian design standards, with pavement widths of between 3.5 and 5.5 meters, and design speeds up to 60km/h on flat terrain, dropping to 20km/hr for narrow mountain roads. The paved network has a non-structural macadam surface overlay over a crushed stone base. While this surface is suitable for light traffic, heavy vehicles can damage weakened sections. Some sections have reverted to gravel owing to lack of maintenance since the late 1990s. The results of a survey by the Japan Engineering Group (JEG) of the UNPKF in mid-2003 of what was described as the "core" road network is summarized in Table 6.2. The survey showed roads to be generally in poor condition. About 65 percent of the length of the core network could be restored to maintainable condition through resurfacing of the road pavement and simple refurbishment of drainage. More substantial rehabilitation is needed for the remaining 35 percent of roads to restore them to a maintainable condition. Bridges are in somewhat better condition: of the 317 bridges in the RAMS inventory, more than two-thirds of which are under 20 meters long, 29 bridges are in "bad" condition, requiring early repair and possibly replacement.

Figure 6.1: Relation Road Density to GDP per capita (LIC with Pop. Density 30 to 80 per km2)



6.5 **Landslides and flooding cause frequent road closures.** About 44 percent of Timor-Leste lies between 100 and 500 meters and 35 percent above 1,000 meters. This steep mountainous terrain is prone to erosion and landslides during heavy seasonal rains. In the coastal plains roads are affected by flooding. The 1999-2000 monsoon rains caused unusually severe damage. In February 2003, during a "normal" wet season, nine of the 13 districts had one or more national and district roads closed or in danger of closure, while roads to at least 16 villages were closed and a further 13 were in danger—meaning only 4-wheel-drive vehicles could pass, so that the roads were

effectively closed to other traffic. The RAMS inventory indicates that 592 km of roads in hilly terrain are subject to landslides (47 percent of the inventoried network) and 124 km to flooding in the coastal plains. Damage from landslides and flooding considerably increases network maintenance costs.

Table 6.2: Status of Major Roads, 2003

Route No.	Road Link	Length (Km)	AADT (vehicles/day, 2000)	Width* (m)	Roughness (IRI,1999)	Road condition
A01	Dili-Com	203	500	5.5	5.1	Good
A02	Dili-Suai	178	125	4.5	9.8	Fair to very poor
A03	Dili-Maliana	151	250	4.5	5.9	Good to fair
A04	Tibar-Ermera	45	200	4.5	6.1	Fair
A05	Aituto-Betano	54	100	4.5	8.7	Good to very poor
A06	Baucau-Viqueque	63	100	4.5	6.0	Good to fair
A07	Viqueque-Natabora	48	50	4.5	10.0	Poor
A08	Lautem-Viqueque	154	75	4.5	10.4	Good to very poor
A09	Manatuto-Natabora	86	50	3.5	11.0	Poor
A10	Ermera-Hauba	69	50	3.5	12.1	Poor to very poor
A11	Ermera-Maliana	63	50	3.5	11.3	Poor to very poor
A12	Maliana-Zumalai	51	50	4.5	11.6	Fair to very poor
A13	Aiassa-Cassa	25	50	3.5	11.9	Poor to very poor
A14	Natabora-Betano	46	50	4.5	10.9	Poor
	Total/Average	**1,235**	**170**		**8.7**	

Source: RAMS, JEG.

6.6 **Nevertheless, surveys indicate that most of the rural population live close to passable roads**. Data from the 2001 village survey indicate that 90 percent of the rural population live in villages with village centers less than half an hour from the nearest vehicle passable roads. Although vehicle passable roads may include tracks that are not part of the recognized road network, about two-thirds of the population live in villages with village centers less than half an hour from a paved road that is part of the network (see Table 6.3). Road access in rural areas is better in lowland areas than in the highlands, and better in the west of the country than in the center and east. These data suggest that access is not currently a major impediment to rural development. Indeed, simulations using household data suggest that road access is not a major determinant of poverty or access to public services.

Table 6.3: Distance of Vehicle Passable & Paved Roads from Village Centers, 2001

	National	Rural	Rural			High-land	Low-land
			East	Center	West		
Vehicle passable road							
% population less than 30 minutes	91.9	90.2	89.4	87.3	100	89.4	90.9
% population more than 60 minutes	6.8	8.2	7.3	11.7	-	9.4	7.4
Paved road							
% population less than 30 minutes	71.2	64.9	73.6	49.4	93.3	54.6	72.5
% population more than 60 minutes	24.9	30.8	23	44.2	6.7	37.7	25.7

Source: 2001 TLSS

6.7 **The vehicle fleet is very small**. The Directorate of Land Transport reports the registered fleet as 14,320 vehicles in 2002, including 6,490 motorcycles, 1,337 trucks and 1,093 minibuses. There are, additionally, approximately 2,000 unregistered vehicles and 3,000 UN vehicles. These

numbers are backed up by the 2001 household survey, which indicates that only 3 percent of the population live in households with motorbikes and less than one percent in households with a car or truck. The registered public transport fleet is small, with just 651 vehicles, of which nearly 600 are minibuses. Most of these are based in Dili and Baucau, with only 150 vehicles registered in the remaining eleven districts. Overall availability of public transport is 0.82 vehicles per 1,000 population. This compares with 1.65 vehicles per 1,000 population in Bali, Indonesia. However, the contrast is much more marked than it would first seem since nearly all Balinese households own a motorcycle and public transport accounts for just 10 percent of motorized trips.

6.8 **Traffic volumes are light.** Various traffic counts have been conducted in recent years, but these are difficult to reconcile and have a wide margin of error. The traffic flow estimates recorded in the RAMS database suggest that the heaviest traffic—in excess of 400 vehicles a day—occurred along the northern coastal road from Dili to Batugade (on the border with Indonesia) and to Baucau, and sections to Aileu and Ermera. These routes account for most of the heavy vehicle traffic. Only fifteen percent of the inventoried network has traffic volumes in excess of 500 vehicles a day, about one-third of the network has traffic flows of over 200 vehicles a day, and one-third of the network has traffic flows of under 50 vehicles a day. Traffic volumes on much of the non-inventoried network are likely to be below 20 vehicles per day. Traffic volumes in 2000 were about one-fifth of the levels prior to independence. Traffic volumes are directly related to the level of economic activity, so volumes can be expected to double over the next ten to fifteen years. While growth rates may be significantly higher for links between economic centers, traffic volumes are likely to remain low for much of the planning horizon over the majority of the network.

6.9 **Given the high road network densities, the accessibility of the network and low traffic volumes, it is hardly surprising that roads and bridges were seen as low priority during the NDP consultations**. Whereas education was considered one of the top three priorities by 70 percent of respondents, health by 49 percent and agriculture by 32 percent, only around one in ten respondents considered roads a priority. Roads and bridges figured in the top three priorities in just two of the thirteen districts, Ainaro and Bobonaro, both in the east. In the west, roads and bridges ranked fifth or sixth. The national results are repeated in an opinion survey conducted in late 2003 by an international NGO,[12] where just 11 percent of respondents considered bad roads the major developmental problem facing Timor-Leste. The highest percentages identifying roads as the top priority were this time found in Viqueque (east) and Aileu (center). Notwithstanding the results of consultative exercises, the quality and accessibility of road network are critical development concerns. Recent evidence of deterioration of road standards highlights their importance and the need for a coherent strategy to ensure that sustainability of the road network.

C. Defining and Programming Expenditure Priorities

6.10 **The National Development Plan presents the broad framework for road sector policy and strategy.** The NDP's overall sector objective is to provide infrastructure in support of economic and social development, whilst simultaneously stressing the importance of equity between regions and urban and rural communities and the needs of defense and national security. Rehabilitation and maintenance of the national and district road networks are identified as priorities for the medium term. Beyond this broad framework, the NDP provides little guidance for operational and budgetary decision-making in the roads sector. The key issue on which guidance is required is how to reconcile network maintenance requirements with the limited financing available.

[12] International Republican Institute, *East Timor National Opinion Poll*, November 2003, page 37.

6.11 **Indicative aggregate-based estimates show that the cost of maintaining the road network to an ideal standard is very high.** Annual expenditure needed to maintain the road network in Timor-Leste was reported in the Transport Sector Master Plan in 2002 at US$18.2 million. The Road Map, published in 2003, indicated maintenance at US$13.5 million per annum. An updated estimate of annual maintenance costs based on a simple, aggregate model suggests the cost of maintaining the 6,036 km network to design standard—"ideal" from an engineering perspective—is about US$19 million a year (see Table 6.4). This estimate is based on a budget planning model that assumes historic unit costs, reflecting average costs in 2001 and 2002, for: periodic road maintenance (entailing a complete surface overlay and minor structural repair); routine maintenance (drain clearing and grass cutting, and spot surface repairs for national and district roads); and emergency repairs following landslides. It also assumes periodic maintenance every ten years, and ten landslide emergency operations with a total length of 250 meters each year. The cost excludes bridge maintenance costs and assumes that roads have been rehabilitated to a maintainable condition. The cost of maintaining degraded surfaces to their design standards according to this estimation is likely to be even higher than shown.

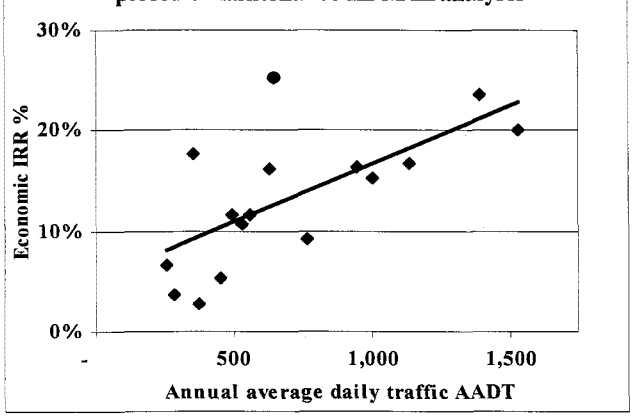
Table 6.4: Potential Annual Cost of Maintaining Road Network to Design Standards based on Historic Unit Costs

Type of works	National	District	Urban	Rural	Total
Unit Costs					
Periodic maintenance ($/km)	40,000	30,000	40,000	10,000	
Routine maintenance ($/km)	1,000	750	700	350	
Emergency works ($ per event)	7,830	7,830	-	7,830	
Road slips ($ per meter)	1,167	873	-	873	
Total Annual Cost ($'000)					
Periodic Maintenance	5,703	2,608	2,864	3,025	**14,200**
Routine Maintenance	1,426	652	501	1,059	**3,638**
Emergency Repairs	370	297	-	632	**1,299**
Total	**7,499**	**3,556**	**3,365**	**4,716**	**19,136**

Source: DRBFC Planning and PER Estimates

6.12 **While a road maintenance program of this size might be considered "ideal" from an engineering perspective, it is not feasible given current financial constraints, nor is it economically viable.** The total cost of maintaining the network to design standards amounts to more than one-quarter of total Consolidated Fund expenditures in FY2004. This is much more than most countries are able to allocate to their road maintenance programs. Furthermore, recent analysis of the road network in eastern Indonesia has shown that periodic maintenance is rarely viable for paved roads with traffic volumes under 500 vehicles a day. This is illustrated by Figure 6.2, which shows an internal rate of return of less than ten percent for four out of five roads with traffic densities of fewer than 500 vehicles a day- less than 15 percent of the Timor-Leste's national road network has traffic volumes above this threshold. As a general rule, paved surfaces become viable once traffic volumes pass 200 vehicles a day. Consequently, the economic returns on periodic maintenance for much of the current paved network in Timor-Leste could be low given current traffic. From an economic point of view, it would make sense to allow some of the network to degrade from paved to gravel surfaces, since the gravel roads remain economically viable at much lower traffic volumes (from 20 to 50 vehicles per day).

