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- 1. Timor-Leste National Development Plan**
- 2. Sector Improvement Plan**
- 3. Schematic Drawing of Dili Water Supply**
- 4. Temperature and Rainfall Data for 2004**
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1. Timor-Leste National Development Plan

2. Sector Improvement Plan

3. Schematic Diagram of Hill Water Supply

4. Temperature and Rainfall Data for 2004

Attachment 1

Timor-Leste National Development Plan

EAST TIMOR

NATIONAL DEVELOPMENT PLAN

After independence on 20 May 2002, the draft Plan will be presented to the Parliament for consideration and adoption.

Planning Commission

Dili

May 2002

EXECUTIVE SUMMARY

INTRODUCTION

1. The first National Development Plan (the Plan) for East Timor is a watershed event in the history and development of the world's newest nation. It is the first time that the people of East Timor have voiced their views about the future of their nation, based on democratic ideals and self-determination. The Plan has been a participative process, involving constituents in every sector of the economy to identify the problems they face and to suggest solutions to those problems. A vast number of people across the country participated in surveys and meetings to help shape a "national vision" for the new country. A Countrywide Consultation was conducted to reach thousands of people in every district and walk of life, resulting in the vision presented at the outset of this document.

2. This planning document represents the views and efforts of those individuals who came together as "working groups" assisted by teams of planning consultants under the Planning Commission. It is important to emphasize that the Plan is the work of East Timorese people. For many, it is their first experience of planning on such a scale. It represents, therefore, the first important step in a process through which the development plan grows, matures, and improves over time.

3. The people of East Timor have many expectations, but these focus strongly on two over-riding development goals:

- a) To reduce poverty in all sectors and regions of the nation, and
- b) To promote economic growth that is equitable and sustainable, improving the health, education, and well being of everyone in East Timor.

DEVELOPMENT STRATEGY

4. East Timor's Development Strategy as described in this plan is to design programs and pursue initiatives that systematically address its main development goals. The first set of tasks during this early transition stage is to establish government capabilities, enabling legislation, and the institutions required to pursue development priorities. These are significant challenges that become unmistakably visible in each of the Plan sector strategies where the ministries and their directorates emphasize these priorities.

5. A second set of priority tasks is for every sector of government to pursue development activities that help reduce poverty. These are very often interdependent with priorities of economic growth, through which the nation's productive capacity is strengthened to create new jobs and higher levels of earned income, and, in time, a vibrant middle class. As the Plan shows, many economic development plans cannot be implemented without legal foundations and



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|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8. Preserve the existing road assets through appropriate allocation of road funds and a system of sustainable maintenance | <ul style="list-style-type: none"> • Number of road with maintenance achieved • Km of roads and percent maintained • Percentage of maintenance on time |
| 9. Establish an institutional structure and develop technical and administrative capacity | <ul style="list-style-type: none"> • Division staff and management approved • Qualified technical staffing levels met • Certified staff levels attained |
| 10. Implement sustainable strategies for the maintenance of rural access roads | <ul style="list-style-type: none"> • Rural road maintenance plan approved • Number of roads maintained under plan • Km of rural roads maintained |
| 11. Establish and implement sustainable erosion control measures | <ul style="list-style-type: none"> • Number of reduced flood-related incidents • Percent reduction for road maintenance • Assessment of environmental impact |
| 12. Enhance human resource capabilities for sustained indigenous development | <ul style="list-style-type: none"> • Number of local qualified staff • Number participating in training workshops • Percentage retained and qualified |

WATER AND SANITATION DIVISION

15.30 The Water and Sanitation (WSS) Division is responsible for establishing the legal and institutional framework for water utilisation and sanitation controls, managing the integrated activities of water and sanitation engineering, water quality control, relevant development and maintenance contracts, and establishing support activities (e.g., customer services, materials warehousing, waste collection vehicles, and waste tanks or sites). The WSS Division also will initiate a program of public information and education workshops to promote safe water and sanitation practices.

WSS Division Objectives

15.31 The Division has aggressive objectives to pursue safe water and sanitation throughout East Timor, but realistic expectations must be appreciated for each of the long-term objectives. The Division will prioritise its efforts with respect to each objective and in general pursue incremental cost-effective programs that can progressively improve human welfare. Primary objectives for administrative responsibility include the following.

- a) To provide adequate, safe and sustainable water supplies for the communities of Dili and major urban centres in districts, with the aim of full cost recovery from users of the water supply.
- b) To facilitate adequate, safe and sustainable water supply and sanitation for village and rural communities through community-based water supply and sanitation facilities.

- d) To facilitate at a National level the collection and safe disposal of nuisance surface waters from major urban areas.
- e) To facilitate at a National level the collection and safe disposal of solid and hazardous waste from major urban areas.
- f) To ensure the appropriate management of water resources for the purposes of water supply and sanitation in cooperation with other relevant ministries.
- g) To inform the public of safe water and sanitation practices that systematically improve the environment and enhance human health and welfare.

