

PART 3

STRATEGIES FOR NATIONAL DEVELOPMENT: SECTORAL PLANS

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9. POLITICAL DEVELOPMENT, FOREIGN RELATIONS, DEFENCE AND SECURITY

“The development of an effective administrative and governance structure and capacity to serve the needs and interests of the people and sovereign State of East Timor is one of the most critical national priorities for the next five years and beyond.”

VISION

9.1 East Timor will be a country with:

- a) a solid democratic culture, based on a pluralist, law-based State, where separation and balance of powers is real and naturally developed;
- b) well structured institutions, open, professional and accountable media, and an organized civil society active in the defence of global interests; and
- c) a population aware of and participatory in the process of social, political and economic development.

INTRODUCTION

9.2 The sector incorporating Political Development, Foreign Relations, Defence and Security is presented in this Plan as the collective efforts of a number of Ministries and Departments, and encompasses broad areas of governance, protection of liberty and safeguarding of human rights.

9.3 Two essential institutions ensuring the healthy functioning of the nation's newly won democracy are the National Parliament and the Public Service. The Parliament must ensure that its legislative functions are accomplished in a timely manner, as it has an important role in the country's democratisation and stabilisation. It also has the responsibility in overseeing and controlling of other powers, always in terms of its legal mandate. State administration is to be undertaken in a professional manner, with effective and efficient performance of its personnel. The administrative apparatus (i.e. number of staff) shall be reduced to the lowest number possible in order to guarantee its sustainability, and so that salaries and other forms of compensation can attract the best national staff to serve the State, without incentives for corruption and/or nepotism.

9.4 East Timor's freedom has been founded upon the willingness of its population to participate in the protection of their liberty and human rights. The country's defence and security will be understood in the widest context of social, political and economic development, in the context of poverty reduction and a participatory and responsible citizenship. They will be

provided by professional military and police forces, which will be non-political and subordinated to the power of the democratically constituted civil institutions. In its foreign affairs East Timor will reinforce its position as a country supporting peace and the values of respect, mutual assistance and cooperation. The administration of justice, accessible to all, will combine professionalism and juridical expertise with sensitivity to the culture and values of East Timor. The protection of rights, freedoms, guarantees and legitimate interests of citizens will be ensured by the establishment of an independent institution, also mandated to monitor transparency in both the public administration and the administration of justice in East Timor. This institution will guarantee, through accessible and informal means, that citizens will be able to find expeditious redress to accusations of illegality and/or injustice in the conduct of public authorities.

9.5 Civil society will take part in the political process through political parties that respect the rules of democracy and implement them at the parties' organizational level and through other legal private associations (i.e. professional associations, unions, NGOs, etc.) established to defend the legitimate interests of their members and to take part in the social, political and economic development of the country. The media will be responsible and able to inform, educate and direct national energy towards development and social harmony, guaranteeing the dissemination of educational information on health, human rights, social harmony and national development.

GOALS

9.6 The overarching goals for the sector include:

- a) Fostering a robust multiparty democratic system;
- b) Creating a lean, effective and efficient public service;
- c) Securing the unity, territorial integrity and sovereignty of the nation;
- d) Creating and maintaining durable internal peace, security and stability;
- e) Developing effective professional, non-partisan (non-political) defence and police forces;
- f) Strengthening regional and international political, economic, cultural and scientific cooperation and relations;
- g) Developing and administering an effective, accessible, justice system that is in conformity with positive values and East Timor's national cultural heritage;
- h) Building and maintaining an effective and independent oversight system;
- i) Nurturing a responsible, independent and effective media;
- j) Strengthening an already robust civil society and creating opportunities for its constructive engagement and participation in national life; and
- k) Enhancing the participation of citizens in public and national life.

OBJECTIVES

9.7 Specific objectives of the National Parliament's are to:

- a) Pass relevant, well drafted legislation in a timely manner;
- b) Establish a multiparty system and democratic rules through a productive dialogue;
- c) Provide a counterbalance to the powers of the Presidency and of the government;
- d) Establish and maintain proper, efficient and effective communication between the various branches of the Government in order to ensure respect for the Constitution and constitutionally enacted laws, transparency within the public administration, and the independence and impartiality of the judiciary.

9.8 The Public Administration will:

- a) Create a culture of public service, establishing professionalism in service provision;
- b) Establish a well equipped and decentralized administration with simple and transparent norms in order to move public administration closer to the people;
- c) Create internal mechanisms to control and avoid corruption and nepotism.

9.9 The objectives for the Defence Force and Police of East Timor are:

- a) Guaranteeing national independence, territorial integrity, constitutional order, and the safety of people and their property.
- b) Preventing crime and involving the community in the reduction of crime.
- c) Providing help to the population in case of natural disasters or emergency.

9.10 Foreign Affairs has the following objectives:

- a) Maintaining friendship and cooperation links within the region, in particular with the neighbouring countries, and with the rest of the world;
- b) Maintaining special links of friendship and cooperation with the Community of Portuguese Speaking Nations (CPLP);
- c) Establishing diplomatic and consular representation overseas in order to develop foreign policy and ensure protection of national citizens abroad;
- d) Maintaining good relations with other countries, maximizing support for the social and economic development of East Timor.

9.11 The Courts (in the widest sense of the judicial system, including all three essential elements of judge, prosecutor and defender) shall:

- a) Guarantee access to prompt, transparent and equitable justice for all;
- b) Administer justice of technical quality independently, with respect for citizenship rights, sensitivity to cultural values and popular participation and involvement.

9.12 The Ombudsman's Office (in support of Human Rights and Justice) aims to:

- a) Create and establish a culture of respect for human rights and legality;
- b) Prevent and fight against corruption and nepotism in the administration of the State in order to develop public trust in a fair and just public administration; and
- c) Establish control mechanisms to ensure the accountability of public servants and public authorities.

9.13 The objectives of Civil Society, where organized in political parties, are as follows:

- a) Make people aware of the political ideals and programs to be undertaken;
- b) Monitor public administration activities in order to identify any errors in policies and programs as well as cases of lack of transparency, nepotism and corruption;
- c) Monitor parliamentary activities and propose solutions to national problems in accordance with the established political rules.

9.14 The objectives of Civil Society, where organized in legal associations, unions and NGOs are as follows:

- a) Defend the legitimate interests of their associates and of the community;
- b) Promote the participation of the citizens in public life.

9.15 The activities of the media should have the following central objectives:

- a) Report with accuracy, impartiality and professionalism the news and issues of national interest, including what happens abroad, and in particular in the countries of the region;
- b) Report in a manner that promotes social peace, development and the promotion of human rights, particularly concerning women, children and the elderly;
- c) Follow closely the activities of the State administration and denounce cases of corruption and nepotism.

GUIDING PRINCIPLES

9.16 The general guiding principles for the sector are:

- a) Democracy, sovereignty, respect for human rights, equity and social justice;
- b) Rule of law and equality before the law;
- c) Transparency and accountability, integrity and public morality;
- d) Predictability and consistency;
- e) Efficiency;
- f) Professionalism;

- g) Sustainability;
- h) Decentralization;
- i) Participation;
- j) Gender and cultural sensitivity; and
- k) Social justice.

9.17 The organs of sovereignty and public administration will respect the following principles:

- a) National sovereignty and State unity;
- b) Respect for the Constitution and for the law, guaranteeing the regular operation of the democratic institutions;
- c) A spirit of public service, professionalism, non-partisanship with respect to political parties, equity and legality;
- d) Moral integrity and professional ethics;
- e) Democratic decentralization of administrative structures ensuring accessibility to services for all citizens;
- f) Transparency and accountability of public agents; and
- g) Government responsibility for ensuring equality for all when facing the law, promoting and guaranteeing protection of human rights and caring for victims.

9.18 In foreign affairs, East Timor is to be guided by principles of:

- a) National independence;
- b) The right of the people to independence, self determination and respect for human rights;
- c) Mutual respect for the sovereignty, territorial integrity, equality and non-interference in the internal affairs of States;
- d) Creation of an international economic order capable of ensuring peace and justice in the relations between different peoples/nations.

9.19 The media will undertake its activities adhering to the following principles:

- a) Freedom to inform and be informed;
- b) Impartiality and quality;
- c) No censorship;
- d) Safeguarding the sources of information.

KEY DEVELOPMENT INDICATORS

9.20 The key development indicators for the sector are as follows:

Parliament

- a) Level of participation of its members in discussions;
- b) Level of the population's awareness of approved legislation.

Public Administration

- a) Level of progress in the design of the organic structures of government and of each of its ministries;
- b) Level of establishment of departments, with the necessary legal and regulatory frameworks;
- c) Enactment of the regulation of the public service, including the formulation of standardised professional career terms of reference, duties and rights, together with a code of conduct and a disciplinary process;
- d) Progress in the areas of recruitment and training in order to meet the public sector's needs for professionalism and for financial sustainability;
- e) Progress in the conducting of studies concerning the reorganisation of sub-national government, with a decentralization of services, promoting effective and competent service provision and an increase of local participation in decision-making.

Security and Defence Forces

- a) Level of progress in recruitment and training of the police forces, armed forces and information services.

Foreign Affairs

- a) Level of progress in recruitment and training of skilled staff;
- b) Progress in the constitution of the first six diplomatic representations and obtaining other forms of representation for the country through the good offices of friendly Embassies.

Public Prosecution and Defence

- a) Progress in recruitment of prosecutors and public defenders and respective supporting skilled staff.

Ombudsman's Office

- a) Progress in the definition of the legal framework for the Office and in the creation of accessible procedures that facilitate the reporting of injustices and human rights violations;
- b) Progress in the recruitment and training of skilled staff;

- c) Progress in the level of awareness, by the East Timorese citizens, of their human rights and their right to good public administration;
- d) Progress in the level of awareness of the existence of services of the Ombudsman as an effective avenue of appeal from the actions or omissions of public administration;
- e) Level of acceptance of the recommendations of the Ombudsman by the respective branches of the public service.

Promotion of Gender Equality

- a) Existence of legislation to protect women from violence;
- b) Accomplishment of targets for the participation of women in the public service, parliament, rural councils, defence and security forces and diplomatic service;
- c) Creation of mechanisms to help decrease school dropout rates for girls.

Media

- a) Progress in the creation of public media;
- b) Approval of press legislation enabling the creation of private means of communication and regulating professional media activities;
- c) Creation of an independent organ that guarantees disciplinary management and observance of ethical behaviour by the media and its professional.

Civil Society

- a) Progress in the constitution of unions and private associations under the law.

PROBLEMS AND CONSTRAINTS

9.21 The principal constraints confronted are as follows:

General constraints:

- a) Human resources;
- b) Financial resources (budget);
- c) Infrastructure (buildings, vehicles, office furniture and supplies, communications and Information Technology (IT));
- d) Problems with multiplicity of languages;
- e) Time pressures;
- f) Limitations in institutional capacity;
- g) Gaps in the body of laws, regulations, procedures and codes.

More specific constraints:

- a) Absence of adequate representation on COM (i.e. Armed Forces);
- b) Unrealistic expectations (e.g. subsidies for producers and consumers, university degrees and Public Sector employment for all students);
- c) Lack of basic social infrastructure (to accommodate spontaneous relocation of population);
- d) Bad habits from previous period (e.g. corruption, nepotism);
- e) Reconciliation problems;
- f) Difficulties with reintegration of ex-FALINTIL and former members of the clandestine resistance network and with assistance to widows and orphans of resistance fighters.

STRATEGIES

9.22 A number of strategies will be adopted to overcome the constraints outlined above:

- a) To clearly define and broadcast the rights and obligations of citizens in general and of public servants, in particular;
- b) To continue the search for more efficient forms of organization of the public administration to improve quality and cost-effectiveness of service provision;
- c) To redistribute available resources, in accordance with new priorities;
- d) To recruit to fill vacancies already provided for in budget;
- e) To train in-house, at the Civil Service Academy, and abroad;
- f) To utilize the temporary solution of foreign staff more effectively, during the period when domestic staff is being trained;
- g) To promote diversification of sources of assistance and develop stronger partnerships with civil society;
- h) To develop appropriate mechanisms to facilitate reintegration of refugees;
- i) To redefine priorities for university education, with a view to preparing graduates in disciplines most useful for the nation's development and improving the quality of university education;
- j) To promote transparency in public life, accountability in public servants and leaders, and equal opportunities for all;
- k) To reconfigure regional administrative divisions and the intermediate levels of government (between the national central administration and the community) to make them more conducive to development and sustainability;

- l) To transform the present international support and sympathy for East Timor into a strong and permanent base to secure the country's political, economic (trade and investment), cultural and national security interests;
- m) To develop an independent oversight capacity, capable of encouraging transparency, and which will allow civil society and citizens to monitor the public service in order to minimise corruption.

POLICIES

9.23 The following policy initiatives of importance will be undertaken by the sector:

General Policies

- a) Creation of incentives to reward effort and excellence in education and in the civil service (i.e. create a merit based public service).
- b) Seek external assistance for buildings and infrastructure.
- c) Selection of bursaries to study abroad in countries where the risk of "brain drain" is minimized.
- d) Development of practical skills training courses (e.g. secretarial, filing, protocol, mechanics, electricians, hospitality services).
- e) Reduction of places in general university courses with limited career prospects.
- f) Provision of translation and interpretation services.
- g) Accelerated training of translators and interpreters.
- h) Provision of language courses in Portuguese and English.
- i) Utilisation of existing facilities and partnerships with non-government entities to provide practical courses in languages, accounting, secretarial, etc. for adults.
- j) Selective utilisation of assistance from donor countries and NGOs.
- k) Development of a policy for payment of university fees and other forms of user charges.

Public Administration and Democratisation Policies

- a) Clear definition and proclamation (broadcasting) of rights and obligations of citizens and of public servants.
- b) Continued search for more efficient ways of organizing the public administration.
- c) Improve quality and cost effectiveness of service provision (i.e. a lean and efficient public administration).
- d) Decentralization and empowerment of communities to manage their local affairs (grass roots democracy).

- e) Gender equality in all aspects of public administration.
- f) Reintroduce Portuguese and introduce Tetun as effective working languages of Parliament and public administration.
- g) Enhance the knowledge of members of Parliament.

Security and Defence Forces

- a) Prioritise needs and requirements of the Armed Forces.
- b) Establish technical and military cooperation agreements with defence branches of CPLP member countries.
- c) Extend support to the veterans of the Resistance.
- d) Establish a Defence Ministry or other liaison office at the COM level.
- e) Elaborate mandate of the Naval Force, including inter-sectoral coordination, and define its development program.
- f) Develop specialized police forces (criminal investigation, immigration/frontier service, rapid response).
- g) Establish selection criteria for the security forces, including factors of reliability and social suitability.
- h) Outsource provision of goods and services to the security services and prisons.

External Relations

- a) Initiate and gradually expand the nation's diplomatic representation in a systematic and planned way.
- b) Transform previous networks of solidarity and support for Timorese resistance in the diaspora into a permanent network of allies for the defence of national interests.
- c) Pursue and strengthen south-south cooperation.
- d) Pursue regional cooperation.
- e) Foster special relationship and cooperation with Portuguese speaking countries.

Justice, Human Rights and Gender Equality

- a) Create an Ombudsman's office to raise the level of awareness of citizens' rights and respect for the law, to defend citizens from any abuse of power by public administration entities and to safeguard against practices of corruption, nepotism and other abuses of power.
- b) Draft the legal framework for the nation.
- c) Reintroduce Portuguese and introduce Tetun as effective working languages for the administration of justice.

- d) Develop the necessary legal capacity to serve the Government by establishing the institutions that are essential for the proper functioning of the legal and judicial system.
- e) Promote reconciliation.
- f) Facilitate access to justice for women and develop the legal means to fight violence and other crimes perpetrated against women.
- g) Ensure equal opportunities for women in recruitment and promotion and provide training in technical and leadership skills.
- h) Promote a free press.

PROGRAMS

9.24 The development of an effective administrative and governance structure and capacity to serve the needs and interests of East Timor and its people is one of the most critical national priorities for the next five years and beyond. After centuries of foreign domination, the country has been left with out the institutional architecture, the human resources capacity or the requisite physical infrastructure and equipment, not only to effectively discharge the challenges of national development, but also to meet the demands of routine governance. After two years of comprehensive effort, political institutions are only nascent; central and regional administrative structures and institutions fledgling; and the operational systems, procedures, and relationships are yet to be developed or clearly defined.

9.25 Given the existing environment, the priority medium term programs will have to be the establishment and strengthening of the organs of state and of public administration, laying the foundations of good governance, creating the avenues for popular and community participation, developing the legal and regulatory framework, building the human resources capacity for policy formulation and execution as well as service delivery, strengthening oversight institutions and fostering the press and civil society. After the previous administration there is also a glaring need to develop a new culture of public service, good governance in public administration and a strong work ethic. The formulation of the above programs is, however, only the initial or preliminary stage. Although there are some mature programs ready for implementation, most will require extensive effort and time for their design and implementation.

Public Administration and Governance

9.26 The core programs in this sector will focus on developing transparent governance, institutional and human resources development, decentralization, and development of a lean efficient and merit based civil service.

Transparent governance

- a) Development of information programs for the general population and for civil servants regarding the activities of Parliament, the functions of each Ministry, the services that citizens have a right to expect from public institutions and the courses of redress available in case of non-compliance.
- b) Introduction of an action program to enhance the skills of Members of Parliament, via technical assistance, specialized courses of study and experience-sharing visits abroad.

- c) Development of a medium and long-term program for the reintroduction of Portuguese and introduction of Tetun as effective working languages of Parliament and government.

Institutional Development

- a) Design and introduce effective administrative regulations, systems, and procedures for all public service institutions.
- b) Develop civil service regulations governing recruitment, working conditions, career paths and a code of conduct.
- c) Develop a training program for the civil service to enhance capacity.

Decentralisation and Participation

- a) Study and introduce an optimal sub-national configuration conducive for development as well as service provision in conjunction with stakeholders.
- b) Study and delineate the levels of administrative hierarchy down to the community that will facilitate cost effective and efficient service delivery and enhance community initiative and participation.
- c) Study options for effective decentralization that clearly defines the roles of central, regional, local and community, and civil society organizations and entities; empowers communities and strengthens transparency and grass roots democracy.

Media Development

9.27 Create public enterprises in radio and TV broadcasting, in accordance with the Constitution, and train media professionals.

Security and Defence Forces

9.28 In the area of defence and security the formation and consolidation of a model professional army to defend the sovereignty and territorial integrity of the nation and, similarly, a police force to maintain internal law and order are the major programs.

Defence program

- a) Development of a model professional army through the continuation of the process of recruitment, training and equipping.
- b) Supporting the process through cooperation agreements with other countries.
- c) Establishment of a Defence Ministry or other liaison office at the level of the COM.
- d) Program to identify the veterans of the Resistance, study their needs, and formulate training and other forms of assistance.

Police and Security Service Programs

- a) Strengthening of the police service by training an additional 520 new recruits at the Police College and by improving the material support to those already deployed.

- b) Establishing new specialized units (criminal investigation, border patrols, rapid response).
- c) Formulating outsourcing modalities and incentives for provisioning the prisons and security services that facilitate participation by local firms.

External Relations

9.29 Diplomacy and external solidarity was one of the most effective pillars of the Resistance. At this new chapter in East Timor's history, the medium term diplomatic programs and external work will be directed at building on this experience, and our extensive solidarity network, to maintain the strong international support and empathy to address our long term national needs and interests. Programs will, therefore, focus on developing the necessary institutional and human resource capacity to chart and implement the policies and programs that will enable us to marshal their extensive external assets and to deal with the ever-evolving global and regional developments.

Capacity Building Program

9.30 The main components of this program are as follows.

- a) Recruitment and training, in country and abroad, to staff Headquarters and Missions.
- b) Construction of a Headquarters building.
- c) Development and implementation of a plan to utilize previous networks of support to Timorese resistance and diaspora organizations, transforming them into a permanent network of allies abroad in defence of Timorese interests.
- d) Elaboration and implementation of a plan to gradually and systematically expand diplomatic representation abroad. Utilisation of various options and modalities to achieve wider representation.

Policy Development Program

- a) Articulate global and regional policies to safeguard and serve the national interest on the bases of the guiding principles and in light of external developments and trends.

Action Program

- a) Develop, in collaboration with other relevant ministries and institutions, action programs relating to the attraction of foreign investment, promotion of exports and foreign trade, and external aid to guide the activities of the ministry. Develop similar action programs regarding political, cultural and defence and security relations.
- b) Develop a program to reinforce south-south cooperation.

Justice, Human Rights and Gender Equality

9.31 The justice system, both in its legal framework and its administration, is of critical importance to society at large and the development process in particular. In this unique situation, where the legal framework is defined by its practical non-existence and where the capacity for the formulation and administration of the body of laws is in its embryonic stage, the issue of prioritization and sequencing becomes of extreme importance. It thus becomes necessary to, on

the one hand, seek a longer time frame to develop the body of laws and the capacity, and, on the other, to put interim arrangements or solutions in place. The elaboration of the following programs of the Ministry of Justice will require extensive time and effort.

Institutional Development Program

- a) Creation of an Ombudsman's office to raise the level of awareness of citizens' rights and respect for the law, to defend citizens from any abuse of power by public administration entities, and to safeguard against practices of corruption, nepotism and other abuses of power.
- b) Creation of a Judicial Training Centre and a Public Defender's office, as independent agencies.
- c) Establishment and implementation of a timetable for setting up functioning registrar and notary services, including modalities to ensure that such services are made available to the population in the interior of the country.

Legislative Program

- a) Formulation of a legislative agenda for the Government indicating the sequence of the desired legislation and the internal and external resources, as well as time required to draft such legislation. This agenda will include, among other laws, National Defence Law, Company Law, Land Law, Investment Law, and Media Law.
- b) Development of the capacity to prepare proposals for legislation, draft legislation and to prepare legal opinions and advices, as required by effective government.

Reconciliation Program

- a) Promotion of reconciliation activities, with the support of the Reception, Truth, and Reconciliation Commission, the Church and civil society.

Rights and Equality Program

- a) Capacity building for women's participation in leadership and decision making through training in order to stimulate skills for decision making, negotiation, politics and other leadership areas.
- b) Ensuring gender balance through recruitment, elimination of constraints and discrimination against women and integration of gender issues in all laws, programs and policies.
- c) Promotion of family-friendly policies that promote appropriate measures to facilitate the family and professional lives of women and support their participation in public life.
- d) Promote legal protection from violence against women through adoption of legislation, access to the judicial system and creation of institutional mechanisms in order that women and girls are able to denounce acts of violence. Promote cooperation between authorities and social support programs and involvement of women in protection services.

- e) Encourage social change regarding violence against women through analysis of causes and consequences, and the development and promotion of education campaigns.
- f) Develop protection services through the creation of refuge centres and support systems for victims of violence and by creating programs for protection, assistance and training for refugee or displaced women to facilitate their reintegration into their communities.

10. POVERTY REDUCTION, RURAL AND REGIONAL DEVELOPMENT

VISION

10.1 That the people of East Timor live in a prosperous society, comfortable in terms of food, shelter and clothing, in safety, and free from illness and ignorance (illiteracy); with an income that is fair and equally distributed; with no discrimination; and with a balanced development of towns and villages and different areas.

INTRODUCTION

10.2 The Poverty Reduction and Rural and Regional Development Working Group was co-chaired by the Minister for Internal Administration and the Secretary of State for Labour and Solidarity. Representatives of all the departments/sections in the Ministry of Internal Administration and the Secretary of State for Labour and Solidarity took part in the Working Group. Also, officials from a number of other Ministries including Agriculture, Education, Health and Finance participated in the Working Group. The output of the Working Group is presented in the following paragraphs.

Poverty Reduction

10.3 Poverty is multidimensional and is experienced in different ways by different people. The usual measure of poverty is the headcount ratio, which is the proportion of people living below the national poverty line. Adapting the methodology used in other countries, the poverty line for East Timor is estimated to be US\$0.55 per person per day in September 2001. It incorporates a food component (2,100 kilocalories) and a non-food component covering, among others, expenditures on education, health, clothing and housing. The data show that more than two-in-five (41 %) East Timorese are below the poverty line.

10.4 Other dimensions of poverty include education, health, water supply, sanitation, infrastructure including roads and electricity, communications, security and empowerment. On education, for example, the adult illiteracy rate in East Timor is high with more than half the East Timorese population unable to read and write. Health indicators show a high mortality for infants and children below five years of age. Death of mothers in childbirth (maternal mortality) is also high. Further dimensions relate to security and empowerment. Security includes security of person, property, food and livelihood (including jobs and vulnerability). Empowerment involves a lack of “voice” and a limited participation of the poor in decision-making on their future and the affairs of their communities on economic, social, cultural and political issues, or a lack of involvement in institutions of society and state. It also involves a lack of freedom to exercise and enjoy basic human rights, essential economic and social rights – to be productive and creative, enjoying self-respect, and contributing to the well being of the community and the nation.



10.5 The incidence of poverty is higher among households headed by those with no schooling (around one-in-two or 49 %), fishers (47 %) and farmers (46 %). Poor households in East Timor are more likely to be large with a low proportion of earners (or a large proportion of children and old people leading to a higher dependency ratio), and have very little land. A large majority (85 %) of the 341,000 poor people live in the rural areas of country.

Rural Development

10.6 More than three-quarters (76 %) of East Timor's population lives in the rural areas. Poverty incidence in the rural areas (46 %) is significantly higher than that in the urban centres (26 %), with Dili and Baucau having the lowest (14 %). The bulk of the country's poor are located in rural areas. Land holdings are small for the majority of the population, with about 24% of households owning less than 0.5 ha each, and a further 60 % between 0.5 and 1.5 ha each. The productivity of land is relatively limited, due to low-input, low-output technologies that emphasise risk minimisation, since crop failure may jeopardise survival of the family. Access to markets is difficult. Buyers may be scarce, and unwilling to pay prices that include profits due to high costs for transport, storage, and processing.

10.7 Access to basic social services in rural areas is significantly lower than that in urban centres. For example, access to both primary and secondary schools in rural areas is far less favourable than in urban centres. A number of the rural sucos do not have a health post and some are not even served by mobile clinics.¹ Most of the qualified medical personnel are concentrated in urban centres, and access to qualified doctors and nurses is virtually non-existent in most rural areas. Access to safe water, sanitation and electricity, while limited overall, is very low in the rural areas. Access to roads and communications is also a major constraint facing rural residents. As a result, many of the income, education and health indicators show a considerable gap between rural and the urban areas.

Regional Development

10.8 The nation is divided into three regions, Eastern, Central and Western,² and 13 districts. Prior to 1999, a Governor headed the East Timor Province, with each of the three regions administered by an Assistant Governor. Bupati administered districts, with Sub-districts led by Camats. After 1999, the Government provided for District Administrators and sub-district Coordinators. However, the roles and responsibilities of these functionaries, as well as the Suco and Aldeia chiefs, are still evolving. The necessary legislation and regulations are expected to be in place in the next two to three years.

10.9 There are significant disparities between the regions and districts in economic and social indicators. For example, poverty incidence is high in the rural areas of the Central and Western regions as compared to the rural Eastern region. Access to public facilities (e.g. schools and health centres) is more difficult in the upland areas/districts, as is access to roads and markets. Although the topography is difficult, the agro-climatic conditions in some areas (e.g. in the

¹ Mobile clinics and health posts are the frontline health delivery facilities that reach down to the villages, while community health centres (CHCs) are often located at sub-district (posto) headquarters and in the small number of hospitals in the urban centres of Dili and Baucau. A few CHCs are equipped with a limited number of beds.

² The Eastern region comprises Baucau, Lautem, Manatuto and Viqueque districts; the Central region comprises Aileu, Ainaro, Liquica and Manufahi as well as Dili districts; and the Western region covers Ambeno (Oecussi), Bobonaro, and Covalima districts. A redefinition of the regions is expected after independence.

Central region) may be favourable for higher value crops (e.g. coffee, fruits and vegetables) and have good proximity to markets.

10.10 The Ambeno (Oecussi), Bobonaro and Suai districts face unique problems. Ambeno is surrounded by Indonesia, and access to the rest of East Timor is either by sea or through Indonesian territory. Given the current state of infrastructure, the costs of linking Ambeno with the rest of East Timor may be prohibitive in the short and medium term. It will require specific economic, trade and social (including language) policies for the district. Similarly, the border districts of Bobonaro and Suai face distinct opportunities and constraints in their relations with the other districts in East Timor and across the border in West Timor.

10.11 Poverty reduction is a crosscutting issue, addressed in the overall development strategy and in each of the sector strategies, programs and projects. As a result, responsibility for poverty reduction is distributed among a wide range of institutions. Similarly, rural and regional development is addressed mainly through macro and sector programs, and several Ministries and Departments are involved in these efforts. For example, the local government functions are under the purview of the Ministry of Internal Administration, while the Secretary of State for Labour and Solidarity is expected to facilitate the delivery of assistance to vulnerable groups, depending on resource availability.

GOALS

10.12 The overall goals of poverty reduction, rural and regional development, as formulated by East Timorese are as follows.

- a) Transform the subsistence economy and achieve a rapid economic growth that is stable and sustainable, utilising to the full the country's resources; create equitable business opportunities and increase rural incomes.
- b) Deliver training and health services, create equal opportunities to obtain work, and establish a social safety net to help victims of disasters.
- c) Create skilled and professional human resources in accordance with the interests and talents of the people in each sector, and ensure an effective utilisation of labour.
- d) Create a society, which is free from internal and external threats, and make the country attractive and safe to citizens and visitors.
- e) Reduce poverty in all its aspects, particularly among women and vulnerable groups.
- f) Promote integrated rural development to reduce poverty, accelerate economic growth, and reduce the gap between rural and urban areas.
- g) Achieve balanced regional development to reduce poverty, improve the lives of East Timorese in all regions, enhance and exploit complementarities between regions and agro-ecological areas, accelerate economic growth, and reduce regional disparities.
- h) Access, maintain, and make available cultural, popular (folkloric) and historic artefacts and government records/materials, for present and future generations of East Timorese.
- i) Promote good governance through: popular participation; responsible and responsive government; a competent, efficient, accountable and transparent civil service;

decentralisation and devolution; a socially responsible private sector; and transparent and accountable civil society organizations.

GUIDING PRINCIPLES

10.13 Promoting rural and regional development within a framework for poverty reduction and economic growth in East Timor will be based on the concept of sustainability, and on the following principles.

a) Participatory Development

- Empowerment of rural people, enabling them to participate, contribute ideas, and make and implement decisions regarding their needs in terms of the policies and programs they have chosen.
- Ensuring the involvement of individuals and communities in all village development activities in rural areas.

b) Integrated and Equitable Development

- Development to be undertaken in an integrated manner between the various sectors, so that it spreads evenly from the centre to the districts and to lower levels.

c) Equality and Non-Discrimination

- Development to respect equality and human rights without racial, religious, gender or ethnic discrimination, in accordance with the Constitution of East Timor.

d) Social Solidarity

- Development to be based on principles of social solidarity among the people, including assistance to vulnerable groups.
- Development to take place within a framework that can create democratic and social conditions conducive to raising the living standard of the poor, and of vulnerable groups.

e) Professionalism

- Poverty reduction to be based on principles of professionalism, such as dedication, honesty, commitment, transparency, creativity, innovation, effectiveness and efficiency.

f) Environmental Protection

- Development to be based on a respect for, and a desire to protect the environment, and the use of natural resources in a sustainable way.

g) Preservation of Culture

- Development to uplift, rather than erode, the nation's cultural heritage and values.

h) National unity, peace and hard work

- Development to promote national unity, peace and reconciliation and the instilling of a strong work ethic

KEY DEVELOPMENT INDICATORS

10.14 The key development indicators identified by the Working Group on Poverty Reduction and Rural and Regional Development overlap to a large extent with those presented in Chapter 2 on Vision, Goals, Principles and Indicators (Annex 1), with a detailed breakdown by gender, rural and urban areas, regions and districts, and income groups (poor and non-poor) wherever appropriate and feasible. They cover the standard indicators including GDP per capita, ratio of income of the richest 20 % to the poorest 20 %, Gini coefficient of inequality in income distribution, labour force and employment, poverty incidence, access to and use of education and health services and safe water and sanitation, housing, electricity and communications. They also include security and empowerment.

PROBLEMS AND CONSTRAINTS

10.15 The problems and constraints for poverty reduction and rural and regional development are grouped under the broad headings of resource constraints, labour, social and gender areas, capacity, infrastructure, rural-urban and regional disparities, civil service, private sector, legal framework and governance.

Resource Constraints

- a) Shortage of animals.
- b) No means to lift and/or pump water for irrigation.
- c) Inadequate agro-processing facilities.
- d) Lack of capital.
- e) Lack of, or limited markets.
- f) Lack of economic opportunities.
- g) Limited economic support services.
- h) Lack of growth centres.
- i) Lack of opportunities for remunerative work.
- j) Shortage of labour during critical periods.
- k) Discrimination in access to work opportunities.
- l) Lack of information on employment and unemployment, and on labour issues such as workplace safety.

Social Aspects

- a) Lack of social accountability.
- b) Informal institutions weakened during the occupation and violence, with no formal social institutions set up during the transition period.
- c) Lack of awareness of rights and responsibilities (civic education).
- d) Lack of willingness to take initiatives and break the cycle of dependence.
- e) Political and social divisions.
- f) Political disturbances.
- g) Social turmoil.
- h) Lack of, or weak social cohesion and solidarity.

Gender aspects

- a) Discrimination against girls and women.
- b) High unemployment rate, especially among women.
- c) Low wages especially for women.
- d) Lack of professional skills among women, especially young women.
- e) Lack of training facilities for women.

Capacity

- a) Lack of teachers and trainers.
- b) Limited capacity within Government, private sector and civil society organisations including NGOs.
- c) Limited capabilities or skills among people in general, and poor people in particular (e.g. literacy) in the villages.
- d) Lack of knowledge of industry.
- e) Lack of skills to start and operate businesses.
- f) Illiteracy, including inability to manage money.
- g) Inadequate number of personnel.
- h) Limited capacity of existing personnel.
- i) Traditional low-input, low-output technologies.

Infrastructure

- a) Lack of appropriate and essential facilities, equipment and supplies, including medicines.
- b) Inadequate number of public facilities, such as schools and health centres.
- c) Inadequate, and limited access to infrastructure.
- d) Poor maintenance of existing infrastructure.
- e) Access to other parts of the country difficult and/or costly.