Figure 6.2: Average Daily Traffic & Economic Internal Rate of Return - Eastern Indonesia periodic maintenance HDM-III analysis



6.13 **The challenge for the road sector in coming years is to maximize the returns from the limited resources available whilst maintaining access across the network.** This will require careful prioritization of public spending, with decisions and clarity regarding the allocation of funds between maintenance and other interventions, the extent and structure of the network, ownership and agency responsibility for network components, network standards, and the basis for allocating resources between network components. The key policy considerations in determining and programming expenditure priorities at an operational level are examined below.

First, maintenance and emergency repairs take priority

6.14 **Maintenance should be given priority in road sector spending because this is by far the most effective and efficient use of funds.** Unfortunately, routine and periodic maintenance is not particularly glamorous and so is commonly under-valued. Yet the costs of deferred maintenance are very high, both for road users and for Government. Poorly maintained roads increase vehicle operating costs, since journeys are delayed and vehicles are damaged. On an annualized basis, every dollar not spent on road maintenance for a road with traffic volumes of 500 vehicles a day will increase road users' costs by between US$3.40 and US$6.10. From the Government's perspective, rehabilitation of degraded roads every ten to twenty years is more than three times as expensive, on a cash basis, than regular maintenance, and over 35 percent more expensive in terms of net present value discounted at 12 percent.[13]

6.15 **The Transport Master Plan clearly identifies routine and periodic maintenance as the first and second priorities, with spot improvements and rehabilitation primarily geared to a reduction in future maintenance costs.** This reflects the high economic returns to maintenance interventions. Emergency repairs should be considered part of routine maintenance, since repairs to landslide and flood damaged road sections are critical to maintaining access. Once routine and periodic maintenance and emergency repairs have been funded, the Master Plan suggests that remaining funds can be allocated to the improvement of unstable sections and sections susceptible to landslide and flooding. These spot improvements include short realignments and stabilization of landslide prone sections, paving of steep slopes, and installation of culverts. Such investments are warranted by reduced maintenance costs over the longer-term and improved access through reduced road closure. More extensive section rehabilitation will be worthwhile where it results in a larger reduction in future road maintenance and road user costs. A risk management approach to maintenance planning will support the effective use of limited funds, and can reduce the incidence of road closure due to flooding and landslides to an optimal level.

Second, define the core network based on the funding available for maintenance

6.16 **The purpose of defining a core road network is to align network size with available funding for maintenance**. The more funding available, the longer the core network. Conversely, if the network cannot be maintained with the available funding, the core network may need to be reduced. This may entail relegating some national and district roads to a lower class. Road classification should define a core network of the most important routes: for instance, access to all districts from Dili and to the main border crossings could be achieved with a national network of less than 1,000 km, compared with the current national network of 1,426 km. A secondary network might be maintained to a lower standard by the national government, with remaining roads relegated to a functional classification for which lower standards and local rather than national responsibility are appropriate (see para 6.18).

[13] World Bank (1996), *Sustainable Transport: Priorities for Policy Reform*, p. 26

6.17 **Initial analysis suggests a need to reduce the length of the core network.** Average annual expenditure needed over the next ten years to bring the entire current road network to a maintainable condition is considerably higher than the level of funding that has been available in recent years and which is currently expected to be available in the future. Unless additional funding can be secured, there will be a need to focus expenditure where it can provide the greatest benefit—the core network—and accept a reduction in the quality of the remainder of the road network.

Third, assign responsibility for network components

6.18 **Responsibility for maintenance of the road network has to be clearly assigned.** Responsibility for road maintenance is usually divided between national agencies, local authorities and communities in accordance with the function of roads and those best able to take responsibility for them. This needs to be supported by a formal assignment of responsibilities for roads. A hierarchy of responsibilities is possible in Timor-Leste. The national government can take responsibility for managing maintenance of the core, national network. Responsibility for lower level roads can be assigned to lower levels of government and communities, with the five regional offices of DRBFC (noting that the five regions do not coincide with the thirteen administrative districts in Timor-Leste) providing support to these entities.

Box 6.1: Improving Access beyond the "Core Network"

While the MTCPW program has focused on the rehabilitation and maintenance of national and district roads, a number of projects have financed improvements in the "farm-to-feeder" roads of the rural road network. These include the TFET financed Community Empowerment Project and the Agricultural Rehabilitation Project, both of which have provided funding for community identified and implemented initiatives. By December 2002, CEP funded some 214 km of roads, and 39 bridges were reported completed by local communities, at a cost of US$253,119 for roads and US$22,585 for bridges. The current CEP portfolio includes a further 87 roads projects, with an estimated cost of US$449,500, and 8 bridges, costing US$36,000. A further 100 km of "farm-to-feeder" community implemented roads have been funded by the Agricultural Rehabilitation Project, at a cost of about US$250,000.

Analysis of the economic returns on a small sample of CEP road projects tends to confirm the marginal economic viability of these investments, although the study argued that each of nineteen projects reviewed had a positive internal rate of return, averaging 26 percent. Since the roads were narrow, unsealed tracks, most often used by pedestrians and motorcycles with rare vehicle traffic, savings in vehicle operating costs were minimal. Some benefits were generated from improved access to markets, however: "by far, the benefits of the roads came out of the employment benefit to the local economy where it was assumed that 50 cents to the dollar earned on the roads projects were spent on the local market". Consequently, the rationale for financing rests largely on their employment generation impact rather than the benefits generated by the road itself. This calls into question the sustainability of such investments, since there is no provision for such subsidies for maintenance.

While this kind of analysis fails to capture the intangible benefits of roads, notably an end to the isolation felt by many communities, the experience of CEP tends to underline the importance of MTCPW focusing on its core network. Rural roads are better financed as community initiatives through flexible funding mechanisms such as CEP, where the funds can be channeled to the priorities that the communities identify, rather than directly from the roads budget.

Jean Foerster, Community Empowerment and Local Government Project: Cost Effectiveness Study, March 2002.

6.19 **Community responsibility is appropriate for rural roads.** Most rural roads under the current classification are "field-to-village" tracks and "village-to-feeder" roads. The DRBFC provides little support for these roads at present. Given the local function and remoteness of rural roads, it is unlikely that DRBFC could maintain them in a cost-effective manner. In any event, since the beneficiaries of rural roads are generally well defined geographically, it makes sense for

local communities to assume responsibility for their maintenance (see Box 6.1). This can be done through voluntary labor, with lower levels of government generally providing materials where needed. The national government could still assist with emergency repairs where this entails structural work on the most important routes in order to maintain access.

Fourth, set appropriate service standards for network components

6.20 **Definition of appropriate service benchmarks for each of the road classes provides a guide for appropriate design standards, maintenance planning, and budget management.** Service benchmarks help make decision-making more transparent and accountable and allow stakeholders to assess whether adequate service is being provided. Emphasis should be given to performance indicators that report output rather than inputs (the amount spent on road maintenance). In this context, there are two key considerations in terms of road service standards: the first is access—whether the service is provided or not—and the second relates to service quality—usually defined in terms of journey times. Both these criteria are closely related to road surface conditions.

6.21 **Access standards are best defined in terms of the acceptable frequency and duration of road closure.** The most frequent cause of road closure is wet weather, which can cause flooding and landslides that close roads and also weaken road foundations, making roads vulnerable to damage by traffic. A high standard of accessibility will be required for national roads, with "all-weather" access desirable. For district and rural roads, the acceptable access standard may require temporary road closures until surfaces have dried and use of fords rather than expensive bridges.

6.22 **Service standards can also be defined in terms of benchmark journey times.** In the Timor-Leste context, for instance, benchmarks might be set at 50km/hr for the high volume national roads, 40 km/hr for the remainder of the national network and 30 km/hr for district roads. Such speeds are a surrogate for vehicle operating costs and travel time, and need to be calibrated to ensure that likely benefits of higher standards than maintained at present can be justified in terms of benefits to the economy.

D. Aligning Expenditures with Priorities

6.23 **In the immediate post-conflict period, priority was given to ensuring access through emergency works and maintenance.** By the end of FY2003 about US$38 million had been spent on the roads sector, of which US$33 million was financed from donor programs and US$6 million from the Consolidated Fund (see Table 6.5). The principal source of financing has been the US$21 million TFET Emergency Infrastructure Rehabilitation Project (EIRP), which has financed repairs to about 1,250 km of national roads and 660 km of district roads, together with community-based road maintenance covering about 1,445 km of roads. A grant of US$4.7 million was provided by the Japanese Government through UNDP for urgent repairs to the Dili-Aileu-Ainaro-Cassa road (136 km). The Japanese Engineering Group has also cleared landslides and undertaken other road repairs. These works, estimated to have cost around US$3 million, are not included in Table 6.5. Nor is the repair or improvement of about 1,000 km of rural road implemented through the Community Empowerment Project (CEP). Over the three-year period, about 70 percent of reported expenditures were allocated to rehabilitation and 20 percent on emergency repairs. Priority was given to maintaining access by relieving critical bottlenecks, in particular bridge repairs, landslides and other pavement failure. This reactive approach has succeeded in keeping the road system open.

6.24 **Forward estimates indicate a significant shift in spending from rehabilitation to maintenance as programmed external assistance winds down.** Financing for the routine

maintenance program, set up in 2000 using TFET funding, has gradually been shifted to the Consolidated Fund, so that routine maintenance operations amounting to approximately US$2 million were largely drawn from that source. Under the FY2004 budget and MTEF, routine maintenance expenditures were programmed at US$2.5 million a year FY2005 and thereafter. Provision was made for periodic maintenance and emergency repairs from FY2005, at US$2.5 million, rising to over US$5.8 million by FY2007. This would have been sufficient to cover most of the national and district network at current unit prices. However, it would leave little funding for the lower priority rural network. During the FY2005 budget process, Consolidated Fund forward estimates for road maintenance were cut back. Unfortunately, detailed composition of revised forward estimates was not available at the time of writing. Forward estimates of domestic and committed external finance for road rehabilitation and upgrading, based on the FY2004 budget, show a declining program of works, with the second phase of the EIRP dominating programmed expenditures. Projects to upgrade the Aileu to Suai road and five bridges between Viqueque and Los Palos during FY2005 and FY2007 are currently under review. If these proceed, expenditure on rehabilitation will be about US$17 million higher than current estimates.

Table 6.5: Estimates of Actual and Programmed Road Sector Combined Sources Expenditure and Financing

Application / Source	FY01	FY02	FY03	FY04	FY05	FY06	FY07
Routine Maintenance	425	2,288	3,148	2,433	3,508	4,021	3,053
Periodic Maintenance	-	-	-	2,519	2,980	3,061	5,808
Emergency Repairs & Rehabilitation	14,540	13,894	5,628	3,003	6,063	-	-
Selected Road Improvements	-	-	-	200	600	800	1,000
Urban Roads, drainage, footpaths	-	-	200	200	300	400	500
Total US$'000	**13,082**	**16,182**	**8,976**	**8,355**	**13,451**	**8,282**	**10,361**
Routine Maintenance	3	14	35	29	26	49	29
Periodic Maintenance	-	-	-	30	22	37	56
Emergency Repairs & Rehabilitation	111	86	63	36	45	-	-
Selected Road Improvements	-	-	-	2	4	10	10
Urban Roads, drainage, footpaths	-	-	2	2	2	5	5
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Consolidated Fund	4	18	41	66	56	100	100
TFET	62	66	30	34	44	-	-
Bilateral Programs	34	16	29	-	-	-	-
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: RBFC and Road Sector Expenditure Review estimates. Note: Excludes work undertaken by PKF. Forward estimates include only committed projects

6.25 **Estimates prepared for the Transport Sector Investment Program call for higher levels of rehabilitation and maintenance spending than currently programmed.** The proposed strategy entails targeted rehabilitation–completing bridges, improving road alignments, stabilizing slopes and restoring road surfaces—of about 35 percent of national and district roads in order to restore them to a condition in which they can be sustained through routine and periodic maintenance. This strategy should reduce the risks of closure and the life-cycle cost of providing roads by reducing the need for maintenance and emergency works. The program cost estimates also assume significant reductions in the unit cost of road maintenance through efficient contracting and the use of labor-based approaches where appropriate, bringing costs in line with other countries in the region. Two financial scenarios were considered for a ten-year period (see Table 6.6). The first "high-case" scenario seeks to restore the national and district network to maintainable condition, with a total cost of around US$192 million (of which 46 percent is allocated to rehabilitation and 54 percent to periodic and routine maintenance). During the early years, about 60 percent of funding would be allocated to rehabilitation to prevent further deterioration of the road network.