Constraints, Problems and Issues

15.32 The WSS Division faces an uphill struggle with long-term expectations to achieve many of its objectives. Many of the constraints can be overcome through legislative enactments and inter-ministerial cooperation, but funding is a limitation that will persist. Social and cultural constraints are viewed as challenging opportunities to enhance living standards and support poverty reduction initiatives. These include the following.

- a) **Legislative.** Agreements are needed on roles and responsibilities between the MWPW and the Secretary of State for Natural & Mineral Resources regarding control and management of water resources. The Division must also have enabling legislation to pursue water and sanitation services, assess tariffs, and expedite procurements.
- b) **Human resources.** Like most Divisions, WSS is facing shortages of human resources in the fields of resource management, sanitation engineering, quality control, plumbing technicians, cost estimating, and public information specialists. Timorese staff are not sufficiently skilled in current methods of water and sanitation systems to administer, cost, plan, or manage.
- c) **Support facilities.** There is a pressing need for customer service centres and warehouse, technical workshop areas, drilling and well equipment, heavy equipment, waste tanks, and procurement of sanitation materials and supplies, including vehicles for waste collection and recycling. There is no effective capital budget for these activities, and limited funding for maintenance.
- d) **Social and cultural issues.** A majority of the population has had little or no experience with modern water or sanitation processes, and do not understand the hazards of unsafe conditions nor how to resolve them. What they cannot understand or see for themselves cannot motivate them to change behaviour. The health problems of East Timor, sanitation safety, social improvement of fundamental living conditions, improved agricultural health systems, and the simple act of clean living in decent surroundings will require a pervasive change in human behaviour. This becomes an enormous challenge for government and social leaders, but in particular a challenge for the Division.

WSS Division Strategies

15.33 The Division will be part of an integrated team comprised of staff from the three ministries to develop an effective body of professional, technical and legislative staff. The Division will address during the first two years of the plan, resulting in a... begin to develop an... services...

priorities of environmental protection. Such an integrated approach will include representatives of health and community development agencies, and the real property and land management staff from several ministries.

15.34 A similar integrated process must be established for long-term operational planning and development of water and sanitation resources. This will involve a commission that can plan and implement programs for district and rural (village) public works, specifically those for safe water, options for disposing of non-solid waste and collection or recycling of solid waste, coordinating priorities of health authorities, and supporting programs of agricultural and community development. A parallel commission will address public works and public health issues for urban public works where special attention must be given to slum rehabilitation, street construction and repair, water and sanitation related to public and commercial users, and the wider ranging development interests for airports, seaports, industrial parks, and public recreation facilities.

15.35 The Division recognises the importance of addressing high-priority objectives related to poverty reduction, improved conditions for human health, and such problems as urban slums and extreme rural isolation. Consequently, during the first two years of the planning period, the Division will concentrate on service delivery requirements for safe water and adequate sanitation for these and other high priorities.

15.36 The Division will seek to ensure that adequately trained or skilled personnel will be maintained for addressing water and sanitation service programs in Dili and primary urban centres during the first three years. This will involve budgeted capacity building training with a continuation of existing transitional donor support programs. During the latter half of the five-year planning period, water and sanitation will require support for rural and district staff training and development, and more extensive technical expertise, which can be partially addressed internally and partially with donor support.

15.37 The Division will seek the most cost-effective way of implementing programs, conducting assessments, and fulfilling projects. Competitive bids and tenders will be stressed for optimal participation by private consultants and contractors, not only for designing and implementing projects, but for potential investments in water and sanitation facilities, supplying materials and fixtures, and maintaining these systems.

15.38 It will be essential for the Division to address the social and cultural patterns of water and sanitation utilisation. Therefore, the Division will establish a program of public information and education on water and sanitation issues, and in the long term, one that can lead to an informed public capable of self-managed hygiene.

WSS Division Programs and Projects

15.39 After recent reorganisation within the department, the WSS Division has identified four core programs. The first, concerned with capacity building, include the joint departmental training and staff recruitment responsibilities. These are interspersed activities while remaining programs address technical project activities.

Program 1: Institution and Capacity Building

15.40 Training and capacity building will occur through inter-Divisional workshops and programs designed to reach a wide constituency that includes NGOs and government staff. The Division will finance no specific projects or programs of water

Projects

- a) Draft Water Resource Management Policies and Regulations
- b) Draft Water Legislation and Regulations on Water Rights and Utilisation
- c) Draft Legislation and Regulatory Procedures for Water Supply Tariffs
- d) Solid Waste, Waste Water, and Drainage Management Laws and Regulations
- e) Community Water Supply and Sanitation Policies and Regulations

Program 2: Urban Water Supply

15.41 Urban water supply is concerned with piped water to 13 urban areas and 12 district capitals outside Dili. These parallel the public works urban planning list presented earlier, with priorities of this Division directed toward projects noted below.