Rural-urban and regional disparities

- a) Limited access to relatively lower quality social services (including education, health, water supply, sanitation, and housing in rural areas, as compared with urban centres.
- b) Regional disparities in educational achievement and opportunities (e.g. Baucau has the largest number of schools in the country whilst some of the other districts have very few schools).
- c) Civil service with very limited presence in regional areas.
- d) Lack of articulation of values and principles on the “service” role of civil service.
- e) Limited capacity within civil service.
- f) Limited number of civil servants.

Private sector

- a) Lack of policies and programs to develop entrepreneurship and support for private enterprise development.
- b) Lack of competition in the private sector.
- c) Legal framework
- d) Lack of legislation and regulations in areas such as immigration and labour.
- e) Lack of national support and advocacy on behalf of susceptible groups in legal difficulties. Outmoded laws.
- f) Inadequate capacity (number of personnel, skills, institutions, facilities and equipment) in the judiciary, legal professions and the police force.
- g) High cost (financially and in time) of justice.
- h) Lack of well-defined property rights, especially for land.

Governance

- a) Lack of coordination and cooperation between government and non-government institutions.

- b) Vested interests aiming to grab much of the public resources.
- c) Uncertainty regarding security and the nature of government and/or governance among the population.
- d) Crime.
- e) Lack of institutional mechanisms for coordination in different districts and/or regions.
- f) Lack of targeted support to meet the needs of children and the disabled.
- g) Lack of plans for district development, based on comparative advantages.
- h) Lack of criteria for allocation of resources to districts.
- i) Lack of capacity at district level to account for funds allocated.
- j) Lack of transparency.
- k) Inadequate accountability mechanisms.
- l) Long colonial past with highly centralised decision-making in government.
- m) Lack of understanding of the Portuguese language among many administrators.
- n) Legacy of bribery and corruption
- o) Political favouritism in civil service recruitment.
- p) Political influence in allocation of funds.
- q) Corruption.

STRATEGIES AND POLICIES INCLUDING PROGRAMS AND PROJECTS

10.16 The proposed strategies are outlined below, together with suggested programs, projects, policies and legislation for the achievement of each strategy necessary for the attainment of the stated goals. Several proposed programs overlap with those proposed by other Working Groups, particularly in areas such as agriculture. The annual action plans of Ministries must take account of the activities of other Ministries and agencies of Government.

POVERTY REDUCTION

10.17 The overall strategy for poverty reduction is presented in Chapter 4. As poverty reduction is an overarching goal, it is mainstreamed into the sector chapters. A sample of these are enumerated in the following.

CREATING ECONOMIC OPPORTUNITIES

10.18 The strategies for creating economic opportunities are included mostly in the sector chapters, especially on Agriculture, Fisheries and Forestry and Industry, Trade and the Private Sector. The specific strategies formulated by the Poverty Reduction and Rural and Regional Development Working Group include the following:

- a) Transformation of the non-farm subsistence economy through small-scale, home and cottage industries and other business activities that generate income for the poor.
- b) Provision of skills training and guidance to increase the ability of the poor in managing small businesses so that they become self-reliant.
- c) Increased production in the rural areas through the application of appropriate farming techniques and promotion of agro-industries.
- d) Identification and development of potential markets for products inside and outside the country

10.19 The policies that are conducive to promoting the above include those on micro finance, and policy or guidelines on small-scale, cottage and village industries. For example, the latter may include exemption from licensing, taxes and other restrictions; while enforcing the observation of hygiene, health and environmental regulations. The types of programs and projects visualised are listed in the following:

- a) small-scale industries promotion program
- b) household and cottage industries promotion program
- c) hawkers and vendors (petty trade) program
- d) micro credit or micro finance programs and projects
- e) training programs for small-scale, home and cottage industries
- f) project to strengthen technical and vocational education.
- g) bee keeping and honey production (apiculture) project
- h) production of tais, bags and baskets project
- i) production of small tools including agricultural implements project
- j) production of packaged food such as peanuts and shrimp/fish crackers project

10.20 The performance indicators are:

- a) number of new small and micro enterprises established and operating by gender of owner/operator
- b) increase in non-farm income of poor and low-income households
- c) number of borrowers under micro credit schemes by gender
- d) average amount of loan per borrower in micro credit schemes total and by gender
- e) number of training programs conducted
- f) number of trainees by gender
- g) number of trainees graduating from technical and vocational education training programs and number employed by gender

10.21 In addition, the Working Group proposed other training for farmers and fishers in such areas as improved crop husbandry, irrigation management, livestock raising and veterinary care and fishing and aquaculture. The policies, programs and projects overlap with those in other sectors. In operational terms, most of the activities are covered in other sectors including Industry, Trade and the Private Sector and Agriculture, Fisheries and Forestry.

PROVIDING SOCIAL SERVICES

10.22 The strategies, programs and projects on provision of education and health services proposed by the Poverty Reduction and Rural and Regional Development mirror those presented in Chapter 10 on Social and Human Development: Education and Health, while those on water supply and sanitation and housing are covered in the relevant sections of Chapter 15 on Infrastructure.³ The specific additions proposed include programs to increase the skills of the people in general and the poor in particular; and to create networks between the Government and non-government institutions that are active in the delivery of education and training services to society.

ENHANCING SECURITY INCLUDING DISASTER PREPAREDNESS AND SAFETY NETS

Security

10.23 The country has been emerging from the 1999 violence and turmoil. There is still lingering insecurity, mistrust and friction from the occupation and resistance movement. Also, political social divisions and some uncertainty about the scope of government security after independence prevail. The Plan proposes the creation and strengthening of family and community consciousness to increase the sense of solidarity, and create safe and peaceful conditions. The specific interventions under the strategy include programs and projects for:

- a) intelligence gathering and pre-emptive actions to prevent and combat crime.
- b) involving communities in monitoring potential risks.
- c) investigating and solving crimes as soon as possible.
- d) strengthening community solidarity through the creation of a system of protecting people, which is participatory and responsible.
- e) supporting people to be active in guarding the security and public order in residential areas in all areas (rural and urban) of the country.
- f) strengthening the capacity of the community to withstand and overcome disturbances and challenges (e.g. through provision of financial resources, equipment and training to communities/areas prone to such disturbances).
- g) establishing an early warning system with the involvement of the people to identify potential security and social disturbances and evolve measures to prevent them.
- h) organising campaigns on civic education and social solidarity

³ For example, the Poverty Reduction and Rural and Regional Development Working Group identified health programs such as rehabilitation and expansion of health facilities, health personnel training, supply of health equipment and essential medicines, immunization, and amelioration of vitamin and micronutrient deficiencies among children and pregnant and lactating women. However, these programs are an integral part of the Plan interventions proposed under the Health Sector in Chapter 11.

- i) mobilising traditional institutions and leaders to promote social cohesion
- j) instilling family values through schools and other means.

10.24 Many of these activities fall under the purview of the Ministry of Internal Administration, especially the Department of Local Administration and Police and Security Forces. The performance indicators include: (i) reduction in number of crimes reported, (ii) number of crimes solved and average time taken to solve the crimes, (iii) number of neighbourhood watch committees established, (iv) number of communities trained and supported including average amount of support provided, (v) number of early warning groups established, (vi) number of people reached by civic education campaigns by gender, (vii) number of leaders contacted and trained in promoting social cohesion, (viii) number of courses conducted in schools on family values and civic education and number of students covered, and (ix) number of people and communities organised to participate in community safety and peacekeeping by the police.

Disaster preparedness

10.25 It is recognised that in the medium term the resources and capacity at the Government's disposal are extremely limited to provide direct assistance to vulnerable groups. Therefore, much of the focus in the Plan is on preventative measures and strengthening the self-reliance of society to care and share and cope with disasters and other contingencies. The programs and projects include the following:

- a) setting up early warning systems to gather and disseminate information on floods, droughts, landslides, etc. These could be simple systems at the village, posto and district levels under a national centre.
- b) compiling information on how communities have coped with disasters in the past (e.g. through the National Archives) and examine whether similar practices could be adopted.
- c) creating a network to strengthen the preparedness of society in facing and coping with disasters.
- d) organizing communities prone to disasters to help themselves through setting up community food banks, stocks of other materials, etc.
- e) encouraging religious organizations and other voluntary groups including NGOs to set up mechanisms to monitor and assist.
- f) establishing a national disaster prevention and preparedness group (including representatives from local and international organizations) to plan and coordinate the activities.
- g) making provision in the government budget for assistance to victims of disasters.
- h) providing support to victims of disasters including emergency aid and support for rehabilitation/reconstruction of houses.
- i) recruiting and training SATGAS who will deal with disasters.

10.26 The disaster preparedness functions mentioned above are the responsibility of the Ministry of Internal Administration. The performance indicators include: (i) early warning system established, (ii) number of food banks and other community storage established to cope

with disasters, (iii) number of religious groups and NGOs mobilised to participate, (iv) national disaster prevention and preparedness group established, (v) amount of money allocated in Government budget for disaster preparedness, (vi) number of disaster victims helped and average amount per victim, and (viii) number of SATGAS recruited and trained.

Vulnerable groups

10.27 The strategies comprise the (i) provision of assistance to vulnerable groups such as women in difficult circumstances (e.g. widows and victims of violence), the elderly (old people), veterans of the resistance movement, refugees, destitute (very poor) families and prisoners to recover and lead satisfying lives as full members of society, (ii) establishment of a special facility for the service of children and the disabled, (iii) organisation of coordination, consultation and joint work between NGOs and the church in the framework of providing services to vulnerable groups, and (iv) formation of a working group to advocate on behalf of vulnerable groups who are facing legal problems.

10.28 The proposed programs and projects include the following:

- a) a campaign to stop violence against women and children.
- b) counselling and assisting female victims of violence who are socially and economically vulnerable.
- c) supporting the elderly with essentials such as food and clothing and organizing recreation groups.
- d) providing assistance to veterans in the form of training, credit and other support services.
- e) supporting refugees and displaced people by returning them to their original places of residence, providing food, clothing, shelter in the transition, facilitating reconciliation, and providing the means to re-establish their lives and livelihoods.
- f) social service programs for children.
- g) helping the disabled (physically challenged).
- h) assisting the school system to provide school supplies and equipment for neglected children.
- i) scholarship/bursary programs for orphans and children from poor families that demonstrate good academic potential.
- j) training programs in computers and sewing for the disabled.
- k) providing economic support to the disabled.
- l) improving the situation of destitute people through provision of food and other basic necessities and housing materials.
- m) supporting prisoners and former prisoners including training and skills development, counselling and resocialization.

- n) establishing a mechanism (working group) to provide legal advice and support to the vulnerable groups in need of such advice.
- o) setting up a consultation and coordination mechanism and organize joint programs between government, church, NGOs and other groups on provision of services to vulnerable groups.

10.29 Many of the activities proposed above are expected to be undertaken by the Social Affairs Department in the Secretary of State for Labour and Solidarity, while the rest will be implemented by other Ministries/Departments (e.g. Education and Justice). However, the Government budget situation is not adequate to provide any significant resources to fund the activities in the next two to three years. Accordingly, it is proposed to include the activities in the annual action plans as budget resources become available.

Empowering the people

10.30 The country had experienced for almost a quarter century, the lack of awareness and interest on the part of civil servants in involving people in the development of the country. It also created an attitude among the people not to take initiative and to depend on the government. It is important to break this cycle of dependence. The development strategies include: (i) strengthening and sustaining the political will in the government to support policies and endeavors for poverty reduction, (ii) liberating society from all social and cultural impediments that constrain development, (iii) strengthen formal and non-formal local social institutions, and (iv) promoting popular participation, especially of the poor and other vulnerable groups in economic, social and political processes.

10.31 The programs and projects proposed to translate the above strategies into action include the following:

- a) organise advocacy groups (e.g. NGOs) to promote and sustain government commitment to poverty reduction.
- b) organise citizens groups to watch and monitor how public resources are being allocated and spent, with particular attention to poverty reduction.
- c) inform people of the successes and failures of government interventions, especially on poverty reduction programs.
- d) promote the strengthening of informal social institutions such as community mutual-help groups, farmers groups, irrigation/water user groups, fishers groups and women's groups, through facilitation and organization.
- e) establish and strengthen formal social institutions such as cooperatives, savings and loan associations and marketing groups (e.g. coffee marketing), and religious and interest groups (e.g. labour unions).
- f) introduce programs to facilitate the formation of the poor into groups, provide training and help undertake economic, social and advocacy activities to advance the welfare of the groups.
- g) formulate and implement legislation to allow the formation, registration and functioning of various groups within the law and without violating the rights of other groups or citizens.

- h) discourage social and cultural practices such as spending beyond one's means, or bride price, through civic education with the involvement of community leaders and prominent persons. Consider introduction of legal measures to curb harmful practices.
- i) undertake community animation and confidence building programs using participatory approaches such as that adopted in the Participatory Potential Assessment.

10.32 The responsibility for implementation of the above activities will be spread across various Ministries/Departments. Some of the programs and projects are already included in the Sector Plans, while others would need to be incorporated in the annual plans.

Gender dimensions

10.33 The strategies include:

- a) the creation of equal opportunities to obtain work including the conditions that have a positive effect on the working conditions and income of women workers in the formal and non-formal sectors, through a:
 - program to create an enabling environment for employment of women in remunerative jobs (including incentives to employers).
 - program of child care (day care) centres for working women with children.
 - policy favouring employment of women.
 - policy and guidelines on workplace facilities for women (e.g. child care centres, separate washrooms and recreation areas).
 - law against discrimination against women in employment and wages.
 - law against harassment of women in the workplace.
- b) provision of training to women in general and young women in particular in a number of skills/fields (e.g. management, enterprise development and information technology) at the national, regional and local levels to facilitate their participation in economic activities, including
 - professional training programs for women in such areas as management, enterprise development and information technology at the national and regional levels.
 - establishing and strengthening professional training facilities for women at different levels.
 - training programs for women at the suco and aldeia levels suited to the local circumstances (e.g. availability of raw materials and supplies and support services such as electricity and credit) and markets for the products and services they produce.

- c) establishment and strengthening of a network of businesswomen through policies to support private enterprise, women's organizations, cooperatives and groups, to enable women to help themselves and other groups. These include a:
 - project to establish network(s) of businesswomen.
 - project to establish and/or strengthen women's groups.
 - program to establish and/or strengthen women's cooperatives.
 - project to support East Timorese women's groups to establish contacts and networks with similar groups in other countries in the Asia-Pacific region, and in other parts of the world.

10.34 The above activities will be mainstreamed into the programs and projects of relevant Ministries. The performance indicators, which may be monitored by the relevant Ministries as well as the Office of Promotion and Equality, include the following:

- a) increase in number of women employed in formal private sector.
- b) institution of policy favouring employment of women.
- c) new workplace facilities for women (e.g. child care centres, separate washrooms and recreation areas).
- d) enactment of law against discrimination against women in employment and wages.
- e) enactment of law against harassment of women in the workplace.
- f) number of professional training programs for women and number of women trained in each discipline.
- g) number of training programs for women at the suco and aldeia levels and number of women trained.
- h) number of networks of businesswomen established and number of members.
- i) number of women's groups established and/or strengthened and number of members.
- j) number of women's cooperatives established strengthened and number of members covered.

RURAL DEVELOPMENT

10.35 **Goal:** Promote integrated rural development to reduce poverty, accelerate economic growth and reduce the gap between the rural and urban areas.

10.36 The strategies include the following:

- a) Empower the rural people through education and organizational skills training.
- b) Strengthen the economic base of the communities and enhance productivity.

- c) Improve access to infrastructure and markets.
- d) Improve the protection and sustainable use of natural resources (e.g. land, water, forests, fisheries and minerals, but excluding oil and gas) and the environment in the communities.
- e) Reduce the gap between urban centres and rural areas in economic opportunities, provision of social services and infrastructure (including communications).
- f) Promote development of urban areas and other growth centres.

10.37 The policies, programs and projects proposed for rural development are:

- a) Integrated community education, training, information and communications program.
- b) Program to strengthen the autonomy and self-reliance of village communities.
- c) Policy on local government/governance at the suco and aldeia levels.
- d) Integrated community economic development program.
- e) Integrated community services development program covering such areas as health, education, water supply, sanitation, agricultural extension and veterinary services.
- f) Integrated community infrastructure development program.
- g) Programs for community management of infrastructure maintenance.
- h) Programs for community protection and the use of public resources, such as forests and fisheries.
- i) Policy/legislation on community management and the use (sharing of benefits) of public resources, such as forestry and fisheries.
- j) Law prohibiting the delineation and privatisation of community and common property resources.
- k) Laws regulating the management and use of natural resources and protection of the environment.
- l) Programs to encourage dispersal of investments to areas close to urban centres, and to areas appropriate for resource endowments and products (e.g. coffee processing).
- m) Programs to improve the quality and quantity of social services in rural areas, with a particular focus on the poor, women and other vulnerable groups.
- n) Programs to improve the rural infrastructure (including farm to market roads, and rural electrification) and communications.
- o) Dili development program.
- p) Urban centres development programs.
- q) Programs to develop markets and growth centres in highlands.
- r) Programs to develop markets and growth centres in lowlands.

- s) Policy on urban development and city/municipal governance (government).
- t) Policy on rural-urban migration.
- u) Policies on markets and growth centres.

10.38 The above policies, laws, programs and projects are either implicitly or explicitly incorporated in the relevant sectors including Agriculture and Infrastructure. The importance of integration of the various development interventions to ensure complementarities (avoid duplication) and enhance the impacts is emphasised. Relevant performance indicators for the activities have been formulated and presented in the sector chapters.

REGIONAL DEVELOPMENT

10.39 **Goal:** Achieve balanced regional development to reduce poverty, improve the lives of East Timorese in all regions, enhance and exploit complementarities between regions and agro-ecological areas, accelerate economic growth, and reduce regional disparities.

10.40 The strategies formulated by the Working Group to achieve the above goal include the following:

- a) reduce imbalances in education, organisational skills and institutional mechanisms for development between the regions/districts.
- b) strengthen the economic base of the districts, taking into account their resource endowments (land, agro-climatic conditions, people and their skills, etc.), enhance productivity, and enhance complementarities between districts/regions.
- c) improve access to infrastructure and markets in regions/districts that are relatively disadvantaged.
- d) allocate central (national) government resources to district(s) based on population, land area, present level of development and other specific problems which the district faces to ensure equitable sharing and promote balanced development of all districts.
- e) develop districts and areas with specific problems – i.e., Ambeno (Oecussi), Bobonaro and Covalima districts, and Atauro and Jaco Islands.

10.41 The policies, programs and project proposed are:

- a) programs to strengthen and expand education and skills training opportunities in relatively disadvantaged regions and districts.
- b) program to strengthen the organisational skills of government, private sector and civil society organisations in regions/districts that are relatively disadvantaged.
- c) program to create and/or strengthen institutional mechanisms for coordination of development activities in regions and districts that are relatively disadvantaged.
- d) formulation and implementation of district and/or regional economic development programs, with particular attention to agro-ecological and human resource areas.
- e) program to adapt appropriate technologies for improving productivity.

- f) tailor-made training and extension programs to enhance the skills of people (e.g. farmers and small entrepreneurs in agro-industries, marble/mineral extraction).
- g) programs of economic support services including rural electrification, input supply, marketing, etc.
- h) integrated infrastructure development program in relatively disadvantaged districts.
- i) strengthen the capacity of district administrations in finance and management.
- j) devise policies to raise additional resources from both internal and external sources.
- k) devise criteria for allocation of resources among districts, taking into account their current state of development.
- l) law on local government, specifying the roles and responsibilities of district and lower level government administrations.
- m) program to develop Ambeno district, including land and sea transport linking it with the rest of the country.
- n) program to develop Bobonaro district.
- o) program to develop Covalima district.
- p) program to develop Atauro Island.
- q) program to protect and develop Jaco Island for eco-tourism and bio-diversity research.
- r) policy on border trade and the flow of people between Ambeno district and West Timor.
- s) policy on border trade and the flow of people between Bobonaro and Covalima districts and West Timor.
- t) policy on development of Atauro Island.
- u) policy on conservation, protection and use of bio-diversity in Jaco Island.

10.42 Many of the activities proposed above require clarifications on the coverage/boundaries of the regions and the roles and responsibilities of local government entities and personnel at the district, sub-district and lower levels. The Ministry of Internal Administration will be an important actor in helping to clarify these and formulating the local government code or law. Also, the Ministry would have to coordinate many of the activities. The promotion of regional development may be spearheaded by different line Ministries such as Agriculture depending on the resource base and comparative advantage of the districts/regions.

CIVIL SERVICE

10.43 **Goal:** Strengthen the capacity of civil service at the national and local levels and enhance its efficiency, transparency and accountability.

10.44 The civil service is staffed mostly with people with minimal experience in government and governance. It is much smaller than that prior to 1999. Strengthening the capacity of the civil service is a priority. The policies, laws, programs and projects include the following:

- a) program to strengthen the capacity of civil service including in administration/management, finance and budgeting
- b) training of trainers program
- c) training programs with adequate representation of different groups such as women and language groups)
- d) curriculum and training materials development projects
- e) external training program(s)
- f) monitoring and follow-up of trainees project
- g) supply of equipment and facilities programs
- h) civil service recruitment policy (e.g. to ensure adequate representation of women, social and language groups and regions/districts transparent, fair and merit-based manner)
- i) civil service reward, promotion and career development policy
- j) civil service separation and disciplinary action policies
- k) civil service code of conduct, rules and regulations
- l) civil service law
- m) orientation and training programs to instil the values and principles of serving the people within the civil service
- n) program to evaluate civil service performance
- o) program for the formulation and promulgation of civil service rules and regulations promoting transparency and accountability
- p) program to establish and operate accountability systems and mechanisms within the civil service
- q) program to establish and operate citizen watchdog mechanisms
- r) policy on public access to, and disclosure of government information
- s) policy on role and accountability of civil service
- t) policy on citizen/community mechanisms to monitor the civil service

10.45 The policies, laws, programs and projects will be implemented by the relevant entities under the Ministry of Internal Administration in cooperation with other Ministries and Departments. Also, citizen participation in monitoring the performance of civil servants in service delivery and in seeking accountability is important.

Immigration Service

10.46 Create an Immigration Service, which is professional and efficient, providing a quality service for citizens and visitors.

- a) program for recruitment of additional staff
- b) training programs, including (English) language training
- c) program to provide office facilities (including buildings), and equipment
- d) program of technical advice and services
- e) program to monitor visitors and immigrants
- f) program to establish a database on visitors and immigrants
- g) policy on immigration, including visa and other entry requirements
- h) policy on immigrants' rights to work, start businesses, and engage in other activities

National Archives

10.47 The objective is to access, preserve and make available cultural, popular (folkloric) and historic artefacts and government records/materials for present and future generations of East Timorese. The National Archive will acquire, preserve and make available to the public oral, written, film, tape, photographic and other materials through the its facilities.

10.48 Many of the artefacts have been lost or destroyed during the 1975-1999 occupation and during the 1999 paramilitary violence. There are no records or knowledge of East Timorese materials taken to other countries including Portugal, other Portuguese-speaking countries and Indonesia. Further, the information on what is available in East Timor is limited. The programs and projects include the following:

- a) cultural and historical materials collection program
- b) cultural and historical materials and heritage buildings/architecture preservation program
- c) cultural and historical display and dissemination programs
- d) research programs (library and field projects, including archaeological projects)
- e) training programs
- f) buildings/facilities and equipment supply projects
- g) program for accession and preservation of government records
- h) policy on culture and heritage
- i) policy on the retrieval and repatriation of East Timorese cultural, historic and heritage materials from other countries
- j) policy on accession and preservation of government records

10.49 The National Archive under the Ministry of Internal Administration will implement the activities, subject to availability of adequate resources.

Labour

10.50 The objectives include the improvement in the utilization of labour with equitable reward (wage) system and workplace safety; establishing and maintaining a labour market database, introduction of manpower planning, and dissemination of the information to all interested parties. The strategies include improving the functioning of the labour market through employment exchanges, business (employer) consultation forums, and the media, establishing and maintaining a labour market database, introducing manpower planning, and disseminating the information to all interested parties;

- a) program for promotion of formation of labour groups/unions to protect workers' rights
- b) program for promotion of occupational safety and environmental health
- c) project for promotion of job security
- d) program for promotion of retirement pension schemes
- e) program for promotion of disability insurance
- f) program for promotion of mediation/arbitration in labour disputes.
- g) minimum wage policy
- h) working hours policy
- i) policies on leave and other workers' rights
- j) labour law that incorporates internationally accepted (ILO) labour standards and practices.
- k) program to establish labour market database
- l) manpower planning program
- m) program to strengthen staff capacities
- n) program to set up labour market monitoring and information collection offices in districts
- o) program of dissemination of labour market information and manpower plan
- p) policy requiring employers to provide information on employment, wages, working hours, etc., by occupation (skill level)
- q) program to establish and operate employment exchanges to match jobseekers with potential employers
- r) program to establish business (employer) consultation forums
- s) policy on advertisement of vacancies in the media

- t) regulation on supply of information on job vacancies to employment exchanges

10.51 The above activities will be implemented by the Secretary of State for Labour and Solidarity in cooperation with other Ministries. The activities will be prioritised and implemented in phases to respond to emerging needs and demands, subject to availability of resources.

11. SOCIAL AND HUMAN DEVELOPMENT: EDUCATION AND HEALTH

“Meeting East Timor’s basic needs in health and education is vital for the nation’s development, in reducing poverty, promoting economic growth, and in improving the livelihoods of its population.”

VISION

11.1 Our vision is that by 2020, the East Timorese people will be well educated, healthy, highly productive, democratic, self-reliant, espousing the values of nationalism, non-discrimination and equity within a global context.

BACKGROUND AND STATUS

11.2 Meeting East Timor’s basic needs in health and education is vital for the nation’s development, in reducing poverty, promoting economic growth, and in improving the livelihoods of its population. Education and Health are the largest sectors, in terms of expenditure, both in 2001-2 and for the foreseeable future. This expenditure reflects the wishes of the population, as expressed in the recent Countrywide Consultation, in which 70% of the population prioritised education as one of the three most important sectors to be developed for the country’s future, followed by health, prioritised by 49%. The PPA completed in January, 2002, produced similar results. These views are captured in the vision presented in this document. In meeting its people’s needs in health and education, however, both government and civil society organisations face formidable challenges.

Education

11.3 East Timor has an illiteracy rate of 50-60%. 46% of the current population have never attended school. Almost two-thirds of the female population is illiterate. The primary enrolment rate is low, as are school retention rates. Approximately 20% of children enrolled in primary schools rarely attend classes. There is a substantial shortage of trained teachers, and teaching quality is low. In the 2000-01 school year, for example, of the 2,091 secondary school teachers, only 106 had formal secondary school training. The curriculum introduced during the Indonesian occupation is viewed by East Timorese students and teachers as outmoded and irrelevant.

11.4 During the UNTAET period, some increases have occurred in primary school enrolment, particularly for girls, but there have been declines in secondary school attendance. Tertiary provision and skills training remain grossly inadequate. The current teacher-student ration in the primary sector is 1:62.

11.5 During the period before oil revenues begin to have an impact, key challenges to be addressed are:

- a) A rapid expansion in primary school enrolment, particularly for children from poor households.



- b) A reduction in the high drop-out rate at primary level.
- c) An improvement in teaching quality through the provision of appropriate training.
- d) The design and introduction of literacy manuals, and the implementation of campaigns to address the low literacy level within the population.
- e) A specification of the respective roles to be played by the government, church, NGOs and local communities in the management of education.
- f) The development of strategies for the furtherance of the Portuguese language at all education levels, and amongst the adult population.

Health

11.6 The heavy burden of disease in East Timor is due largely to the prevalence of communicable diseases such as malaria, tuberculosis, respiratory tract and childhood infections. The current TB rate is 900 per 100,000. Life expectancy ranges from 50-58, and is combined with high infant mortality rates of 78-149 per 1,000 live births, and under 5 mortality rates of 124-201 per 1,000 live births. Women bear an unacceptable burden of maternal mortality and morbidity, with maternal mortality rates at 350-800 per 100,000 live births. Only 30% of births have any skilled birth attendance. Approximately 3-4% of children aged 6 months to 5 years are acutely malnourished, whilst one in five is chronically malnourished. 45% of children under 5 are underweight.

11.7 During the Indonesian occupation, the health system delivered poor quality services, and was widely mistrusted by the population. During the paramilitary rampage, most health facilities were destroyed, and there was a total collapse of the health system.

11.8 During the UNTAET period, access to basic services has been restored, a TB program has been implemented, immunisation services have been developed for women and children, and basic health packages have been designed. Health centres have been rehabilitated and re-equipped. A plan has been devised for human resource development, capacity-building, and health training.

11.9 The main challenges to be addressed by the health sector are to design and implement policies, programs and projects addressing:

- g) high rates of maternal and infant mortality
- h) a high proportion of illness and death due to preventable communicable diseases
- i) the prevalence of malnutrition, iodine and vitamin A deficiency
- j) the lack of access to safe drinking water and sanitary facilities for a majority of the population
- k) poor reproductive health
- l) the prevalence throughout the country of post-conflict mental health problems and trauma
- m) poor and inequitable access to health services

- n) inadequate management support systems
- o) an inadequate referral system
- p) poor knowledge of HIV/AIDS among the population.

11.10 In both the health and education sectors, a major challenge is to set clearly-defined, specific priorities in line with available expenditure. A medium term framework has been developed, selecting priority areas that can ensure most successfully the delivery of services to a population with continuing high levels of poverty.

Gender

11.11 Women play a vital role in East Timorese society. They manage community resources, households, and constitute a crucial part of the labour force, particularly in agriculture. Yet they are not adequately represented in positions of power throughout the country. Gender inequalities are addressed in many of the objectives, strategies and policies in the national plan. There are particular gender concerns in human development – notably in relation to women’s levels of literacy, training, and health needs. These issues are covered in the particular projects and programs outlined for the health and education sectors.

GOALS

11.12 The goals for the education and health sectors are to:

- a) improve the education and health status of the people of East Timor;
- b) contribute to the improvement of the economic, social and cultural well being of individuals, families and communities in East Timor; and
- c) promote gender equality and empower women in East Timor.

GUIDING PRINCIPLES

11.13 Several principles serve to guide development in education and health, with the following of particular importance.

- a) **Human Rights:** Human development programs will respect all internationally recognized human rights and fundamental freedoms consistent with the East Timor Constitution, including the right to development.
- b) **Cultural, Religious and Gender Sensitivity:** Human development in East Timor will respect its people’s cultural and religious diversity and enhance equality among men and women, by promoting the values of tolerance, dialogue and peaceful resolution of differences.
- c) **Quality and Relevance:** The implementation of human development programs in East Timor shall promote high standards and ensure that the choices are oriented to the country’s needs.

- d) **Sustainability:** To achieve long-lasting human development, human and natural resources shall be managed taking into account financial capacity, appropriate and existing technology.
- e) **Equity and Accessibility:** The provision of education, health and other basic needs shall be fair, affordable and within everyone's reach.
- f) **Social Solidarity:** Human development programs will promote the values of community participation, self-help and shared responsibility between government and all actors in civil society.
- g) **Ethics and Efficiency in Public Service:** Public service will be guided by the values of courtesy, efficiency, productivity, honesty and high ethical standards in order to achieve full transparency, accountability and public satisfaction.
- h) **Legality:** Given the special circumstances of East Timor as a new nation, human development will take place within a responsive legal framework and with respect for the rule of law.
- i) **Creativity and Innovation:** Human development will aim to harness people's natural creativity and reward innovation.
- j) **Protection of the Environment:** Human development programs will take into account the impact on the environment and promote environmental protection for future generations.

KEY DEVELOPMENT INDICATORS

11.14 The key development indicators for the sectors and for particular components of each area are as follows.

Education

- a) Literacy rate
- b) Net enrolment ratio in primary and secondary schools
- c) Primary education completion rate
- d) School attendance
- e) School participation by age
- f) School participation rates of richest and poorest quintiles of the population
- g) Household expenditure on education at primary and secondary levels
- h) Levels of educational attainment

Health

- a) Life expectancy at birth
- b) Infant mortality rate

- c) Under 5 mortality rate
- d) Maternal mortality rate

Labour

- a) Labour force participation rate
- b) Unemployment rate

Economic, Social and Culture

- a) GDPper capita
- b) % of households below the poverty line
- c) Income distribution index
- d) % of displaced families with access to education and health services
- e) % of orphans and widows with access to education and health services
- f) % of disabled with access to education and health services
- g) % of families with access to radio/television/telephone
- h) Number of cultural and civic society associations
- i) Voter participation rate
- j) Number of street children
- k) Number of orphanages
- l) Crime rate
- m) Suicide rate
- n) Number of libraries/Number of people visiting libraries
- o) Number of people in receipt of social security
- p) Rate of youth participation in social/cultural organizations

Gender Equality

- a) Ratio of boys/girls at all education levels
- b) Ratio of literate females, urban/rural
- c) Percentage of women employed on completion of studies
- d) Incidence of domestic violence
- e) Female access to health services

- f) Proportion of females holding decision-making positions, in both public and private sectors.

PROBLEMS AND CONSTRAINTS

PROBLEMS AND CONSTRAINTS COMMON TO BOTH SECTORS

11.15 Both the education and health sectors face a number of difficulties, some of which are common to both sectors, and some of which apply to each sector separately. The common problems and constraints are as follows:

Literacy

- a) High levels of illiteracy, particularly amongst women
- b) Female education plays an important role in health since women make many of the decisions about the health of the family. Better-educated people know more about healthy behaviour and make better choices about childbearing, food distribution and nutrition, personal hygiene and seeking health care. The literacy rate among the adult population is generally low with women lagging behind (54% for men and 40% for women).

Culture

- a) Lack of awareness of education and health problems, particularly for women. There is also a general lack of understanding of education and health benefits.
- b) Cultural inhibitions - many people do not seek appropriate health care until it is very late (due to a preference for traditional practitioners).
- c) Girls experience discrimination in access to education due to traditional practices, such as early pregnancy and marriage, demanding household work and the failure of educational materials to address gender issues.

Poverty

- a) Income levels are related to people's standard of living, access to food, education and health care – the essential elements of health. About 41% of the East Timorese population lives below the poverty line. Poor people are more likely to become ill, remain ill, and discontinue their education.