Table 6.6: Cost Estimates for Ten-Year Road Rehabilitation and Maintenance Program High and Low Case Scenarios (Constant 2003 prices) US$ millions

	Cost over ten years				Average annual expenditure by period			
	National	District	Other	Total	Yrs 1-3	Yrs 4-6	Yrs 7-10	Average
Road Rehabilitation	44.7	19.8	-	64.4	10.0	6.3	3.9	6.4
Bridge Rehabilitation	24.6	-	-	24.6	2.7	4.0	1.2	2.5
Periodic Maintenance	28.9	5.4	39.8	74.1	5.0	9.0	8.0	7.4
Routine Maintenance	11.1	5.4	12.6	29.1	3.0	2.9	2.9	2.9
Total High Case	**109.3**	**30.6**	**52.4**	**192.3**	**20.6**	**22.2**	**15.9**	**19.2**
Road Rehabilitation	23.0	8.4	-	31.4	5.0	3.0	1.8	3.1
Bridge Rehabilitation	14.8	-	-	14.8	1.6	2.4	0.7	1.5
Periodic Maintenance	18.6	2.3	27.1	48.0	3.4	5.8	5.1	4.8
Routine Maintenance	8.3	4.1	12.6	25.0	2.6	2.5	2.5	2.5
Total Low Case	**64.7**	**14.8**	**39.7**	**119.2**	**12.6**	**13.7**	**10.1**	**11.9**

Source: Transport Sector Expenditure Review estimates.

The proportion of funding allocated to periodic and routine maintenance gradually increases to about 70 percent of expenditure by the seventh to tenth years of the program. This would cover the whole national, district and urban road network as well as a substantial part of the rural roads. Under the "high-case" scenario, programmed maintenance costs for the first three years are broadly in line with the allocations presented in the MTEF through to FY2007, increasing by about 20 percent in nominal terms by the tenth year. The second, "low-case" scenario seeks to arrest deterioration in the network but would result in a lower sustainable standard. Financing requirements are estimated at about US$120 million over ten years (of which 39 percent is allocated to rehabilitation and 61 percent to periodic and routine maintenance). Again, rehabilitation expenditures are front-loaded, with periodic and routine maintenance gradually increasing to about 80 percent of expenditure by the seventh to tenth year. Under the "low-case" scenario, programmed maintenance costs for the first three years are lower than those anticipated in the MTEF. It should be stressed that these estimates have not been subject to economic evaluation or detailed engineering studies.

6.26 **The scale of the rehabilitation and maintenance program implemented over the remainder of the NDP period will depend, primarily, on the Government's ability to mobilize financing and, secondarily, on its ability to reduce unit costs** (see para 6.32). Consolidated Fund allocations presented in the FY2004 Budget provided for increases in funding from US$5.3 million in FY2004 to US$10.5 million in FY2007. This corresponds to about 40 percent of the total financing requirement of the *first three years* of the "high-case" scenario and 65 percent of the financing requirements for the *first three years* of the "low-case" scenario. Although additional funds can be mobilized from cost recovery measures (see para 6.31), external financing would be required to fully implement the proposed investment programs. On the basis of FY2004 programmed Consolidated Fund expenditures, external financing requirements amount to about US$12 million a year for the first three years of the "high-case" scenario and a modest US$4 million a year for the first three years of the "low-case" scenario. Allocations were subsequently cut back during the FY2005 budget process, leading to an increase in external financing requirements.

6.27 **Careful prioritization will be needed to ensure an appropriate balance of spending between rehabilitation and maintenance as well as among individual rehabilitation projects.** Improvements in planning and evaluation are needed to establish a prioritized program of road investment proposals that is integrated with economic development plans in other sectors and

maximizes economic and social returns. In the absence of sufficient funding to implement the proposed program, road expenditure will have to be focused on the core network, where the returns will be greatest. This may entail maintenance of the remainder of the network to a lower standard.

E. Mobilizing and Managing Road Sector Finance

6.28 **The critical considerations for road sector funding are that allocations should be predictable and sustainable over the long-term.** Operational planning is only practical when those responsible for managing road maintenance programs know how much funding will be available well into the future. Once the resource envelope is known, sector planners can define the appropriate length of the core network and service standards, prepare the requisite maintenance schedules and enter long-term works implementation arrangements. Recent changes in roads sector financing have created uncertainty regarding future financing. Road maintenance allocations were cut in the third quarter of FY2004, to offset allocations of materials from non-project aid, effectively bringing community-based roads maintenance to a stop. Allocations to the roads sector were subsequently revised downwards during the FY2005 budget. In this context, formulation of a realistic long-term financing strategy for the roads sector is a matter of priority.

6.29 **Sector allocations defined through the budget process, with forward estimates providing allocations over the medium term, should provide a reliable basis for forward planning.** These allocations will ensure a predictable flow of funds as long as the forward estimates are reasonably "hard"—providing the basis for negotiation of allocations for the following year's budget—so that actual appropriations are closely aligned with the forward estimates. Appropriations for the sector are drawn from a single "Roads, Bridges and Flood Control Program," corresponding to the administrative department. Program appropriations cover administrative overheads and routine maintenance activity. Appropriations for capital expenditures are identified separately as projects under the program (covering periodic road maintenance, road improvement, urban roads, flood control and public safety). The budget structure could be made more transparent by distinguishing routine maintenance as a specific sub-program, so that funding for these items can be tracked separately from administrative overheads. Nevertheless, the budget's current broad structure is adequate and, as the FY2004 budget demonstrates, provides a sound basis for programming allocations to critical road maintenance functions. However, it is important that road maintenance spending is ring-fenced within the budget so as to ensure predictability in funding, protecting road maintenance from year-to-year and within-year changes in allocations. Changes in resource allocations, such at the sudden withdrawal of funding in FY2004 and cuts in forward estimates in the FY2005 budget process, make it almost possible to prepare long-term plans for the sector.

6.30 **Earmarking of specific revenues to the roads sector is unnecessary as long as programmed Consolidated Fund expenditures provide a reliable basis for planning.** Revenue earmarking is often employed in low-income countries to mobilize additional funding for the roads sector and improve the predictability of resource flows. Typically, revenues generated by road users—such as levies on fuel, vehicle and driver licensing, and tolls—are statutorily assigned to the roads sector, thereby providing a permanent source of financing. While earmarking is probably not warranted in Timor-Leste, there is a need for monitoring of revenue from motorists and expenditure on roads and traffic management to ensure that the level and structure of charges on road users is appropriate.

6.31 **Nevertheless, there is scope for improving cost recovery.** Charges levied on road users help ensure that those who receive private benefits from use of the road network pay for part of the costs of providing these services. This reduces the burden on the general public and the potential

for perverse subsidization of road users. At present, cost recovery is limited. In FY2003, the Directorate of Land Transport collected about US$180,000 from vehicle registration fees, as compared with US$488,000 in FY2002. Improvements in vehicle registration management are needed to mobilize revenues from this source, potentially generating around US$1 million a year. Ideally, registration charges will be related to the size of vehicles, with much higher rates for heavy vehicles: the supplementary levy of US$400 a year for heavy vehicles, proposed in the Transport Master Plan, would generate around US$0.5 million a year. A more significant source of revenues would be from the introduction of a fuel levy, in addition to the current fuel excise. The retail price of fuel in Timor-Leste is not high by international standards. However, it is high given the low level of taxes. Reducing the imported cost of fuel to a level comparable with that in countries similarly situated to Timor-Leste (i.e. countries that import their fuel, and are distant from the sources of the fuel) and an off-setting increase in fuel tax would leave retail prices unaffected and could raise additional revenue to the Government of about US$1.5 million per year. Allowing for growth in the number of vehicles in Timor-Leste, it should be possible to generate US$5.8 million in 2007 from fuel taxes and registration charges. This would meet 70 percent of the cost of road maintenance in that year. A longer term objective should be to recover the cost of all road maintenance costs from road users.

F. WORKS IMPLEMENTATION

6.32 **The Transport Sector Investment Program is predicated on reductions in unit costs for both rehabilitation and maintenance activities**. Selection of the appropriate works implementation mechanism will be critical in ensuring efficiency and value-for-money in the implementation of the program. Sector planners have three options: community implementation; use of private sector contractors; and direct administration—or force account—where works are implemented by Government works depots. These options and alternative implementation strategies are reviewed below.

Community-based maintenance

6.33 **Community implementation is preferable for maintenance of rural roads.** For much of the rural network, communities may be expected to provide free labor, with Government input limited to basic equipment and technical supervision of engineering works such as road layouts or culverts. However, this is not yet the practice in Timor-Leste, where labor on the rehabilitation and improvements of "farm-to-feeder" roads has generally been paid—pay rates were recently increased from US$3 a day to US$3.50 a day. Over the longer-term, the cost of rural road maintenance needs to be reduced significantly. Community ownership of rural road links may be sufficient incentive for maintenance to be undertaken through labor contributions.

6.34 **By far the most extensive use of community implementation to date has, however, been for routine maintenance of the core network.** A Community Based Maintenance (CBM) Program was established under the EIRP, with a total of 311 contracts awarded in 2000 and 2001for some 200,000 person-days of community managed routine maintenance activities. CBM activities have continued with Consolidated Fund financing. Use of CBM for maintenance of national roads is proving problematic. Contracts with communities are difficult to administer and supervise. Initially established as a means of generating rural employment, the same objective could be achieved at lower cost by private contractors, as long as the labor requirements are specified in the contract.

Private contractors

6.35 **For most rehabilitation and maintenance activities, use of private contractors will be more cost-effective than community implementation or direct administration.** Competition between contractors during the procurement process is vital to keep down costs. The services procured can be adjusted in line with funding availability. Development of a local contracting industry will also support the more general upgrading of skills and entrepreneurship. The National Development Plan recognizes the importance of private sector involvement: one of the guiding principles for sector development is "to utilize the private sector to the maximum extent possible in the cost effective delivery of projects, programs and services, and support and promote the development of the private sector in this role" (NDP, 2002, p. 265).

6.36 **A competent contracting industry has emerged in Timor-Leste.** The DRBFC has pre-qualified 153 contractors for roads works, 45 for bridges and 14 for flood control (see Table 6.7). Of these, 71 contractors classified under categories A to C1 are probably capable of undertaking full routine maintenance, including culvert and small bridge repairs and pothole patching of paved roads. A further 82 contractors may be suitable for routine works, such as cleaning side and cross drains and vegetation control. There is some international involvement in the contracting industry—mostly the larger firms—but the majority are locally-owned.