Projects

- a) Strategic Planning for Water Resource Management (Master Plan)
- b) Capital Works, Rehabilitation of Dili Headworks and Distribution
- c) Capital Works, Rehabilitation and Augmentation of District Towns Water Networks
- d) Operation, Maintenance, and Service Improvements of New Connections in Dili
- e) Resolution of Illegal Connections, Removals, or Legitimation in Dili
- f) Implement New Connection Services and Billing Processes for District Towns
- g) Resolution of Illegal Connections, Removals, or Legitimation in District Towns
- h) Implement Billing and Technical Monitoring Systems Nationwide
- i) Extend and Update Master Plan for Expansion of Water Services
- j) Preparation of Database for Assets, Maintenance, and Water Systems
- k) Development Systems for Water Resource Management

Program 3: Urban Sanitation

15.42 The Urban Sanitation program is concerned with solid waste management, wastewater and drainage, and safety of habitation within populated areas where there are priority problems concerning collection and waste disposal.

Projects

- a) Strategic Planning for all Urban Waste and Sanitation Models
- b) Capital Upgrading of Solid Waste Management Infrastructure in Dili

- d) Augmentation of Drainage System for Dili
- e) Capital Works Implementation for District Towns of Solid Waste, Wastewater Collection and Treatment, and Drainage Infrastructure
- f) Update to Efficient Sanitation Operations and Maintenance for Dili
- g) Implement or Update Sanitation Operations and Maintenance in District Towns

Program 4: Community Water and Sanitation

15.43 This program is designed to implement new systems for both water and sanitation required in areas outside Dili and in the 12 district capitals. Projects reflect combined area or district township activities.

Projects

- a) Strategic Planning to Develop Best Practice Models for Rural and Small Towns
- b) Capital Investment and Systems Development for WSS in Isolated Communities of Atauro, Oecussi, and Others as Designated.
- c) Develop and Implement Emergency Response Systems for Communities with Respect to Water, Sanitation, Health Issues, and Disaster Relief
- d) Revise Guidelines on Operations and Maintenance for Community Systems Congruent with the Strategic Master Plan

Program 5: Water & Sanitation Support and Public Safety

15.44 This program is concerned with human resource development beyond internal Division staff to include district water authorities, community or private interests, and the public in general as to water utilisation, sanitation systems, and human safety. There is a strong emphasis on HRD training that will require donor assistance with technical advisers, community development experts, and NGOs capable of supporting a public awareness program on such issues as water safety, disease prevention related to water and sanitation, and attention to water and sanitation standards.

Projects

- a) Capacity Building for WSS Standards and Safety
- b) Community Development for Safe Water and Town Sanitation Utilisation
- c) Enforcement processes for Illegal WSS Usage, and to Prevent Vandalism and Destruction of Systems
- d) Public Awareness of Safe Water Practices, Safe Habitation, and Good Hygiene
- e) Public Media and School Programs for Habitation and Agricultural Practices

Table 15.4: Water and Sanitation Performance Indicators

Objectives	Performance Indicators
1. Provide adequate, safe and sustainable water supplies	<ul style="list-style-type: none"> • 80% of urban population with access to safe piped water • 80% of rural population with access to safe local water supply
2. Provision of adequate, safe and sustainable water supply and sanitation for village/rural communities through community owned and managed water and sanitation facilities	<ul style="list-style-type: none"> • 100% of areas adjacent to urban centres with appropriate access to water • 80% of villages and enclaves with access to appropriate self-managed systems • 80% of villages and rural communities with effective sanitation facilities
3. Facilitate at a National level the safe disposal of sewage and wastewater in urban areas	<ul style="list-style-type: none"> • 100% of urban areas with solid waste systems • 100% urban areas with wastewater systems
4. Facilitate the collection and safe disposal of nuisance surface waters from major urban areas	<ul style="list-style-type: none"> • Urban drainage systems in Dili and district capitals • Reduction of hazardous water and flooding
5. Facilitate at a National level the collection and safe disposal of solid and hazardous waste from major urban areas	<ul style="list-style-type: none"> • Urban collection and disposal sites established • 100% collection coverage for solid and hazardous solid waste
6. Ensure the appropriate management of water resources for the purposes of water supply and sanitation in cooperation with other relevant ministries.	<ul style="list-style-type: none"> • Effective regulations of water utilisation and waste collection among ministries • Ports and public water access regulated
7. Inform the public of safe water and sanitation practices that systematically improve the environment and enhance human health and welfare	<ul style="list-style-type: none"> • 100% of population reached with safe water practices information • 100% of all schools with institutional programs on safety in water and sanitation