Poor nutrition

There is a high prevalence of malnutrition, iodine and vitamin A deficiency. Malnutrition is prevalent among infants and pre-school children, as well as pregnant and lactating women. Available information indicates that 3-4% of children aged six months to five years are acutely malnourished, while one in five is chronically malnourished. Vitamin A deficiency, iodine deficiency disorder and anaemia are significant problems in children and mothers.

Unequal distribution of food and health care in the family favours boys. This is similarly the case in the areas of education opportunity and health care.

Lack of adequate food, directly affecting health, and indirectly, the ability to learn.

Limited knowledge of nutritional practices.

Infrastructure

- a) Inadequate infrastructure, lack of available transport, and poor physical facilities result in geographical and social isolation of villages and households.

Quality of services

- a) General lack of availability of inputs and materials
- b) Low public confidence in both the health and education systems

Resource constraints

- a) Inadequate financial resources
- b) Inadequate human resources in number and skills

Legal Framework

- a) Lack of comprehensive legal framework
- b) Inadequate management and support systems

Gender related issues

- a) Low level of awareness of gender issues at all levels and sectors

SECTOR SPECIFIC PROBLEMS AND CONSTRAINTS

11.16 A number of problems and constraints are experienced in both the education and health sectors separately, including the following.

Education

- a) Community
 - Lack of involvement in school management
 - Household and farming needs limiting school attendance – particularly for girls.
 - High number of illiterate people
- b) Pre-School
 - Insufficient number of pre-schools (currently, there are 43 pre-schools)
 - Lack of budgetary support from the Government
 - Lack of support from both the community and NGOs
- c) All School Levels (Primary School to University)

- Most six year old children do not enter the 1st grade of primary school
 - Students do not complete the six grades in six years
 - Lack of support for special school provision
- d) Insufficient Number of Schools
- e) Low Quality
- Lack of specialized teachers
 - Lack of appropriate study material
 - Lack of qualified labour force
 - Lack of adequate study material
 - Very limited access by students to libraries
- f) Low Effectiveness and Efficiency of Educational Management
- Lack of strategic planning for documenting and replicating existing good practice (as, for example, in existing pre-school provision and women's literacy circles organised outside the formal sector by NGOs)
- g) Sport
- Lack of sports activities in schools and within society in general
 - Government has not yet defined its policy regarding Youth and Sports
 - No sports managers or relevant technical and human resource capacity
 - Insufficient and inadequate sports equipment
- h) Curriculum
- The current curriculum is too abstract and arduous
 - The curriculum context does not reflect the values and reality of East Timor
- i) Youth
- The qualifications held by unemployed youth are not relevant to the current labour market
 - There are insufficient youth activities
- j) Culture
- Lack of experience in articulating cultural values, and in assessing how these values can be expressed most effectively and appropriately

- Very few readily accessible museums, libraries and organized historical documentation centres
- k) Language Provision
- Difficulties in standardising Tetun and reintroducing Portuguese as a language of instruction in a relatively short period of time

Health

- a) Major Public Health Problems
- High maternal and infant mortality.
 - East Timor has one of the highest rates of maternal mortality in the region with estimates ranging to over 800 deaths per 100,000 live births. This is unacceptably high. The infant mortality rate is estimated by the Ministry of Health to be 70 - 95 per 1,000 live births, the most common causes being infections, prematurity and birth trauma.
 - A high proportion of illness and death due to preventable communicable diseases such as malaria, tuberculosis, childhood respiratory infections, measles, typhoid, and diarrhoeal diseases.
 - A high prevalence of malnutrition, iodine deficiency and vitamin A deficiency.
 - As noted above, this is a problem for both education and health sectors. Specifically, for the health sector, malnourished people are more likely to get sick and to die from their illnesses.
 - Low access to safe water and sanitation.
 - Unhygienic conditions increase people's chances of getting sick and making their illnesses worse. A majority of the population do not have access to safe water and sanitary facilities. They depend on contaminated or unprotected sources of water. Existing systems for solid and liquid waste disposal are inadequate.
 - Poor reproductive health is a major cause of maternal mortality.
 - A complex interplay of social, economic, environmental and cultural factors, and limited availability of health care services contribute to poor reproductive health within the population. There is an increasing incidence of teenage pregnancies with short periods of time between each pregnancy.
 - High prevalence of communicable diseases and a rising incidence of non-communicable diseases.
 - Poor knowledge of HIV/AIDS among the population.
 - HIV/AIDS is a global problem that has potential to have devastating effects on the people of East Timor as they become exposed to the rest of the world. Current knowledge and awareness about HIV/AIDS is low.

- Lack of education on oral health.
 - Prevalence of post-conflict mental health problems and trauma.
 - Currently, mental health services are inadequate. Major mental problems observed in post-conflict East Timor include psychosis, acute schizophrenia, suicidal depression and severe trauma-related reactions.
 - An increase in environmental degradation, occupational and environmental health problems in recent years.
- b) Problems Related to the Performance of the Health System
- Poor and inequitable access to health services.
 - Much of the population living in the rural areas, does not have easy access to the health system – due both to geographical inaccessibility and to inadequate provision of infrastructure and transport facilities. Average walking time to the nearest health facility is 70 minutes.
 - Inadequate management support systems.
 - The absence of a regulatory framework – health regulations do not deal with public health issues, such as environmental and occupational hazards.
 - Inadequate referral system.
 - This results in delayed treatment and inappropriate utilisation of health services.

OBJECTIVES

11.17 The following objectives address the various problems identified in health and education.

Education

- a) Increase the population's awareness and understanding of basic educational needs, and particularly:
 - Reduce the number of illiterate people within the adult population, with an emphasis particularly on women;
 - Encourage community and NGO participation, particularly in relation to the implementation of pre-school education;
 - Strengthen the community ownership of education through inclusion of parent, community, student and teacher groups, involving them in the development of appropriate quality educational provision in local areas.
- b) Increase access to education and develop means for ensuring the retention of children within the school system, at all levels; improve the drop-out rate.
- c) Rationalize educational provision in relation to the varying needs of different areas.

- d) Improve educational provision, particularly through the provision of professional training, notably for girls and women, adults, and groups with special needs.
- e) Increase the efficiency of school organization and management.
- f) Encourage sports education in schools.
- g) Develop a curriculum appropriate to East Timor's contemporary needs, encouraging the development of cultural identity, and stressing the importance of the values of democracy, self-sufficiency, national unity and non-discrimination. Develop programs for unemployed youth, and for school drop-outs, providing qualifications enabling them to re-enter the labour market.
- h) Develop extra-curricular occupational programs.
- i) Develop forms of culture and art, emphasizing the national identity of East Timor.
- j) Re-introduce and develop Portuguese and Tetun as the official languages of East Timor.

Health

- a) Reduce levels of maternal and infant mortality.
- b) Reduce the incidence of illness and death due to preventable communicable and non-communicable diseases, including HIV/AIDS.
- c) Improve the nutritional status of mothers and children.
- d) Improve reproductive health in East Timor.
- e) Ensure that all people have access to health services.
- f) Ensure the delivery of a minimum health care package at all levels of service.
- g) Collaborate with all stakeholders in the health sector to achieve national goals for health.
- h) Ensure that sufficient and adequate health professional training is undertaken to meet national requirements.
- i) Regulate the employment of all health professionals to ensure minimum standards of professional practice.
- j) Provide sufficient referral and tertiary health care services, including laboratory support services, to ensure that referral cases are treated effectively.
- k) Improve the organization and management systems in the health sector.
- l) Increase women's access both to health information, and to quality health services.
- m) Increase the availability of mental and dental health services.
- n) Contribute to the improvement of occupational and environmental health in East Timor.

POLICIES

11.18 Based on these objectives the following basic policies will be formulated.

Education

- a) Promote mandatory education for all children of school age.
- b) Develop primary education for all as the main goal and priority in allocation of government resources.
- c) Create incentive partnerships with the private sector, NGOs, parents' associations and the community, to support education at all levels, in pre-school, secondary school, vocational training and non formal education, as well as in university education.
- d) Establish a minimum qualification for teachers, such as a university degree. Develop additional relevant specialisations for secondary school, vocational training, as well as for university teachers and assistants;
- e) Mainstream gender concerns in all educational programs and monitor the impact of these programs on women's education, through the development and use of gender-sensitive indicators.
- f) Work with relevant sectors/organisations to advocate an improved status for women, promoting equal rights for men and women in access to education.
- g) Have as a key policy objective to increase women's access to information on educational provision.

Health

- a) Emphasise preventive and promotive health care, provided closest to the community, with the additional aim of limiting expenditure on hospital care.
- b) Adopt primary health care policies enabling increased accessibility and coverage of health care.
- c) Adopt a policy of integrating the health care system with other sectors.
- d) Target groups to achieve the greatest health impact (e.g. emphasizing mother and child health care).
- e) Develop health staffing policies appropriate to the needs of the country.
- f) Promote access and utilization of basic health services by vulnerable groups.
- g) Adopt Integrated Management of Childhood Illness (IMCI).
- h) Mainstream gender health concerns in all programs and monitor their impact on women's health, through gender-sensitive indicators.
- i) Work with relevant sectors/organisations to advocate an improved status for women, promoting equal rights for men and women in access to health.

- j) Have as a key objective to increase women's access to health information and quality health services.

STRATEGIES

11.19 These policies will be realised through the following strategies.

OVERALL STRATEGIES

Education

11.20 In the short term – over a 2-3 year period – strategies will aim to consolidate the efforts and achievements of reconstruction. This will be done through rationalising educational provision in relation to the needs of different areas of the country, and by developing human resources within the educational sector as a whole. Institutional capacity will be strengthened within the ministry, to promote reforms and to plan and develop educational programs.

11.21 In the longer term – over a 5-10 year period – strategies will aim to promote reforms in key areas of the sector, as well as developing measures for institutional strengthening to achieve the provision of universal primary school education. Curricula will be designed and implemented, promoting high quality teaching relevant to the needs of East Timor. Institutional capacity will be strengthened, with the aim of an efficient management of the overall educational system.

Health

11.22 To meet our goal, strategies will emphasise the importance of primary health care, focusing on prevention and the targeting of underserved areas. Primary health care is a system of essential health care, based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at each stage of its development, in a spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first contact point with the national health system for individuals, the family and community, bringing health care as close as possible to where people live and work. It forms the first step in a continuing health care process.

Gender

11.23 Women in East Timor have been suffering from both a national culture of violence, and from the results of mass displacement. Both of these increase the feminization of poverty. There are no laws either ensuring the protection of women's fundamental rights or addressing the social and cultural obstacles favouring men's access to opportunities. The goal of promoting gender equality and empowering women must entail changes in attitudes, government social institutions and private sector practices. Our overall strategy is focused on mainstreaming gender and gender equality in all areas, and at all levels of education and health, assessing the implications for women and men of any planned action in order to ensure that institutions, policies and programs respond to the needs and interests of women as well as men and distribute benefits equitably between women and men.

The root cause of gender inequality in human development lies in the social structures, institutions, values and beliefs which create and perpetuate women's subordination. Solutions should not aim merely to integrate women in the development process but must also reshape the human development agenda, reflecting gender concerns. Consequently, gender objectives in education and health must emphasize the need for gender awareness campaigns at all levels, in order to deal with the stereotypes that are obstacles to a full participation of girls in the educational process, particularly after secondary school, as well as for the need for formal and vocational training as an instrument of empowerment. In relation to health status, the objectives of our strategy centre on information and educational campaigns on women's right to health, involving all key stakeholders, to ensure that women, due to their specific vulnerability – particularly in reproductive health - are not exposed to continued health hazards and risks.

SPECIFIC STRATEGIES

Education

11.25 The strategies that are specific to education are the following.

- a) Educational campaigns, focusing on three areas:
 - Promotion of the importance of basic education (defined not simply in relation to reading, writing and numeracy, but encompassing a broad range of thinking, conceptualizing, analyzing, participating and learning skills);
 - Literacy programs: addressing the range of relevant skills required to enable poor and vulnerable groups to develop basic learning skills and knowledge of issues relevant to their daily lives and to their plans for the future.
 - Nation-wide campaigns on pre-schooling and primary education, raising the importance of girls' access to education.
- b) Improving enrolment and attendance
 - Educating teachers, community leaders and parents on the importance of their responsibilities in securing enrolment and attendance in school of children of school age.
 - Improving health at schools by providing school snacks as a way of reducing absenteeism and drop out rates.
- c) Rationalising educational provision, by building new schools, increasing school size, and closing redundant schools.
- d) Improving teaching capacity, through:
 - The training of teachers, in Portuguese/Tetun language.
 - Increasing the availability of textbooks and other teaching materials; school facilities must be adequate and sufficient for all levels, including special schools.
 - Establishing performance management programs and national examinations.
- e) Setting up career plans for teachers and school deans.

- Developing programs for institutional strengthening.
 - Setting up scholarship programs for school managers and administrators.
 - Developing training programs in basic education planning and management for the different levels of school managers at central, districts and schools offices.
- f) Providing equipment for sporting facilities and organizing sport competitions.
- g) Developing relevant curriculum and education programs.
- Developing an appropriate curriculum at all levels, which promotes practical activities, interaction between teachers and students, relevancy of content to contemporary East Timorese reality, and takes into account questions of human rights and gender.
 - Developing contemporary programs for education, introducing new learning techniques.
 - Developing and/or improving the quality of text books, other materials, and learning processes, stressing the importance of eliminating stereotypes associated with gender, and adopting a relevant curriculum.
- h) Developing appropriate vocational training and distance learning programs.
- i) Developing East Timorese concepts of literacy and basic education through conferences, training programs, and professional development.
- j) Developing extra-curricular activities, social and cultural events for East Timorese youth.
- k) Designing workshops, conferences, and seminars promoting East Timorese cultural values.
- l) Developing Tetun and reintroducing Portuguese as the official languages of instruction.
- m) Assisting policy development through inputs into government by international experts, and via conferences, materials, and other documented international experience.

Health

- a) Targeting mother and child health by:
- Increasing immunization coverage of all children under five
 - Growth monitoring
 - Adopting Integrated Management of Childhood Illness (IMCI) and providing training at Community Health Center level
 - Providing antenatal services close to the community

- Upgrading midwifery skills
 - Training Traditional Birth Attendants (TBAs)
- b) Emphasising health promotion through health education focusing on major health problems and targeting community schools, youth groups, and risk groups through health promotion campaigns, training, curriculum integration, media, environmental health education
- c) Prevention and control of communicable diseases through:
- Disease surveillance
 - Capacity building, including training
 - Developing a system of timely detection and control of epidemics/disease outbreaks
- d) Improving nutritional status of mothers and children through:
- Micronutrient supplementation
 - Promotion of exclusive breast feeding
 - Growth monitoring
 - Health education on good nutrition
- e) Improving management of human resources by:
- Developing a comprehensive human resources development plan
 - Training an adequate number of health personnel based on national needs
 - Establishing regulatory mechanisms for medical practice and professional ethics
 - Developing incentive systems for motivating health personnel
 - Optimizing the use of available human resources through appropriate skill mix and productivity improvement
- f) HIV/AIDS prevention through:
- Providing Information, Education and Communication (IEC) targeting vulnerable groups and individuals
 - Establishing voluntary counseling and testing
 - Encouraging community participation and working with social, religious and women's organizations
 - Developing the capacity of health workers and community groups
 - Developing the legal and policy framework

- Developing support services
 - Advocacy work with key stakeholders, such as churches and women's organisations
- g) Promoting reproductive health through:
- The creation of awareness on STI and other reproductive health problems
 - Sex education in schools, media and health facilities, and youth centres
 - Promoting the benefits of family planning
 - Early detection, diagnosis and treatment of breast cancer, cervical cancer, STI/HIV
- h) Improving access to, and utilization of health services particularly by vulnerable groups through:
- The construction of new facilities
 - Rehabilitation of existing facilities
 - Provision of additional services in facilities to ensure all priority interventions are available
 - Involvement of NGO health providers in the overall plan to increase coverage of primary health care
 - Fostering active participation of the community
 - Reducing the cost of seeking health care by the poor, children under 5, pregnant women, the elderly and the disabled.
 - Health promotion and education to influence health-seeking behaviour, alleviating social-cultural barriers
- i) Developing and implementing a rational secondary and tertiary hospital development plan
- j) Improving management systems of health services by:
- Strengthening the planning and policy development capacity of the Ministry of Health
 - Improving financial resource allocation to increase efficiency
- k) Adopting a multi-sector approach in dealing with health problems, in order to ensure contributions by other sectors concerned with health status improvement
- l) Improving access to information and provision of health services through:
- Expanding coverage of women's health care services

- Working with other partners to promote women's health and education
- Monitoring the impact of health programs on women's health
- m) Developing national mental and oral health programs that address prevention, promotion and appropriate treatment at district level
- n) Improving occupational and environmental health through:
 - Collaboration with the Departments of Labor, Environment and Infrastructure to develop regulations, strategies and plans to combat occupational and environmental health hazards
 - Environmental and occupational health education programs, designed by the Ministry of Health

PROGRAMS AND PROJECTS

Education

11.26 Based on the objectives, policies and strategies, and addressing the problems and constraints outlined above, the following programs and projects will be implemented by the Ministry of Education over the five-year NDP period.

Program 1: Expand Access and Improve Internal Efficiency

11.27 While one of the major accomplishments of the Transitional Administration has been the tremendous increase in enrolment at all educational levels, it is estimated that almost 25% of all children of school age are still out of school. Moreover, there is a significant misalignment of age by grade due to the late start for most first graders, and a high drop-out and repetition rate which renders the system very inefficient. The key program thrust for the next five years is therefore to expand access particularly in basic education, and to improve the internal efficiency of schools. Some of the projects to be implemented are as follows.

- a) Information Campaign on the Importance of Schooling
- b) School Drop-out Prevention
- c) School Location Planning
- d) Multi-grade Schools
- e) School Health and Nutrition
- f) Community-Based Pre-School Development

Program 2: Improve the Quality of Education

11.28 One of the main issues in East Timor is the poor quality of education, largely brought about by the low qualifications of teachers and headmasters. A key program thrust in the next five years is therefore an improvement in quality, particularly in primary and secondary education. This thrust will also respond to the requirements for effectively bridging the transition in the language of instruction (from Indonesian to Portuguese/Tetun), as well as developing the curriculum and teaching materials, responding to the goal of creating an East Timorese national

identity, in addition to the emphasis on mathematics and the sciences. The key projects for implementation under this program are the following.

- a) Curriculum Review and Development
- b) Textbooks and Teaching Materials Development
- c) Language of Instruction Development (Tetun and Portuguese)
- d) Teacher and Headmaster Training
- e) Rehabilitation and Capacity Building of the Institute for Continuing Education
- f) School Supervision and Improvement
- g) Fundamental School Quality (TFET2)
- h) Project to Redefine Technical-Vocational Education.
- i) National Examinations and Supervision Improvement
- j) Teachers' Career Development and Welfare
- k) International Cooperation and Linkages
- l) 100 Schools Project (UNICEF-assisted)

Program 3: Build Internal Management Capacity and Improve Services Delivery

11.29 The educational system faces tremendous challenges and opportunities which require a capable and effective service delivery system. Due to a general lack of experienced educational managers, sector management capacity can pose a major constraint. There is also a need to develop physical facilities (such as for logistics) in order to ensure that critical inputs for the schools system are adequate. Building the internal capacity to formulate policies and plans, and to identify, prepare and implement responsive projects, as well as facilities development, will therefore be an important program thrust. Some of the projects identified to respond to this need are as follows.

- a) Training for Educational Managers
- b) Project to Build Capacity for Policy Formulation, Planning and Project Development
- c) Warehousing Expansion and Logistics Development.

Program 4: Non-Formal Education and Adult Literacy

11.30 A number of surveys have confirmed that adult illiteracy is a major problem that will pose severe constraints to productivity, growth and family health and welfare. The non-formal education and adult literacy program is designed to directly address this problem. Some of the specific interventions are as follows.

- a) Literacy Campaign
- b) Literacy Project for Young Illiterate Women
- c) Community Reading Centers Project

- d) Distance Learning Project.

Program 5: Develop Tertiary Education

11.31 The University's five-year plan envisages the improvement of tertiary education as an indispensable and solid nation-building effort in East Timor. It sets out to pursue key parameters of small size, high quality and gradual financial and government autonomy and has the following projects.

- a) Institutional Strengthening
- b) Staff Development
- c) Curriculum Development

Program 6: Promote East Timorese Culture and the Arts

11.32 To meet the needs of a newly emerging nation, the promotion of East Timor's culture will be a priority program in the next five years. The thrust of this program will be initially to structure the state's response to this need by identifying and establishing cultural institutions and developing their institutional capacity to perform their mandate. The initial projects identified for this purpose are as follows.

- a) Institutional Capacity Building for Culture Project
- b) Cultural Renewal and Promotion Project
- c) Survey and Documentation of Traditional Culture/Arts Project

Program 7: Promote Youth Welfare

11.33 As a consequence of the demographic structure of the population, East Timor's population has a large proportion of young people (45% under 15 years old). When combined with the reality of early drop-out from school of young people, the country has a large proportion of youth who are relatively under-employed, unskilled and often barely literate. An important program thrust of the education plan is therefore to provide youth welfare services and programs to respond to their needs. Some of the initial projects identified for implementation in the next five years are as follows.

- a) Structuring and Institutional Support to Youth Sector Development
- b) Project to Train Unskilled Youth

Program 8: Promote Physical Education and School Sports

11.34 Physical education and sports is an important ingredient for the development of the whole individual, and therefore a necessary component of the education plan. In view of the relatively underdeveloped state of this component of the curriculum, the program thrust in the next five years is to create awareness of its importance, structure the ministry to provide an adequate response to its requirements, and undertake basic refurbishment of sports facilities and train teachers and coaches. Some of the projects identified to implement the program are as follows.

- a) Structuring and Capacity-Building of Sports Institutions Project
- b) Information Campaign Project on the Importance of Physical Education and Sports

- c) Teachers/Coaches Training Project
- d) Rehabilitation of Sports Facilities Project.

Program Priorities

11.35 In its expenditure for the financial year, 2002/03, the Ministry of Education has prioritised funding on programs 1 and 2, on improving the quality of education, expanding access, and improving internal efficiency. The focus within these funding areas will be on primary education, followed by junior and senior secondary education, respectively. Following these, the next priority areas for funding are from program area 4, for continuing and non-formal education, with the emphasis on improving levels of adult literacy. Details are provided in the Summary of Expenditures for the Education Ministry, contained in the 2002/03 Budget Submission, accompanying the Plan.

Health

11.36 The Ministry of Health will implement the following programs and projects.

Program 1: Child Health

- a) Child Health
- b) Expanded Program of Immunisation
- c) Nutrition
- d) Growth Monitoring
- e) Micronutrients distribution
- f) Food Supplementation
- g) Breast Feeding
- h) Health Education on Good Nutrition

Program 2: Maternal Health

- a) Ante-Natal Care
- b) Safe Motherhood

Program 3: Reproductive Health

Program 4: Health Promotion

- a) School Health Program
- b) Media and Public Health Campaigns

Program 5: Communicable Diseases Control, including:

- a) TB
- b) STD/HIV/AIDS
- c) Malaria Control

- d) Disease Surveillance and Response
- e) Diarrhoeal diseases
- f) Leprosy

Program 6: Environmental and Occupational Health

- a) Environmental Health Promotion
- b) Occupational Health and Safety

Program 7: Specialised Services Programs

- a) Integrated Mental Health
- b) National Oral Health
- c) Hospital Services
- d) Ambulance Service
- e) Disaster Preparedness

Program 8: Medical Supplies Program

- a) Essential Drugs Program

Program 9: Laboratory Services

- a) Central Laboratory Services
- b) National Blood Transfusion Service

Program 10: Health Facilities Rehabilitation and Development

Program 11: District Health Services

Program 12: Health Sector and Management Programs

Program 13: Health Policy and Planning Development

- a) Health Policy and Regulation
 - Establishment of Regulatory Mechanisms
 - Health Policy Framework
 - Strategic Planning
 - Inter-Sectoral Co-ordination.
- b) Human Resources Development
 - Training and Scholarship Program
 - Strengthening of Training Institutions

- Establishment of National Institute of Health Sciences
- c) Health Information System
 - Establishment of National Health Information System

Program 14: Support to Administration and Finance functions

- a) Administration
- b) Finance
- c) Logistics

The Second Health Sector Rehabilitation and Development Project

11.37 Within the program areas listed above, the Ministry of Health currently is focusing on the Second Health Sector Rehabilitation and Development Project, that is, on the project as set up in the second phase of TFET. The objectives of this project are to assist the Ministry of Health in rehabilitating and developing a cost-effective and financially sustainable health system in East Timor, responsive to the immediate basic health needs of the population and, within a well integrated and sustainable health policy framework, to prepare the health system to meet future needs.

11.38 The project has three main components and sixteen sub-projects, for which the Ministry is requesting funding. These components are as follows.

Component 1: Support to ongoing Health Service Delivery

11.39 This component will support the delivery of health services, including selected high priority activities (immunization, tuberculosis treatment, nutrition, and health promotion) and basic services (including maternal and child health), in accordance with district health plans, medical supply systems, logistical systems, and essential hospital care, through the provision of technical assistance to the Ministry of Health. The project will also support the provision of pharmaceuticals to health facilities, including hospitals.

Component 2: Improvement of the Range and Quality of Health Services, and the Development and implementation of Health Support Systems

11.40 This component will support the improvement of the quality of basic health services provided at the district level, including the enhancement of health promotion activities, environmental health, communicable diseases surveillance and reproductive health, through the provision of technical assistance to the Ministry of Health and the provision of training to health services staff. It will also include the rehabilitation, construction and equipping of hospitals, and the improvement of communication systems and transport between health facilities and hospitals. The project will further support the establishment of an autonomous medical supply entity, and the provision of technical assistance for management.

Component 3: Development and implementation of Health Sector Policy and Management Systems

11.41 This component will support the development of health sector policy, health management systems and capacity building through technical assistance for health studies, the development of a strategic plan for human resources, the provision of fellowships, and the development of administrative and financial systems.

11.42 Details of the funding required for financing the development of these projects in 2002-3 are provided in the summary of expenditures for the Ministry of Health, contained in the Budget Submission accompanying the Plan.

PERFORMANCE INDICATORS

11.43 The performance indicators for the education and health sectors are summarised in the following tables.

Table 11.1: Performance Indicators for Education

Objectives	Performance indicator
1. To raise the population's interest and knowledge of basic educational needs a) Reduce the number of illiterate people within the adult population, with an emphasis on women; b) Enforce community and NGO participation, particularly regarding implementation of pre-school education;	Number of population participating in educational campaigns. Number of illiterate people (including women) reduced Number of children enrolling in pre-schools increased Number of pre-school facilities increased
2. a) Increase the access to education as well as school retention of children of both sexes within school ages; b) Improve drop-out rates at all educational levels and in all social and sex groups	Number of student drop-outs, including girls, reduced Number of children repeating school years reduced
3. Rationalize the school network	Teacher/students ratio
4. Improve the educational process at all levels, from pre-school to university, focusing also on professional training for all, including girls and women, adults, and groups with special needs.	Number of teachers using Portuguese language increased Course results improved Ratio of success
5. Increase the efficiency of schools and the educational system.	Punctuality of teachers increased Educational managers in districts and central offices trained Reduction in the number of international assistants. Relationship between school and first employment
6. Compulsory sports education in schools.	Intensive sports programs established in schools
7. Develop a curriculum appropriate to contemporary needs, reflecting indigenous culture and the values of democracy, self-sufficiency, nationalism and non-discrimination.	Quality assurance for delivery of curriculum
8. Improve youth qualifications, particularly for those who have left school early, and for the unemployed, through professional training	Number of unemployed youth finding employment Duration in occupation
9. Develop extra-curricular occupational programs;	Level of youth participation in social and cultural activities increased
10. Develop culture and the arts, based on the national identity of East Timor	Number of documents and cultural data available increased
11. Developing Tetun and Portuguese as the national & official languages	Number of students speaking Tetun and Portuguese increased.

Table 11.2: Performance Indicators for Health

Objectives	Performance indicator
1. To reduce maternal and infant mortality	MMR (reduced Maternal Mortality Rate) IMR (reduced Infant Mortality Rate) % of births attended by trained health worker % of children under 12 months with DPT3 vaccination % of pregnant women receiving tetanus vaccination
2. To reduce the incidence of illness and death due to preventable communicable diseases	% population with preventable communicable diseases Number of people infected with HIV % of TB cases treated successfully
3. To improve the nutritional status of mothers and children	% of children with low birth weight % of pregnant women with anemia % of children below weight for age measurement % of target population receiving micronutrients supplements
4. To improve reproductive health in East Timor	Total fertility rate Contraceptive prevalence Incidence of STIs Incidence of teenage pregnancies % of women receiving screening tests
5. To ensure that all people have access to health services	% of population in patient admission Number of outpatient visits per capita % of population within a 2 hours walk to health facility % of population utilizing outpatient and in-patient services
6. To ensure the delivery of a minimum health care package at all levels of service	% of health facilities that adequately deliver a minimum package of health services
7. To collaborate with all stakeholders in the health sector to achieve the national goals for health.	Number of inter-sectoral activities/programs Mechanisms and forums established Number of joint plans with other stakeholders
8. To ensure that sufficient health professional training is undertaken to meet national requirements and regulate the employment of all health professionals to ensure minimum standards of professional practice.	Number of health workers trained in specific areas Regulatory bodies established % of health facilities with adequate staff
9. To provide sufficient referral and tertiary health care services, including laboratory support services, to ensure that referral cases are treated effectively	Referral system developed Number of referral facilities with adequately providing referral services
10. To improve the organization and	% of policies, regulations, guidelines and

management system in the health sector	protocols developed
11. To increase women's access to information and to quality health services	% of women with access to information and quality health services Number of women utilising services
12. To increase the availability of mental and dental health services	Number of mental and dental health workers trained Number of districts providing mental and dental services
13. Environmental and occupational health	% of the population with access to safe water % of the population with access to sanitation Incidence of occupational health hazards Number of strategies, plans and regulations developed with other sectors

Gender Mainstreaming

The indicators presented in the table below will be used to monitor gender mainstreaming on education and health policies, programs and projects as well as assist in the measuring of gender needs assessment. These indicators are complementary to those presented by the Health and Education sectors.

Table 11.3: Gender Mainstreaming Performance Indicators in Education

Objectives	Performance indicator
1. To raise the population's interest in, and knowledge of basic educational needs a) Reduce the number of illiterate people within the adult population, with the emphasis on women; b) Enforce community and NGO's participation, particularly in the implementation of pre-school education;	Targeted community information promoting the benefits of female education % of women participants in educational campaigns Ratio of literate females to males Frequency of use of local role models and women's groups advocating female education
2. a) Increase educational access for all school-age children. b) Improve retention rates at all educational levels, for girls and boys, and in all social groups	Ratio of girls to boys in primary and secondary education Sex disaggregated data on participation and retention rates
3. Rationalise the school network	% of female teachers Distance from facilities
4. Improve the educational process at all levels from pre-school to university, focusing also on professional training for all, including girls and women, adults, and groups with special needs.	Level of enrolment at all grades by gender Sex disaggregated data on levels of educational attainment in subject areas Frequency of school attendance and retention at all grades by sex

5. Increase the efficiency of schools and the educational system.	Type and number of education schedules Relationship between school and first employment disaggregated data by sex
6. Compulsory sports education in schools.	Separate and adequate dressing rooms and toilet facilities for girls and boys Types of sports
7. Develop a curriculum appropriate to contemporary needs, reflecting indigenous culture, democracy, self-sufficiency, nationalism and non-discrimination.	Extent of gender stereotyping (in curricula and education material) Number of workshops for teachers on non-discrimination
8. Improve youth qualifications, particularly for those who have left school early, and for the unemployed, through professional training	Sex disaggregated employment profile Number and type of enrolment profile on non-formal education courses

Table 11.4: Gender Mainstreaming Performance Indicators in Health

Objectives	Performance indicator
1. To reduce maternal and infant mortality	HIV prevalence rate in 15-35 year old pregnant women % of reported cases of domestic violence against pregnant women
4. To improve reproductive health in East Timor	Inclusion of men in health education activities, in particular reproductive health % of male beneficiaries of reproductive health care
8. To ensure that sufficient health professional training is undertaken to meet national requirements, and regulate the employment of all health professionals to ensure minimum standards of professional practice.	Sex disaggregated data on the numbers and training levels of male and female health workers
11. To increase women's access to information, and to quality health services	% of women with access to information and quality health services (IEC Programs) % of female health workers available for consultation with women. Number of women utilising services
12. To increase the availability of mental and dental health services	Number of female health workers specifically trained in mental health, particularly on gender based violence

12. AGRICULTURE, FISHERIES AND FORESTRY

“In the medium-term the agricultural sector, more than most, provides opportunities for economic growth, exports, employment and improvements in social welfare throughout East Timor.”

VISION

12.1 By 2020 East Timor will have sustainable, competitive and prosperous agricultural, fisheries and forestry industries that support improved living standards for the nation's people.

INTRODUCTION

12.2 The agriculture sector comprises crop and livestock activities, fisheries and forestry. The sector is pre-eminent in East Timor, with the majority of the population deriving their livelihood from agricultural activities.

12.3 Prior to the violence that followed the September 1999 Independence Referendum, agriculture and its support industries employed more than 85% of the workforce, contributed 40% of GDP, and earned 90% of foreign exchange, mostly from coffee exports. Exports included coffee and live cattle, along with illegal exports of sandalwood. The key position of agriculture in the economy means that there remains a strong imperative to rebuild the sector for reasons of food security, employment and income generating opportunities. In the medium-term the agricultural sector, more than most, provides opportunities for economic growth, exports, employment and improvements in social welfare throughout East Timor.

12.4 The Ministry of Agriculture and Fisheries (MAF) is the Government agency with prime responsibility for the sector and its development. The private sector and NGOs are also very important to the future development of the sector and will provide many of the support services plus the commercial services required by agriculture, fisheries and forestry. Donor support for the sector was strong in the post-1999 period and the continuation of such support is critical in the medium-term.