Table 6.7: Road Contractors by Class, February 2003

Class	Maximum Contract ($000s)	Roads	Bridges	Flood barriers
A	>500	6	6	0
B1	500	16	4	3
B2	250	21	18	2
C1	150	28	7	2
C2	75	39	7	5
C3	< 25	43	3	2
Totals		**153**	**45**	**14**

Source: RFBC.

6.37 **Furthermore, the performance of contractors is reasonable given the difficult operating environment.** An assessment of 66 contracts under the EIRP,[14] of which 14 were for class B and 37 for class C works, indicated that 16 of the contracts had poor work cited and 18 poor progress. Cost overruns were substantial, at an average of 42 percent, which may reflect difficulties in costing works. Significantly, performance of international contractors was not noticeably better than that of local contractors. While offering the opportunity for improvement, the performance can be seen in the light of being undertaken in transitional, and sometimes difficult, circumstances.

6.38 **There is potential to make greater use of private contractors for road maintenance.** In FY2003, allocations of routine maintenance funds between the five "road regions" were made on a formula basis, 50 percent of funds allocated to community-based maintenance, 30 percent to private sector contractors, and 20 percent to depots. Some flexibility is allowed, but there were restrictions on allocations to the private sector. Increases in the share of funding for private contractors would be in line with stated policy. The FY2004 budget provided for just 21 private sector routine maintenance contracts, as compared with over a hundred qualified contractors.

6.39 **The capacity of the local contractor industry can be further improved.** Ensuring a continuing, steady program of works will facilitate the further development of the industry, and will reduce the cost of projects by avoiding the high costs involved in maintaining teams for sporadic works. Reduction in the average cost of works can be achieved through encouragement of technical innovation and equipment investment, active competition for work, and effective supervision of quality. Some training of contractors in bid preparation, cost-estimation and contract procedures was undertaken under EIRP. However, experience has shown that many contractors are

[14] ADB Emergency Infrastructure Rehabilitation Project Completion Report,

still unfamiliar with bidding and contractual procedures. A survey of local contractors, covering both skills assessment and equipment inventories, could help identify contractors' needs, and serve as the basis for further training under future road projects. Development of pre-qualification procedures and standard bid and contract management documents, such as those employed under EIRP, would also reduce the administrative burden for local contractors.

Direct administration

6.40 **The EIRP helped establish five regional depots, with basic works equipment, for carrying out small-scale emergency works and routine maintenance.** Performance so far has been poor. In FY2003, the regional depots had spent just 2 percent of their operating budgets by mid-year, with very little operational activity recorded. The regional engineers who head the regional depots appear to be more closely involved in the supervision of community-based and private sector contracts than in the implementation of activities under direct administration. This is unlikely to be an effective use of the scarce skilled staff; besides, the depots have been unable to use much of the equipment at their disposal due to difficulties in recruiting skilled operators.

6.41 **Establishment of the Directorate of Equipment and Materials has shifted the balance of resources and incentives towards direct administration.** With the phased withdrawal of the Japanese Engineering Group from March 2003 to June 2004, 26 vehicles previously used by the Japanese Engineering Group were transferred to a newly created Directorate of Equipment and Materials (DEM). It is currently proposed that a further 61 items of equipment, including 19 small dump trucks, 12 large dump trucks, 12 bulldozers, 4 cranes, 3 graders, and other assorted large and small equipment, will be transferred to the Government when the JEG withdraws. It is likely that other Peacekeeping Force units will seek to transfer additional equipment to the Government over the coming months. The DEM has a budget of US$265,000 in FY2004, programmed as rising to US$474,000 in FY2007. There remains the risk of yet higher costs as the cost of maintaining ageing equipment rises and is combined with the running costs of an organization whose role will evaporate within a few years as the equipment reaches the end of its economic life and is retired. The recent use of equipment transferred to date by the DRBFC to construct a bridge at Natabora extends the Government's role beyond the current focus on project identification and contracting. There is greater merit in the DRBFC maintaining a focus on project management, and for options to be explored to make equipment available to the private sector, which is likely to be better able to use it effectively. Options could include sale or leasing of the equipment in Timor-Leste, with the proceeds being transferred to Government.

6.42 **Although some direct administration capacity may be required to undertake emergency works and routine maintenance, private sector contracting is generally preferable.** Although public works depots are often justified on grounds of cost-effectiveness, direct comparisons with private sector operators are not always valid. The administrative overhead costs and the value of equipment and other assets are rarely fully reflected in the works depots' budgets. Properly supervised private sector operators are actually more cost-effective and, for this reason, there is a marked trend toward the use of contracting for maintenance works in other countries. Samoa, for example, recently changed to contracting out all capital and maintenance works, transferring all equipment previously owned by the government to the private sector.

G. Strengthening Institutional Capacity

6.43 **The Ministry of Transport, Communications and Public Works faces pressing capacity constraints in engineering skills and, most notably, in the areas of policy, planning and management.** The DRBFC has a staff of 105 budgeted positions (of which about 70 are

Box 6.2 Key Recommendations - Roads

- ***Formulation of a roads policy**, including a) definition of a core network of the most important roads to be maintained by national government; b) clarification of road maintenance responsibilities across levels of administration; c) definition of clear expenditure priorities, focusing on routine (including emergency) and periodic maintenance expenditure, with careful targeting of rehabilitation spending on areas most likely to reduce future maintenance needs and road user costs; and d) adoption of combined sources expenditure framework as the basis for sector expenditure planning.*
- ***Definition of a realistic, long-term financing strategy for the roads sector,** ensuring predictable resource allocations by ring-fencing roads sector resource allocations from further budgetary adjustments.*
- ***Prioritization of maintenance expenditure on the core network**, allowing less critical portions of the network to degrade from paved to gravel surfaces, which are more cost-effective at lower traffic volumes.*
- ***Updating and institutionalization of the RAMS database** as a tool for monitoring road conditions and planning road works.*
- ***Development and monitoring of clear, output-based performance indicators**, including access standards (whether the service is provided or not, i.e. frequency and duration of road closure) and service standards (i.e. benchmark journey times)*
- ***Inclusion of routine maintenance as a specific sub-program in the budget***
- ***Promotion and increased use of private contractors in road rehabilitation and maintenance**, by: a) ensuring a steady and increasing stream of funding for roads maintenance; b) introduction of sector-wide pre-qualification process, together with a streamlined competitive tendering process using standardized bid and contract management documents; and c) provision of training for contractors.*
- ***Integration of project management staff** into the routine work of the Directorate of Roads, Bridges and Flood Control (DRBFC).*

filled). Of the fourteen posts at level five and above, all but one are engineers. There is a small Planning Unit in the Secretariat of State for Public Works, with a budgeted staff of just four, but this has only recently begun operations. Furthermore, much of the strategic analysis has been undertaken by consultants and the EIRP Project Management Unit, with little involvement of national personnel in day-to-day operation and decision-making. Few of the national staff were directly involved in the preparation of the *Transport Master Plan*. Obviously, this is an area where further capacity building is needed. In the implementation of future technical assistance activities, particular attention needs to be paid to the integration of the project staff into the routine work of the DRBFC. In addition to on-the-job-training and courses, consideration should be given to partnering with a skilled organization facing similar technical challenges from another country to provide a source of advice, backup, and staff exchange.

6.44 **Strategic and operational decision-making has to be supported by up-to-date information on road conditions and sector performance as well as a prioritized plan for rehabilitation and maintenance.** The RAMS database has not been updated or institutionalized. Upgraded data on road condition and traffic volumes are urgently needed to support an assessment of the optimal level of road investment and maintenance, the definition of prioritized expenditure programs, risk management, and maintenance planning and programming. DRBFC staff should be supported in the updating and use of RAMS. Most importantly, the information systems have to be used routinely in both operational and financial planning. Development of a detailed roads sector rehabilitation and maintenance plan would be a useful first step in this direction.

6.45 **Management of the resources available to the roads sector has been hampered by multiple funding sources, each with its own decision-making and expenditure processes.** Much of the expenditure on roads has been implemented through project management offices

rather than being directly administered by the DRBFC. This has reduced the role of the DRBFC in managing road development and maintenance and the extent of its capacity building. The use of separate project management offices has also limited the development of its contracting capacity. Accordingly, there is a need to support the development of skills in the DRBFC for contract packaging, bidding, tender assessment, and contract management.

6.46 **Given the need to develop capacity for sector planning and works implementation, a strong case may be made for adopting a sector approach, with external funding channeled through Government systems.** The roads sector will figure prominently in the Government's investment program well into the future, with an increasing share of financing from domestic sources. In this context, the development of national systems for works implementation, contracting and works supervision should be seen as a priority. Adoption of standard bidding documents and contracts would facilitate this process. Ideally, standardization would encompass contracts financed by donors as well as Consolidated Fund-financed works, with, preferably, donors increasingly providing support and oversight for their project management activities to be undertaken by line staff of the DRBFC. As far as possible, funding should be channeled through budget systems so that personnel gain experience in managing higher levels of funding.

6.47 **The Ministry of Planning and Finance can play a useful role in ensuring policy consistency and value-for-money in the use of scarce resource allocations for the road sector.** Perhaps the most important function of MPF is to balance the DRBFC's input-oriented, engineering focus by directing attention to policy priorities, defining and monitoring of transport outcomes, and supporting analysis of the costs and benefits of alternative uses of funds. This should reduce the risk of a failure to adequately prioritize between the allocation of funds to road rehabilitation and maintenance and among various roads, and of using higher design standards than is efficient.

7. IMPROVING ACCESS TO QUALITY HEALTH SERVICES

A. INTRODUCTION

7.1 **The National Development Plan (NDP) of May 2002 assigns high priority to the health sector in order "to increase access to services by making primary health care available and affordable to the people of East Timor, particularly the vulnerable groups, providing a sustainable health system focusing on priority health needs"** (NDP, 2002, p. 3). The NDP also makes a commitment to the Millennium Development Goals (MDGs), which have been adapted to the national context (see Table 7.1). The health sector was the only sector to develop a sector policy framework whilst implementing an ambitious reconstruction program. The Health Policy Framework of June 2002 provides a guide for the future development of the health system in an independent Timor-Leste. The policy framework emphasizes the following aims: building on the achievements made to date in restoring public health and curative services; recognizing the importance of MoH's stewardship role; delivering a basic package of affordable, effective interventions through a system of district health services that are able to respond to local needs; ensuring that basic services are provided to the poor, who remain primarily in rural areas; cooperating proactively with the private sector and non-governmental organizations (NGO); and exploring the development of contracting-out options for some ancillary and basic services, such as health promotion, which may be better managed by other providers.

Table 7.1: Timor-Leste Millennium Development Goals

Indicator	Baseline 2001-02	Target 2015
Infant Mortality Rate	88	Reduce by 50%
Vaccination with DPT3 (%)	56	Achieve >90
Maternal Mortality Ratio	~800	Reduce by 70%
Births attended by skilled staff (%)	24	Achieve 90%
Malaria deaths	~200	Reduce by 80%
TB cases	8000	Reduce by 90%
HIV prevalence (%)	.01-.35	Maintain same level

Source: Draft Sector Investment Program, 2003. Annex Table 6.

7.2 **The re-establishment of health service following the violence of September 1999, which led the virtual collapse of all health services and the destruction of seventy percent of government-owned health infrastructure, is a remarkable achievement.** The sector also faces the challenges of rapid population growth and a historically high burden of disease (see Table 7.2). This chapter reviews the health sector's impressive progress in addressing these difficulties, as well as the challenges that remain ahead. Section B describes the configuration of the public health system and the significant role played by both government and non-government health providers. Section C outlines key challenges for personnel management in the sector, including the continued reliance on international doctors and specialist staff in the face of local capacity constraints and the increasing pressures to expand staff numbers beyond sustainable levels. Development of a comprehensive human resource plan for the health sector is advocated. Section D notes Timor-Leste's remarkable progress is re-establishing a functioning health system, while highlighting several critical areas of concern in health system performance. Low utilization of

Table 7.2: Health Status Indicators in Timor-Leste, 2002

Indicator	Timor-Leste	East Asia and Pacific	Low income countries	Post-conflict countries a/
Infant mortality rate (per 1000 live births)	88	33	81	84
Male	99			
Female	72			
Maternal mortality rate (per 100,000 live births) b/	420			
Undernutrition – Weight-for-age under 5 years (percent)	43			
Life expectancy	57	69	59	51
Male	56	68	58	50
Female	59	71	60	53

a/ Average of selected post-conflict countries (Burundi, Chad, El Salvador, Ethiopia, Guatemala, Mozambique, Nicaragua, Rwanda, and Uganda).
b/ Modeled estimate; data are for 1999.
Sources: World Bank Poverty Assessment, 2003; World Development Indicators, 2003.

health services poses risks for the country's health status and leads to inefficiently low levels of outpatient consultations in relation to staffing levels. A health-seeking behavior study is proposed to better understand the reasons for limited demand. Section E argues that the health sector's expenditure framework is broadly in line with priorities, but will need to adjust to reduced levels and changing allocations of external financing. Section F explores health sector costing, arguing that the planned configuration of health services will exceed Consolidated Fund budget allocations in the near term. Careful attention will need to be given to the cost of hospital services and medical supplies, including pharmaceuticals. Section G recognizes the recent improvements made in the sector's program budget structure and internal budget monitoring system, but raises some concerns about coordination across departments and between the center and districts. Finally, Section H discusses mechanisms that could be put in place to enhance transparency and accountability for performance, including the strengthening of bottom-up oversight mechanisms.

B. HEALTH FACILITIES

7.3 **The HPF seeks to increase the coverage and quality of health services through delivery of a standard minimum package of cost-effective curative and primary health care interventions.** The stated policy is that basic health services should be available within two hours' walking distance from communities, with the referral system functioning to provide hospital services in the form of emergency obstetric and surgical care within two hours' drive of sub-district facilities. A target has been set to contain the expenditure of tertiary health services (hospital care) to below 40 percent of the health budget in order to free up resources for priority basic health care services.

7.4 **Services at the sub-district level are provided by health posts staffed by a nurse and a midwife, supplemented by mobile clinics operated from community health centers.** Mobile clinics provide regular visits to remote communities by motorbike. Each sub-district has a Level 2 community health center with a staffing complement of six paramedical staff. Each district has a Level 3 or 4 community health center (CHC) with a staff of ten to fourteen, including a doctor, some in-patient capacity for stabilization of maternity cases, and some laboratory facilities. CHCs have radio communication, each district has at least one ambulance, and in each district at least one ambulance or emergency vehicle is equipped with a radio. A District Health Management Team of four is responsible for overall management of services, including an imprest account for financing operational expenses at the district level, and for district health planning within guidelines and resource constraints issued by the Ministry of Health.

7.5 **Consistent with a policy focus on district health services, the Government has rationalized the hospital system.** Out of more than 20 hospitals operating under the Indonesian occupation, MOH has rebuilt six including a National Referral Hospital in Dili, a regional hospital in Baucau (at a significantly lower capacity), and four small facilities with the capability for limited emergency (including obstetric) care, located with a view to ensuring that the vast majority of the population is within four hours of a facility (see Table 7.3). When all the facilities are built, Timor-Leste will still have a low number of hospital beds per capita at around 0.5 beds per 1,000 people, as compared with the low income country average of 1.3 in the 1990s. In making these decisions, the Ministry of Health recognized the budget and personnel constraints in the foreseeable future and the importance of maintaining capacities—financial and human resource—for public and district health programs.

Table 7.3: Government Health Facilities

Facility	Number	Comments
National Hospital	1	Dili (226 beds)
Regional Hospitals	5	Bacau hospital (114 beds) plus 4 24 bedded facilites.*
Community Health Center (CHC)	65	Some still require rehabilitation
Health Posts	174	Some for rehabilitation, others for replacement

** Oecussi, Maliana, Suai, Maubisse.*
Source : Ministry of Health

7.6 **Alongside government health facilities, a significant proportion of health services are provided by private practitioners, churches and other NGOs.** In 2002, the 74 staff—including three doctors and 12 general nurses—of the Café Clinic Timor network saw 127,000 patients in 5 districts and Dili through 8 fixed clinics and 24 mobile clinics. Café Timor is a coffee cooperative, which operates in the five coffee-growing districts. Its clinics receive a subsidy from USAID which provides funding for the overall cooperative, but the network is designed so that core financing is from the cooperative's profits. For the past year, the major part of the clinic's financing has come through funding to the cooperative under the Fair Trade Agreement. Together with the USAID funding, this has allowed the clinics to serve not only the members of the cooperative, but other residents of the districts covered, under an MOU soon to be ratified with Government. When the USAID subsidy ends at the end of 2004, the clinics will be entirely self supporting through the Fair Trade Agreement, but will be able to serve only their members, and possibly with a reduced range of services. In addition, church agency services are significant. Caritas, the Catholic church's health agency, operates 27 clinics across the country with 125 voluntary medical staff including four doctors. Caritas, together with the Government, is also responsible for the national TB program. At least five clinics are operated by other churches, but information on services and utilization of these clinics is not available. A limited number of private providers, including doctors and other health personnel, provide services mainly in the urban centers. Private pharmacies, the number of which has expanded rapidly in the last year, are an increasingly important source of health care advice as well as pharmaceuticals. Currently, only the public sector provides hospital services, including some temporary services provided by the Peace Keeping Forces which are now closing down.

7.7 **Utilization of non-government health facilities is significant.** Although estimates of health service utilization are not particularly reliable, there is a consensus that non-government health service providers supply at least 20-25 percent of the total ambulatory care. Private and religious facilities are more heavily utilized by the non-poor. The 2003 Poverty Assessment indicates that among those reporting use of health services, 29 percent of non-poor respondents used private and religious services as compared with 14 percent among the poor.

7.8 **There is scope for better coordination of non-government and government services.** The Health Policy Framework is open to increased private service provision, both not-for-profit

and for-profit. As above, the MoH has agreed with the provision of services to non-cooperative members by Café Clinic Timor. If this is to continue, MOH could make contracting-out arrangements with CCT. MoH has also contracted with several NGOs to provide specific services—for example to implement HIV/AIDS programs funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria. In addition, guidelines for FY2005 district health plans call for a focus on both government and non-government services. However, there is some way to go in avoiding duplication of provision and building service delivery synergies.

C. HEALTH PERSONNEL

7.9 **MoH has 1,472 employees on the payroll (excluding international staff), most of whom are at Level 3 (51 percent) or at Level 4 (19 percent).** These two categories include about 600 nurses and 230 midwives (see Table 7.4). In 2003 there were 17 Timorese doctors employed by the Ministry of Health, as compared to about 42 international doctors and medical specialists in 2003. Several national doctors are employed in MoH administrative and policy functions. A total of 54 local doctors are training overseas at present, and it is expected that about 40 will successfully complete their studies. However, many of the new doctors returning from training are choosing to join the private or NGO sector, including Café Clinic Timor. MoH estimates that there were at least 526 medical staff (10 doctors, 339 nurses, and 177 midwives) working in the non-government sector in 2003. This represents more than one-third of the estimated total medical staff working in Timor-Leste. Since public sector health services will continue to face shortages of Timorese doctors in the foreseeable future, MoH cannot depend on doctors to deliver basic curative and preventive services, which will need to be delivered by cadres of paramedical professionals in the short- to medium-term.

Table 7.4: Public Sector Medical Staff Numbers, September 2003

	Government	Non-government	Post-graduate training	Total
Doctors*	17	10	8	35
Doctors in training**	54			54
Nurses	591	339		930
Midwives	227	177		404

Source: HRD Division, MOH

** including the Minister of Health*

*** 14 may not complete training due to less than satisfactory academic performance*

7.10 **The majority of the doctors and specialists working in the publicly funded health system are recruited internationally and funded through sources outside the Consolidated Fund budget.** Between FY2002 and FY2004, most of the doctors supporting district health services have been funded by the Trust Fund for East Timor (TFET) as part of the planned transition from the unsustainably high cost of international NGO-provided, internationally financed emergency services provision arrangements put in place in 1999 to more sustainable domestic financing. In FY2004, a core number of these doctors are being transferred to the Consolidated Fund budget, with additional support being mobilized by the Government from Cuba and China through a range of donor financing and contractual arrangements.

7.11 **Health staff are concentrated in Dili (36 percent) and Baucau (13 percent), and there are considerable pressures for a major expansion of staffing in the districts.** One plan presented during the FY2004 budget discussions, although ultimately not funded, is illustrative of these pressures. The proposal would have added 253 additional staff, increasing the staffing complement of District Health Management Teams from 5 to 14 positions and significantly expanding the number of health posts (adding a total of 68 new health posts, or over one-third the

total number). The proposal appears to have arisen for several reasons: in response to the priority allocated by the Council of Ministers in the Stability Program to extend health coverage in rural areas; in a rush to expand staff to the approved establishment; due to dissatisfaction with the performance of the mobile clinics; and because personnel planning was not subject to a clear budget constraint.

7.12 **MoH has begun to contract out work handled by support staff.** Catering and laundry services at hospitals, security at community health centers and hospitals, and cleaning services have been identified as suitable for contracting out. MoH has taken initial steps in contracting out ground maintenance, food supply and preparation, and laundry services for Dili hospital and has launched similar initiatives in other hospitals. Though contracting out may not reduce costs, it should provide scope for reducing overall staff numbers and increasing flexibility. Contract design, procurement and monitoring skills will be needed.

7.13 **Development of a human resources plan for the health sector is critical.** Such a plan needs to start from a clear understanding of the policy and strategic framework for the health sector, and of appropriate and feasible roles for each cadre. A human resources plan should also recognize the budget constraints on the public sector, and take into account both the existing stock of human resource capacities and the supply constraints on specific scarce skills (especially doctors, medical specialists and specialist technicians). MoH recognizes the importance of human resource planning and has made a number of attempts to develop plans, but the most recent of these failed to address budget constraints, supply limitations, and the role of the private sector.

D. Health System Performance

7.14 **The re-establishment of a functioning health service in Timor-Leste is a remarkable achievement**. Facilities have been renovated, staff hired, drugs purchased, and services delivered. Institutional building blocks have been put in place throughout the country, including a Ministry of Health, a cadre of health service providers, and a basis for district health services planning and management. A hospital configuration policy has been established, which calls for a broad range of hospital services to be provided in the context of financial and human resource constraints.

7.15 **It is estimated that, as of 2003 in all districts, 82 percent of the population are served by a rural health facility within 2 hours' walking time, including mobile clinics, and that these facilities are within two hours' driving time of a hospital with emergency obstetric care capabilities**. However, the HPF's definition of access in terms of travel time has important implications for the overall efficiency of health service delivery, as it could potentially lead to the construction of a greater number of health facilities than can realistically be staffed or utilized by the population in a given area. It would be useful in future, therefore, to expand the definition of adequate access to include: a target service volume in terms of the number of patients to be handled by each facility, and access to health facilities that are fully staffed with trained workers according to the planned staffing complement. Mobile clinics could continue to provide outreach in remote areas.