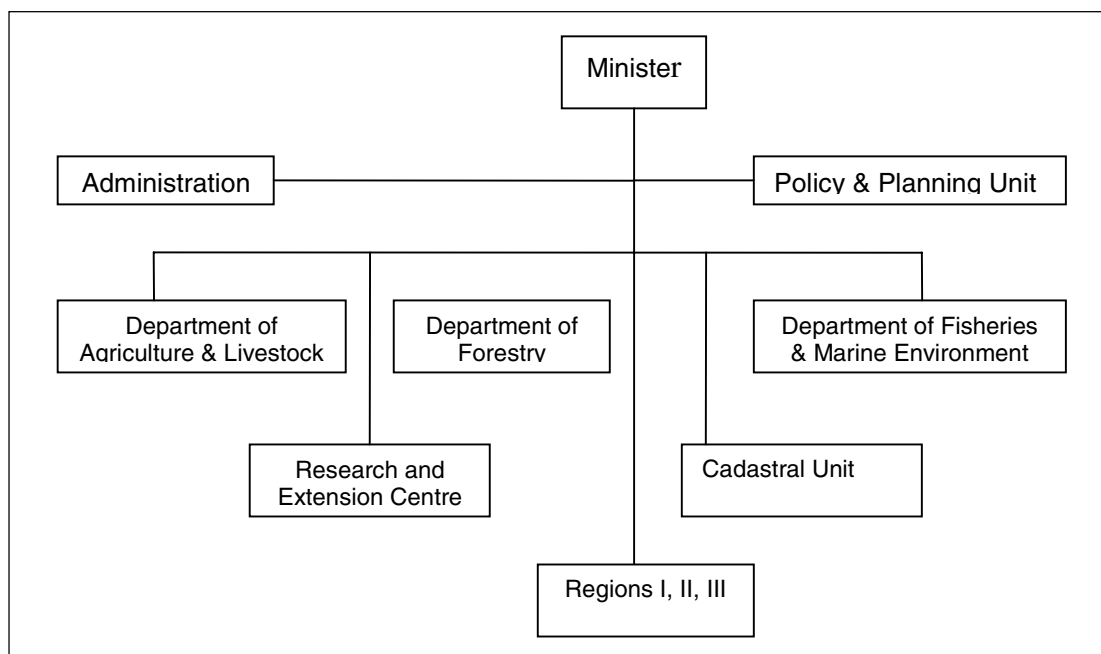
12.5 The structure of MAF is as shown in Figure 12.1, with the development programs and other activities implemented and administered predominantly on a Departmental basis. The activities and responsibilities of each Department or other functional area are as follows.

- a) **Administration:** includes Finance and Budget Support Services, Agricultural Planning, Bilateral and Multilateral Coordination, and Administration and Operational Support Services.
- b) **Policy and Planning Unit:** the agricultural sector's role as a key economic and social sector in the nation demands that the Ministry is able to formulate appropriate policies for the sector. MAF needs



- c) also to be capable of planning programs and projects that support the development of agriculture. At the time of preparing the Plan this Unit had been proposed but neither staff nor financial resources were available for implementation. This is an important Unit that requires initial support from a donor agency.
- d) **Department of Agriculture and Livestock:** includes the Divisions of Crop Production, Horticulture, Livestock, Irrigation and Water Management.
- e) **Department of Forestry:** includes Programs of Reforestation and Forest Rehabilitation, Forest Protection and Resources Management, and Forest Production and Utilisation.
- f) **Department of Fisheries and Marine Environment:** includes Programs of Fisheries and Marine Environment Management, Fisheries Industry Development, and Aquaculture.
- g) **Research and Extension Centre:** includes Programs of Geographic Information System (GIS), Information and Extension, and Research Laboratory.
- h) A separate Cadastral Unit.
- i) Three Regional Offices.

Figure 12.1: Structure of the Ministry of Agriculture and Fisheries



Poverty and the Agriculture Sector

12.6 Data from the poverty assessment undertaken in 2001 showed that agriculture is the main source of income in 94% of sucos, that 97% of sucos have farms, and that 57% have some irrigation. It was also found that the crops produced were predominantly used for self-consumption (subsistence), with less than 20% of sucos selling most of their rice or maize. Consequently, it appears that there is little surplus agricultural production in the nation. The cash

income of farm families in 2002 is generated mainly by the sale of chickens, pigs, eggs and some vegetables.

12.7 Analyses of poverty data indicate that food insecurity is faced by 18.6% of the population, or more than 154,000 people in East Timor. Furthermore, preliminary results from the Countrywide Consultation point to concern about food shortages and the need to increase both the quantity and quality of food crops.

12.8 The PA also serves to indicate that 41% of the population suffers from poverty, with those in rural areas more likely to be experiencing poverty. Agricultural policy and strategies, therefore, need to recognise the likelihood of seasonal food shortages and accord suitable priority to programs to overcome those shortages. Based on concern about food shortages, the medium-term development policy could focus on a goal of reducing poverty and food insecurity. The policy instruments to do so, however, require careful consideration. Strategies such as education and training, complemented with applied research and field demonstrations will improve farmer knowledge of adaptive technology. These are key platforms in the MAF's development programs. In addition, better access to inputs, along with improved access to markets via improved infrastructure will increase productivity in the medium to long term. Ultimately, economic growth provides the best solution to poverty, so that sustainable productivity improvements in agriculture, supporting increased employment and incomes, provides the best way forward.

12.9 Agriculture, particularly coffee, was responsible for more than 90% of export income during the Indonesian administration. Since 1999, however, the world price of coffee has slumped to historic lows, while inadequate quality control and poor crop husbandry typify the local industry. This serves also to highlight the narrow base of agricultural production for exports, although domestic production of food crops is well diversified. At present, East Timor has little or no comparative advantage in relation to the export of agricultural commodities. Current wage levels and the use of the US dollar as the medium of exchange render East Timor internationally uncompetitive on price alone. While MAF has an important role in this respect, so too do other arms of Government, such as the MoF.

12.10 The private sector has a vital role to play in the development of agriculture – including fisheries and forestry – in areas such as infrastructure development, transport, storage, manufacturing and processing, marketing, contract services, and the supply of inputs.

12.11 The production of agricultural produce in East Timor is indicated by reference to Table 12.1. As shown in the table, there appear to be inconsistencies in the data reported. The Poverty Assessment was, however, based on an extremely robust sample that provided data considered to be very reliable. It is these data that are considered to be most credible.

Table 12.1: Crop Production in 1997 and 2001

Commodity	Production (tons 1997) Indonesia	Yield (tons/ha 1997)	Production (tons 2001) MAF	Yield (tons/ha 2001)	Production (tons 2001) TLSS	Yield (tons/ha 2001)
Food Crops						
Rice	40,286	2.7	38,340	2.9	54,302	1.54
Maize	106,600	1.8	113,527	2.0	68,959	0.57
Peanuts	3,200	1.0	3,301	1.1	1,677	0.51
Soybeans	1,200	0.8			821	0.39
Cassava	66,500	4.0	68,237	4.2	55,349	0.61
Sweet Potato	16,200	3.9	43,976	4.1	31,663	0.47
Tree Crops						
Coffee dry bean	9,700	0.2	9,491	0.405	14,984	0.52
Coconuts	9,900	0.2	8,040	0.702	2,137	1.01
Candlenut	690	0.2	1,063	0.472	n.a.	n.a.
Cocoa	42	0.08			n.a.	n.a.
Cloves	12	0.05			n.a.	n.a.

Sources: Indonesian Central Bureau of Statistics, Livestock Service of East Timor, UNTAET, MAF's estimates. The 2001 TLSS.

MISSION

12.12 MAF's Mission is to efficiently deliver services to agricultural, fishing and forestry communities in East Timor, services that support improved productivity, income earning potential and exports and that, therefore, support improved social welfare in the rural areas of the nation, taking account of MAF's human, capital and financial resources.

GOALS

12.13 The goals of MAF are to:

- a) achieve food security and improve food self-sufficiency;
- b) diversify agricultural production and increase export earnings by the sector;
- c) develop agriculture predominantly on the basis of an integrated farming systems approach;
- d) facilitate agro-industrial development leading to increased processing and value-adding in-country;
- e) improve the quality of agricultural commodities produced in the nation;
- f) manage agriculture, fisheries and forestry resources in a way that supports sustainable production; and
- g) increase rural incomes, generate employment in rural areas and, consequently, reduce poverty and improve the welfare of rural communities.

GUIDING PRINCIPLES

12.14 The key guiding principles for development of the agriculture, fisheries and forestry sectors are as follows.

Sustainability

Agricultural, fisheries and forestry production activities will use natural, social and financial resources in a sustainable manner. This will be based on the well-known definition of sustainability from the 1983 World Conservation and Environmental Development Conference, which states:

“sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Efficiency

Agricultural, fisheries and forestry resources will be used in a manner that prevents waste, ensures they are employed in a cost-effective way, and maximises community benefits from their use⁴.

Equity

All farmers and fishers will have the same access to the services provided by MAF and other Government agencies, while the benefits of development will be distributed fairly across the nation and between generations.

Self-reliance

Government will encourage private sector initiatives and provide a conducive policy environment and support services to make agriculture and fisheries profitable and globally competitive.

Values

The values of East Timorese will be considered in development programs, which will take account of, and respect, cultural values and traditional practices such as farmers working together in crop production (*serbisu hamutuk*).

Participatory Development

Decision-making by MAF will be undertaken in consultation with major stakeholders in the sector.

KEY DEVELOPMENT INDICATORS

12.15 The key development indicators for the agricultural sector are as follows.

- a) Increased food production, rural incomes and per capita nutritional intakes. The increase in food production is possibly the most critical indicator. It will be

⁴ Efficiency has two aspects: allocative efficiency, requiring that the net benefits to the community from the use of resources are maximised; and productive efficiency, requiring that the technically most efficient (and least wasteful) mix of resources is used in production.

measured by both the overall amount of food production and food production per household.⁵

- b) Increased total area (hectares) planted to new crop varieties.
- c) Higher incomes and employment among farmers adopting a farming systems approach.
- d) Increased foreign exchange earnings from exports of quality agricultural and fisheries products.
- e) Higher proportion of irrigated land relative to total arable land
- f) Higher crop yields and productivity due to intensification, adoption of new varieties, farmer training, and improved genetic stock in livestock, aquaculture and fisheries.
- g) Increased number of Agricultural Service Centres, along with production and post-production infrastructure.
- h) Quality standard improvements in agriculture and fisheries products.
- i) Increased number of livestock volunteer workers, water user associations and other farmers' associations.
- j) New protected areas through improved resources management and development, terrestrial and marine parks, law enforcement and information dissemination.
- k) Enhanced forestry and fisheries products' utilisation.
- l) Increased production and quality of fishery products due to training, improved harvest and post-harvest fish handling and infrastructure development.

PROBLEMS AND CONSTRAINTS

12.16 The critical problems and constraints faced by MAF and the nation in relation to development of the agriculture sector include the following.

Capacity

MAF currently faces a lack of institutional and personnel capacity to undertake the wide range of tasks with which they are confronted, including the implementation, management and monitoring of donor-funded activities. The planned increase in staff numbers in 2002/03, along with capacity building for staff will address these issues to a partial extent.

Management and Entrepreneurial Skills

Farmers and fishers in East Timor are typified by low levels of management skills and entrepreneurial ability. This is a capacity constraint in the private sector component of the sector.

⁵ These two indicators relate food security at national level to food security at household level. The former measures the gross increase in food production while the latter measures the equitable distribution of increases in food production.

Data and Information

As stated in the Introduction, doubts remain about the veracity of the data which MAF has at its disposal. This imposes a constraint on planning and development in the sector. Results of the 2001 Poverty Assessment will be helpful in this context, but further, regular data collection will be important to policy and program development.

Financial Resources

MAF, like other Ministries, faces severe budgetary constraints for staffing, other recurrent costs and capital equipment. Therefore, it will continue to rely on donor support in the medium term to establish both a stock of needed capital equipment and a cadre of suitably trained staff.

Poor Transport, Communication, Marketing and Processing Infrastructure

Many sucos and aldeias cannot be reached by vehicles, and the majority have little or no communication facilities other than transistor radio. This imposes constraints both on development programs and extension activities, while also hindering the marketing of produce by isolated communities. Furthermore, value-adding is constrained by a lack of processing facilities.

Low Productivity

Agriculture in East Timor is typified by low productivity with, for example, average rice yields around 1.5 tons per hectare (compared, say, to the Philippines where average yields are around 4 tons per hectare). Low productivity results from farmers' shortage of cash, low input systems, inadequate knowledge of alternative production systems the continued use of traditional cultivation techniques, zero or minimal fertiliser use, and high seeding rates to guard against losses. Farm practices are also typified by risk-averse behaviour as farmers attempt to guarantee food for their families, which is rational under existing farming circumstances. Increasing productivity through introducing appropriate changes to production systems comprises one of the biggest challenges for MAF and its Department of Agriculture and Livestock.

Poor Quality Produce

The quality of agricultural commodities produced in East Timor is generally quite poor. This reduces farm incomes and competitiveness in both domestic and international markets.

State of Irrigation Schemes

Irrigation schemes were extensively damaged in 1999, although many were already in a poor state, due to lack of maintenance and weak structure. Water shortages and poor management are typical and, amongst other things, result in irrigated rice normally grown only as one crop per year.

Land Tenure

Lack of clarity about land tenure presents a constraint on commercial agricultural development, as well as on various support services that require access to land to become established. The current situation relating to land tenure remains to be ascertained in accordance with the Constitution of the country, but is currently typified by great uncertainty. There is no proper land registry, no recording or verification of land transactions, no transparent system for allocating or governing foreign interests in land use, and no framework in which to determine competing claims to land.

Comparative Advantage and Diversity

The principal export in past years from East Timor has been coffee. The current state of the international coffee market means, however, that the industry is currently non-viable. East Timor coffee formerly had a reputation as a quality product, but this reputation has been damaged in recent years by poor post-harvest handling and processing and the subsequent placement of an inferior product onto the international market. Furthermore, husbandry of the crop, in general, is poor to non-existent, leading to reduced productivity and quality. The present use of the US\$ means also that East Timorese exports are expensive on world markets – the nation has virtually no comparative advantages in international trade at the present time. Finally, the parlous state of the coffee industry shows the need to diversify the export base; reliance on only one or a small number of exports brings with it both price and production risks.

Fisheries Legislation and Management

East Timor is yet to develop and implement a Fisheries Act and to formulate the approaches to the management of various fisheries through fisheries management plans. A precautionary approach has been taken to the allocation of fishing rights because fish stocks are poorly understood. There is an urgent need to address these matters so that the nation can develop its fisheries in a manner that is economically, biologically and socially sustainable.

Forest Degradation

The forests of East Timor are in a very poor state, with previous logging activity, firewood collection, shifting agriculture and defoliation by the Indonesian military each contributing to the current status of forests. There is much to be done in terms of reforestation, the declaration and management of protected areas, and watershed protection. Reforestation is both long-term and expensive with domestic funding unlikely to be able to make a significant contribution to needed efforts.

Forestry Legislation

There is currently no forestry legislation, although UNTAET Regulation #2000/19 is designed to protect various natural areas, while UNTAET Regulation #2000/17 deals with the prohibition of logging and timber exports. There is, however, a need to develop appropriate legislation and further regulations as soon as practicable.

Quarantine

There is currently a lack of regulation and services for quarantine in East Timor. This is important to the whole nation, but of particular importance as it develops new agricultural industries, particularly those with an export focus.

STRATEGIC POLICY DIRECTIONS

12.17 The overall strategic policy directions for MAF in the next five years are designed to overcome these problems and constraints. They include the following.

- a) Establish effective and efficient technical support services to assist farm communities to increase food (particularly rice and maize), livestock and vegetable production.
- b) Introduce and develop new and adaptable technologies such as new cultivars and other inputs to enhance farm productivity. Such technologies will be complemented

with adaptive field experiments, field demonstrations and extensive training for farmers.

- c) Promote and develop diversification of agriculture through identification of potential niche markets for East Timor farm commodities in the region and in Europe and North America. This might include creating incentives to produce crops such as tropical fruits for both the domestic and export markets.
- d) Maintain and improve the existing irrigation systems for rice, along with other crops including horticulture and legumes.
- e) Promote the development of a sustainable fishing industry targeting both domestic and export markets. Such development will be supported by an appropriate regulatory framework, encouragement for local and foreign investment through appropriate fiscal arrangements, and protection of the nation's marine resources.
- f) Create services to assist farmers to develop and improve animal production (cattle, buffalo, goats and poultry). A regulatory framework that enforces appropriate sanitation standards in abattoirs and processing plants will be formulated.
- g) Develop and implement an extensive vaccination and sanitation campaign to prevent disease and improve animal production.
- h) Rehabilitate and improve infrastructure, including irrigation systems, silos, roads and markets. Such activities will be undertaken in conjunction with the Departments of Public Works and Transport.
- i) Promote crop rotation as critical in crop production systems to maximise profitable use of agricultural land, thereby increasing farm incomes and also improving soil structure.
- j) Increase coffee production through the systematic renovation of coffee plantations by pruning, or replacement of old trees with new *Arabica* plants and, where appropriate, by expanding the area of plantings. Simultaneously, niche markets will be sought in Asia, Europe and North America.
- k) Promote, develop and improve production from tree crops such as candlenut and coconut for both domestic and export markets.
- l) Develop and expand the reforestation program to increase forest cover and the production of commercially valuable trees for the timber industry.

PROGRAMS AND PROJECTS

12.18 The development programs and projects of the Ministry are presented under the three core departments of Crops and Livestock, Forestry and Fisheries and Marine Environment. Programs for the GIS and Cadastre Units of the Ministry are shown separately.

DEPARTMENT OF AGRICULTURE AND LIVESTOCK

Mission Statement

The mission of the Department of Agriculture and Livestock (DAL) is to improve the well-being of farm families through encouraging them to adopt profitable, productive and sustainable farming practices in relation to both crops and livestock.

12.19 The overarching goal of the DAL is a highly developed crops and livestock industry within farming communities typified by progressive and self-reliant farmers who are adopting profitable, productive, and sustainable farming systems practices. DAL will undertake a farming systems development approach that strongly recognises existing resource limitations, knowledge, skill and indigenous technologies. It will undertake its development activities in a manner that is specific to each agricultural ecosystem (upland, irrigated lowland, rain fed lowland, sloping lands, and cool-elevated lands). The focus will be on integrating crops and livestock production, along with adaptation and promotion of proven, profitable and sustainable farming systems technologies featuring efficient use of soil and irrigation water.

12.20 DAL consists of four divisions: Crop Production Division, Division of Horticulture, Livestock Division; and Division of Irrigation and Water Management.

Problems, Goals and Policies

12.21 The key problems confronted by the DAL are the following.

- a) Low productivity, production and value of food crops, cash crops and livestock.
- b) Poor animal husbandry and animal health.
- c) Irrigation schemes are, overall, in a state of disrepair and road access in rural areas is deficient.
- d) Transport and marketing infrastructure to serve post-harvest distribution is limited or non-existent.
- e) The coffee industry is in urgent need of revitalisation.
- f) Lack of know-how about improved agricultural techniques and best practices.

12.22 Consideration of these problems means that three goals are of particular importance to the DAL. These are to:

- a) increase the productivity of the crop and livestock sectors, focusing initially on rice, maize, fruit and vegetables, coffee and chickens;
- b) make more intensive use of agricultural land; and
- c) improve the quality of agricultural produce.

12.23 The three principal policy options for achieving these goals are to:

- a) increase information provision and training for farmers;
- b) ensure the availability of better inputs such as seed and livestock medicines; and
- c) rehabilitate irrigation schemes and coffee plantings.

12.24 To put these policies into practice the Department, through its Divisions, will implement the various programs described below. The projects to be implemented under each program, with the actual or proposed sources of funding and the current status of individual projects are as shown in Tables 12.24 – 12.28.

Crop Production Division

Program 1: Enhancement of Food Crops Production

Program 2: Enhancement of Horticultural Crop Production

Program 3: Enhancement of Industrial Crops Production

Program 4: Support to Farmers' Associations

Program 5: Crop Protection

Program 1: Enhancement of Food Crops Production

12.25 The goal of this program is to increase the productivity, overall production and quality of important food crops grown in East Timor. The program will be focused on food crops, mainly rice and maize, which are grown by 23% and 81%, respectively, of East Timorese households. The current low yields and productivity of these two crops results from the use of poor seeds and varieties that grow poorly under the existing soil and climatic conditions; and inadequate application of improved practices that are already tested and continue to be used by other farmers in Asia. Program activities will include on-farm demonstrations of certified seed use; improved production practices, cropping systems and crop diversification; and variety testing and seed multiplication of newly selected varieties of rice and maize, as well as *Phaseolus*, mungbean, soybean, cowpea, sweet potato, peanut, and cassava. The performance targets, after five years of the program, are as shown in Table 12.2.

Table 12.2: Performance Targets, Enhancement of Food Crops Production: 2002-2007

Performance Targets (at the end of 5 years)	Measurement
50% reduction in number of months with insufficient food supply among rural households	National poverty/nutrition surveys
Stabilisation of deficit in rice supply	National poverty/nutrition surveys and MAF data
Development of 3 model rice villages	MAF monitoring records
Release of new food crop varieties: - 2 varieties of new irrigated lowland rice - 3 new varieties of maize - 1 new variety of mungbean, soybean & cowpea - 3 new varieties of peanut - 3 new varieties of sweet potato and seed pieces distributed to 5,000 households	MAF monitoring records

Program 2: Enhancement of Horticultural Crop Production

12.26 The goal of this program is to increase the production and quality of fruit crops grown by East Timorese for both food and cash. This program does not include the ‘industrial’ crops such as coffee. A large number of households in East Timor are dependent on the production of horticultural crops, from the relatively dry lowland areas in the north, to the humid and cool elevated lands in the mountainous region, through to the relatively humid lowlands in the south. The recent household poverty assessment showed that richer farmers tend to grow proportionally more fruit trees than poorer farmers, indicating that development of horticultural production might have an impact on poverty alleviation. Initial activities include improvement of the germplasm of suitable fruit crops, training selected farmers in commercial nursery operation, conducting on-farm demonstrations about improved cultural practices, and seed or seedling multiplication of the best performing newly recommended varieties. Performance targets are shown in Table 12.3.

Table 12.3: Performance Targets, Enhancement of Horticultural Crops Production

Performance Targets (for FY02/03)	Measurement
Two plant nurseries (1 in the highlands and 1 in the lowlands) for selected varieties of fruit crops to use as sources of seeds or planting materials for propagation and training of plant nursery operators. Identification of plants.	Crop Production Division records

Program 3: Enhancement of Industrial Crops Production

12.27 The goal of this program is to enhance and develop industrial crops that will contribute to income earning opportunities and employment in rural areas, and to export earnings for the nation. The program will focus on crops that involve value-adding activities and support: (a) the development of industrial crops such as coffee, candlenut, coconut, sugarcane, Manila hemp, and vanilla; (b) germplasm collection, identification, and evaluation; (c) seed or seedling multiplication; (d) on-farm demonstration of best practices in orchard management; (e) processing of value-added products; and (f) training of farmers in nursery and planting operations.

12.28 An estimated 25,000 farm families derive a substantial portion of their income from coffee, while another 15,000 obtain a small portion of their income from the crop. Consequently, about 40,000 families earn at least some cash income from coffee, meaning that around 200,000 people (given that the average family size is five persons) or a quarter of the population rely on the crop for at least a portion of their livelihood. Seasonal off-farm labour is also employed in the transport and processing of coffee. While not the only activity, coffee production will be an important component of the program because the crop is already grown and well understood. Furthermore, coffee is – at least for the present – heavily supported by aid donors and the MAF program will complement donor activities. Donor support includes:

- a) USAID: NCBA Timor Economic Rehabilitation and Development Project (TERADP);
- b) Portugal: Replanting of Coffee Fields and Research on Coffee Production;

- c) Portugal: Integrated Rehabilitation and Construction of Coffee Processing Facilities;
- d) USAID: Abaca Pilot in Liquica (under Economic Recovery Program: Agriculture).

Table 12.4: Performance Targets, Enhancement of Industrial Crops Production:

Performance Targets (for FY02/03)	Measurement
3 batches of farmers trained in the production of high quality processed coffee	Crop Production Division records
5 demonstration sites on proper rehabilitation of coffee orchards	Crop Production Division records
2 nurseries of selected varieties established	Crop Production Division records

Program 4: Support to Farmers' Associations

12.29 The goal of this program is to facilitate the marketing of agricultural inputs and products, through private commercial agricultural associations owned by farmers. This program is being supported by the TFET-funded Agricultural Rehabilitation Program I (ARPI) and ARP II projects, and is helping establish three Agriculture Service Centres (ASCs) in Bobonaro, Viqueque, and Aileu, each serving 3,500-4,000 farmers. The total beneficiary population is close to 10,000 farmers. The ASCs will facilitate: (a) marketing and trading of agricultural products (including rice in Bobonaro, candlenuts and copra in Viqueque, and coffee in Aileu); (b) sales of agricultural inputs (such as seeds, fertilisers, pesticides, and farm tools); and (c) transport of agricultural products from farm sites to markets. Apart from staff time, all project costs are met under TFET funding; MAF staff will play a counterpart role and support the in-field activities of the program. Performance targets are shown in Table 12.5.

Table 12.5: Performance Targets, Support to Farmers' Associations

Performance Targets	Measurement
Three Agriculture Service Centres established and operational	ARP II monitoring records
Agriculture inputs and transportation available, and marketing network re-established for nearly 10,000 farmers	ARP II monitoring records

Program 5: Crop Protection

12.30 The goal of the Crop Protection Program is to support the improvement of food supply at the household level by controlling common pests and diseases (including weeds) that lead to loss of yields in the field and during storage of crops. Essential functions include monitoring common pests and diseases, and informing farmers about how to act in a timely fashion to control common pests, particularly rats, and reduce their impact. The program will also administer and operate the plant quarantine program that will prevent entry of new pests and diseases into East Timor, and regulate the importation and use of pesticides by farmers. Given that this is an integrated program, no projects are specified.

Table 12.6: Performance Targets, Crop Protection

Performance Targets	Measurement
13 groups of farmers trained on proper use of pesticides, preparation of pesticide sprays and proper disposal of pesticide containers.	Crop Production Division records
Regulation on importation and sale of pesticides; plant quarantine regulation drafted	Crop Production Division records
Regular radio program on pest management, proper use of pesticides and information on hazardous and toxic agricultural chemicals produced. Trials on eradication of Siam Weed	Crop Production Division records

Livestock Division

Program 1: Development of Livestock Production

Program 2: Prevention and Eradication of Livestock Diseases

Program 1: Development of Livestock Production

12.31 The goals of this program are to increase food production, animal protein consumption, and income through provision of support to farmers in establishing small chicken hatcheries, increasing cattle production, and improving the marketing of chickens and cattle. Assistance will be provided to approximately 1,000 chicken owners and 500 livestock owners, with a particular focus on women in the case of chicken production.

Table 12.7: Performance Targets, Development of Livestock Production

Performance Targets	Measurement
30% increase in total meat and egg production from current levels	Consumption and nutrition records
20% increase in cattle population (no. head)	Livestock Division records

Program 2: Prevention and Eradication of Livestock Diseases

12.32 The goal of this program is to improve the animal health and productivity of livestock in East Timor, leading to increased farmers' incomes. MAF will support the TFET-funded ARP II project in the carrying out of: (a) essential vaccination campaigns for cattle, buffaloes, pigs and chickens; and (b) help develop a system of private Village Livestock Workers (VLW) to provide assistance to local farmers in basic veterinary services. The target beneficiaries include all the households owning cattle, buffaloes, pigs and chickens in East Timor, in addition to 200 sucos where VLWs will be trained. Donor support for this program is currently available under the TFET Second Agriculture Rehabilitation Project (ARP II). The continuation of this program is an imperative for livestock production in East Timor and the wider region. Activities such as

vaccination for Newcastle Disease in chickens will make a significant contribution to poverty reduction, nutrition and income earning opportunities.

Table 12.8: Performance Targets, Development of Livestock Production

Performance Targets	Measurement
80% of target adult population of buffaloes and cattle (approx. 150,000), and 270,000 pigs vaccinated	Livestock Division Records
500,000 doses of Newcastle Disease vaccine distributed to communities	Livestock Division Records

Irrigation Division

Program 1: Rehabilitation of Existing Irrigation Schemes

Program 2: Establishment of Rural Water Harvesting Systems

Program 3: Maintenance and Repair Work

Program 4: Sector Management Recovery and Development

Program 1: Rehabilitation of Existing Irrigation Schemes

12.33 The goal of this program is to increase agricultural production in lowland areas and stimulate off-farm employment through the rehabilitation of community irrigation schemes, agricultural access roads, and selected irrigation schemes that have suffered light-to-medium damaged but have been assessed as viable from an economic, social, and environmental perspective. CFET resources will be used to cover minor operating costs and MAF staff inputs for the supervision of these works, which will be funded by TFET-ARP II and the UNOPS/UNDP Urgent Rehabilitation II Project. The target beneficiaries are estimated at 18,500 rural households. Increased rice production from the rehabilitation of the larger irrigation schemes is estimated to benefit about 2,200 farming families. Donor support includes:

- a) TFET Second Agriculture Rehabilitation Project;
- b) UNDP/UNOPS Urgent Rehabilitation II; and
- c) CIDA – Rehabilitation of Water Irrigation Channel in Iliomar.

Table 12.9: Performance Targets, Rehabilitation of Existing Irrigation Schemes

Performance Targets	Measurement
Rice yield increasing from 1.5 to 2.0 MT/ha at the end of the first year, 2-4 MT at the end of 3 years, and increasing to more than 4.0 MT/ha after five years	Irrigation Division monitoring records and field surveys

Program 2: Establishment of Rural Water Harvesting Systems

12.34 The goal of this proposed new program is to improve the reliability of irrigation water supplies for upland communities, which are particularly vulnerable to water shortages during the dry season. The program will be piloted in two communities during FY02/03, using a limited CFET budget of \$5,000 for the construction of vaults and tanks in vegetable areas in the highlands of East Timor. Based on lessons learned from this pilot, the program will be expanded into a specific project in FY03/04.

Table 12.10: Performance Targets, Establishment of Rural Water Harvesting Systems

Performance Targets	Measurement
Construction of small irrigation water tanks and vaults in 2 pilot communities	Irrigation Division monitoring records

Program 3: Maintenance and Repair Work

12.35 The goal of this program is to provide essential maintenance and repair for irrigation schemes rehabilitated in previous years under donor-funded projects. The costs of annual operation and maintenance of irrigation schemes are estimated at about 10% of the capital investment. While most of the schemes rehabilitated in the past have been community tertiary canals, meaning that operation and maintenance costs are borne by the community, there is a need to allocate modest CFET funding (US\$45,000) to essential maintenance and repair. The targeted beneficiaries would be communities in a 7,700 ha area previously rehabilitated under ARP I.

Table 11.11: Performance Targets, Maintenance and Repair Work

Performance Targets	Measurement
Maintenance and repair work covering 2,100 hectares	Irrigation Division monitoring records

Program 4: Sector Management Recovery and Development

12.36 Under this program, the MAF Irrigation Division will complete two essential policy studies, one on Water Users Associations, and a second on broader Water Management Policy. These studies will develop the Government's policy towards operation and maintenance of irrigation schemes, such as the share of communities' responsibilities for the schemes, and the incentives and policies influencing the use of water, one of East Timor's most critical natural resources. MAF staff will contribute to the formulation of these essential policies. Donor support for technical aspects is provided under:

- a) TFET: Second Agriculture Rehabilitation Project

Table 12.12: Performance Targets, Sector Management Recovery and Development

Performance Targets	Measurement
Two draft policy documents on Water Users Associations and broader Water Management Policy	Irrigation Division monitoring records

DEPARTMENT OF FISHERIES AND MARINE ENVIRONMENT**Mission Statement**

The mission of the Department of Fisheries and Marine Environment (FME) is to lead sustainable development of the fishing and aquaculture industries in East Timor and ensure they play a significant role in national food security and income generation.

12.37 The overarching goal of the FME is to lead the development of the nation's aquatic resources in a sustainable fashion, while providing opportunities for coastal communities to benefit from such development. Current and planned development is based on the *Strategic Plan for the Fisheries of East Timor*. The Strategic Plan addresses major issues facing the fishing industry, including: (1) the declaration of fishing boundaries between East Timor, Australia and Indonesia; (2) the licensing of offshore commercial operations; and (3) the definition of East Timor's various fisheries. The FME will focus on: (a) training for capacity building; (b) development of appropriate administrative protocols to ensure coordination of all fisheries programs and activities; (c) maximising the value of the catch by improving fish handling, transport, storage, processing and marketing; and (d) upgrading the database of fishing capacity held at FME. The FME will also work with Legal Affairs and other Government departments to ensure that a fishing zone for East Timor is defined, declared and ratified as soon as practicable.

Problems, Goals and Policies

12.38 The key problems confronted by the Department are the following.

- a) No Fisheries Act and legislation
- b) No fisheries management plans
- c) No international maritime boundaries
- d) Lack of staff skills
- e) Lack of fisheries data
- f) Underdeveloped fresh water and marine and brackishwater aquaculture sector
- g) No fisheries monitoring capability or activities at present
- h) Facilities destroyed in September, 1999
- i) Lack of shore-based industry
- j) Under-developed harvest sector

12.39 Based on these problems, the goals of the FME are to:

- a) establish and implement a Fisheries Act and accompanying legislation;
- b) establish a profitable private sector-based fishing industry that maximises sustainable economic returns to East Timor;
- c) establish a viable aquaculture industry;
- d) provide sustainable marine recreational activities for the recreational fishing, charter fishing and dive tour sectors;
- e) assert jurisdiction and control over the living marine resources in the seas of East Timor;
- f) develop the capacity of the staff of the FME;
- g) sustain and enhance the aquatic resources of East Timor and their supporting ecosystems; and
- h) operate an efficient and accountable FME.

12.40 The policy options for achieving these goals include the following:

- a) develop appropriate legislation, regulations and management instruments for sustainable development of fisheries in East Timor;
- b) develop each fishery via a step-wise, precautionary approach;
- c) develop fisheries-specific management and development plans consistent with the principles of ecologically sustainable development (ESD);
- d) establish a responsive extension system that works closely with commercial, private and subsistence fishers;
- e) provide a regulatory system that promotes community-based management for reef and coastal fisheries, including the development of local by-laws that protect the interests and user-rights of the community;
- f) rehabilitate the former government run Ikan Mas hatcheries, and supply assistance, technical advice, and fish fry to local fish farmers on a cost-recovery basis; and
- g) provide staff training across the full spectrum of fisheries-related disciplines, including socio-economics and sustainable fishing practices, thereby upgrading staff skills to meet the needs of a modern fisheries sector.

12.41 To put these policies into practice the FME will implement the programs described below. The projects to be implemented under each program, with the actual or proposed sources of funding and the current status of individual projects are as shown in Table 12.26.

Program 1: Fisheries and Marine Environment Management

Program 2: Fisheries Industry Development

Program 3: Aquaculture

Program 1: Fisheries and Marine Environment Management

12.42 The goals of this program are: (a) the creation of a policy and legislative environment, backed up by appropriate stock assessments, monitoring and data that supports sustainable development of East Timor's fisheries; and (b) co-management of fisheries resources, involving coastal communities, the Department and other stakeholders. CFET funds will be used predominantly for staff inputs, with staff working mostly on programs that are supported by donors. The support from donors is received under:

- a) AusAID: Fisheries Management Planning
- b) AusAID: Survey of Nearshore Fish Stocks – Dili Harbor
- c) TFET: Second Agriculture Rehabilitation Project

Table 12.13: Performance Targets, Fisheries and Marine Environment Management

Performance Targets (at the end of 5 years)	Measurement
50% overall increase in production	Records of catches at landing sites
25% increase in industry employment	National employment surveys

Program 2: Fisheries Industry Development

12.43 The goal of this program is to facilitate the development of the fisheries sector in East Timor so that it contributes to economic growth, incomes, employment and export earnings. The program builds on the initiatives in Program 1 by supporting the growth of a commercial fishing industry based on the legislation, regulations, management protocols and marine boundaries promulgated under that Program.

Table 12.14: Performance Targets, Fisheries Industry Development

Performance Targets (at the end of 5 years)	Measurement
Quantum of facilities re-established	Monitoring of rehabilitation
Increase in annual revenues from leasing of services at the fishery port	Income realised by the Government from the port & its operations

Program 3: Aquaculture

12.44 The overarching goal of this program is to develop and expand a local aquaculture industry, both freshwater and marine, to enhance food security and add to local and export incomes. The program is comprised of one project at the current time, with a principal goal to make fish fry available so that the aquaculture industry can redevelop in East Timor and become an important provider of food, incomes and employment. Prior to the 1999 violence five fish hatcheries were owned and managed by the East Timor Fisheries Authority. These hatcheries supplied fish fry to both small and large fish farmers. Without at least one freshwater fish hatchery and one marine/brackishwater hatchery, East Timor runs the risk of losing potential investment and employment opportunities. Revenue from fish farming would not be realised and

food security issues heightened. Ultimately, the aim is that the management and operation of such facilities will be taken over by the private sector with FME providing research and other professional inputs, but not taking any commercial risks.

Table 12.15: Performance Targets, Aquaculture

Performance Targets	Measurement
Expansion in the aquaculture industry	Annual aquaculture production
Number of privatised hatcheries	Number of hatcheries in the nation

DEPARTMENT OF FORESTRY

Mission Statement

The mission of the Department of Forestry (DoF) is to ensure the sustainable management of East Timor's forest resources through effective planning, capacity building, community participation and the formulation of appropriate policies and legislation.

11.45 The overarching goal of the DoF is to develop appropriate policies, legislation and management strategies as the basis for the formulation and implementation of forestry management plans to facilitate the sustainable management of forest resources in East Timor. DoF will work with other stakeholders, including rural communities who are reliant on forest resources, in its management and development programs. The Department will, therefore, encourage the participation of rural communities and other stakeholders in all aspects of sustainable forest resources management in the nation.

Problems, Goals and Policies

12.46 The key problems confronted by DoF are the following.

- a) No forestry legislation and minimal regulation
- b) Inability to police those regulations that do exist
- c) No forestry management strategies yet in place
- d) Lack of staff capacity and skills
- e) Lack of forestry data
- f) Collection of firewood and lack of action on watershed protection

12.47 Consequently, the goals of the DoF are to:

- a) collect and analyse information on forestry resources in East Timor, to be used as the basis of planning and decision making;
- b) develop essential forestry policies, legislation and management strategies;
- c) prepare a Forestry Master Management Plan and develop and implement Action Plans based on that Plan;

- d) build the capacity of the national staff to implement forestry programs;
- e) promote reforestation and sustainable land management practices in East Timor for erosion control, soil rehabilitation, watershed protection and subsistence use;
- f) provide effective and efficient management programs for sustainable forestry, with emphasis on forest lands, their resources, and protected natural areas; and
- g) develop strategies that could encourage the participation of rural communities and other stakeholders in planning and decision making related to forest resources management.

12.48 The policy options for achieving these goals include the following:

- a) develop appropriate legislation, regulations and management instruments for sustainable development of forestry in East Timor;
- b) develop forestry management and development plans consistent with the principles of ecologically sustainable development (ESD);
- c) promote and support community-based management of forest resources and water source areas;
- d) support staff training across the full spectrum of forestry-related activities;
- e) establish the protocols and facilities for the collection, collation and analysis of forestry data; and
- f) support the development of a number of protected natural areas throughout East Timor.

12.49 The Department will implement the various programs described below in response to the needs summarised above. The projects to be implemented under each program, with the actual or proposed sources of funding and the current status of individual projects are as shown in Table 12.24.

Program 1. Reforestation and Forest Rehabilitation

Program 2. Forest Protection and Forest Resources Management

Program 3. Forest Production and Utilisation

Program 1: Reforestation and Forest Rehabilitation

12.50 The aims in this program are to: (a) reforest degraded areas in East Timor with valuable local timber species, in particular sandalwood; (b) restore the ecological balance of degraded areas and arrest the environmental problems resulting from their degraded condition (while promoting the development of forest resources in those areas); and (c) encourage community participation in the rehabilitation of East Timor's degraded forest areas. Reforestation is an immediate response to widespread upland degradation. An estimated 85% of upland areas are denuded and devastated due to forest fires and non-environmental friendly upland management (including widespread collection of firewood). In line with this, Agro-forestry techniques are considered an alternative to slash and burn cultivation, as farmers are able to produce forest trees, fruit trees, and cash crops, including livestock. Aside from the uplands, mangrove areas

have been exploited for fuel wood and other products. Mangroves play a major role as coastal habitats and hence are a priority for rehabilitation. Donor support for this program comprises:

- a) TFET: Second Agriculture Rehabilitation Project (Pilot Participatory Development and Natural Resources Management)
- b) Portugal: Reforestation and Alternative Cash Crops
- c) CIDA: Tree Nursery, Reforestation and Agroforestry in Seloi
- d) CIDA/CARE: Community-based Natural Resources Management in Covalima and Dili

Table 12.16: Performance Targets, Reforestation and Forest Rehabilitation

Performance Targets	Measurement
No. of hectares of reforested upland and rehabilitated mangrove areas	Forestry Division monitoring records
No. of partnerships between NGOs and MAF staff	Forestry Division monitoring records
No. of Participatory Action Plans for Natural Resource Management	Forestry Division monitoring records

12.51 This program is focused on the protection and conservation of the forest resources of East Timor, through: (a) increased public awareness; (b) development of a framework for management of watershed areas; and (c) protection and conservation of the biodiversity and socio-cultural significance of important natural sites. The program will cover projects in the areas of watershed management, protected natural areas (PNA), and public information, building upon the existing watershed management activities started by MAF in FY01/02. Target beneficiaries include the communities within the targeted watershed and protected areas, farmers wishing to use resources of the protected area and East Timor in general through the protection of its biodiversity and cultural heritage. The expected outcomes of the program include a greater understanding amongst communities of regulations on protected areas, involvement in community-based Integrated Management Planning, and raised public awareness. Donor support will be provided under:

- a) AusAID: Agriculture and Fisheries Community Watershed Project
- b) TFET: Second Agriculture Rehabilitation Project (Pilot Participatory Development and NRM component)

Table 12.17: Performance Information, Forest Protection and Forest Resources Management

Performance Targets	Measurement
No. of Watershed Management Plan Development proposals prepared	Forestry Division monitoring records
No. of PNA boundary maps prepared	Forestry Division monitoring records

Program 3: Forest Production and Utilisation

12.52 The goal of this program is to develop and promote the sustainable use of timber and non-timber forest products in East Timor. It includes the undertaking of a forestry inventory on key production areas, dissemination and discussion of a revised Forestry Policy and Strategy, public hearings in support of draft directives on tree crops and non-timber forest products, and enforcement of forest laws. The effective conservation of natural resources relies largely on communities' wise use of those resources and their awareness and participation in resource management. This program will rely heavily on public information and consultation.

Table 12.18: Performance Information, Forest Production and Utilisation

Performance Targets	Measurement
No. of directives and workshop proceedings reflecting issues and solutions proposed by the communities	Forestry Division monitoring records

RESEARCH AND EXTENSION CENTRE

12.53 The Research and Extension Centre is a "service centre" to the technical Departments of the Ministry of Agriculture and Fisheries and, consequently, no particular mission or problems, goals and policies are laid out for the Centre as it is structured to respond to the needs of the other areas of MAF.

12.54 The goal of the Research and Extension Centre is to provide support in the derivation and dissemination of important technical, management and other information to clients of MAF through its Departments. The Centre will combine the crucial functions of information and GIS systems with a small laboratory for soil, plant and pest analyses. CFET funding will be allocated to MAF staff inputs to the programs supported by the centre, operating costs for the equipment held by the Geographic Information System (GIS) program, and a small amount of capital expenditures for the purchase of essential laboratory equipment and communications equipment for the GIS program.

12.55 The Research and Extension Centre will have three essential programs:

Program 1. Research and Laboratory

Program 2. Information and Extension

Program 3. Geographic Information System (GIS)

Program 1: Research and Laboratory

12.56 The goal of this program is to improve household and food security of farm families through the provision of basic diagnostic laboratory services for soil quality, pests and diseases. Technical advice for optimising crop yields through effective soil and fertiliser management and protection of crops and livestock against pests and diseases are some of the services that are often provided by the public sector. This program will reduce risks by facilitating quick responses to inquiries about soil quality, pests and diseases, along with location-specific fertiliser recommendations.

Table 12.19: Performance Information, Research and Laboratory

Performance Targets	Measurement
Recommended fertilisation to improve soil nutrient limitations in problem soils & screening for adaptability of crops in 3 agro-ecological sites, plus a schedule of optimal planting times	Research and Extension Centre monitoring records
Data on soil physical and chemical characteristics analysed for a minimum of 50 farmers in 13 Districts	Research and Extension Centre monitoring records
Insect pests problems identified and recommendations provided to 30% of farmer-clients	Research and Extension Centre monitoring records
Weed species identified and proper control measures recommended	Research and Extension Centre monitoring records
Information materials on common pests and diseases produced	Research and Extension Centre monitoring records

Program 2: Information and Extension

12.57 The goal of this program is to provide essential agricultural information and transfer of knowledge and skills to farmers. The program will help develop information programs addressing specific needs of farmers (such as market and climatic conditions, timing of vaccination campaigns, technical advice), disseminated through appropriate channels, such as radio, community centres, Churches, markets, pamphlets, and mobile audio-visual units. The results of the recent poverty assessment indicated that access to better information is associated with higher income amongst farmers. In addition to information dissemination, this program would help link MAF with international networks of the Consultative Group for International Agriculture Research (CGIAR) through the internet. In a country with isolated communities and limited Government resources, establishing electronic linkages with international centres of excellence will become increasingly important. Such links would enable East Timorese staff, for example, to contact international experts via the Internet to diagnose new plants or animal diseases, or identify new crop varieties. Donor support for this program comprises:

- a) TFET Second Agriculture Rehabilitation Project

Table 12.20: Performance Information, Information and Extension

Performance Targets (for 5 years)	Measurement
4 printed information documents on rice, 2 on maize, 2 on root crops, 2 on beans; weekly 5-minute radio reports on improved farming practices.	Research and Extension Centre monitoring records
Weekly agriculture radio program on agricultural projects and technology	Research and Extension Centre monitoring records
CGIAR links established and operational	Research and Extension Centre monitoring records

Program 3: Geographic Information System

12.58 The goal of this program is to support MAF in the planning and delivery of geographic information and high quality maps on current land use, land use potential, agricultural production and production trends, and socio-economic information, as a basis for natural resource management and decision making. The GIS program aims to: (a) develop a cost recovery GIS interpretation and mapping service for non-MAF users; (b) expand and provide assistance with database development and mapping for land suitability based on available soils information; (c) produce thematic maps of land capability for agricultural expansion; (d) expand the GIS network to other Ministry departments and integrate the individual units' databases; and (e) train staff in database access, data entry, accessibility, desktop mapping, and evaluation of data reliability. Donor support for this program comprises:

- a) AusAID Agriculture/Forestry Landuse Mapping and GIS project

Table 12.21: Performance Information, Geographic Information System

Performance Targets	Measurement
Train 3 MAF staff in database structure, data entry, accessibility, and evaluation of data reliability	GIS program monitoring records
Develop and institute a cost recovery system	GIS program monitoring records
Expand and provide assistance with database and mapping for land suitability	GIS program monitoring records
Produce thematic maps of land capability	GIS program monitoring records
Integrate individual Departmental databases	GIS program monitoring records

CADASTRAL UNIT

12.59 The Cadastral Unit is responsible for: (a) maintaining the National Geodesian System, cartographic projections, elevation data, support to hydrographic work and delineation of the territory; (b) acquisition and processing of aerial photographs, analysis of quality of national cartography, certification of professionals in the areas of topography and cartography, and standardisation of maps; (c) maintaining the National Building Register, including production of identification cards for building registration, establishment of norms and technical specifications,

issuance of licenses, inspection of licensed buildings, and enforcement of regulations related to building codes; (d) processing of geographic information, including satellite imagery, and support to planning; and (e) maintenance of the national Global Position System stations, including provision of topographic and geographic information to the general public.

12.60 The Cadastral Unit has one essential program: Geography and Cadastre

Program 1: Geography and Cadastre

12.61 The objectives of the Geography and Cadastre program are to maintain the National Geodesic System, maintain cartographic coverage, implement the National Building, Rural and Urban Cadastres, issue licenses, maintain geo-reference information, and generally cooperate with other institutions to assist them in the areas of geodesic, cartography and cadastre services. The Geography and Cadastre program proposes the following activities: (1) capacity building and training; (2) developing an inventory of the previous geodetic points provided by Portugal and Indonesia; (3) data collection; and (4) Sub-village administration survey.

Table 12.22: Performance Information, Geography and Cadastre

Performance Targets	Measurement
Geography: maintenance, provide geodetic points throughout the country & finalise border demarcation between Indonesia & East Timor; Sub-village administration survey	a. Orde 0:6 geodetic points b. Orde 1:25 geodetic points c. Orde 2:50 geodetic points d. Orde 3:100 geodetic points Approx. 250 km for 6 districts: Lautem, Baucau, Viqueque, Manatuto, Dili & Liquica
Cadastre: survey the land parcels in Dili for tax and/or certification	2,500 land parcels in first step
Mapping & GIS: produce basic topographic maps	250-500 maps at different scales (1:5000, 1:100000, 1:25000, etc.)

POLICY AND PLANNING UNIT

12.62 The Policy and Planning Unit is a planned new initiative of MAF. Because agricultural development is so critical to the development of East Timor and the well-being of the nation's people, and because human and financial resources are scarce, MAF needs to be able to carefully plan, implement and monitor those programs and projects for which it is responsible. Skills in areas such as benefit-cost analysis, used to prioritise projects, and in monitoring and evaluation of budgets and projects will be amongst the required planning expertise.

Furthermore, policy development is extremely important in the sector. Agriculture, fisheries and forestry development all rely heavily on the development of appropriate policies in a wide range of areas such as fisheries management and licensing and user-pays requirements in the sub-sector. The allocation of the economic rents appropriated by commercial fishers is also an important policy question to be addressed. In agriculture, policies in areas such as import duties,

irrigation water allocation, support for certain production activities, input subsidies and marketing arrangements might be amongst key matters to be analysed.

12.64 It is proposed that donor funding is sought in 2002/03 for support of the Policy and Planning Unit. The Unit would be staffed by an international advisor with appropriate expertise, along with a small number of local staff from MAF who, after a period of 6-12 months, would be expected to take over the running of the Unit. The establishment of systems for tasks such as monitoring and evaluation would be important activities in the start-up phase, as would the training of local staff in areas such as benefit-cost analysis.

Table 12.23: Performance Information, Policy and Planning Unit

Performance Targets	Measurement
Establishment of appropriate systems for monitoring & evaluation and project appraisal	Systems established and running within the first 6 months of the project
Training of local staff in monitoring & evaluation, benefit-cost analysis and project planning, including use of appropriate software	Number of staff trained in each 12 month period.
Mapping & GIS: produce basic topographic maps	250-500 maps at different scales (1:5000, 1:100000, 1:25000, etc.)

Table 12.24: Projects of the Crop Production Division, Department of Agriculture and Livestock, Ministry of Agriculture and Fisheries, 2002/03-2006/07

Program/Projects	Cost US\$'000 2002 – 2006	Funding Sources (actual & potential)	Funding Available?	Implementation Period
<u>Crop Production Division</u>				
Program 1: Enhancement of Food Crops Production				
Project 1.1 Enhancement of Food Crops Production	180	CFET	YES	2001-2006
Project 1.2 Seeds of Life – East Timor	59	CFET/ACIAR	YES	2001-2003
Project 1.3 Reduction of Post-Harvest Losses of Rice & Maize in East Timor	178	CFET	YES	2001-2006
<i>Project 1.4 Enhancement of Beans Production</i>	<i>n.a.</i>	<i>n.a.</i>	<i>NO</i>	<i>2003-2006</i>
<i>Project 1.5 Enhancement of Root Crops Production</i>	<i>n.a.</i>	<i>n.a.</i>	<i>NO</i>	<i>2003-2006</i>
Program 2: Enhancement of Horticultural Crop Production				
Project 2.1 Enhancement of Fruit Crops Production	176	CFET	YES	2002-2006
<i>Project 2.2 Enhancement of Vegetable Crops Production</i>	<i>n.a.</i>	<i>n.a.</i>	<i>NO</i>	<i>2003-2006</i>
<i>Project 2.3 Enhancement of Root Crops Production</i>	<i>n.a.</i>	<i>n.a.</i>	<i>NO</i>	<i>2003-2006</i>
<i>Project 2.4 Development of Native Herbal Plants</i>	<i>n.a.</i>	<i>n.a.</i>	<i>NO</i>	<i>2003-2006</i>

Program 3: Enhancement of Industrial Crops Production

Project 3.1	Coffee refurbishment and Development	92	CFET/Portugal	YES	2001-2004
<i>Project 3.2</i>	<i>Promotion of Coconut Nursery</i>	<i>n.a.</i>	<i>n.a.</i>	NO	2003-2006
<i>Project 3.3</i>	<i>Promotion of Cotton Production</i>	<i>n.a.</i>	<i>n.a.</i>	NO	2003-2006
<i>Project 3.4</i>	<i>Promotion of Vanilla Production</i>	<i>n.a.</i>	<i>n.a.</i>	NO	2003-2006
<i>Project 3.5</i>	<i>Promotion of Sisal Production</i>	<i>n.a.</i>	<i>n.a.</i>	NO	2003-2006

Program 4: Support to Farmers' Associations

Project 4.1	Support to Farmers' Associations	176	CFET/TFET	YES	2001-2006
<i>Project 4.2</i>	<i>Support to Farm Mechanisation</i>	<i>n.a.</i>	<i>n.a.*</i>	NO	2003-2006
<i>Project 4.3</i>	<i>Support to Agricultural Extension and Farm Input</i>	<i>n.a.</i>	<i>n.a.*</i>	NO	2003-2006
<i>Project 4.4</i>	<i>Support to Micro Credit Finance</i>	<i>n.a.</i>	<i>n.a.*</i>	NO	2003-2006

Program 5: Crop Protection

Project 5.1.1.	Crop Protection	176	CFET	YES	2002-2006
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Notes: * These projects were each proposed in the JICA study of Integrated Agricultural Development in East Timor, although funds have not committed by JICA or any other donor at the time or preparation of the Plan. Projects in *italics* have no funding attached to them at the time of Plan preparation.

Table 12.25: Projects of the Livestock and Irrigation Divisions, Department of Agriculture and Livestock, Ministry of Agriculture and Fisheries, 2002/03-2006/07

Program/Projects	Cost US\$'000 2002 – 2006	Funding Sources (actual & potential)	Funding Available?	Implementation Period
<u>Livestock Division</u>				
Program 1: Development of Livestock Production				
Project 1.1 Native Chicken Intensification/Production	495	CFET	YES	2002-2006
Project 1.2 Development of Cattle Production	495	CFET	YES	2002-2006
<i>Project 1.3 Support to Cattle Production</i>	<i>n.a.</i>	<i>n.a.*</i>	NO	<i>2003-2006</i>
Program 2: Prevention and Eradication of Livestock Diseases				
Project 2.1 Vaccination of Cattle and Other Livestock	492	CFET/TFET	YES	2002-2006
Project 2.2 Village Livestock Workers	491	CFET/TFET	YES	2002-2006
<i>Project 2.3 Extension of Veterinary Services</i>	<i>n.a.</i>	<i>n.a.*</i>	<i>NO</i>	<i>2003-2006</i>
<u>Irrigation Division</u>				
Program 1: Rehabilitation of Existing Irrigation Schemes				
Project 1.1 Caraulun Emergency Project	86	CFET/TFET	YES	2002-2003
Project 1.2 Irrigation Rehabilitation Projects	85	CFET/TFET	YES	2001-2003
<i>Project 1.3 Nation-wide Irrigation Rehabilitation Projects</i>	<i>n.a.</i>	<i>n.a.*</i>	<i>NO</i>	<i>2003-2006</i>

Program 2: Establishment of Rural Water Harvesting System

Project 2.1 Establishment of Rural Water Harvesting System	84	CFET	YES	2002-2003
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Program 3: Maintenance and Repair Work

Project 3.1 Maintenance and Repair Work	927	CFET	YES	2002-2006
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Program 4: Sector Management Recovery and Development

Project 4.1 Sector Management Recovery and Development	84	CFET	YES	2002-2003
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Notes: * These projects were each proposed in the JICA study of Integrated Agricultural Development in East Timor, although funds have not committed by JICA or any other donor at the time or preparation of the Plan.

Table 12.26: Projects of the Department of Fisheries and Marine Environment, Ministry of Agriculture and Fisheries, 2002/03-2006/07

Program/Projects	Cost US\$'000 2002 – 2006	Funding Sources (actual & potential)	Funding Available?	Implementation Period
Program 1: Fisheries and Marine Environment Management				
Project 1.1 Fisheries Policy, Act and Legislation	58	CFET/AusAid		
Project 1.2 Maritime Boundaries and Offshore Monitoring	142	CFET		
Project 1.3 Fisheries Management Plans	142	CFET/AusAid/WB		
Project 1.4 Staff Training	141	CFET		
Project 1.5 Research and Data Collection	141	CFET/AusAid		
Program 2: Fisheries Industry Development				
Project 2.1 Rehabilitation of Hera Port	82	CFET/TFET	YES	2001-2004
Project 2.2 Improved Harvest and Post-Harvest Method	140	CFET/Iceland	YES	2002-2006
Project 2.3 Development of a Professional Charter Boat and Diving Industry	138	CFET	YES	2002-2006
Program 3: Aquaculture				
Project 3.1. National Development of an Aquaculture Industry	138	CFET/Portugal	YES	2001-2004

Table 12.27: Projects of the Department of Forestry, Ministry of Agriculture and Fisheries, 2002/03 – 2006/07

Program/Projects	Cost US\$'000 2002 - 2006	Funding Sources	Funding Available?	Implementation Period
Program 1: Reforestation and Forest Rehabilitation				
Project 1.1 Agroforestry	145	CFET/CIDA	YES	2002-2006
Project 1.2 Reforestation and Soil Conservation	145	CFET/TFET/Portugal	YES	2002-2006
Project 1.3 Mangrove Rehabilitation and Conservation	145	CFET	YES	2002-2006
Project 1.4 Community Forestry	144	CFET/CIDA	YES	2002-2006
<i>Project 1.5 Nation-wide Reforestation</i>	<i>n.a.</i>	<i>n.a.</i>	<i>NO</i>	<i>2003-2006</i>
<i>Project 1.6 Nation-wide Community Forestry</i>	<i>n.a.</i>	<i>n.a.</i>	<i>NO</i>	<i>2003-2006</i>
Program 2: Forest Protection and Forest Resources Management				
Project 2.1. Watershed Management	141	CFET	YES	2002-2006
Project 2.2. National Park and Wildlife Management	141	CFET	YES	2002-2006
Project 3.3. Public Information and Education	141	CFET	YES	2002-2006
Program 3: Forest Production and Utilisation				
Project 3.1 Forest Inventory	141	CFET	YES	2002-2006
Project 3.2 Forest Planning, Policy and Legislation	53	CFET	YES	2002-2006
Project 3.3. Forest Utilisation and Law Enforcement	194	CFET	YES	2002-2006

Notes: * These projects were each proposed in the JICA study of Integrated Agricultural Development in East Timor, although funds have not committed by JICA or any other donor at the time or preparation of the Plan.

Table 12.28: Projects of the Research and Extension Centre, the Cadastral Unit, and the Policy and Planning Unit, Ministry of Agriculture and Fisheries, 2002/03-2006/07

Program/Projects	Cost US\$'000 2002 – 2006	Funding Sources (actual & potential)	Funding Available?	Implementation Period
<u>Research and Extension Centre</u>				
Program 1: Research and Laboratory				
Project 1.1 Research and Laboratory	148	CFET	YES	2002-2006
Program 2: Information and Extension				
Project 2.1 Information and Extension	148	CFET	YES	2002-2006
Program 3: Geographic Information System				
Project 3.1. Geographic Information System	148	CFET	YES	2002-2006
<u>Cadastral Unit</u>				
Program 1: Research and Laboratory				
Project 1.1 Geography and Cadastre	931	CFET	YES	2002-2006
<u>Policy and Planning Unit</u>				
Program 1: Policy and Planning Unit				
<i>Project 1.1 Geography and Cadastre</i>	<i>n.a.</i>	<i>n.a</i>	<i>NO</i>	<i>2002-2003</i>

APPENDIX 12.1: OVERVIEW OF DONOR FUNDED PROJECTS IN THE AGRICULTURE SECTOR

TFET PROJECT 1 OVERVIEW

1. Second Agriculture Rehabilitation Project (ARP II)

The aims of ARP II, with funding of \$8.0 million from TFET and \$0.9 million from CFET, are to improve food security of rural families and increase agricultural production in selected areas of East Timor. The implementation period is December 2001 to December 2003. Estimated expenditures in FY02/03 amount to \$5.1 million. The project includes the following activities.

- *Pilot Participatory Development and Natural Resources Management* in up to 30 pilot communities in seven districts (Baucau, Covalima, Dili, Lautem, Liquica, Manufahi, and Oecussi). This component will provide small grants to communities to strengthen their self-reliance and the management of their natural resources. The sub-sector focuses are forestry and fisheries, with other inter-sectoral inputs (crops and livestock).
- *Rapid Infrastructure Rehabilitation*, including 2,100 ha of community irrigation schemes, 100 km of farm-to-market access roads, 1,430 ha of larger irrigation schemes, establishment of 11 Water User Associations, and a feasibility study for schemes that suffered major damage. The sub-sectoral focus is irrigation.
- *Services to Farmers*, including the provision of information, programming and establishment of a small CGIAR Liaison Secretariat at MAF, vaccination services for livestock, and piloting of a system of private Village Livestock Workers (VLWs). This component also includes the establishment and initial operation of up to six Agriculture Service Centres (ASC), each of which would be privately run and owned by farmer associations, to facilitate the marketing of agricultural commodities and provision of inputs. The sub-sector focuses are research and extension, livestock and crop production.
- *Program Management*, including policy advice in the areas of general agricultural policy, forestry strategy, fisheries baseline data, capacity building, minor equipment and vehicles for district staff, and incremental operating costs and advisory services for a Project Management Unit (PMU). The sub-sectoral focuses are crop production, fisheries, forestry and general administration.

2. Hera Port Rehabilitation Project (implemented through ADB)

This project, with funding of \$1 million from TFET and \$0.1 million from CFET, will assist the Government of East Timor to rehabilitate the Hera Fishing Port and put in place the necessary infrastructure to attract private investment for its operations. The project will be implemented through FY02/03, and is focused in Dili. Estimated expenditures in FY02/03 are \$800,000 and the sub-sectoral focus is fisheries.

BILATERAL PROJECTS OVERVIEW

1. Australian Centre for International Agricultural Research (ACIAR): Seeds for Life Project

This project, valued at \$266,000, is focused on: (a) evaluating the suitability of plant genetic materials provided by the Consultative Group of International Agricultural Research Centres (CGIAR) to East Timor conditions; (b) introducing modern cultivars to improve disease tolerance, nutrient imbalance and climatic conditions; (c) improve farmers' access to high quality seeds of modern cultivars; and (d) gather baseline data for future development programs on increasing farm productivity. The project runs from November 2000 to October 2003 in Ainaro, Bobonaro, Baucau, Aileu, Lautem, and Viqueque. The sub-sectoral focus is crop production.

2. AusAID: East Timor Rural Development Program

This project, with a total cost of \$9.5 million, has an aim of assisting East Timor's rural development efforts in the districts of Bobonaro, Viqueque and Aileu. It consists of two major phases. Phase I (January 2001 – December 2002) includes (a) project establishment; (b) rapid impact projects in upland and lowland activities, supporting community-based activities (which might include, for example, lowland rice production, upland subsistence farming, small livestock programs, chicken vaccination, and support to coffee production); and (c) three Technical Resource Centres. During the second phase (January 2003-December 2005) the project will support detailed design and implementation of longer-term Rural Development Projects. This is a multi-sector project.

3. AusAID: Fisheries Management Planning

This project, at a cost of \$907,500, aims to build the capacity of Fisheries staff to develop policies and regulations associated with the management of East Timor's marine fisheries, and assist MAF to design and implement a series of fisheries management plans in cooperation with coastal communities. The project runs from February 2002 to January 2005, and is national in scope. The sub-sectoral focus is fisheries.

4. AusAID: Survey of Nearshore Fish Stocks – Dili Harbor

The principal aims of this small project (\$7,700) are to assess the impact of current fishing levels on the fish stocks of Dili Harbor and provide scientific skills transfer to the fisheries staff at MAF. The project runs from April 2001 to August 2002, with a sub-sectoral focus of fisheries.

5. AusAID: Agriculture and Forestry Landuse Mapping and GIS Development and Training.

This \$760,000 project has aims to: (a) strengthen landuse mapping and GIS information on soil resources and classify agro-ecological zones; (b) develop zoning for organic coffee; (c) identify of erosion-prone areas; (d) identify the layout of major irrigation schemes and the condition of access roads; and (e) provide landuse baseline data. The project runs from November 2000 to November 2002, and is national in scope. The sub-sectoral focus is MAF's Research and Extension Centre.

6. JICA: Study of Integrated Agriculture Development in East Timor

The aim of this project, at a cost of \$3.7 million, is to formulate a mid-term comprehensive development plan for agriculture, forestry and fisheries in East Timor. It includes an assessment of the present situation and problems, an inventory survey, and implementation of pilot agricultural projects for human resources development (including integrated upland agricultural management, and fisheries). The project runs from March 2001 to December 2002, and is national in focus. The sub-sectoral focuses are multi-sectoral and general administration in MAF.

7. JICA: Capacity Building in East Timor, Japan and ASEAN Countries

This project (on a request basis) will provide technical assistance to MAF by providing Japanese experts and training in East Timor, Japan and ASEAN countries. The timing and funding are dependent on requests from MAF.

8. JICA: Rehabilitation and Strengthening of Rice Farming in Lautem and Manatutu

This project is focused on the distribution of seeds and tools to farmers, rehabilitation of agricultural infrastructure, and capacity building for farmers' groups, at a cost of \$863,000. The project runs from February 2000 to January 2003, and is implemented in partnership with CARE. The sub-sectoral focus is crop production.

9. JICA: Recovery Program for Village Based Economic Activities in Los Palos/Manufahi

This project, at a cost of \$241,000, is focused on farmers' group organisation, comparative studies, needs assessment, distribution of agricultural tools to, and assistance in commodity production and marketing. The project runs from March 2001 to March 2004, and is implemented in partnership with Yayasan HAK. This is a multi-sector project.

10. JICA: Agriculture Development Project in Baucau

This project, at an initial cost of \$330,000, is focused on technical assistance to farmers in rice production, vegetable production and livestock breeding in Baucau. It also involves a survey about further rural development assistance needs. This project is nearing completion and has a sub-sectoral focus of crop production and livestock.

11. Portugal: Replanting of Coffee and Coffee Research

This project is focused on coffee research and coffee processing, at a cost of \$265,000. It involves seed selection, experiments on coffee shading, trials on composting, experiments with nursery construction techniques, integrated pest management, trials on planting techniques, and nursery construction and plant distribution to communities. The project runs from November 2000 to 2003, and is operational in Ermera, Aileu, Ainaro and Same. The sub-sectoral focus is crop production (industrial crops).

12. Portugal – Integrated Rehabilitation and Construction of Coffee Processing Facilities

This project (approximately \$220,000) focuses on rehabilitation of coffee processing. It involves rehabilitation of water capture, storage and allocation facilities; construction or rehabilitation of coffee processing facilities; coffee processing machinery supply; and demonstration and maintenance of equipment. The project runs from April 2000 to 2003, and is operational in

Ermera, Aileu, Same, and Liquica. Estimated expenditures in FY02/03 amount to \$70,000. Sub-sectoral focus: Crop Production (Industrial Crops).

17. Portugal: Reforestation and Alternative Cash Crops

This project, at a value of \$310,000, has aims to set up nurseries for coffee shade trees, firewood, timber (sandalwood, teak and others) and tree species for erosion control, and provide strategic distribution of seedlings to communities. The project runs from January 2002 to 2004, and is active in Ermera, Aileu and Liquica. The sub-sectoral focus is forestry.

18. Portugal: Aquaculture

This \$62,000 project has aims to do experiments on breeding different aquaculture species, and to undertake comparative studies in traditional and modern facilities. It also aims to supply fish fry to communities and, subsequently, evaluate the acceptance and possible further development of the project. The project runs from April 2001 to 2004/05, and is active in Ermera and Aileu, with a sub-sectoral focus of Fisheries.