7.16 **The delivery of health care services is gradually improving in terms of the use of health facilities, immunization, and mother and child**. Since 2000, utilization of health facilities has increased from less than 0.5 visits per capita per year to about 2 visits per capita, a total of 1.4 million outpatient consultations in the public health system in 2003. MoH administrative data indicate that 38 percent of expected births were attended by a skilled health worker, though with marked variation between districts. Fertility is among the highest in the world (above 7 births per mother). Use of modern methods of contraception is very low (about 12

percent at the end of the 1990s). An immunization program has been re-established, with increasing coverage overall. Health system data report DPT3 coverage to be at 59 percent and measles coverage at 55 percent. However, the national average disguises significant variations by district. DPT3 coverage ranges from 26 to 87 percent, and measles coverage from 29 to 87 percent. Furthermore, independent data from population-based household surveys show much lower coverage rates. The 2002 Multi-Indicator Cluster Survey (MICS) showed a DPT3 rate of only 18.3 percent. These discrepancies arise, in part, from uncertainty about the size and growth rates of Timor-Leste's population. An expanding tuberculosis program, delivered jointly by government and an NGO, is gradually introducing Direct Observation Therapy (DOTS) for tuberculosis nationwide, but operationalizing DOTS in many rural areas is proving problematic.

Table 7.5: Health Performance Indicators September 2003, by District

District	Outpatient visits per capita (OPD)	Maternity services coverage	DPT-3 dropout rate	Measles coverage	Access to health facility	Facilities reporting no stock outs
	%	% skilled attendance at birth	(<1)	%	%	%
Aileu	2.37	26	23	89	91	100
Ainaro	3.16	26	-9	195	93	100
Baucau	1.38	13	-1	88	71	100
Bobonaro	1.47	39	0	38	84	100
Covalima	1.95	65	0	101	81	
Dili	3.67	72	-22	89	100	100
Ermera	3.55	41	29	58	95	100
Lautem	1.72	44	12	49	7	100
Liquica	2.06	38	-4	82	85	100
Manatutu	1.98	62	15	121	82	
Manufahe	2.87	38	-1	39	92	100
Oecussi	0.85	27	14	129	96	100
Viqueque	1.07	42	-10	91	67	100
National	**2.3**	**43**	**1**	**86**	**81**	**85**

Source : Ministry of Health.

7.17 **Alongside these important achievements, there are some concerns about the performance of the health system.** Although the burden of disease in Timor-Leste is high, the demand for and utilization of services is low and inequitably spread throughout the population, from both a regional and a poverty perspective.

7.18 **Annual outpatient visits, though recently increasing to 2 per person from 0.5 in the early part of 2000, remain comparatively low.** In the 1990s, the average number of yearly outpatient visits per person was 5 in East Asia, 6 in Latin America and the Caribbean, and 4 in Sub-Saharan Africa. Outpatient consultations per health worker per day for districts without hospitals range from 3 in Aileu to 5 in Manufahe for 2002. This is a very low workload and raises questions about the demand for services, quality of services, and absolute staff numbers given utilization patterns. Utilization is low despite the availability of interventions for infectious diseases that are widely acknowledged to be effective, including immunization for childhood diseases such as measles and whooping cough, DOTS for TB, and multi-drug therapy (MDT) for leprosy. Moreover, as shown in the recent Poverty Assessment, only 8 percent of those with health complaints sought health care. Of those who make outpatient visits, more than half say the primary reason is to obtain medication.

7.19 **There is considerable variation across the country in both levels of utilization and the supply of health services** (see Table 7.5). Urban residents rely mostly on hospitals and private facilities. Half the rural population rely on community health centers. Mobile clinics are most important to the lowest income quintile, 20 percent of whom use this type of facility for outpatient treatment. Urban areas are much better served than most rural areas, and those rural areas with higher population density tend to be better served than those that are more sparsely populated. Recent evidence that, in some districts, people are returning to traditional lands from villages and hamlets established during Indonesian occupation may increase this problem. The variation in the availability and utilization of services is also complicated by geographical variation in the type and extent of some diseases, such as malaria and some water-borne illnesses. The 2004 Census, combined with surveys of health indicators, such as the Demographic and Health Survey completed in 2003, should provide a robust basis for planning the distribution of health services.

7.20 **While the high priority given to the basic package of services is appropriate, it is clear that cross-sectoral health concerns such as nutrition, sanitation and access to safe water also have a significant impact on health outcomes.** Infectious diseases are the major contributor to morbidity and mortality, with the most common being malaria, acute respiratory infection, diarrheal disease and tuberculosis (TB). Although Timor-Leste is located in the tropics, it is a dry land with a distinct drought-monsoon climatic cycle which, together with its geography, is conducive to the transmission of vector and water-borne diseases and, at the same time, hampers access to services—particularly in the wet season when roads become impassable in many areas. Food security, and as a consequence nutrition, is emerging as a significant health issue. The 2001 Household Survey revealed that nearly ninety percent of the population experiences inadequate food provision at some point during the year. The 2003 Multi-Indicator Cluster Survey reported that over 40 percent of children are moderately or severely underweight. HIV/AIDS, already present in high risk groups, has the potential to spread rapidly (and increase the incidence of TB as well) in the absence of a sustained and effective prevention program. There is also a need to deal with major cross-sectoral issues, such as the need for improved water supply and sanitation in both rural and urban areas. Access to safe water (though not the direct responsibility of MoH) has increased but has yet to reach pre-1999 levels. As reported by the Government's Water and Sanitation Sector Investment Plan, only 30-50 percent of the rural population currently has access to safe water, and only 10-30 percent to safe sanitation facilities. In this context, close coordination between MoH and institutions responsible for agriculture, water and sanitation is needed in the design of programs that are most likely to improve health outcomes.

7.21 **In further developing the core priorities for the basic package, it will be important to better understand the reasons for the low utilization of and demand for different types of services.** A health-seeking behavior study could greatly help to understand why mothers do or do not seek services for themselves and their children, and what they do when they are sick. Opportunities exist to create demand incentives to seek key services: health promotion; mobilization of communities in support of their local facility, including efforts to bridge the community to first-level health facilities through programs like Pastoral da Crianca; and community risk-pooling arrangements. Such a study can also help to understand what clients feel and know about the services available, and what this may mean for the design of effective interventions. The design of services also requires a greater recognition of the significant constraints on the supply of services, in terms of human resources, financing, and the structure of provider incentives, as well as better integration of publicly financed and managed services with the diverse supply of non-government services.

E. HEALTH EXPENDITURE FRAMEWORK

7.22 **The restoration of health services in Timor-Leste in the post-conflict period was funded by a major international cooperative effort involving multilateral and bilateral agencies and a range of non-governmental organizations.** From the start, the embryonic MoH recognized the need to restore core services without cutting off future development options, and to establish a sound policy framework that recognized the critical importance of planning services to be sustainable, from both a fiscal and human resource perspective. In this context, MoH developed a program budget structure incorporating the Consolidated Fund, TFET and major bilateral projects, which provided a broad overview of developments as well as a mechanism for strategic thinking about the incremental recurrent costs arising from donor-financed expenditure decisions.

Table 7.6: Financing of the Health Sector (US$ thousands)

	FY02 Est. Actual	FY03 Est. Actual	FY04 MYBU	FY05 Estimate	FY06 Estimate	FY07 Estimate
Consolidated Fund	4,984	7,786	9,071	10,083	10,752	12,177
TFET	7,754	7,952	3,922	0	0	0
Multilateral/Bilateral	7,398	5,968	7,971	4,878	1,507	0
UN Assessed	829	140	70	0	0	0
Total resources	**19,301**	**18,934**	**25,046**	**18,849**	**21,853**	**12,177**

Note: There is considerable uncertainty about forward estimates from Multilateral/Bilateral sources.

Source: Estimated actual for Consolidated Fund from Abstract of Aggregate Expenditure. Forward estimates for Consolidated Fund taken from FY04 Budget estimates. Forward estimates for TFET and multilateral and bilateral donors taken from Draft Sector Investment Plan for Health; UN Assessed budget taken from Budget documents and World Bank estimates.

7.23 **Total expenditure on health was US$18.9 million in FY2003 and is forecast to rise to US$25 million in FY2004** (see Table 7.6). The Consolidated Fund, the core recurrent budget for health, currently constitutes about 40 percent of total health expenditures, and is expected to rise to about 50 percent by FY2006. External assistance dominates health sector financing, with allocations broadly in line with the health policy focus on providing accessible basic services. The Health Policy Framework notes that in 2000, external assistance covered approximately three-quarters of Timor-Leste's health spending requirements. In FY2003, bilateral and multilateral assistance accounted for 59 percent of health sector resources, excluding the share of the Consolidated Fund which is donor financed. However, since most bilateral agencies have not finalized their country programs, the overall level of external financing for the sector for the outer years has not yet been defined. The TFET/EC program, which finances rural health clinic and hospital rehabilitation and construction, technical assistance, training, medical supplies and pharmaceuticals, covers about 40 percent of current expenditures on health. As the TFET/EC program winds down, other multilateral and bilateral programs will assume greater importance. Many of these programs will be negotiated in FY2006, as bilateral partners prepare new country programs. It is crucial that new projects and programs are consistent with the sectoral priorities, and that they take into account the incremental recurrent costs to be covered by Government after project completion.

7.24 **There is an emerging concern that bilateral and some multilateral aid is being directed to a broader range of activities than can be adequately sustained from the Consolidated Fund.** These activities have, for the most part, always been integrated into the sector-wide planning process that preceded TFET support, but have received more support than originally anticipated. While activities such as ambulance programs, blood banks, oral and mental health, and expanded malaria activities are important, it is not clear that they will be able to be

sustained in the future at the levels intended. MoH and donors will need to work together in this direction in order to ensure that priorities are fully addressed before covering less urgent needs.

7.25 **The Government has endorsed the development of a sector-wide approach to health policy reform.** This type of coordinated approach is intended to ensure that assistance to the sector takes place under the umbrella of a well-defined strategy and is confined to priority areas as identified by the Government, minimizing the risk that projects and technical assistance programs will encourage unprogrammed investments that may lock in fiscally unsustainable recurrent expenditures in non-priority areas. A sector-wide approach will become increasingly important as joint donor financing arrangements such as TFET are phased out and bilateral and project-based funding mechanisms begin to form a greater share of external assistance resources. Moreover, operating under a sector-wide approach is important to avoid overtaxing the Government's absorptive capacity in terms of processing and effectively spending a large volume of external resources, dealing with a variety of donors with diverse bureaucratic procedures and often overlapping projects, and monitoring the sustainability of new programs and projects in the longer term.

7.26 **Total per capita expenditures on health are high by international standards, with budgeted Consolidated Fund expenditures at about US$9.5 per capita and Combined Sources expenditure at US$27 per capita.** By comparison, total health expenditures in low-income countries are estimated to be just under US$6 per capita, and in the East Asia and Pacific Region, which includes a number of middle-income countries, total US$16 per capita. Budgeted Consolidated Fund expenditures on health for FY2003 represent about 11 percent of total planned Consolidated Fund spending, or the equivalent of 2 percent of estimated GDP. Estimated combined sources expenditures amount to 5.8 percent of GDP, as compared to average public expenditures on health of 1.1 percent in low-income countries and 1.8 per cent in the East Asia and Pacific Region.

7.27 **Although health has been given high priority in Consolidated Fund expenditure allocations, sector allocations are lower than anticipated in the National Development Plan and may not be sufficient to compensate for reductions in funding from external partners.** The FY2005 budget programs increases in health sector expenditures from 11 percent in FY2004 to about 14 percent of total planned Consolidated Fund expenditures in FY2008. Unfortunately comprehensive data on the FY2005 budget were not available at the time of writing. Tables 7.7 and 7.8 are based on data from the FY2004 budget papers, which programmed slightly higher levels of health spending than the current budget exercise. Although expenditure increases over the medium-term, it is unclear whether the programmed growth will be sufficient to compensate for reductions in other funding sources. From FY2006 onwards, the Consolidated Fund budget will need to absorb expenditures of about US$2 million on pharmaceuticals and medical supplies as well as costs for a new hospital. Moreover, MoH has not yet taken adjustments in the expenditure profile into account in its sector planning. Sector plans have been prepared on the basis of the significantly higher levels of Consolidated Fund spending presented in the National Development Plan—which anticipated growth of health spending to 17 percent of Consolidated Fund spending in FY2007—resulting in budget plan proposals for FY2004 that are well above sustainable levels, both from national units of the Ministry and from District Health Management Teams.

7.28 **Consolidated Fund forward estimates provide for a gradual increase in the share of spending on goods and services and reductions in the share of spending on personnel** (see Table 7.7). The projected decline in wages as a proportion of total Consolidated Fund expenditures from 32 percent in FY2004 to 26 percent FY2007, whilst goods and services

expenditures are programmed to increase from 55 percent to 64 percent over the same period. Uncertainties (and likely decline) in future levels of overall funding for the health sector, the difficulty of reducing personnel expenditures once staff are taken on as permanent civil servants and low workloads are strong arguments for containment of personnel costs. However, in addition to charges for national staff against the personnel allocation, the FY2004 budget allocates US$1.2 million for contracted international medical staff, amounting to 23.5 percent of goods and services spending. Two factors will strongly influence future budget needs for this purpose: the degree to which doctors are localized and the extent of donor financing for doctors and medical specialists. Charges for international medical staff significantly reduce allocations for pharmaceuticals and medical supplies and other operational expenditures. Consequently, allocations may not be sufficient to maintain the level of medical supplies as external assistance declines.

Table 7.7: Consolidated Fund Expenditures on Health by Economic Classification (US$ thousands and Percent)

	FY02 Est. Actual		FY03 Est. Actual		FY04 Forecast		FY05 Forecast		FY06 Forecast		FY07 Forecast	
	($'000)	(%)	($'000)	(%)	($'000)	(%)	($'000)	(%)	($'000)	(%)	($'000)	(%)
Wages/salaries	2,130	43	2,775	36	2,802	32	2,871	29	3,015	28	3,167	26
Goods & Services	2,616	52	3,929	50	5,101	55	5,862	58	6,736	63	7,743	64
Capital	237	5	1,082	14	1,168	13	1,350	13	1,001	9	1,267	10
Total	**4,983**	**100**	**7,786**	**100**	**9,071**	**100**	**10,083**	**100**	**10,752**	**100**	**12,177**	**100**

Note: Capital expenditure in FY2003 includes two projects funded centrally rather than through the MOH budget.
Source: FY2002 and FY2003 Financial Statements, and FY2004 Budget.

7.29 **Capital spending under the Consolidated Fund is modest at 14 percent, largely because investments are funded from external financing, but so too are allocations for maintenance.** This raises concerns regarding the sustainability of investments. MoH should continue to develop its asset register and use this as a basis to estimate an adequate building maintenance budget. At least 3-5 percent of the value of the infrastructure should be allocated for this purpose. Expenditure from combined sources continues to focus heavily on infrastructure. While relatively high capital expenditures are to be expected in Timor-Leste as destroyed infrastructure is replaced, there is a danger that the emphasis currently being placed on infrastructure will lead to an unmanageable recurrent cost structure in future, skewed away from longer term priorities. The challenge in the next few years will be to shift emphasis to service delivery, including health promotion and training.

Table 7.8: Forward Estimates of Consolidated Fund Expenditures on Health by Program (Percent)

Program	FY2004	FY2005	FY2006	FY2007	Total FY05-07
Ministerial Offices	1	1	1	1	1
Permanent Secretary & Inspectorate	6	6	7	7	6
Hospital and Specialized Services	46	44	44	42	44
District Health Services	41	45	49	51	47
Special Capital Projects	7	5	0	0	2
Total	**100**	**100**	**100**	**100**	**100**

Source: FY2004 budget papers.

7.30 **Planned Consolidated Fund spending by MoH program is closely aligned with policy priorities, though there are pressures to increase spending on hospitals and**

specialized services. Unfortunately, owing to changes in the program structure it is not possible to compare Consolidated Fund expenditure allocations from FY2001 through FY2003 with those presented in the FY2004 Budget and MTEF. The new program structure indicates that overhead administrative costs are modest, at around 7 percent of total health Consolidated Fund expenditures. Further, unprogrammed growth in administrative overheads is best controlled by limiting the number and size of MoH departments dealing with specialized support services and activities. The Government has committed through the HPF to keeping hospital expenditures under 40 percent of total recurrent expenditures in order to ensure that adequate fiscal space is available for priority public health and district health services. Forward estimates suggest that expenditure allocations for hospitals and specialized services are currently slightly above this target, at 46 percent in FY2004, but are expected to decline to 42 percent in FY2007. This is a laudable objective but it is going to require strict fiscal discipline on hospital budgets. There are already pressures to: (i) expand budgets and staffing for specialized services such as the blood bank and laboratory services; (ii) expand national training capacity; (iii) make increased provisions for specialist medical services in hospitals; and (iv) make room in the Consolidated Fund budget for the operation of Maubisse hospital once it is constructed—an estimated US$290,000 per year based on the operational costs of the similarly sized Maliana hospital. These policy issues are best addressed within the framework of the Sector Investment Program process, when the relative merits of alternative applications of scarce funds can best be assessed.

Table 7.9: Expenditure by District

District	Total	Proportion	Consolidated Fund Planned Expend/ Capita	TFET Medical Supplies & Drugs	Total With Medical Supplies & Drugs	Total Planned Expend/ Capita
	($'000)	(%)	($)	($'000)	($'000)	($)
Dili	318	9%	2.07	130	448	2.92
Baucau	326	9%	2.80	65	391	3.36
Aileu	245	7%	8.18	45	290	9.67
Ainaro	258	7%	5.44	97	355	7.49
Bobonaro	290	8%	4.08	123	413	5,82
Ermera	309	8%	3.35	137	446	4.84
Lautem	344	9%	6.38	96	440	8.15
Liquica	222	6%	4.69	51	273	5.77
Manatuto	318	9%	8.48	91	409	11.35
Manufahi	299	8%	7.68	88	387	9.92
Oecussi	205	6%	4.37	88	293	6.23
Covalima	280	8%	6.22	102	382	8.49
Viqueque	310	8%	4.48	125	435	6.29
Total	**3,723**	**100%**	**4.38**	**1,238**	**4,961**	**5.84**

Source: Ministry of Health, FY2004 Budget Submission.

7.31 **Although the MoH plans to increase the share of the Consolidated Fund budget allocated to district health services over the period FY2004 to FY2007, the allocation of funds between districts appears to be inequitable and may need to be revised.** The district share of the Consolidated Fund budget is already significant at 41 percent, and is expected to increase to 51 percent by FY2007 (see Table 7.8). As shown in Table 7.9, the share of Consolidated Fund health expenditure across districts is relatively constant at around 6-9 percent of the total Consolidated Fund district allocation. Due to population variations, however, this leads to wide disparities in per capita Consolidated Fund expenditures, which range from US$2.07 in Dili to US$8.48 in Manatuto. Table 7.9 also presents expenditures on pharmaceuticals and medical supplies financed by TFET to give an overall picture of recurrent expenditures if all operational expenditures were covered by the Consolidated Fund. Per capita

pharmaceutical allocations seem to be relatively high in a few districts, suggesting that prescribing practices or utilization rates may vary significantly. Taken together, total average per capita expenditures at the district level amount to US$5.84 in Timor-Leste, which is only slightly lower than the low-income country average of US$6.

F. Costing Health Service Provision

7.32 **Leading up to the preparation of the FY2004 budget, the Ministry of Health has laid important groundwork in prioritizing and sequencing programs, and in costing the implications of proposed activities and policy changes.** This process focused on identifying the costs incurred in individual districts and hospitals, and provided a firm foundation for the FY2004 budget.

7.33 **It is estimated that, once rehabilitation and construction activities are complete, the configuration of health services currently planned in the NDP and HPF will cost approximately US$15.6 million per year.** This figure exceeds the current Consolidated Fund health budget and FY2006 forecast by around US$5 million (see Table 7.6). These estimates were based on unit costs for each level of health service facility which were then aggregated to provide a total cost for the Ministry (see Tables 7.10 and 7.11). The model assumes that recurrent costs currently being picked up by donors—roughly US$5 million—will become part of the Consolidated Fund budget, including salaries of internationally funded doctors and specialists, pharmaceuticals and other medical supplies, and training. It is also assumed that MoH will proceed with its plan to contract out several low-level services now being provided through the civil service. The costing model does not take into account alternative health financing strategies such as the introduction of user charges, expansion of non-government service provision, promotion of health insurance or prepayment schemes at the community level. Developments in these areas have the potential to reduce the net cost of the publicly funded health system.

7.34 **Costing estimates suggest that hospitals will absorb 44 percent of health expenditures.** This figure is broadly in line with the declared policy to keep expenditure on hospitals below 40 percent of the health budget, but underlines the need for expenditure control if the target is to be achieved. Without pro-active cost control, the expenditure share of hospitals could increase toward half the budget as more costs are assumed under the Consolidated Fund. Cost estimates include the cost of internationally recruited doctors and specialists, estimated at

Table 7.10: Annual Health Sector Unit Cost Estimates by Facility Level (US$ thousands)

Facility Level	Estimated Annual Unit Cost
Mobile Clinic	3
Health Post	14
Community Health Center	
Level 2	47
Level 3	138
Level 4	165
Regional Hospital	492
Baucau Hospital	1,099
Dili Hospital	3,735

Source: PER Estimates

Table 7.11: Annual Health Sector Unit Cost Estimates by Expenditure Category (US$ millions)

Facility Level	Estimated Annual Unit Cost
Wages and Salaries	2.9
International Personnel	*1.8*
Medical Supplies, including Drugs	2.9
Other Operating Costs	4.5
Maintenance of Buildings and Equipment	1.6
Depreciation of Buildings and Equipment	1.6
Total	15.6

Source: PER Estimates
Note: Total does not add up due to rounding.

US$1.6 million per year for the foreseeable future. Progress in replacing these personnel with local medical staff would help contain costs, though it is clear that this will take considerable time to achieve.

7.35 **The cost of medical supplies, including drugs, requires careful monitoring.** The purchase of pharmaceuticals is currently financed by external partners with distribution costs covered from the MoH central budget. Individual health facilities are currently not charged for the drugs that they use. Consequently there is no incentive to control costs in this area. This situation will change following establishment of the Autonomous Medical Stores (SAMES) in May 2004, with responsibility for procurement and distribution of medical supplies. SAMES will charge medical supply costs against the Consolidated Fund, posting these charges against individual facilities. Health facility managers will then be required to include medical supplies in their budgets. Hopefully this will help discourage overuse of drugs. Changes in prescribing practice will also be needed. Anecdotal evidence suggests that health workers tend to prescribe by symptom, leading to a number of drugs being prescribed to treat one condition. This has led to an expectation among patients that a range of drugs will be prescribed, and a tendency to evaluate service by this yardstick. Some user charges for drugs may also be needed in the longer term to assist in managing drug usage and costs. Improvements in procurement practices will also be needed. There is some control over the type and quantity of drugs used through reliance on the WHO essential drugs list (adapted for Timor-Leste). However, drug procurement through international competitive bidding and international shopping is based largely on historical records of drug issue, which may not reflect the new approach to health service delivery set out in the HPF.