19. Portugal: Capacity Building

This project, valued at \$130,000, has aims to provide training on different techniques of nursery construction for coffee, fruit trees, and forestry species, as well as aquaculture techniques. It also includes capacity building for MAF, district staff, and associations and cooperatives of farmers/experts. The project runs from April 2001 to 2004/05, and is active in Ermera, Aileu, Same, and Ainaro. The sub-sectoral focuses are administration and multi-sectoral.

20. Portugal: Interaction with Other Institutions

This project, valued at \$60,000, provides for interactions between East Timorese staff and various institutions, such as CIFIC (Centro de Investigação das Ferrugens do Cafeeiro.), ISA (Instituto Superior de Agronomia), UTAD (Universidade de Trás dos Montes), INMG/UTAD (Instituto Nacional de Meteorologia e Geofísica), UA (Universidade de Aveiro), UE (Universidade de Évora), IHERA (Instituto de Hidráulica Engenharia Rural e Ambiente), Porbatt (Portuguese Battalion), and ACIAR. The project runs from January 2002 to 2003/04 and is national in scope. The sub-sectoral focus is administration.

21. USAID: NCBA Timor Economic Rehabilitation and Development Project

This \$12 million project has provided support to coffee cooperatives in East Timor since 1994. It involves: (a) coordination of crop extension activities; (b) assessment of community welfare needs; (c) finance; (d) processing facilities; (e) seedling nurseries; (f) demonstration plots; (g) a vanilla seedling nursery; (h) community primary health care; (i) a Cooperative and Small Enterprise Training Centre; and (j) a Consumer Goods Wholesale Cooperative run through small enterprise village shops and kiosks. The project runs from 1994 to December 2002 and is operational in the districts of Ermera, Ainaro, Aileu, Manufahi and Liquica. The sub-sectoral focus is crop production (industrial crops).

22. USAID: Economic Recovery Program (Agriculture)

This program, valued at \$900,000, is focused on the provision of materials and equipment to farmers for various activities such as agro-processing inputs, rehabilitation of small-scale irrigation schemes, industrial crops (e.g. Abaca), and fishpond rehabilitation. The project runs from 2001 to 2003 with a multi-sectoral focus.

MULTILATERAL PROJECTS OVERVIEW

1. UNDP/UNOPS: Ainaro and Manatutu Community Activation Project

This \$5.1 million project is focused on food security improvement, strengthening linkages to agricultural services, and integrated watershed management. The project runs from December 2001 to 2005, and will be active in Ainaro and Manatutu. It is a multi-sectoral project.

2. UNDP/UNOPS: Urgent Irrigation Rehabilitation Project II (funded by the Government of Japan)

This proposed project, at a value of \$5.8 million, will focus on the rehabilitation of irrigation structures in Lacro and Manautu, along with training of members of Water Users' Associations. The sub-sectoral focus is irrigation.

13. NATURAL RESOURCES AND ENVIRONMENT

“Real, lasting poverty reduction is only possible if the environment is able to provide the services people depend on, and if natural resources are used in a manner that does not undermine long-term development”

VISION

13.1 East Timor will manage and utilise its natural resources in a sustainable manner that takes account of environmental needs in order to support economic growth and improved community welfare.

INTRODUCTION

13.2 The development and management of natural resources, including mineral resources, and the environment is the responsibility of the Department of Natural and Mineral Resources (DNMR) and the Division of Environment (DoE), both of which are agencies of the Ministry for Economic Affairs and Development. The Ministry is also responsible for Trade and Industry, Energy, Investment and Tourism.

13.3 East Timor is relatively poorly endowed with natural resources, apart from the oil and gas reserves of the Timor Sea. Anderson and Deutsch (eds., 2001) note that oil and gas are amongst the few high value natural resources that can be exploited for economic purposes, with the Timor Sea thought to be one of the world's 20 richest oil deposits. Fisheries stocks are poorly understood, but might also comprise an important economic resource.

13.4 Natural resources are limited in East Timor, and given that the nation needs to make best use of its various resources, the sound management of those resources is a critical matter. Best use in this instance means that resources must be used efficiently, thereby maximising the net benefits realised by the community from such resource use. Sound management is normally taken to mean that resources are managed in a sustainable manner. The Conference on Sustainable Development in East Timor (Anderson and Deutsch, eds., 2001, p. 8) adopted the World Conservation and Environmental Development Conference's definition of sustainability; viz:

“sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

13.5 East Timor is a mountainous country that is less than ideal for agricultural production. Its soils are derived from limestone and metamorphosed marine clays and are, consequently, generally of low fertility. The generally steep terrain,

shallow soils and heavy rainfall events during the wet season, render many parts of East Timor very prone to erosion. Deforestation and grazing often adds to the problems of loss of topsoil. Ongoing erosion causes sedimentation of rivers, reservoirs and near-shore marine areas.

13.6 Forest resources are widely used by households for both timber and non-timber purposes, and previously were also important in East Timor as export commodities. During the Portuguese and Indonesian administrations export income was earned from the sale of species such as teak, redwood, mahogany and sandalwood, all of which are native to East Timor. Apart from sandalwood, timber products were mostly exported as unprocessed logs. Very little forest now remains, and the vegetation consists largely of secondary forest, savanna and grassland. The ecology of the flora and fauna of East Timor is poorly understood.

13.7 Forests contribute to family livelihoods by providing firewood, non-timber products, poles and timber. Firewood collection is, however, a major cause of deforestation. Effective forest management has been achieved only in those few cases where the forest area has been clearly defined and is recognised by the community.

13.8 There was substantial damage to the forestry sector during the violence of 1999. Most Government and private facilities were destroyed or stolen, while stockpiles of teak logs and about 1,300 m³ of sandalwood for export were not allowed to leave. Large areas of mountain forests where resistance groups sheltered were defoliated and now comprise degraded scrubland.

13.9 UNDP (2000) concluded that East Timor's marine ecosystem, if used in a sustainable fashion, has considerable potential to support economic development and sustain the population, thereby contributing to poverty reduction. Fisheries development is currently guided by a Strategic Plan formulated by the Department of Fisheries and Marine Environment (FME).

13.10 Many species of animal in East Timor are threatened with extinction, particularly those that rely on forests. A number of marine species are also thought to be under threat. The coastal zone is, however, considered to be in very good condition. Mangrove ecosystems are substantially intact and many beaches are fringed by coral reef. Reefs are a source of biodiversity and are important for the ecological functions they provide. Plans exist to create both terrestrial and marine protected areas in order to conserve biodiversity.

13.11 Pollution and the lack of waste management pose significant problems in the urban areas of East Timor. Consequently, they also pose human health risks as well as a threat to marine ecosystems and species in nearby marine areas. Dili has a very limited sewerage system and an inadequate system for the collection and disposal of solid waste. Poor waste management has resulted in the pollution of groundwater, which is the source of drinking water for many of the people living in Dili. Litter is a substantial problem, particularly in the urban areas, with plastic and other materials usually being washed into the ocean during storms, where they represent a hazard to marine species.

Poverty, Natural Resources and Environment

13.12 Consistent with the efforts to integrate environmental considerations into development policies and programs, it is now recognised that there is an "urgent need to integrate environmental concerns into poverty alleviation..." (World Bank Group, undated, p. v). Furthermore:

“Real, lasting poverty reduction is only possible if the environment is able to provide the services people depend on, and if natural resources are used in a manner that does not undermine long-term development” (World Bank Group, undated, p. v).

13.13 Consideration of the links between environmental interventions and poverty reduction in East Timor should allow: (1) an improvement in people’s health due to access to resources such as potable water; (2) enhancement of the livelihoods of poor people, particularly those in rural areas where people depend on land, water, forests and biodiversity; and (3) reduction of people’s vulnerability to natural disasters such as violent storms, floods and fires.

MISSION

13.14 Two mission statements are reported here because the mission of the Department of Minerals and Natural Resources (DNMR) is somewhat different to that of the Division of Environment (DoE).

13.15 The mission of the DNMR is to:

Efficiently administer legislation relating to minerals, energy and extractive industries in a consistent, fair, transparent, timely and accurate fashion; and partner industry and provide leadership in achieving regulatory reform.

13.16 The mission of the DoE is to:

Conserve and protect natural resources and environment in East Timor through sustainable development planning.

GOALS

13.17 The goals for the mineral and natural resources and environment sectors are to:

- a) efficiently manage minerals, energy and extractive activities in a consistent, fair, environmentally appropriate, transparent and timely fashion;
- b) protect and enhance the natural environment of East Timor;
- c) raise community awareness about the importance of protecting the environment and behaving in ways that support such protection;
- d) work with other Government departments and agencies in integrating environmental considerations into their policies, programs and projects; and
- e) ensure accountability to the Government and community for financial, environmental and safety aspects of the extractive and energy industries.

GUIDING PRINCIPLES

13.18 The guiding principles for development in the minerals, natural resources and environment sectors are as follows.

Sustainability

East Timor's resources will be used in such a way that they will still be available to future generations, or at least provide benefits to those future generations of East Timorese (e.g. by careful investment of mining royalties).

Efficiency

The nation will make the best possible use of agricultural, water and other resources. They will be used in such a way as to maximise the benefits from their use to all citizens ("allocative efficiency"). It also means that the nation will not be wasteful with its resources – they will be managed and used carefully ("productive efficiency") (Box 13.1).

Box 13.1: The Notion of Efficiency in Resource Use

The notion of economic efficiency is that a nation will manage and use its various resources in such a way as to maximize the net social benefits to the whole of the nation from that use. This implies that the 'best' or optimal combination of outputs is produced by means of the most efficient combination of inputs. Efficiency can be at odds with equity, because an improvement in efficiency might make some people better off and some worse off. Policy-makers must deal with such trade-offs.

Equity

Everyone will be treated equally or fairly. For example, people in rural areas should have the same access to health, education and other services as people in urban areas, along with the same opportunities to advance their living standards.

KEY DEVELOPMENT INDICATORS

13.19 The key development indicators for each sub-sector are the following.

Department of Natural and Mineral Resources

- a) Establishment of a database on mining, minerals, oil and gas resources.
- b) Trained cadre of East Timorese to deliver all services to the sector.
- c) Development, promulgation and implementation of legislation and regulations for mining, oil and gas.
- d) Survey and mapping of the minerals, oil and gas resource base in East Timor.

Division of Environment

- a) More effective appraisal of development proposals and consequent reduced environmental impacts from development activities.

- b) Development, promulgation and implementation of legislation and regulations on environmental impact assessment and pollution control.
- c) Increased capacity of DoE staff to implement environmental regulations.
- d) Completion of policies on important environmental matters, including water catchment management, coastal zone management and biodiversity conservation.

PROBLEMS AND CONSTRAINTS

13.20 The problems and constraints faced by both DNMR and DoE are, in general, the same. Where either the Department or the Division face unique difficulties those are noted below.

Capacity

Both agencies face a lack of institutional and personnel capacity to undertake the wide range of tasks with which they are confronted. DoE has neither the number of staff, nor suitably skilled staff, to meet its myriad of important challenges. Similarly, DNMR has a very small staff complement, although it is planned to increase staff numbers considerably through the Plan period. The DNMR also confronts the problem of a lack of appropriate staff skills.

Legal and Regulatory Frameworks

The enabling legal and regulatory frameworks currently do not exist to support the responsibilities of both DNMR and DoE. The legal and regulatory legacy from the Indonesian administration is both irrelevant and ineffective. This also results in weak control of the environmental impacts of various development activities and, in the case of DoE, reduces its effectiveness in establishing cooperative mechanisms with other agencies in relation to environmental management.

Data and Information

Neither DNMR nor DoE has access to relevant and accurate data on the inventory and state of natural resources and the environment of East Timor. The lack of such information constrains their ability to ensure sustainable development and management of these resources.

Financial Resources

Both agencies face severe budgetary constraints for staffing, other recurrent costs and capital equipment. Both require certain capital equipment to meet their responsibilities and, therefore, they will rely on donor support in the medium term to establish both a stock of needed capital equipment and a cadre of suitably trained staff.

Acknowledgment and Independence

These constraints apply particularly to DoE. The existing institutional structure means that DoE is not a fully independent body, constraining its ability to make and implement decisions on the appropriateness of particular development proposals. Concomitantly, there is little or no acknowledgment that DoE and its attendant environmental legislation (once developed and implemented) should play a role as an independent umbrella agency that can regulate all development activities, particularly those that carry environmental risks.

GOALS OF EACH AGENCY

13.21 The key goals for DNMR and DoE to address the various problems identified are as follows.

Department of Natural and Mineral Resources

- a) East Timor will be self-reliant in terms of institutional and staff capacity to manage the sustainable exploitation of natural and mineral resources and that such self-reliance will be achieved by June, 2005.
- b) Appropriate legislation and regulations will be developed, promulgated and implemented by DNMR in support of the management of the nation's natural and mineral resources.
- c) The nation will develop the capability to appropriate the benefits of its natural and mineral resource base through increased local value-adding and by ensuring that it receives an appropriate share of the resource rents arising from exploitation of its resources (see Box 13.2).
- d) DNMR will develop a suitable database, inventory of resources and resource mapping to support management of minerals, oil and gas and to develop promotional material for the sector. These materials will be in place by June, 2003.
- e) The natural and mineral resources sector will be integrated into relevant regional and global networks by the end of 2003.

Box 13.2: Economic Rent

Economic rent is the return earned on the use of natural resources over and above normal profit levels. Often, this surplus is taken by a small number of users. Fisheries and oil and other minerals provide many international examples of the rent being taken by the fishers and miners, with little returned to the actual owners of the resource – the community. In East Timor, development of such resources should be based on the principle that they belong to all citizens. Fishers, miners and others should be allowed to make a fair profit, including a premium for risk, but returns over and above these levels should come back to the people. This means that appropriate policies need to be developed in relation to the use of natural resources.

Division of Environment

- a) The evolution of an environmental governance framework for East Timor that will include:
 - sufficient institutional capacity in DoE and other relevant Government agencies to protect and conserve the environment and biodiversity;
 - well researched, practical and effective environmental policies (laws, regulations and guidelines);
 - effective cooperation and coordination across sectoral agencies through formal and informal channels;
 - established processes such as State of the Environment reporting; and

- ratification, where appropriate, of relevant international treaties and conventions.
- b) DoE will facilitate increased awareness of environmental issues amongst the public and Government agencies through publications, campaigns and environmental curricula.
- c) Air, water and soil pollution will be managed, particularly in urban areas.
- d) The environmental impacts of existing developments will be better managed, while an effective system for the environmental appraisal and review of investment proposals will be implemented.
- e) DoE will establish a well-researched approach to biodiversity protection and conservation, including the establishment of a system of protected areas for East Timor.

POLICIES

13.22 Based on the problems and constraints and, subsequently, the goals of DNMR and DoE, the following basic policies will be formulated.

Department of Natural and Mineral Resources

- a) Extensive institutional and capacity building programs in the period 2002-2006 to yield an appropriate institutional structure, including the establishment of a separate Ministry of Minerals, Natural Resources and Energy, along with the development of a critical mass of local East Timorese staff with the requisite skills to manage all activities in these sectors.
- b) The Department will establish an enabling legal and regulatory framework based on the national resource base.
- c) DNMR will identify and join regional and global natural and mineral resources networks, develop strategic alliances that facilitate the appropriate exploitation of East Timor's mineral and natural resources, and promote the minerals, mining, oil and gas resources of the nation to the world.

Division of Environment

- a) DoE will emphasise capacity development initiatives to build specialist environmental and other required skills amongst its staff, and support such capacity development in other Government agencies.
- b) Institutional strengthening of DoE will be a focus of policy, with assistance from bilateral and multilateral donors.
- c) Appropriate regulatory and legal frameworks that support environmental management will be developed, beginning with regulations on pollution control and environmental assessment.
- d) Considerable focus will be placed on strengthening cross-sectoral linkages to improve the coordination of environmental management and raise the profile of

DoE as the core Government agency with the charter for environmental assessment and management.

- e) Environmental awareness campaigns and efforts to raise public consciousness, along with Government and private sector awareness of environmental matters, will be a central plank of DoE's policy framework.

PROGRAMS AND PROJECTS

13.23 Based on the foregoing information, the programs and projects summarised below will be implemented in the period 2002/03 – 2007/08 to meet the needs of each sector.

DEPARTMENT OF NATURAL RESOURCES AND MINERALS

13.24 The Department's development activities are driven by an overarching goal to plan, design and implement an efficient, effective and economic mining, oil and gas sector management and regulatory regime in East Timor. The following three programs will be implemented by the DNMR.

Program 1: Institutional and Capacity Building

Program 2: Enabling Legal and Regulatory Framework

Program 3: Sectoral Development and Promotion

13.25 The projects to be implemented under each program, with the actual or proposed sources of funding and the current status of individual projects, are as shown in Table 13.6.

Program 1: Institutional and Capacity Building

13.26 This program is based on a decision by Cabinet to establish the Department and vest in it the task of "the management and regulatory functions for the natural resources and mining sector." The institutional development aspects of this decision include budget provision, the planning, design and establishment of DNMR, recruitment of staff, allocation of office space and provision of certain capital equipment in support of its operations. The capacity building aspects are focused on staff development, including:

- a) assessment of the gaps in the skills available in both the public and the private sectors;
- b) public sector skills development and capacity enhancement through both in-house and out-of-country training, along with hands-on 'apprenticeships';
- c) development of a central team of 20 East Timorese staff in critical skill areas related to the development and management of the mining, oil and gas sector; and
- d) support for private sector skills training for East Timorese, enabling them to benefit from emerging employment opportunities related to mining, oil and gas sector developments.

Table 13.1: Performance Targets, Institutional and Capacity Building

Performance Targets	Measurement
Department of MNR fully operational	Number of staff recruited and regulatory framework in place
Cadré of 20 trained East Timorese staff	Number of suitably trained staff
Development of needed skills in the Civil Service	Numbers of training programs and qualifications achieved by local staff
Private sector skills training	Establishment of vocational and technical level courses to support employment in the sector.

Program 2: Enabling Legal and Regulatory Framework

13.27 Indonesian mining and gas laws, technically, remain effective in East Timor. In reality they are, however, redundant as neither the organisational structure nor the sanctioning authorities are in place to enforce those laws. This comprises a substantial constraint on development in the sector, and one that discourages investors because of the uncertainty it implies. Assistance is needed to develop an appropriate legal and regulatory framework, with UNDP and ESCAP committing to providing such assistance. Once a legal and regulatory framework is established, management systems and procedures will be developed and implemented.

Table 13.2: Performance Targets, Enabling Legal and Regulatory Framework

Performance Targets	Measurement
Mining, oil and gas legal regime developed and implemented	Implementation of legal regime; number of applications for exploration and development licenses
Implementation of management systems and procedures	Number of training programs; management structure operational

Program 3: Sectoral Development and Promotion

13.28 Reliable information about mining, oil and gas resources in East Timor is lacking. Consequently, the main activities in this program relate to surveying, mapping and the construction of an inventory of the nation's minerals, oil and gas resources. A reliable resource inventory is needed to: (1) allow the Government, through DNMR, to understand the likely stock of resources and, therefore, be able to manage that stock in the best interests of the nation; and (2) allow potential investors to plan and assess opportunities in East Timor. Furthermore, the proposed remote sensing and GIS based survey and database development forms the main building block of the sectoral development and promotion strategy. Donor support will be sought for this program.

Table 13.3: Performance Targets, Sectoral Development and Promotion

Performance Targets	Measurement
Complete survey and mapping of mineral, oil and gas resources in East Timor	Data available and accessible and usable in support of promotion and sectoral development

DIVISION OF ENVIRONMENT

13.29 The overarching goal of DoE is to implement a National Environmental Management Plan (NEMP) for East Timor, which is a necessary part of the Government's approach to sustainable development. The implementation of the NEMP will play an important role in poverty reduction through improved access to clean water and other resources, and also contribute to economic growth in the long term because of improved management of the nation's scarce natural resources. Under the NEMP development proposals will be screened for potential impacts and advice given on the need for environmental management plans or environmental impact assessment (EIA). Effective laws and capable staff will ensure that such processes are efficient and provide investors with high quality advice. While improving the investment environment, it will also reduce the economic and social costs of environmental damage. Environmental awareness and education for the community will support a cleaner environment and have positive health outcomes.

13.30 DoE will focus on one overall program, viz:

Program 1: Environmental Governance Framework for East Timor

The projects to be implemented under this program, with the actual or proposed sources of funding and the current status of individual projects, are as shown in Table 13.5. The projects and the principal elements in each project are as summarised in Table 13.4.

Table 13.4: Project Activities and Outcomes, Division of Environment

Activities and Short-term priorities	Outputs – Medium-term
<i>Project 1: Development & implementation of environmental legislation</i>	
EIA Regulations	Environmental Protection Act
Pollution control regulations	Environmental Protection Act
DoE capacity to implement legislation	Capacity within Government & at District Level
Relevant sectoral laws with environmental safeguards	Capacity within Government & at District Level
<i>Project 2: Policy development for catchments and coasts</i>	
Natural resources working group formally established	
Draft policy on catchments & coastal zone management	
Policy & draft law on biodiversity conservation	
<i>Project 3: Development of National Environmental Policy</i>	
National Environmental Council	
National Environmental Policy	
National Environmental Action Plan	

Program 1: Environmental Governance Framework for East Timor

13.32 The elements of the Environmental Governance Framework for East Timor Program are summarised above. The performance targets for the program are shown in Table 13.5.

Table 13.5: Performance Targets, Environmental Governance Framework for East Timor

Performance Targets	Measurement
EIA regulations prepared and implemented by June 2003	Passing of regulations by Parliament; application to development activities
Reduced pollution in Dili and other urban areas	Fewer cases of gross pollution. Pollution licenses issued for major hotels & polluting industries in Dili
Three DoE Bulletins produced each year. Celebration of World Environment Day in 2003 Increased awareness of environmental issues	Number of Bulletins, number of people attending Environment Day celebrations
Natural Resources Working Group meets at least 4 times per year	Number of meetings, issues raised and acted upon
Initial draft policies produced and released for discussion by June 2003	Development of draft environmental policies on pollution control and EIA. Number of people consulted about policies
Capacity building of DoE staff through training programs in East Timor & overseas; at least one each of language training, technical skills training, management training	Number of training programs and personnel receiving training; increase in technical skills
Environmental capacity development at District level	Employment of consultant by November, 2002; recruitment of 4 District staff members, number of workshops and training programs

Table 13.6: Projects to be implemented by the Department of Natural and Mineral Resources and the Division of Environment, Ministry for Economic Affairs and Development, 2002/03 – 2006/07

Program/Projects	Cost US\$'000 2002 - 2007	Funding Sources (actual & potential)		Funding Availability/ Commitment Status	Implementation Period
		Donor	Funding year		
DEPARTMENT OF NATURAL RESOURCES & MINERALS					
Program 1: Institutional and Capacity Building					
Project 1.1. Institutional Development	(i) 125	(i) CFET,	(i) Recurrent	(i) Fully committed	2002 – 2007
Project 1.2. Capacity Building	(ii) 80	(ii) USAID	(ii) 2001-02	(ii) Fully committed	2001 – 2002
(i) Public Sector Capacity Building	(i) 150	(i) USAID	(i) 2001-02	(i) Fully committed	2001 - 2002
(ii) Private Sector Skill Development	(ii) 2000	(ii) None	(ii) 2002-06	(ii) No commitment	2002 - 2006
(iii) Critical Core Mass Development	(iii) 500	(iii) None	(iii) 2002-05	(iii) No commitment	2002 - 2005
Program 2: Enabling Legal and Regulatory Framework					
Project 2.1: Mining & Oil & Gas Laws and Legal Regimes	112	UNDP	2001-02	Fully committed	2001 - 2002
Project 2.2: Mining & Oil & Gas sector management systems and procedures	included in 112 above	UNDP	As above	As above	As above

Program 3: Sectoral Development and Promotion

Project 3.1: Natural and Mineral Resources Survey and Mapping to Develop a Reliable Database for Resources	1,500	UNDP (112), other donors to be identified	2001-03	Initial work under UNDP project 2.1, other donors to be identified	2001 - 2003
Project 3.2: Sectoral Promotion and Marketing Strategy	250	CFET (85) other donors to be identified	2002-06	Initial work under CFET allocation, other donors to be identified	2002 - 2006

DIVISION OF ENVIRONMENT

Program 1: Environmental Governance Framework for East Timor

Project 1.1: Development & implementation of environmental legislation	250	CFET, Asian Development Bank	Yes		2002 – 2004
Project 1.2: Policy Development for Catchments & Coasts	363	Donor(s) to be identified	No		2003 – 2005
Project 1.3: Development of National Environmental Policy	411	Donor(s) to be identified	No		2005 – 2007

14. INDUSTRY, TRADE AND THE PRIVATE SECTOR

“Private sector investment and entrepreneurial activity, stimulated by continued reconstruction activity and donor inputs in the near-term, will be the key driver of poverty reduction and economic growth in East Timor in the medium- to long-term.”

VISION

14.1 To establish an East Timorese economy that is stable and that enables a society to be just and prosperous.

INTRODUCTION

14.2 As part of the national planning process, the Working Group for Industry, Trade and the Private Sector reached a consensus on a sector Vision, as well as on sector Goals, Guiding Principles and Key Development Indicators. These are presented in Box 14.1. The agreed Vision, Goals and Guiding Principles then formed the basis for preparation of the future work programs of the five Divisions within the MEAD. Details of the programs are set out below. Each division has performance indicators related to programmatic activities and objectives. These programs were agreed within the proposed Medium-Term Fiscal Framework that covers the financial year 2002-2003 and the three subsequent financial years.

14.3 The foundations of a market-based economy were implicitly set during the UNTAET period and have since been confirmed in the articles of the recently adopted Constitution. The Government has embarked on a model of economic growth led by private business, supported by an open approach to trade and investment, and coupled with significant emphasis on human development and good governance. Private sector investment and entrepreneurial activity, stimulated by continued reconstruction activity and donor inputs in the near-term, will be the key driver of poverty reduction and economic growth in East Timor in the medium- to long-term.

14.4 The transition period has witnessed a return to economic growth and a rapid restoration of much of the regular supply of goods and services. The economy will undergo further transformation during the life of the Plan. First, the level of international financial support and the size of the international presence will begin to reduce over the next few years, and the magnitude of reconstruction programs will also decline, possibly causing negative rates of economic growth in 2002-2003 and 2003-2004. Second, toward the end of the life of the Plan, relatively large revenues from the oil and gas sector are expected to commence. Both changes pose risks and opportunities to the economy and both have been factored into the national planning process as fully as possible.

14.5 The successful transition to “economic independence” will continue to require substantial support from international donors for private sector development in the medium-term. In an economic sense, East Timor must build from a very low base and the constraints on growth are many. But there are

certain opportunities that East Timor can pursue. Offshore oil and gas resources present the most significant opportunity and, if well managed, will be the principal source of East Timor's intergenerational wealth. Perhaps more important though will be the need to develop further the non-oil and gas sectors of the economy, in particular agriculture and fisheries. This will be important in terms of reducing the level of poverty among the poorest, especially in rural areas, and helping to avoid over-investment in industries producing non-tradable goods following the start of inward flows of oil and gas revenues. East Timor also has potential for sustained growth in tourism and among select forestry products.

14.6 More efficient and effective processing of raw materials, natural resources, and in particular agricultural produce, will subsequently enhance domestic development as well as contribute to export revenues. With better transport, communications infrastructure and better-educated workers, East Timor over time will become more attractive to investors.

14.7 The principal task of East Timor's economic policy-makers, however, is to develop the best possible enabling environment in which private sector business activity can succeed. Accordingly, this is the central thrust of the programmatic initiatives set out in the Plan. Continued development of the business regulatory environment, reinforced through effective promotional activities, is the cornerstone of the sector's plan. This will place a demand upon the resources of those parts of Government responsible for preparing and passing legislation and subordinate legal instruments. Several parts of the regulatory framework have been readied to varying stages, for example the foreign investment law. However, other areas such as legislation addressing land reform and uncertain property title have not yet been effectively addressed. Overall, there are three broad areas of intended program activity within the sector:

- a) Policy and regulatory development related to the private sector-enabling environment.
- b) Government and joint public-private promotion of industry, investment, tourism and trade.
- c) Capacity building of civil servants and private sector operators.

14.8 The largest portion of East Timor's private sector is its micro-enterprises and SMEs, and the needs of these businesses dominate the policy-making horizon. As the formal enabling framework takes greater form, and as private sector activity deepens and the average size and capacity of businesses grows, a key challenge will be to take advantage of downstream opportunities that may follow from the offshore oil and gas operations. This includes seeking to build the capacity of smaller businesses, developing better domestic and foreign supply chains, and broadening the economic base, thus generating more employment, utilizing more advanced technology, and increasing non-oil and gas exports. This will be the principal task of greatest relevance to economic policy-makers in the years to come and will continue well beyond the life of the Plan.

14.9 Trade, both foreign and domestic, will play a crucial role in achieving this growth and development. East Timor should actively develop its trading industries, especially those with an export focus, and seek to increase trade with its neighboring countries, mainly Indonesia and Australia, where proximity to markets and logistics provide realistic opportunities. East Timor should seek membership of appropriate trade groupings and seek preferential treatment from key export markets. East Timor's foreign trade regime needs to be carefully set. It needs to be open, and it needs to reflect the fact that East Timor shares land and sea borders with Indonesia and these borders will become increasingly porous. Import tariffs set too highly in such an

environment will tend to encourage inward smuggling and loss of customs revenue. While imports can bring technologies and products essential to growth and development, imports can also destabilize the economy, fuel higher prices, and polarize employment opportunities in the near term. Therefore, it is imperative that growth in trade and foreign investment does not disenfranchise the population and cause incidental costs to the environment and society. Similarly, domestic trade will play an important part in continuing to restore the supply of goods and services, especially to outlying rural areas. This has already occurred to some extent, mainly enabled by a relatively rapid replacement of the national truck and bus fleet since 1999.

14.10 Development of East Timor's agricultural base and its rural areas will be an important part of economic growth and poverty reduction strategies. New manufacturing capacity will be targeted in rural areas where rural non-farm employment opportunities can be generated. Processing of raw materials and agricultural products to add value to outputs will enhance domestic development as well as contribute to export revenues and reduce poverty.

14.11 In building the enabling environment, the following are the main issues that East Timor will need to address:

- a) minimize barriers to domestic and foreign investments
- b) provide more certain land and property rights, especially for enterprise development
- c) improve availability of, and access to, credit for micro-enterprises and SMEs
- d) expedite enactment of key laws
- e) ensure that enhancement of the policy and regulatory framework is matched by corresponding capacity of the legal system to adjudicate
- f) increase level and diversity of exports, and improve domestic productive capacity
- g) maintain sufficient flexibility and competitiveness in the national wage structure
- h) soundly invest proceeds from offshore oil and gas extraction

14.12 The Working Group and the MEAD undertook an extensive amount of analysis of policy and strategy options which formed the basis of decisions on the programs and projects presented here. This process of analysis was, in itself, an important outcome of the national planning process. The Working Group and the MEAD also recognize that the formulation of the Plan is the beginning rather than the end of the planning process. Beyond the scope of this document, the MEAD will establish action plans that will be used to guide the ongoing activities required within the programs and projects. The MEAD is also aware of the importance of monitoring and evaluating progress against performance indicators as they are set out in the Plan and will institute appropriate monitoring and evaluation systems.

14.13 The national planning process has shown a large number of outstanding requirements that would benefit from additional external assistance. Within this sector, there are high-priority programs and projects that will be essential to achieve economic growth and to reduce poverty that may be funded by donors. These include, for example, projects to develop the regulatory framework, micro-enterprise and SME development, trade and foreign investment policy and law development, and capacity building.

14.14 In conclusion, it is certain that a vibrant private sector will be the key determinant of whether East Timor can achieve sustainable growth leading to improved livelihoods. However, in the near term and during the critical transition period, little can be achieved in development without the continued assistance of international donors and it is intended that this document will help guide donor deliberations on future interventions in this sector.

WORKING GROUP RESULTS

Box 14.1 Vision, Goals, Guiding Principles and Key Development Indicators, Issues and Constraints

Vision:

An East Timorese economy that is stable, and that enables a society to be just and prosperous.

Goals:

1. To increase the level of per capita income
2. To improve the ability to compete with the rest of the world
3. To create new employment
4. To eradicate poverty
5. To create a healthy capital investment environment
6. To develop export-oriented industries
7. To raise the inflow of international tourists
8. To promote the sale of local products overseas
9. To strengthen the banking system to enable a strong economy
10. To provide infrastructure to help, in particular, agri-business develop
11. To broaden community access to commercial credit

Guiding Principles for Program Development:

1. That national welfare is equitable
2. That provides full employment opportunities
3. That reduces income inequalities
4. That optimizes benefit from natural resources

Key Development Indicators for the Five-year Plan:

1. Income per capita to reach \$600 per annum (in 2002 dollars)
2. Percentage of non-coffee exports to reach 60% of total non-oil and gas exports
3. Value of non-oil and gas exports to grow ten-fold from 2001 export levels
4. Ratio of Imports/GDP to fall from 170% to < 70%
5. Number of foreign investment operations to reach 2,000
6. Total foreign tourists to reach 5,000 per annum
7. Industrial production/GDP to reach 15%

Issues and Constraints

The Working Group identified the following as some of the issues, risks and constraints facing the sector and to which the Plan seeks to respond:

1. Lack of literacy in the country.
2. High population growth rate that will place pressure on labor market.
3. Low levels of technology and productivity in all sectors.
4. Unclear incentives for business people.
5. Limited government budget to fund programmed activities.
6. Low levels of production efficiency, notably in agricultural.
7. Coming reduction in international presence and resulting demand distortions.
8. Minimal experience in and understanding of sovereignty.
9. Lack of civil servant policy-making experience.
10. Uncertain property and land rights.
11. Incomplete legislative framework in virtually every essential commercial area.
12. Continuing lack of physical capital, plant and equipment.
13. Relatively high wage rates relative to probable international competitors.
14. Uncertainty about areas of national comparative advantage.
15. Small domestic market for absorption of domestic goods and services.
16. Insufficient access to, and levels of, credit for small business

17. Inability of lenders to take collateral against loans.
18. Limited domestic experience with entrepreneurship and business.
19. Undeveloped business services sector for enterprise support.
20. No inward/outward passenger/tourist ships from Indonesia.
21. Lack of supporting systems and infrastructure to develop tourism.
22. Underdeveloped infrastructure, especially telecommunications and energy.
23. Adverse implications of inappropriately protective trade and investment policy.
24. Lack of functional banking and financial intermediation.
25. Adverse domestic welfare transfers from poorly conceived economic policy.
26. Persistence of extreme negative Current Account.
27. Higher import barriers that will adversely affect poverty reduction efforts and stifle economic development.
28. Non-national treatment accorded to foreign businesses will occur if care is not taken to ensure enabling investment legislation and adjudication under a rule of law.
29. Future expectations of higher taxes by business as public expenditures rise.
30. Non-repayment of loans leading to restrictions on credit extension will reduce willingness of banks to increase lending.
31. Non-compliance of domestic businesses for payment of tax and utilities will continue to threaten both infrastructure and commercial development.
32. Import-dependency without growth in domestic production will lead to unsustainable trade deficits.
33. Dependence on oil and gas royalties will result in failure to develop other industries will lead to a distorted and narrowly based economy.
34. Higher trade tariffs may lead to corruption at border areas, or increase smuggling, and will threaten confidence in governance.
35. Appreciating/strong US dollar relative to currency of key export markets will result in macroeconomic and monetary imbalances.
36. Insufficient inclusion of women in private sector development activities.