7.36 **Although sensitivity analysis permits examination of the cost implications of other proposed policy changes, further analysis is needed to determine the most cost-effective structure of service delivery.** A 10 percent increase in the number of health posts and mobile clinics, for instance, is estimated to cost around US$260,000, suggesting that the policy priority to extend coverage does not have major financial consequences for the health budget provided that any expansion in health posts and mobile clinics is incremental and well targeted. However, decisions regarding the district level service delivery structure require further analysis, particularly as regards the relative cost-effectiveness of health posts and mobile clinics. It is estimated that the annual unit cost of a "model" health post is US$13,700, as compared with just US$2,700 for mobile clinics. While it is recognized that health posts provide a wider range of services than the mobile clinics, given low attendance rates it is not evident that health posts are more cost-effective than the mobile clinics in delivering health outcomes.

G. Health Expenditure Management

7.37 **The Ministry of Health operates in a challenging environment, in which the decentralized, service delivery oriented organization must function amid highly centralized personnel and financial management systems.** This situation creates a range of challenges for health sector management in a context of considerable need and limited resources.

7.38 **MoH has developed an impressive internal budget monitoring system, allowing allocation of costs to individual hospitals and managers.** This provides a basis for more decentralized management in the future. Once the District Health Management Teams are established and operating effectively, they could assume greater autonomy and responsibility in managing health services at the district level. It is conceivable that, at least for District Health Management Teams who have demonstrated their management capacities, block allocations for

districts could then be piloted to further increase the flexibility and demand responsiveness of health expenditure management.

7.39 **MoH has modified the program structure for the FY2004 budget, so as to distinguish central administrative functions, hospital and specialized services, and district services.** This represents a considerable advance from the previous structure, which failed to distinguish between levels of service. The four programs are further divided into sub-programs and activities to be monitored internally by MoH. This new structure is closely tied to the MOH organization structure, which will facilitate monitoring of budgets by individual managers, and of the performance of these managers in service provision. However, the four programs are not necessarily consistent with the HPF's priority focus on basic services, as it is difficult to distinguish total spending on priority activities, such as primary health care or immunizations. Moreover, the processing involved in this analysis is time consuming and appears to be dependent on continued technical assistance. It may be possible to transfer more of the processing burden to the central Financial Management Information System (FMIS) by specifying one or two more programs and/or taking advantage of the system's capacity to identify expenditure by district. The complexity associated with transferring budget between programs is advanced by MOH as a reason for limiting the number of programs specified in the budget. The 10 percent restriction on within-program line item transfers reduces budget management flexibility and seems unnecessary in the context of a program budget system that intends to focus on implementation performance rather than micro-management of budgets. One approach could be to relax this rule in the case of ministries with a good record in managing their budget, thus providing an incentive for improved performance. Restrictions on virements between expenditure categories (i.e. wages and salaries, goods and services, and capital) within programs could be retained.

7.40 **The work undertaken by MoH in preparing for the FY2004 budget revealed inadequate coordination of planning and budgeting.** Planning functions fall under the Director of Health Policy and Planning, while budgeting tasks are managed by the Director of Administration, Finance and Logistics Services. This arrangement could work with close collaboration between staff in different sections throughout the planning and budgeting process. In practice, however, the process is initiated by planning staff and handed over midstream to budget staff, who have not been directly involved in earlier stages. As a result, the budget circular was not received by budget staff until some time after it reached the ministry, and the structure being developed for annual action plans diverged for a time from the agreed program structure for budget preparation. Consideration could be given in the medium term to bringing some planning and budgeting staff together under one director, particularly in relation to resource allocation tasks.

7.41 **It is important that the district health planning process is undertaken with clear guidance on resource availability.** Without a hard budget constraint, district health plans are likely to focus resource bids on expanding capacity rather than on making existing facilities fully functional in delivering the basic package of health services. District budget planning processes should also take into account the role of regional hospitals in sharing patient loads in districts where these larger hospitals are located. It seems, for example, that the availability of regional hospitals in Oecussi and Covalima, which are funded outside the district health budget, are given insufficient consideration in setting budgets for these districts.

7.42 **Operational planning activities within MoH are compartmentalized.** Human resources planning is not synchronized with micro planning for policy implementation, and neither are well coordinated with budget planning. These difficulties help to explain the emerging

gap between implementation plans for the HPF and the implementation process itself, as evidenced by movements toward the unplanned expansion in the number of health facilities, particularly health posts, and unplanned growth in the staffing complement of some health posts, community health centers and district health management teams. There is thus a need to strengthen links between policy making at the MoH headquarters level and the service delivery arms of the ministry, and the district health planning process is a good opportunity to address this issue.

7.43 **Budget execution rates in the health sector have been higher than those in other sectors, though requisition, payment and petty cash systems have been identified as factors that impede efficient service delivery.** In FY2003, MOH spent 94 percent of its final Consolidated Fund appropriation. Expenditure and commitments for the first half of FY2004, to end-December, totaled 31 percent of the budget, with an additional 15 percent already committed. Annualized rates, presented in Table 7.12, suggest a fairly accelerated pattern of budget execution. Nevertheless, MoH still encounters difficulties, particularly as regards expenditures at the field level. Purchases made through the Consolidated Fund for amounts up to US$500 are handled via the petty cash system. Districts can purchase goods up to the value of US$200 each from petty cash, but any purchases between US$200 and US$499 are routed through MoH at the center, and processed through a Commitment and Payment Voucher (CPV). At present, all CPVs are endorsed by the Minister of Health and the Treasury department. This system works at MoH headquarters, which manages its own petty cash, but is not working effectively in the districts. District health services do not have authority to manage petty cash themselves and must deal with the sub-district treasury office each time replenishment is needed. Petty cash replenishments are lodged by the district to MPF's District Administration Officer for approval, which is often delayed until all agencies in that district have requested replenishments. Centralization of approval for CPVs at Ministerial level aggravates these delays. In addition, the Autonomous Medical Supply System (SAMES) manages a petty cash account of only US$150, which is consumed rapidly but with similar delays in replenishment as a result of the CPV system. This constitutes a serious impediment to efficient service delivery. Solutions may lie in extension of petty cash management authority to the health management team at the district level and for key departments, such as SAMES.

Table 7.12: FY2004 Health Sector Budget Execution As of December 2003, Annualized Percentage

	Cash	Cash & Commitments
Wages and Salaries	88	88
Goods and Services	58	90
Capital	8	106
Capital Expenditure	*8*	*154*
Capital Development	*8*	*64*
Total Expenditure	**62**	**92**

Source: FY04 Financial Statements, December 2003.

7.44 **Payment of wages and salaries is made monthly in cash, though payroll is not always corrected for attendance.** Payment amounts are determined from payroll lists maintained by Treasury's Payroll Section and confirmed monthly by MoH; these lists indicate staff to be paid, any allowances including overtime, and any deductions for absences from work. Staff in regional hospitals and the district health service are paid via sub-treasury offices in districts. It is understood that not all MoH managers monitor staff attendance or process adjustments in pay for absenteeism, which could be leading to over-expenditure on personnel costs.

H. ACCOUNTABILITY AND OVERSIGHT

7.45 **Publication of performance information could enhance accountability for results.** Systems of performance-oriented program budgeting and financial reporting provide a significant amount of public information on the use of public resources. Annual financial statements provide a public record of MoH's performance in budget implementation. However, the Ministry's quarterly monitoring reports, which track performance across a series of health indicators, are not publicly available. Releasing this information would help generate public discussion on health issues. While there does not appear to be a requirement for the preparation and dissemination of an annual report on MOH activities, this would be desirable. Technical assistance in health legislation during 2002 has helped to draft several laws and regulations, including an Organic Law for MoH, a Health Act and a Pharmacy Act. Publication and dissemination of these laws and regulations would provide an important source of information for the public on MoH policy and responsibilities.

7.46 **There is scope to expand bottom-up community oversight of MoH activities.** The Ministry's engagement with churches and other non-government entities on planning and implementing health activities could be strengthened. The HPF calls for the establishment of district health committees—to provide advice on health priorities at the district level, review draft district health plans, and monitor implementation in these areas—and supports community involvement in health provision at the village level, but neither of these policies for community engagement have been implemented as yet. It would be worthwhile, however, to pursue the development of these channels for participation before the service configuration at the district level becomes too firmly entrenched to make adjustments for community feedback.

7.47 **MoH could strengthen accountability for performance, improve utilization of critical health services and encourage a sense of community ownership in the operation of health facilities through a few simple steps.** Possible measures for consideration include: (i) clear signposting of MoH facility locations and hours of operation; (ii) more prominent advertising of services provided by each facility, particularly for primary and preventive services, in a form that is readily understood by the community; (iii) staff listings indicating service delivery responsibilities and times of availability, displayed on notice boards in order to increase public awareness of what can be expected from the people involved in health service delivery; (iv) simplified equipment and stock registers for drugs and other medical supplies, copies of which could be displayed on notice boards for public scrutiny, with the aim of reducing the potential for misuse; and (v) widespread notification that health services, including those offered by mobile clinics, are free of charge (or, if user fees are introduced, explicit posting of the charges involved) in order to reduce the potential for "informal" fees—a common practice in both administrative and service delivery positions under the Indonesian system, which may well have become entrenched in Timor-Leste.

I. WHERE TO NOW

7.48 **Now that basic health services have been re-established and MOH is close to finalizing its basic package of services, the Government can turn its attention to operationalizing health sector strategies.** It will be important for this to take place within the fiscal constraints imposed by the Government's Medium-Term Expenditure Framework, particularly as they relate to the Consolidated Fund and the proposed Sector Investment Program currently being developed by the Ministry of Planning and Finance. This exercise also presents an opportunity to redefine the role of Government in meeting health needs, given limited funds, low numbers of qualified staff, and the limited demand for and utilization of health services.

Box 7.1: Key Recommendations – Health

- ***Development of a human resources plan for the health sector*** *that recognizes budget constraints, limitations in the supply of human resources, and the role of the private sector.*
- ***Further prioritization of health service delivery to cover key primary health care needs and major cross-sectoral issues.***
- ***Implementation of a sector-wide approach*** *to ensure that external assistance remains consistent with sector priorities and limited to areas with sustainable recurrent cost implications.*
- ***Maintenance of flexibility in the allocation of Consolidated Fund resources*** *in order to respond to expected shifts in other funding sources.*
- ***Adequate provision in the budget for maintenance of health infrastructure*** *(at least 3 to 5 percent of the infrastructure value).*
- ***Consolidation of MoH planning and budgeting staff under one director,*** *in order to improve coordination of planning and budgeting and provision of clear guidance on resource availability in preparation for the district health planning process.*
- ***Extension of petty cash management authority to the district level in the short term,*** *with a longer term focus on increased authority over financial resources at the district level through the implementation of block grants.*

Increasingly, the Government is recognizing the array of resources and capacities in the private and NGO sectors that can be better tapped to enhance overall capacity to meet health sector objectives.

7.49 **MoH also recognizes the importance of outlining a strategic framework to address critical organizational, financial and management constraints to service delivery, and ultimately health outcomes.** While district health plans can be strengthened considerably, and criteria for resource allocation to the districts further developed, it should be recognized that the Ministry of Health is to date the only ministry to have developed a district planning system – a considerable achievement. The district health plans provide the means for implementing the strategic directions set out in the Health Policy Framework, and the micro-policies currently being developed. More remains to be done to establish mechanisms for getting resources to districts and facilities, which enable staff to respond to local needs while ensuring sound financial accountability. The allocation of staff according to workloads is constrained by current personnel management systems. Incentive structures are not adequate to encourage staff, particularly midwives, to serve in remote areas, or to induce staff to participate in regular and timely outreach programs, including mobile clinics, though these activities are a core feature of the health sector priority of ensuring access to basic services. Prioritization of spending in the health sector will be essential to maintain the Government's desired emphasis on cost-effective and pro-poor health care services that improve the health status of its citizens.

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