OFFICE OF THE DIRECTOR-GENERAL (ODG) – OVERVIEW

14.15 The ODG provides the overall departmental leadership and administrative coordination of activities of the four Divisions. The Director-General will have primary responsibility for departmental capacity building, staff training, budget management, and coordination of complementary Division activities. The ODG will also support promotional activities, coordinate multi-media requirements, and implement a realistic monitoring and evaluation system to implement and guide the sector's efforts against the programs and projects set out in the Plan.

14.16 The ODG will become the primary repository for materials and skills that are necessary for economic development, capacity building, and support for departmental projects. The ODG will also be responsible for training, inter-departmental communications, and joint projects with other agencies of Government. Donor-related activities specific to programs or projects under the MEAD will be coordinated through the ODG, including activities for micro-enterprise and SME development, tourism, domestic and foreign investment, industry development, foreign and domestic trade, and business registration.

14.17 It is important to distinguish between activities within the budgeted framework of the MEAD (and the programmatic divisions) and those projects that will require external budget support or direct donor assistance. The ODG is responsible for managing all of the programs and projects of the sector. This includes government-funded activities that can normally be classified as capacity building, promotional, and policy and regulatory development. Such responsibilities will also require coordination with other departments, in particular, in relation to drafting legislation and regulations, and with external donors and NGOs.

14.18 The ODG will also be responsible for managing and leading externally funded programs and projects which are identified within the Plan but will be beyond the scope of the national budget to implement. The ODG will support various donor and NGO initiatives by helping to design and implement projects, and providing access to Government support as necessary. Similarly, the ODG will work with donors, civil society and NGOs, to ensure that the benefits of external inputs are maximized and well distributed, and that duplication is avoided.

14.19 The ODG will also be responsible for leading efforts to engage with foreign partners, both investors and governments, in an effort to grow the economy. This will include fostering stronger foreign trade links, explaining the potential of East Timor to foreign investors, and ensuring that benefits from such efforts are demonstrably connected to economic growth and poverty reduction throughout the country. In order to achieve this, the Government intends to work closely with the private sector and civil society to explain the expected benefits of economic development efforts and how those benefits should be available to all, but in particular to the poorest.

OFFICE OF THE DIRECTOR-GENERAL– PROGRAM SUMMARY

PROGRAMS OF THE ODG

Key Objectives:

- a) To generate new employment and create economic opportunities
- b) To ensure coordination with other Government departments on private sector development

- c) To assist and stimulate effective relationships with foreign countries and foreign investors
- d) To pursue legal and regulatory initiatives that enable a competitive private sector
- e) To encourage private sector development that can drive future economic growth in East Timor
- f) To coordinate policy and regulatory development for all parts of the private sector
- g) To provide the departmental support for division promotions and effective public relations
- h) To achieve sustained improvements in departmental capabilities for economic development

Key Strategies:

- a) Understanding the specific requirements of private sector businesses
- b) Coordinating the wide range of necessary policy and regulatory development work
- c) Maximizing the value of, and coordinating, donor contributions to the sector
- d) Coordinating the promotional work of Divisions and achieving efficiencies
- e) Leading efforts to find solutions to business problems such as uncertain land title rights
- f) Strengthening institutional economic policy-making, administrative and promotional capacity
- g) Sequencing implementation of sector programs and projects according to set priorities

Program 1: Coordination of Divisional Promotions

- a) Divisional promotions
- b) External assistance for promotions

Program 2: Coordination of Policy and Regulatory Development

- a) Policy bank
- b) External technical assistance coordination
- c) Regulatory Development Coordination
- d) Enterprise land reform
- e) International arrangements

Program 3: Institutional Capacity Building

- a) Institutional strengthening with donor assistance
- b) Seminars and workshops

OFFICE OF THE DIRECTOR-GENERAL – OBJECTIVES

14.20 The ODG represents the departmental leadership and focus for administrative coordination and has the following primary objectives:

- a) To pursue, in coordination with other relevant departments, the development of a full commercial code including, primarily, laws on insurance, incorporation, unincorporated business entities, contract, trademarks and bankruptcy.
- b) To develop with the MoJ a company registration and licensing system.
- c) To institute a Land Code including a land registry which will facilitate more certain land and property rights and enable more protection for capital improvements to land for both foreign and domestic investors.
- d) To support the passage of laws that will better enable the operations of banks and micro-finance providers to increase their levels of lending, and their ability to mobilize savings.
- e) To establish an overarching micro-enterprise and SME development program, and coordinate donor intervention for training, business services, access to credit, and build stronger domestic trade linkages that better support flow of goods and services between Dili and the districts.
- f) To promote the importance of the private sector through public media, and to demonstrate the benefits of a market-based economy, and to coordinate divisional printing of publications.
- g) To build institutional capacity within the department for and establish a sustainable professional development program.
- h) To promote the principle of National Treatment for all investors and enterprises, thus equal treatment under the law.
- i) To support the development of capable business associations and chambers of commerce to address private sector issues.

OFFICE OF THE DIRECTOR-GENERAL – STRATEGIES

14.21 In order to achieve its objectives, the ODG will support the strategic initiatives of other departments and government agencies. It will provide departmental leadership in implementing the programs and projects of the Plan. It will take the lead in establishing and following an agreed format for monitoring and evaluating its own efforts and that of other departments in implementing the programs and projects of this sector. The ODG will seek to regularly explain the nature of the sector plans to other departments and the private sector so that all stakeholders are informed about the efforts of Government to grow the economy and reduce poverty. The

ODG will also necessarily respond to changing circumstances, as well as ensuring that the Plan is regularly updated in accordance with broader Government planning processes. This integrated sector strategy will be realized through coordinated division strategies that achieve economic growth through effective legal and regulatory initiatives, enhanced training, pursuit of a strong domestic economy that concurrently supports export development, and a diversified economic base that supports new employment while reducing poverty.

OFFICE OF THE DIRECTOR-GENERAL – PROGRAMS AND PROJECTS

Program 1: Coordination of Divisional Promotions

14.22 The ODG has the capacity to pursue objectives related to general public relations, but more importantly, to support promotional activities for each of the programmatic divisions. These may include inter-divisional projects for private enterprise development, joint industrial and investment initiatives, SME development, and interdependent trade development projects. Essentially, the ODG will provide a focal point for information, publication, and material database development relevant to industry, investment, trade, and tourism.

14.23 The projects to be implemented under this program are the following.

- a) Public Relations on Private Enterprise Development
- b) Association and Chamber Development and Support
- c) Divisional promotions
- d) Internet and Web-based systems development
- e) Departmental Printing and Publications

Program 2: Coordination of Policy and Regulatory Development

14.24 Many objectives of economic development of high priority to the Department and the private sector rely on inter-ministerial cooperation for legislation. Consequently, the ODG will develop a liaison procedure with each relevant ministry or agency, outlining the type of legislation required for economic development and the rationale to underpin a policy for legislative initiatives. The ODG will then identify projects or activities under the program that can be managed through appropriate divisions within the department or through cooperative governmental efforts. In many instances, these will require donor assistance that the ODG will either directly pursue or identify as projects to be presented to the CoM and donor organizations.

14.25 The projects to be implemented under this program are the following.

- a) Regulatory Development Coordination
- b) Policy Bank
- c) External Technical Assistance Coordination
- d) Enactment of a Foreign Investment Law
- e) Intellectual Property Rights, Patents, Trademarks, Copyrights
- f) Consumer Protection Laws and Related Safety, Truth in Advertising

- g) Enterprise Land Reform and Titling
- h) Public Land Reform and Titling
- i) Rural and Agricultural Law Reform and Titling
- j) Land Title and Registration System
- k) International arrangements
- l) Land Lease and Use Rights Project

Program 3: Institutional Capacity Building.

14.26 There are several priority objectives requiring capacity for training and requisite expertise for human resource development. The training will require external expertise and donor-supported technical assistance for general training processes and for specific educational activities. The ODG will identify component activities under this program, the target participants, and the expected results within the five-year planning horizon. Eventually, the objective will be to have internal training and development capacity with effective educational materials and resources to sustain staff initiatives in economic and private sector development. As an additional benefit, these capabilities will allow the department to be a provider for materials and access to training in economic and private sector affairs for other offices and agencies.

14.27 The projects to be implemented under this program are the following.

- a) Departmental Staff Capacity Training
- b) Development of Human Resource Training for Business & Economics
- c) Skills Training and Entrepreneurship (relates to Informal Sector Initiatives)
- d) SME Training Support and Modeling
- e) Institutional Strengthening with Donor Assistance

OFFICE OF THE DIRECTOR-GENERAL – PERFORMANCE INDICATORS

Objectives	Performance Indicators
1. Generate new employment and create economic opportunities	<ul style="list-style-type: none"> • Number of new jobs • Percent reduction in unemployment • Increased per capita GDP
2. Ensure coordination with other Government departments on private sector development	<ul style="list-style-type: none"> • New commercial laws enacted • New regulatory regimes initiated • Number of appropriate inter-ministry and cross-divisional projects initiated
3. Build relationships with foreign countries and foreign investors	<ul style="list-style-type: none"> • Trade legations or foreign offices initiated in region, globally • Number of foreign investor inquiries • Number of foreign investors with East Timor registrations • Resolution of trade or currency treaties and other international issues
4. Build an efficient and competitive private sector enabling environment	<ul style="list-style-type: none"> • Percent increase in private sector contribution to GDP • Percent increase in private sector jobs • Number of newly registered private commercial enterprises
5. Enable the private sector to drive future economic growth in East Timor	<ul style="list-style-type: none"> • Progress on sustainable infrastructure for private enterprise growth • Resolution of utility and power issues • Effective tax regime to encourage domestic and export growth
6. Coordinate policy and regulatory development for all parts of the private sector	<ul style="list-style-type: none"> • Fully completed commercial code • Implementation of foreign investment law • Effective insurance and banking laws • Land reform and titling program instituted

DIVISION OF INDUSTRY (DoI) – OVERVIEW

14.28 A large work program has been set out for the DoI to address both economic development within the industrial sector and to make an important contribution to poverty reduction. The DoI has conducted useful baseline studies. It will continue to conduct industry

assessments while exploring new opportunities that may be attractive to investors. The results will allow the DoI to orchestrate a meaningful industry promotion program and directly pursue innovative ways in which the country can encourage a stronger platform of private sector initiatives that can be sustained.

14.29 The challenges for industry, which are essentially concerned with manufacturing and processing systems, are enormous after nearly 70 percent of the industrial base was destroyed. Despite this, it is encouraging that so much potential remains if manufacturing can be reconstructed as a foundation for future growth.

14.30 In 1997, there were approximately 46 different types of manufacturing in five industrial sectors (rice and coffee processing, wood furniture and crafts, textiles and weaving, construction, and baking). Manufacturing also existed in iron works, dyeing, salt production, and a number of very small micro-enterprise cottage activities. At that time, 4,494 enterprises were formally registered, employing about 13,355 workers, and generating an official output of more than \$20 million in income on \$65 million invested. Today, some manufacturing remains in most sectors, but at such low levels and with such marginal resources that it is difficult to classify any activity as self-sustaining.

14.31 A DoI study completed in 2001 indicated that there are around 1,300 enterprises engaged in some means of manufacturing or processing. This could be an optimistic estimate as many sampled enterprises were informal cottage activities in rural areas. Estimated total employment among these may not be more than 8,700 workers, and little is known about the investment base or income generation. Consequently, plans for the DoI rest strongly on the ability to establish a reliable picture of manufacturing, of employment, investment, and industries with growth potential.

14.32 The DoI cannot, on its own accord, implement a feasible strategy for growth in manufacturing or national industry development. Success will depend greatly on integrated activities within the MEAD, and the interdependent activities of this and other government ministries. In most instances, division objectives, strategies, and project activities represent operational planning, project oversight, and coordination, not direct use of departmental budget and staff.

14.33 The DoI will focus primarily on small-scale enterprises, and further emphasize opportunities in agri-business, but also be part of the integrated departmental activities conducive to trade and tourism. The division has formulated objectives as benchmarks for the five-year planning period, and it has devised strategies based on the themes of integrated activities and the interdependencies among government constituents. A composite overview of division plans is presented in Box 12.3 and these components are further described in subsequent sections.

DIVISION OF INDUSTRY - PROGRAM SUMMARY

PROGRAMS OF THE DoI

Objectives:

- a) To create greater employment opportunities in the industrial sector
- b) To provide a better enabling environment for private sector investment
- c) To produce more added-value products in East Timor, especially in agriculture

- d) To increase export earnings through using more technology in production
- e) To ensure increases in export of non-oil and gas related products relative to GDP
- f) To increase Government tax receipts via a profitable formal private sector
- g) To ensure that Government policy does not hinder micro-enterprises and SMEs

Strategies:

- a) Developing a stronger business culture and support to SMEs
- b) Promoting private participation in infrastructure development
- c) Devoting resources to export promotion and diversification of the export base
- d) Increasing commitment of resources to development of basic business skills
- e) Strengthening the policy and regulatory environment
- f) Facilitating creation of industrial infrastructure such as the Industrial Zone
- g) Working toward greater access to bank credit for small businesses
- h) Encouraging improved competitiveness, efficiency and productivity
- i) Improving the economic policy-making capacity of Division staff

Program 1: Industrial Development

Key Projects:

- a) Industrial Zone assessment and development
- b) Business Development Centres and subordinate Business Offices
- c) Formation of Chamber of Commerce and development of business associations
- d) Industry database enhancement

Program 2: Policy and Regulatory Development

Key Projects:

Small Enterprises Project II business regulatory environment development

Support for inter-agency development of Policy Framework for Micro-financing and Credit

Development and maintenance of relevant industrial and commercial policies

Program 3: Divisional Training and Development

Key Projects:

- a) SEP II civil servant economic policy-making skills training

- b) Training in industrial development experiences
- c) Training in service delivery to the private sector

Program 4: Micro-enterprise and SME Development

Key Projects:

- a) Small Enterprises Project (SEP I)
- b) Small Enterprises Project (SEP II)
- c) Micro-finance Development Project
- d) Formation of Inter-industry Commission on the Micro-enterprise and SME sector
- e) Establishment of industrial skills and crafts centre and exhibition centre

DIVISION OF INDUSTRY - OBJECTIVES

14.34 The following are some of the objectives of the DoI:

- a) To create greater employment opportunities in the industrial sector and support growth initiatives in other sectors.
- b) To ensure that Government policy does not hinder growth of microenterprises and SMEs and supports efforts to build domestic trade.
- c) To work with other departmental activities to promote a favourable investment climate and to mobilize investment capital in the private sector.
- d) To promote development in the manufacturing, processing, and industrial enterprises, specifically in relation to agro-businesses.
- e) To assist the private sector in creating greater value-added production that can stimulate strong domestic growth and accelerate employment.
- f) To increase the number of established registered manufacturing enterprises.
- g) To increase industrial output relative to overall GDP.
- h) To increase the tax revenue base, over time, through the formalization of new enterprise and employment activities, and by demonstrating the benefits of participation in the formal economy
- i) To increase export earnings through using more technology in production

DIVISION OF INDUSTRY - STRATEGIES

14.35 In order to achieve its objectives, the DoI will follow an integrated, multi-sectoral approach with strategic programs and focused projects during the next five years. The core strategies require working jointly with other ministries to improve the physical and institutional

structures conducive to the promotion and development of industry, trade, investment and tourism with responsible utilization of natural resources.

14.36 The divisions programs will be implemented through a strategy of targeted development of industrial infrastructure, such as industrial estates, that can provide as a priority, strong domestic manufacturing and process capabilities. This will require a parallel strategy aimed at financial needs of the industrial community encouraging new credit and investment, greater access to bank credits, and donor-assisted activities that can improve credit access and financial intermediation to industrial enterprises.

14.37 A crucial strategic role of the DoI will be to identify opportunities and assist SME development that reaches small, cottage, and entrepreneurial activities. The most forward-looking strategy will be concerned with competitiveness, which reaches well beyond industrial reconstruction or early transitional activities to include East Timor's position within the region and among more global interests for participating in bilateral trade agreements, establishing industry delegations, and pursuing projects that can achieve realistic competitive advantages.

DIVISION OF INDUSTRY – PROGRAMS AND PROJECTS

14.38 The division will pursue several programs to implement its strategies with each defined according to logical categories of activities. Each program will initiate projects and identify activities that can be initiated under the division or through joint-divisional efforts, and in each programmatic area the division will identify potential donor-assisted projects and activities. Many of these have overlapping responsibilities within the department, but also with other governmental ministries.

Program 1: Industry Promotion

14.39 Internal to this program will be a concerted effort to support and promote export development, bilateral trade with primary trading partners, broad-based investment, and tourism. The DoI will have responsibilities in all areas, but more specifically in coordinated projects inclusive of manufacturing, agro-business, and vendor-related activities that support initiatives such as hospitality development. Industry promotion will occur, in part, through the BDCs and regional offices, and through support for CoC and private sector business associations. It is also essential to build into the departmental system an integrated industry database that can be utilized in trade, investment, and domestic industrial development promotions.

14.40 The projects to be implemented under this program are the following.

- a) Development of National Industrial Association and Chamber of Commerce
- b) Formation of Inter-industry Commission on Cottage and Micro-enterprises
- c) Assessments on Industry and Database Development
- d) Establishment of Industrial Skills and Crafts Training Centre
- e) East Timor Handicrafts and Industrial Products Showroom
- f) Industrial Zone assessment and development
- g) BDCs

Program 2: Policy and Regulatory Development.

14.41 This program area captures the leading role of the division of industry for legal and regulatory initiatives specific to manufacturing and industry sector growth. A critical part of this program is coordination of the Small Enterprises Project II with respect to the component activities designed for regulatory development that will be orchestrated with a specific (and separate) program of SME development described momentarily. Much of the division's work will be jointly pursued under the ODG and with cross-divisional support.

14.42 The projects to be implemented under this program are the following.

- a) Regulatory Requirements for Industrial And Economic Zones
- b) Inter-Agency Development of Policy Framework For Micro-Finance And Credit
- c) SEP II Business Regulatory Environment Development
- d) Establishment of a Government Credit Guarantee Agency for Industry
- e) Capital Markets and Industrial Investment Initiative

Program 3: Divisional Training and Development

14.43 The DoI has a commensurate responsibility to develop staff capabilities to plan and manage industrial projects, or to coordinate inter-divisional activities. Not least of all, staff must be able to work closely with many different ministries and a variety of donors who will be essential to success in East Timor's drive toward a market-based economy. Consequently, the division will provide industrial databases, materials, information resources, and programmatic models for training and management development. It will work together with other divisions to design intervention proposals to support department-wide efforts at comprehensive staff and management development. Several project activities are listed below:

14.44 The projects to be implemented under this program are the following.

- a) Division Capacity Building and Training in Industrial Development
- b) SEP II as Related to Civil Service Economic Policy Making and Skills Training
- c) Joint Training for Services and Industrial Vendor Support Systems in the Private Sector

Program 4: Micro-enterprise and SME Development.

14.45 A majority of projects and activities under a micro-enterprise and SME mandate will address issues within the informal economy. This will occur consciously as part of the division strategy to assist entrepreneurs, cottage enterprises, and established SMEs who can become taxpayers while benefiting from official support and public services. Projects under this program will provide assistance to micro-enterprises, but also support new ventures, independent entrepreneurs, and SMEs with growth potential through training and business services. In addition, the division will work closely with trade and tourism, and with other sectors such as agriculture, forestry, and fishing, to target interdependent problems of access to bank credit, and micro-finance. Many of these initiatives will necessarily require donor support and technical assistance, particularly for enhanced skills and technology development.

14.46 The projects to be implemented under this program are the following.

- a) SME Development Initiative for the Private Sector
- b) Formation of Inter-Industry Commission to pursue legitimization and registration of micro-enterprises and SMEs
- c) Joint project with divisions on BDCs and business advisory services
- d) Business Skills Training for the Private Sector (SEP I and II)
- e) SME II market rehabilitation project
- f) Micro-finance Development Project and lending promotion activity
- g) Project on competition policy, and competitiveness
- h) Business Information and Entrepreneurship

DIVISION OF INDUSTRY – PERFORMANCE INDICATORS

Objectives	Performance Indicators
1. Create greater employment opportunities in the industrial sector and other businesses	<ul style="list-style-type: none"> • Number of new jobs in manufacturing and related industrial enterprises • Percent decrease in unemployment • Percent increase in per capital GDP
2. Provide a better enabling environment for private sector investment	<ul style="list-style-type: none"> • Number of newly registered private companies • Implementation of commercial code and related regulations
3. Produce more added-value products in East Timor, especially in agriculture	<ul style="list-style-type: none"> • Number of new products fabricated in industry and agro-business • New processes introduced in conversion systems and Industry • Perception of higher quality products and services
4. Increase export earnings through using more technology in production	<ul style="list-style-type: none"> • Increased capital asset base • Number of companies with exportable goods • Number of companies with new production technologies • Percent increase in value-added exports
5. Ensure increases in export of non-oil and gas related products relative to GDP	<ul style="list-style-type: none"> • Percent increase of exports of non-oil and gas related production • Number of new external trade linkages

6. Increase Government tax receipts via profitable formal private sector businesses	<ul style="list-style-type: none"> • Increased taxes from registered business enterprises • Number of new registered private sector enterprises • Percentage increase of taxes from exports and domestically marketed products
7. Ensure that Government policy does not hinder growth of SMEs and the informal sector	<ul style="list-style-type: none"> • SME rate of growth matches or exceeds industry and sector performance • Percentage of SME capital assets matches or exceeds industry averages • Percent of commercial credit available

DIVISION OF INVESTMENT – OVERVIEW

14.47 The mandate of the DI is to encourage and facilitate new investment, in particular foreign investment. This will require establishment of an enabling environment for foreign and domestic investments and pursuit of capital projects that can improve the nation's technological profile and provide greater employment opportunities. Inward flows of foreign capital, especially as the size of the international presence continues to decline, will be critical to economic growth and poverty reduction. The DI will take the lead on seeking to improve the regulatory and policy framework for foreign investors, promoting foreign and domestic investment, and building the capacity of its staff to carry out their tasks effectively. The DI will work closely with other divisions such that new investment can be attracted to areas that best support the targeted objectives of the overall sector, including industry, trade and tourism.

14.48 The DI cannot achieve these overarching objectives independent of efforts from other parts of Government. The only feasible way to succeed on these issues as a nation is through integrated activities and a cooperative, interdependent commitment among the ministries and key agencies as well as with the private sector and civil society. With that in mind, the DI has formulated objectives for the five-year planning period, and it has devised strategies to implement programs of investment and development within an interdependent system of activities.

14.49 The DI has, during the UNTAET period, already developed a reasonable approach to managing and attracting foreign investment, based on informal, but broadly understood, Government policies. These policies, given that the country was in a transition period, served the country well and have enabled a surprisingly high level of foreign investment. The coming period will require these quasi-regulatory arrangements to be formalized.

14.50 Further, the policies and practices emerging from the DI will have a strong signaling effect to the private sector. The Government recognizes this and is committed to maintaining an open and transparent role in approving, registering and licensing foreign investment in an efficient and even-handed way. To give this approach a legal footing, the DI has formulated a draft policy and regulation governing FDI. These underscore the Government's commitment to seeking additional FDI and to providing a high level of service to investors. The DI has a large work program set out within the Plan but it attaches especially high priority to putting in place a formal policy and regulation governing FDI.

14.51 The focus on coordination with other divisions and departments is intended to ensure that the benefits of FDI are maximized. This relates to, for example, the desire to increase appropriate investment in the tourism sector, as well as coordinating with the DoE to ensure that the Government's commitment to environmental protection is upheld. Additionally, the Government is keen to attract long-term, high quality FDI, especially where it brings new technology, is labor-intensive, promotes exports or increases domestic productive capacity, and creates new demand for inputs from local suppliers.

DIVISION OF INVESTMENT – PROGRAMMATIC SUMMARY

PROGRAMS OF THE DI

Objectives:

- a) To maintain an open and responsible foreign investment framework
- b) To attract foreign investment that creates employment and brings new technology
- c) To help link foreign investment with domestic businesses, especially for supply
- d) To create a “One-Stop Shop” for foreign investors to help streamline the investment process
- e) To attract foreign investment that generates new, sustainable export industries
- f) To encourage foreign investment that adds value to agricultural products
- g) To demonstrate to all stakeholders the merit of foreign investment to the country

Strategies:

- a) Working with other Divisions to build a strong policy and regulatory environment
- b) Initiating and overseeing the passing of a foreign investment law
- c) Supporting broader Government efforts to redress land and property title uncertainty
- d) Maintaining oversight of the activities and initiatives of foreign investors
- e) Improving the technical capacity of Division staff over time
- f) Promoting East Timor as an attractive investment destination
- g) Using forms of promotional advertising such as brochures and exhibitions
- h) Advising potential investors of the risks and opportunities available in various sectors
- i) Consulting regularly with domestic businesses about the impact of FDI
- j) Preventing crowding out of domestic businesses

Program 1: Investment Promotion

Key Projects:

- a) Investment Service Centre (One-Stop Shop)
- b) Production of Promotional Literature
- c) Overseas and domestic foreign investment promotion events
- d) Website project

Program 2: Policy and Regulatory Development

Key Projects:

- a) Development, maintenance and enforcement of policy and legislation
- b) Support to development and oversight of licensing requirements

Program 3: Divisional Training and Development

Key Projects:

- a) Overseas training in language and service delivery
- b) Technical training in foreign investment management

Program 4: Foreign Investment Management

Key Projects:

- a) Foreign investment database
- b) Foreign investment reporting and review mechanism
- c) Certification of foreign investment

DIVISION OF INVESTMENT - OBJECTIVES

14.52 Below are some of the key objectives of the DI:

- a) To draft and implement a Foreign Investment Law capable of sustaining long-term interest in foreign investment while enfranchising and complementing domestic investments and satisfying social and environmental parameters.
- b) To work with the MoJ to facilitate a foreign company registration and licensing system.
- c) To cooperate with appropriate ministries to develop a Land Code with a land registry which sets out ownership rights and provides certainty for investors to add capital improvements to land.

- d) Create feasible scenarios for FDI and domestic development for cultural centres, eco-tourism, and recreational facilities.
- e) Establish feasibility studies for capital-intensive enterprises (resorts, fisheries, LPG gas depots, and others) that can be marketed to foreign investors.
- f) Within the DI, create an Investment Service Centre (one-stop shop) that can process investment inquiries and applications for foreign investment certificates and complement Division of Trade activities.
- g) To establish programs and services that promote investment opportunities in regional tourism, thus reinforcing a positive global image for East Timor as an attractive foreign investment opportunity.
- h) To ingrain the principle of National Treatment for all foreign investors and enterprises, thus ensuring equal treatment under the law.
- i) To work jointly with the Divisions of Industry and Trade to establish special economic zones for controlled export and transshipment of value-added, processed goods.
- j) Establish a sustainable professional development program on foreign investment and its related activities for internal departmental staff, and that can be used for external staff and private sector development through seminars and workshops.

DIVISION OF INVESTMENT - STRATEGIES

14.53 The DI endorses the concept of an open approach to foreign investment, and the division will follow an integrated process for strategic implementation of all objectives. Even those with primary responsibilities resting within the division, extensive cooperation with other divisions will be required to achieve the desired outcomes. The division will pursue a comprehensive strategy of generating greater legal capacity for investment with effective processing and management of registered foreign investments. This will include monitoring and evaluation to protect the environment, and joint strategies for planning with trade and tourism to promote ecologically sound investments. Investment strategies include a systematic effort to design project proposals that can be considered by government or by donor organizations. These will be targeted investment initiatives that will result in sustainable expansion of infrastructure or a policy framework that can encourage accelerated foreign investments. Understandably, a strategy of encouraging labor-intensive industries will have more direct effect on employment and poverty reduction than large capital-intensive projects, yet the division will evaluate the strategic impact of any initiative that foster growth while not threatening to crowd out local business.

DIVISION OF INVESTMENT – PROGRAMS AND PROJECTS

14.54 The primary strategies described above imply orchestrated programs to serve as vehicles for achieving divisional objectives. These are described individually with projects proposed that can be reasonably addressed within the five-year plan, even though many will rely on interactive development with other divisions. Significant donor assistance will be crucial as resources and technical expertise in many project areas is beyond local capabilities in the near term.

Program 1: Investment Promotion.

14.55 The division will specifically address innovative approaches to domestic and foreign investments, incentive systems, feasibility plans for unusual projects, joint investment-trade activities, public information and foreign investor information systems, and various types of assistance that can be offered through governmental hospitality and investment centres. These may include domestic and foreign media activity, VIP centres and support at airports and seaports, advisory services for foreign investors, conferences on trade and investment, and seminars and workshops on investment

14.56 The projects to be implemented under this program are the following.

- a) East Timor Industrial Products and Trade Exposition Centre (joint with others)
- b) Create investment liaison activities with Tourism to support promotions of a NTB
- c) Investment Service Centre (One-Stop Shop)
- d) Investment promotion project for regional trading partners (mainly through Trade liaisons in Australia and Indonesia)
- e) Investment promotion project to include East Timor in trade and investment databases among major foreign trade regimes (e.g., Japan, Hong Kong, others)
- f) Production of Promotional Literature
- g) Website for international investment and trade activities
- h) Promotional development of materials and marketing of East Timor's investment opportunities
- i) Information and promotion project with activities for investor packages, and project
- j) activities for interfacing with public media, providing seminars, and promoting investment-oriented conferences

Program 2: Policy and Regulatory Development

14.57 In concert with the ODG, the DI will support legislative and regulatory initiatives related to economic growth, and it will take a leading role in laws and regulations concerning foreign and domestic investments. Closely related to legislative issues are those activities of processing and registering foreign investments, and subsequently monitoring investor activities for compliance.

14.58 The projects to be implemented under this program are the following.

- a) Draft and pursue enactment of a Foreign Investment Law
- b) Joint development of a Foreign Investor Registry System with the MoJ
- c) Implementation of an internal processing system for Applications and Certifications of Foreign Investors
- d) Interdependent coordination of a Customs and Trade Regime

- e) Support to development and oversight of licensing requirements

Program 3: Training and Development

14.59 The division will pursue specific staff training and investment development activities that systematically improve departmental capabilities for promotion, coordination, and management of foreign investments. These activities will also be structured to strongly support all domestic development and complement programs and projects under the divisions of industry, trade, and tourism.

14.60 The projects to be implemented under this program are the following.

- a) Establish capacity building activities for foreign language materials and overseas investment communications.
- b) Technical training and assistance for promotion of foreign investments
- c) Technical training and intervention support for foreign investment processing and management systems

Program 4: Foreign Investment Management

14.61 The key to managing foreign investment activities will be to provide a “one-stop-shop” focus within the division. This will not be a specific centre in itself, but a comprehensive approach to foreign investments whereby an investor can obtain information on opportunities, make applications, process requests for registering companies, and process requirements for licenses or permits. At the same time, the division can expedite applications and rapidly route information for reviews and approvals, and subsequently position the investor for efficient registration. Management also includes projects that expand investment capacity, and that ensure monitoring and responsible compliance procedures. Planning will be required with inter-ministerial cooperation on many projects under the program.

14.62 The projects to be implemented under this program are the following.

- a) Foreign Investment Database
- b) Foreign Investment Certification
- c) Feasibility studies for investor scenarios in resorts, hospitality, culture, and recreation opportunities
- d) Feasibility studies for major foreign investments (e.g., LPG terminal, port transshipment system, air cargo, and fisheries.)
- e) Investment coordination with Divisions of Trade and Industry for capitalization of industrial zones
- f) Joint projects with government agencies for seaport and airport development

DIVISION OF INVESTMENT – PERFORMANCE INDICATORS

Objectives	Performance Indicators
1. Maintain an open and responsible foreign investment framework	<ul style="list-style-type: none"> • Absence of protective regulations and equitable treatment under the law for all enterprises • Number of investment inquiries by foreign investors • Favorable trade and customs regimes comparable to regional trade partners
2. Attract foreign investment that generates employment and introduces new technology	<ul style="list-style-type: none"> • Number of new investors • Increased value of FDI relative to GDP
3. Help link foreign investment with East Timorese businesses, especially for supply	<ul style="list-style-type: none"> • Number of joint ventures or invested cooperatives with foreign and domestic enterprises • Number of foreign investment applications and number of joint venture or subcontracted business registrations • Percent participation by East Timorese
4. Create a “One-Stop Shop” for foreign investors to help streamline the investment process	<ul style="list-style-type: none"> • Effective application and registration system in place • Progressive number of registrations processed in a timely manner
5. Attract foreign investment that generates new and sustainable export industries	<ul style="list-style-type: none"> • Number of foreign investors engaged in export of commodities • Survival rate of foreign invested companies
6. Encourage foreign investment that adds value to agricultural products	<ul style="list-style-type: none"> • Rate of increase in agricultural production • Number of agribusiness enterprises with foreign invested new processes/technology • Value of agricultural products • Improved logistics or markets
7. Demonstrate to all stakeholders the merit of foreign investment to the country	<ul style="list-style-type: none"> • Number of public information releases or media events on foreign investment • Number of participants in sponsored events, seminars, and conferences • Proportional participation in events by private enterprises

DIVISION OF TOURISM – OVERVIEW

14.63 The tourism sector has been identified as having great potential in East Timor, although care must be exercised in its development in order to protect the natural environment, and to avoid the mistakes made in tourism development in other countries. Prior to 1975, East Timor was attracting around 3000 tourists per year. There is scope within the life of this Plan to attract numbers well beyond that. Indeed, and in the absence of reliable statistics, there is some indication that quite a large number of tourists (perhaps 1,000 per annum) have already arrived in East Timor during the UNTAET period. Evidence suggests that the majority of these tourists have been friends and family of international personnel working in East Timor.

14.64 The DT has already undertaken a large amount of preparatory policy development and baseline studies. There is scope, however, for further policy development work and for the Government to better inform the private sector about prospects for tourism in East Timor and specific investment opportunities. The Plan calls for the DT to carry out additional promotional work and better advertise the many attractive features available to tourists.

14.65 Investment by private businesses will be the key driver of growth in this sector, although the role of Government in promoting tourism and assisting private sector operators is crucial. The relevant Key Development Indicator refers to a consistent growth in the number of tourists attracted to East Timor, yet a critical result will also be sustained growth in foreign investment within the sector. Tourism is a relatively labor-intensive sector, and so tourism is to be promoted with a view to generating new direct and indirect jobs. Investment in tourism, and tourist spending, will drive demand for a range of goods and services including in construction, transportation, and supplies such as linens, foodstuffs, clothing and handicrafts.

14.66 A key objective of the DT is to raise the national image of East Timor to being an attractive destination for both investors and tourists. The broader private sector-enabling framework will be instrumental in achieving this. In line with other divisions, the DT recognizes the need to develop a commercial code as well as improved infrastructure. Although the DT is not directly responsible for infrastructure, it will help coordinate regarding the necessary infrastructure improvements, for example, water and sanitation, telephone connections, and environmental protection requirements. The DT will have an active role in coordinating with the Divisions of Trade and Investment on overseas and domestic promotional activities.

14.67 The DT also proposes to ensure that civil society understands the Governments tourism policy and how tourism is expected to help drive economic growth and reduce poverty. The DT, as part of its sector development, also intends to demonstrate the potential benefits for protecting cultural and historical heritage that can occur as a result of properly regulated tourism development.

DIVISION OF TOURISM – PROGRAM SUMMARY

PROGRAMS OF THE DT

Objectives:

- a) To build a tourism industry in East Timor that generates employment and maintains culture
- b) To attract and maintain foreign investment in the tourism sector and capture foreign skills

- c) To identify and promote strategic tourism sites and experiences in East Timor
- d) To create a profile of East Timor abroad as an attractive tourism destination
- e) To support the development of necessary supporting tourism infrastructure
- f) To establish a specialized centre of training in tourism and hospitality
- g) To develop cross-sectoral appreciation of the benefits of tourism

Strategies:

- a) Developing a repository of professional personnel with specialized tourism skills
- b) Improving welcome and farewell facilities at the airport
- c) Capturing a greater amount of data on what tourists are seeking in East Timor
- d) Establishing a separate governmental body to oversee tourism development
- e) Adopting an agreed tourism policy that sets out a tourism development framework
- f) Using international forums to promote tourism investment opportunities
- g) Maintaining an ongoing promotional agenda via print media and the Internet
- h) Conserving natural and cultural capital that will underpin East Timor's tourism appeal
- i) Ensuring that tourism is developed at a rate acceptable to the community
- j) Requiring skill transfers from foreign operators to domestic operators

Program 1: Tourism Promotion

Key Projects:

- a) Multimedia materials production and distribution
- b) Website project
- c) Tourism database
- d) Visitor and tourist reception and information centres

Program 2: Policy and Regulatory Development

Key Projects:

- a) Tourism policy framework
- b) Strategic planning for industry development

Program 3: Divisional Training and Development

Key Projects:

- a) Tourism and hospitality training centre
- b) Overseas capacity building training for divisional staff
- c) Seminars and workshops

DIVISION OF TOURISM - OBJECTIVES

14.68 Following are some of the objectives of the DT:

- a) To create a NTB to promote East Timor within the Southeast Asia region, and to establish a positive global image for East Timor through foreign travel and tourism channels, government agencies, and commercial investment interests.
- b) To establish an advocacy and advisory role to assist government with constructive reforms and progressive, sustainable development.
- c) To establish airport and seaport arrival facilities for business travelers and tourists in concert with related infrastructure improvements.
- d) To sustain a professional development program for hospitality and services.
- e) To identify and insulate strategic locations for resort or coastal development, thereby protecting the environment from haphazard development, but also providing a long-term planning scenario for hospitality and tourism investment.
- f) To establish sanitation standards and waste management regulations for all licensed public facilities, thus supporting a proactive image for business travel and tourism.
- g) To establish a performing arts centre with student enticements for cultural events, thus anchoring East Timor's cultural history while providing tourist-related interests in the nation and the region.
- h) To foster documentation of traditional recipes and encourage culinary art through formal schools and materials, and enhance the quality of all food and beverage services through skills training, workshops, and a repository of multi-ethnic and regional information.
- i) To create an Internet Website promoting tourism in East Timor
- j) Establish a Hospitality Training Institute for hotel, restaurant, and tourism services to solidify skill levels and a labor market within the sector.

DIVISION OF TOURISM - STRATEGIES

14.69 The DT will pursue a primary strategy of creating a diversified tourist industry, effectively using natural coastlines, interior elevations, and recreational benefits of sea-and-island environment. Development will be planned within a framework of ecological preservation

and cultural enhancement, promoting growth through a skilled workforce with quality facilities and services.

14.70 A promotional strategy will be implemented through a focal program to establish an image for East Timor that attracts tourists and business investors. Promotional activities will be targeted to trading partners in close proximity to the country, and subsequently to selected countries where East Timor can be strongly marketed.

14.71 The division also has a commitment to train and develop staff within the division and to provide broader training services to other government agencies or to private sector constituents with an interest in tourism, travel, and hospitality services.

DIVISION OF TOURISM – PROGRAMS AND PROJECTS

Program 1: Tourism Promotion.

14.72 The DT will pursue all cost-effective and realistic opportunities to promote travel and recreation activities in East Timor through print and electronic media, Web services, projects of cultural and eco-tourism, and recreational advantages of the natural coastline, interior, and sea. Promotions will also extend to materials and projects designed for marketing through trade missions, commercial foreign travel agencies, and foreign travel network associations. A number of projects and activities under the program will be concerned with value-enhancing and image-building priorities, such as welcome centres at airports and seaports for business and casual travelers, hosting seminars and meetings on tourism, and creating investor packages for external promotions.

14.73 The projects to be implemented under this program are the following.

- a) Develop a Web Site for broad-based Internet promotions
- b) Establish multi-media materials, pamphlets, and public relations activities
- c) Create packaged investor feasibility studies for foreign investment in tourism and recreational activities
- d) Create a database on tourism sites, investments and attractions
- e) Visitor and tourist reception centres
- f) Publication and dissemination of travel and tourism information through trade and foreign country liaisons

Program 2: Policy and Regulatory Development

14.74 Responsibility for this program will include initiatives by the division for planning coastline and inland sites that can be ecologically safe and attractive to foreign investors. Other objectives will involve establishing a NTB, coordinating regulations that relate to hospitality and travel services, working with airport and seaport authorities, and coordinating (or structuring proposals for) projects such as the creation of a cultural centre or a hospitality training program. Many other projects may be pursued with donor assistance, and the division itself will have operational responsibilities, such as working with the Investment Centre to approval foreign investments in tourism.

14.75 The projects to be implemented under this program are the following.

- a) Creation of the NTB and operational constituency
- b) Legal and Regulatory reforms affecting hospitality, travel, and tourism
- c) Tourism Policy Framework
- d) Joint project with airports on planning, tourism support, travel facilities
- e) Joint project with seaports on planning, tourism support, travel facilities
- f) Strategic planning for resort development and coastline or interior site development
- g) Cooperative projects with public works on sanitation and waste management standards for public licensed establishments

Program 3: Divisional Training and Development

14.76 The DT will develop internal staff training materials, hold workshops, and support short courses on travel, tourism, and hospitality management to hone divisional capabilities. In addition, the division will develop training modules that can be used in other government offices, or used in conjunction with promotional activities for private sector development. There are several projects under this program while most responsibilities are within operational activities.

14.77 The projects to be implemented under this program are the following.

- a) Develop training materials, seminars and workshops on tourism, hospitality management, and travel
- b) Overseas capacity building training for divisional staff
- c) Establish regular staff training and periodic reviews, seminars, and workshops with technical assistance (donor related) on Tourism, planning, and sector regulatory priorities
- d) Establish a culture and performing arts centre
- e) Establish a hospitality training institute centre
- f) Contribute materials workshops, and information to the departmental database and utilize the database for outreach seminars and intergovernmental staff development

DIVISION OF TOURISM – PERFORMANCE INDICATORS

Objectives	Performance Indicators
1. Build a tourism industry in East Timor that generates employment and maintains culture	<ul style="list-style-type: none"> • Number employed in tourism, hotels, hospitality, and related services • Number of new tourism enterprises • Percentage increase in contribution by sector to GDP • Number of Tourists arriving • Average stay and expenditure of tourists
2. Attract and maintain foreign investment in the tourism sector and capture foreign skills	<ul style="list-style-type: none"> • Increased level of foreign investment in tourism industry • Number of foreign-invested service enterprises in tourism • Number of applications for foreign investment in tourism-related enterprises • Increased tax base from foreign investors within tourism sector
3. Identify and promote strategic tourism sites and experiences in East Timor	<ul style="list-style-type: none"> • Number of approved sites and finished plans for tourism development activities • Number of foreign investor links to site plans and developments • Level of investment in tourism site development
4. Create a profile of East Timor abroad as an attractive tourism destination	<ul style="list-style-type: none"> • Results from surveys and assessment as to image by tourists of East Timor • Feedback reports from foreign travelers or agents on marketing and promotion of East Timor
5. Support the development of necessary supporting tourism infrastructure	<ul style="list-style-type: none"> • Number of facilities, hotels, or sites that meet set standards • Number of sites and percent of total that have facilities comparable to those in other regional countries • Number of SMEs and handicraft firms able to market to tourists • Increase in tourist days/year
6. Establish a specialized centre of training in tourism and hospitality	<ul style="list-style-type: none"> • Number of students enrolled • Percent increase in applications • Percent of graduates employed
7. Develop cross-sectoral appreciation of the benefits of tourism	<ul style="list-style-type: none"> • Level of participation in tourism events, seminars, workshops • Public image of tourism services

DIVISION OF TRADE - OVERVIEW

14.78 Trade, both foreign and domestic, will play an important role in growing the economy and reducing poverty. Maintaining an open foreign trade policy, and resisting protectionist tendencies to increase import tariffs, will be critically important in ongoing efforts to increase national competitiveness, grow consumer spending surplus, and respond accurately to production constraints, especially in agriculture. A stronger external sector has been repeatedly identified as an essential precursor to a stronger economy. The Government's currency policy will also have a strong effect on the economy in general and trade in particular. The US dollar, should it retain its current relative value, or appreciate relative to key trading partners, will make East Timor's exports less competitive and make imports more affordable.

14.79 The Government intends, upon independence, to seek membership of appropriate trade organizations. In relation to this, the Division of Trade will work closely with the Ministry of Foreign Affairs and Cooperation. Preferential treatment from key export markets, should it be obtainable, will immensely help East Timor's export competitiveness as it continues its transition to a viable, independent economy. The Government's key trading partners will be Australia and Indonesia. Accordingly, additional effort to maximize benefit from bilateral relations with these countries should help East Timor to increase market access and levels of exports. As East Timor further formalizes its foreign trade policy over the next few years after independence, it will be important to recognize the shared and porous land and sea borders with Indonesia and the prospect of inward smuggling and loss of customs revenues should import tariffs be set too high.

14.80 The Government is also determined to reduce the size of the trade deficit and so has built into the Plan specific programs and projects designed to enhance domestic production capacity. This is aimed at increasing the level and diversity of exports and enabling local businesses to compete with foreign businesses in the production of regularly imported goods, for example, foodstuffs.

14.81 Improving domestic trade linkages will arguably be the key factor in reducing poverty in rural areas, and in reducing income disparities between rural and urban areas. Improvements to domestic trade linkages will require a cross-sectoral approach, and will focus heavily on improving information flows and services, and building business support services. Programs and projects have been adopted in other sectors to improve rural access to telecommunications, and to continue to maintain the state of the roads. Additional training to rural businesses is also planned.

14.82 The Division of Trade, working with the DoI, will play a role in monitoring levels and types of businesses, both big and small, domestic and foreign. The Business Registration Unit (BRU) will carry out much of this work. The Plan calls for enhanced efforts in business registration, both so that the process provides more utility to business users and serves as a more helpful database for Government. It is possible that the BRU may move to the MoJ as part of the future Office of Companies Registrar, to be established pursuant to the law on corporations. The BRU, nevertheless, is included here as a separate program.

DIVISION OF TRADE – PROGRAM SUMMARY

PROGRAMS OF THE DIVISION OF TRADE

Objectives:

- a) To increase the level and diversity of exports
- b) To maintain an open and competitive foreign trade regime
- c) To explain the benefits of resisting protective tariffs
- d) To seek membership of appropriate regional and international trade groups
- e) To reduce the trade deficit
- f) To improve the information systems of the Business Registration Unit
- g) To add value to export products using new technology spillovers from FDI

Strategies:

- a) Promoting East Timor's products overseas at trade fairs and via other means
- b) Encouraging foreign and domestic businesses to develop an export orientation
- c) Supporting business associations develop overseas links that will enhance trade
- d) Pursuing an amendment to exempt income tax on exports (excluding gas and oil)
- e) Enabling domestic trade to link into foreign trade, especially for exports
- f) Developing domestic production of imported goods, especially foodstuffs
- g) Improving information monitoring systems for the Business Registration Unit
- h) Seeking preferential trade arrangements from key exports markets as appropriate

Program 1: Trade Promotion

Key Projects:

- a) Trade Exposition Centre
- b) Trade fair Participation
- c) Multimedia materials production and distribution
- d) Domestic trade promotion and domestic market linkages
- e) Overseas foreign trade promotion

Program 2: Policy and Regulatory Development

Key Projects:

- a) International trade agreement accession
- b) Trade and customs law
- c) Foreign trade policy
- d) Domestic trade policy

Program 3: Divisional Training Development

Key Projects:

- a) Overseas capacity building training for divisional staff
- b) Seminars and workshops
- c) Language and trade management training
- d) Program 4: Business Registration Unit

Key Projects:

- a) Business registration and updating
- b) Information systems
- c) Monitoring and evaluation

DIVISION OF TRADE - OBJECTIVES

14.83 Some of the objectives specified for the Division is as follows.

- a) To establish a Trade Exposition Centre for trade and investment development.
- b) To create regional trade promotion activities that reach throughout the country with relevant initiatives and support.
- c) To encourage innovative development processes and technologies that add value to products or that introduce new products capable of reaching export markets.
- d) To establish trade legations with close trading partner nations.
- e) To establish trade-oriented relationships with regional multi-lateral associations, including ASEAN, the Pacific Forum, and others according to East Timor's capacity.
- f) To build domestic trade linkages by promoting better information services that are more accessible to small business people
- g) To establish, in conjunction with the Divisions of Industry and Investment, an industrial zone for controlled export and transshipment of value-added products.

- h) To establish a Web Site for trade information and market opportunities that captures both export profiles and import requirements essential for domestic development.
- i) To establish staff training and management development activities to enhance trade regulatory and management capabilities within the division and among other relevant government agencies.

DIVISION OF TRADE - STRATEGIES

14.84 The Division of Trade will pursue an aggressive strategy of integrated domestic development on which to foster exports and concurrently attract investments that can sustain future trade growth. The key to effective trade is having the domestic strength in exportable products that, in East Timor's situation, will require a broad-based development program of industry, tourism, agriculture, and infrastructure. The Division of Trade cannot directly pursue initiatives in any of these circumstances, but it can provide the support of government trade programs and a policy environment conducive to trade and investment.

14.85 The division will directly assert its capabilities in trade promotion to reach foreign trade conduits for investment and market opportunities. This will be an information-based strategy of utilizing the departmental database on all industrial and economic activity to formulate market-penetrating marketing materials and web-based access to East Timor's trade opportunities.

14.86 The division will pursue a human resource development strategy aimed at elevating the division's capabilities for working in, regulating, and managing a trade regime. In addition, this effort will establish materials and skill-based resources for wider utilization within government, for joint private-sector training and promotion activities, and for future development planning systems.

DIVISION OF TRADE – PROGRAMS AND PROJECTS

Program 1: Trade Promotion

14.87 The Division of Trade will pursue joint projects within a broad program of development with airport and seaport authorities to expand foreign trade, export processing, warehousing, and logistics. In addition, the division will be working closely with divisions of Industry and Investment on initiatives concerning special economic zones and industrial parks. The ultimate objective of this program is to rapidly enhance the capability of East Timor to development exportable products and to pursue export markets.

14.88 The projects to be implemented under this program are the following.

- a) Establish the Trade Exposition Centre in conjunction with divisions of industry and investment
- b) Coordinated activities with divisions of Industry and Investment for capitalization of industrial zones
- c) Joint projects with government agencies for seaport and airport development to facilitate trade logistical capabilities
- d) Support and promotion of export-related industry for inclusion in industrial parks

- e) Domestic trade promotion and domestic market linkages
- f) Technical assistance for SME training and enterprise development of trade-related marketing, promotion, and financing,
- g) Export finance and development for expediting international transactions
- h) Export and Trade participation, such as regional presence in trade shows, hosting trade and export/investment opportunities
- i) Infrastructure joint projects for enhancing export capacity, such as bonded warehousing, auction systems, and commodity logistics systems
- j) Establishing foreign trade relations, particularly to Australia and Indonesia, with linkage to broader regional trade conduits and international trade commissions
- k) Web-based linkage to international trade and investment networks and multi-media products
- l) Promotional packaging of investment and trade opportunities, informational brochures, and multi-lingual materials for domestic and foreign dissemination
- m) Database management of exports and imports, companies, industry growth, and tourism, as part of a comprehensive departmental data management system

Program 2: Policy and Regulatory Development.

14.89 The principal objective of this program is to develop an integrated trade policy that addresses foreign trade, company licensing, regulatory authority to protect the environment, and to give incentive to businesses. The Division of Trade will not be in a position to pursue unilateral legal or policy initiatives, yet it will be important to policy development and the regulatory operations required under a trade regime.

14.90 The projects to be implemented under this program are the following.

- a) Domestic trade policy
- b) Foreign trade policy
- c) Support for cooperative development of trade and customs law
- d) Develop a regulatory system for foreign trade licensing and monitoring with accountability for customs or tax reporting
- e) International trade agreement accession
- f) Creation of policy instruments for export incentive programs or domestic development that reduces dependencies on imports
- g) Establish trade-related government support activities for SME development and enhancement of informal sector participation through such activities as cultural products and services and handicrafts

- h) Create a liaison function within trade to coordinate trade and investment activities with departments of environmental protection and relevant divisions concerned with mineral and natural resources

Program 3: Divisional Training and Development

14.91 Because trade represents a complication field with many different constituent interests, it is essential to have on-going staff training and capacity building within the MEAD, and externally with agencies accountable for supporting trade endeavors. Therefore, the Division of Trade will create a body of training materials and information under a model that can be replicated and updated as trade and private sector activities accelerates.

14.92 The projects to be implemented under this program are:

- a) Develop training materials and workshops on trade, regulation of trade, management of trade transactions and financing, and use of network systems for regional and international trade legations
- b) Develop multi-lingual training and trade management materials to enhance departmental, governmental, and foreign legation trade management and promotion capabilities
- c) Establish regular staff training and periodic seminars and workshops with technical assistance (donor related) on trade, customs, trade expediting, and related topics of investment, import controls, and joint development projects
- d) Contribute materials on workshops and trade information to the departmental database, and ensure access to web-based and archive information resources
- e) Establish a media liaison domestically and through trade legations for public relations and trade-related development news

Program 4: Business Registration.

14.93 The existing Business Registration Unit is the only effective national point for company registration, and it is a fee-based service. However, there will be a far more important role for the registration process as a commercial code and a company law are enacted (in whatever form those take), and a complementary activity under a registrar for foreign investments. The institutional structure of these licensing (or registration) processes has yet to be solidified, and indeed, the position of the current registry may be within another ministry. As a planning scenario, the BRU staff anticipates an enlarged role with far greater responsibilities and more pressing demands. These are listed here under “projects” but are more accurately “functional activities.”

14.94 The projects to be implemented under this program are the following.

- a) Establish an effective and comprehensive registration process for domestic and foreign companies with appropriate regulations on licensing and permits
- b) Create a fee-based registration process that is equitable among different classifications of enterprises and commercial activities

- c) Technical assistance to develop effective use of registration income, if not accruing to the general budget, for relative private sector development or enhanced management of the registration process
- d) Information database
- e) Establish a compliance methodology for equitably monitoring registrations, ensuring legal procedures, and accounting for new, terminated, and inactive enterprises
- f) Technical assistance for institutional restructuring that solidifies activities of registration with commercial codes, company laws, the foreign investment law, and other regulations under appropriate ministries

DIVISION OF TRADE – PERFORMANCE INDICATORS

Objectives	Performance Indicators
1. Increase the level and diversity of exports and earn additional foreign revenues	<ul style="list-style-type: none"> • Percent increase of exports • Number of new products or repackaged products exported • Percent contribution to GDP • Rate of growth of exports by sector
2. Maintain an open and competitive foreign trade regime	<ul style="list-style-type: none"> • Comparative trade regime to trade partners without disparities • Trade balances
3. Explain the benefits of maintaining good trading relations and resisting protective tariffs	<ul style="list-style-type: none"> • Number of media events, seminars, and trade programs • Proportional participation by all sectors and classification of individuals in trade events • Absence of protective regulations or implementation of incentives
4. Seek membership of certain regional and international trade groups as appropriate	<ul style="list-style-type: none"> • Progressive participation by East Timor in ASEAN and other Pacific Rim associations • Recognition of East Timor for observer status and for membership in key regional associations
5. Reduce the trade deficit	<ul style="list-style-type: none"> • Percentage growth of exports in excess of percentage increase in imports • Reduction of trade gap by each major sector with oil and gas interest tracked independently • Reduction due to oil and gas exports
6. Improve the information systems of the Business Registration Unit	<ul style="list-style-type: none"> • Accomplish institutional restructuring • Implement enforceable registration system for domestic and foreign enterprises • Increase revenues from registrations • Reduced time for registration
7. Add value to export products using new technology spillovers from foreign investment	<ul style="list-style-type: none"> • Value chain analysis of technology implementation from foreign investments • Analysis of secondary market for replacement technology • Improved productivity

15. INFRASTRUCTURE

“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.”

VISION

15.1 To plan for, provide and manage physical infrastructure that is efficient, cost-effective and financially sustainable, and which supports the social and economic development priorities of the people of East Timor.

INTRODUCTION

15.2 Infrastructure is an issue of overarching importance to all sectors of the economy and society. This includes the physical capabilities and service systems that provide to all people the essentials of electric power, water, sanitation, postal services, telecommunications, roads, air and sea transport facilities, and various support services. Infrastructure has perhaps the strongest cross-sectoral implications for national development. 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. Infrastructure represents many diversified responsibilities, and through the Working Groups established the vision statement above on which to pursue priority development activities.

15.3 As background to this plan, it must be emphasised that infrastructure is in a poor state, substantially damaged and in some instances obliterated by years of conflict and lack of meaningful maintenance. Reconstruction efforts have been progressive with airports and seaports operational, major road repairs and maintenance programs underway, and to a significant degree, water supply and sanitation services restored. Substantial progress has been made to reconstruct a majority of the damaged buildings and houses through humanitarian relief work and donor reconstruction programs. Telecommunications services have been restored using largely temporary measures supported by UNTAET and through a communications system contracted with an Australian company. Postal services remain very weak. Electricity generation is now near to its pre-1999 levels of supply and reliability, but there has been insufficient progress in putting the power sector on a sustainable footing.

15.4 The Infrastructure Sector as presented in this Plan is treated as the collective efforts of many directorates. (The term “Division” is used for directorate to distinguish it from the administrative department.) Officially, there is no infrastructure agency. Instead, it consists of Divisions under three separate Ministries. The Ministry of Water and Public Works (MWPW), recently reorganised, has four functional Divisions under the Director-General of one department. The Ministry of Economic Affairs and Development (MEAD) has



one infrastructure-related activity, the Division of Energy, which reports directly to the Minister. And the Ministry of Communications and Transport (MCT) has five Divisions administered under the Director-General of one department. These Divisions have unique responsibilities, and budgetary accountability is within their respective ministries. However, activities among the various Divisions are captured in this planning document, often resulting in a consensus voice, yet because the individual Divisions have differentiated priorities, this plan addresses each separately. Table 15.1 summarises the structure used within the report while the term “Infrastructure” is used as the collective initiatives of all concerned.

Table 15.1 Planning Structure of Infrastructure Sector

Ministry	Division (Directorate)
Water and Public Works	<ul style="list-style-type: none"> • Public Works • Roads, Bridges and Flood Control • WSS • Research and Development
Economic Affairs and Planning	<ul style="list-style-type: none"> • Division (directorate) of Energy: EDTL, operates as a Government-owned company.
Communications and Transport	<ul style="list-style-type: none"> • Land Transportation • Civil Aviation • Sea Transportation • Telecommunications and Post • Meteorology

MAJOR GOALS OF INFRASTRUCTURE

15.5 The Infrastructure Sector will emphasise national priorities of economic development and a strong commitment to poverty reduction throughout its department activities. In essence, the role of government will be strongly focused on establishing physical capabilities and public services required for sustained development. Consequently, there are two overarching infrastructure goals that amplify the sector vision. They are:

- a) to minimise adverse impacts on the natural and human environment, and to take account of the needs and aspirations of those disadvantaged by poverty, remoteness and difficulty of access to infrastructure services; and
- b) to regulate the sector so that infrastructure and services are safe, are provided at a fair price, and give maximum opportunity for Timorese people and enterprises to participate in their construction, management, operation and use.

GUIDING PRINCIPLES FOR DEVELOPMENT

15.6 A composite approach to development permeates the Infrastructure sector even though each of the departments operates within differentiated and independent parameters. There are several guiding principles that underscore the major development goals and provide a foundation for accountability. These are as follows.

- a) To pursue infrastructure development that is safe and that can provide accessibility to needed services and utilities by everyone.
- b) To pursue activities that bring infrastructure and services to the disadvantaged, thus encouraging economic growth while reducing poverty.
- c) To create an enabling environment required for sustained development while ensuring a regulatory process that guarantees fair prices without corruption, effective revenue management, and transparent public administration.
- d) To work in cooperation with other Government ministries, agencies, district administrations and communities in ensuring the efficient delivery of services.
- e) To utilise the private sector to the maximum extent possible in the cost effective delivery of projects, programs and services, and to support and promote the development of the private sector in this role.
- f) To promote whenever possible equity between regions and between urban and rural communities.
- g) To ensure the protection of the natural and man-made environment, safety from natural disasters, and the protection of human life.

DIRECTOR-GENERAL, DEPARTMENT OF WATER & PUBLIC WORKS (MINISTRY FOR WATER AND PUBLIC WORKS)

15.7 Following recent restructuring, the Office of Director-General (ODG) under the MWPW now has management responsibilities for public works administration of four Divisions. These concern public works, roads, bridges, and flood controls, water and sanitation, and research and development. These are more fully explained under Division plans. The Director-General's Office has overall department responsibility, represented by the following operations and department services.

- a) Financial planning, management, budgeting and control.
- b) Human resource management and departmental coordination.
- c) Procurement services including civil works equipment and services (in accordance with technical requirements of directorates).
- d) Management of departmental assets.
- e) Provision and operation of facilities to enable directorates to pursue their programs and project activities.

15.8 The ODG as the operational arm under the Ministry has several important inter-ministry tasks. These are not presented here as distinct programs or projects, yet they are focal activities that must be accomplished. These are to achieve interdepartmental integrated ministerial agreements, largely directed toward capital assets and development responsibilities. The five main concerns are as follows.

- a) An agreement on responsibilities with all ministries on capital allocations for new or renovated offices, and future roles for maintenance.
- b) An agreement with constituent ministers on use of natural, mineral, and water resources for public works and construction.
- c) An agreement with appropriate departments in agriculture, fishing, and forestry, and those concerned with the environment for use of surface water, responsibilities for rivers, various maintenance requirements.
- d) An agreement with Communications and Transport that covers all public works activities requiring equipment, transport, and national communications assets.
- e) An agreement with Industry, Trade, and Tourism regarding development and maintenance of industry parks, business centres, or tourist structures.

PUBLIC WORKS DIVISION

15.9 The **Public Works Division** under the ODG and the MWPW is concerned with reconstruction of public buildings in Dili and the nation's districts, oversight of tenders for new public construction, coordinating public housing (government facilities) in Dili and the districts, and instituting urban planning. Division responsibilities focus on reconstruction and new public development of facilities, but activities each beyond the Division to include cross-cutting interests of other ministries and Divisions. The Division's objectives, strategies for pursuing those objectives, programs and projects are described in the following passages.

Public Works Objectives

15.10 The Division's objectives reflect its primary responsibilities yet also accommodate interdependent activities of other agencies, such as coordinating urban development plans that must coincide with road, traffic, and public utility services, and regulatory issues that involve other departments and ministries. These are the following.

- a) To reduce housing shortages in urban centres through improved planning and regulation in support of national policies.
- b) To improve housing facilities in urban slum areas through planning, contracting, engineering services, and cooperative support for poverty reduction initiatives.
- c) To provide structural development and essential public services while minimising adverse ecological and environmental effects.
- d) To provide engineering services for the design and implementation of public buildings, government staff housing, and associated facilities as required to support government development programs.

- e) To facilitate the improvement of spontaneous housing settlements through planning, design, and implementation of micro infrastructure utilising community participation and management approaches.
- f) To implement urban development planning and control systems in Dili and district capitals including urban land use planning, development control systems, and building regulations.
- g) To pursue human resource development with a sustainable staff with technical capabilities for management of a diverse program of public works development.

Constraints, Problems, and Issues

15.11 The Division faces constraints similar to all other Divisions and directorates, primarily thus concerned with severely limited budgets and the lack of well-qualified human resources in a number of areas that require very specific technical education and experience. The Division also lacks a legal foundation for pursuing many necessary projects, and it faces logistical challenges of serving rural areas or administering district programs. With that said, many of the objectives and program activities are aimed at resolving these problems, not treating them as uncontrollable barriers to development. Several points are illustrative:

- a) **Legislation and a regulatory framework.** Lack of an enabling environment constrains the Division from pursuing medium-term and long-term objectives, and therefore it is essential that the ministries (with departmental and Division cooperation) initially pursue laws that will provide building and land codes, housing policies and construction standards, and empower Public Works and other constituent Divisions to pursue urban, rural, and regional planning.
- b) **Human resources.** A majority of proposed programs and projects under this plan cannot be realised without technical expertise. In the near-term, donor assistance may fulfil these needs, but the Division will require staff with a broad range of technical skills that include: urban planning and design; community development; townscape & landscape architecture; all relevant engineering; land surveying; and cost estimating.
- c) **Support facilities and funding.** Oversight and management of public works, tendering and follow-on quality control, and actual the environmental necessities of urban and rural district projects will require laboratory testing and inspection processes which do not exist nor are they funded. Public works activities require rural presence, travel, and a project management/monitoring process that will require capital and staff beyond the scope of this plan.

Public Works Strategies

15.12 Public Works will develop a legislative framework to address relevant infrastructure policy issues, and generate the regulations required to appropriately implement and manage operations. Much of the legislative and regulatory framework will be derived from experiences of other countries, adapted to the particular socio-economic and cultural conditions in East Timor.

15.13 With departmental support, local human resource capabilities will be enhanced through a number of skills training programs developed over the five-year planning period. Immediate human resource needs, particularly those for higher-skilled and experienced experts, will require near-term recruitment and external assistance.

15.14 The Public Works Division, other government agencies and ministries recognise the importance of a GIS. Public Works is willing to be responsible for establishing an GIS that could become a national asset for broader utilisation, but wherever the GIS is positioned, it will be an essential tool for the Division in terms of urban planning, construction, and development.

15.15 Public Works will implement the engineering design and supervision processes for public buildings and housing construction. The Division will establish outsource and tender procedures, then ensure oversight of projects in cooperation with the respective constituent funding Divisions or ministries. Current projects, and those in the near-term, are funded under TFET; larger future projects will require donor assistance.

Public Works Programs & Projects

15.16 The Division of Public Works has structured individual project activities under five programs. It is understood that the ODG will also be addressing integrated activities for administrative training, planning, and capacity building that concerns all Divisions within the department while specific technical training will be addressed by the separate Divisions. Fully descriptions of programs and projects are contained in detailed planned documents by each Division.

Program 1: Institution Building

15.17 The focus of this program is to draft and Implement planning guidelines, draft regulations for public works, implement housing standards, create building and construction codes, address both public and private land utilisation.

Projects

- a) Draft Planning Act and with Timor Planning Institute.
- b) Capacity building for staff planning, urban planning, rural development at national, district, and village levels.
- c) Draft a Housing Policy and establish regulations on public and private housing.
- d) Draft a National Building Code.
- e) As an activity in support of the Building Code, formulate Industry Construction Standards.
- f) Establish a Works Specification and Cost Analysis procedure for all tendering and procurement.

Program 2: Urban Planning

- a) Dili Zoning Plan under the Dili District Administration.
- b) Central-South Dili, Central-North Dili, East Dili, and West Dili Land Use Plans
- c) Baucau, Suai, and Maliana Strategic Zoning Plans and Land Use Plans
- d) Liquiça, Manatuto, and Ermera Strategic Zoning Plans and Land Use Plans

- e) Lospalos, Viqueque, Aileu, Ainaro, Same, and Oecussi Strategic Zoning Plans and Land Use Plans

Program 3: Slums Improvement

- a) Central-South Dili Slums and Central-North Dili Slums Improvement Program
- b) East Dili Slums Improvement Program and Study of West Dili Slums

Program 4: Provision of Government Buildings

- a) Renovation of MWPW Offices
- b) Renovation of District Offices for Water and Public Works
- c) Renovation of Ministry of Internal Administration Offices
- d) Renovation of Ministry of Agriculture Offices
- e) Renovation of Customs Offices under the Ministry of Finance
- f) Establish and Renovate a National Registry Building
- g) Renovation of Judges and Prosecutors Housing (Central and Districts)
- h) Renovation of District Offices (Covalima, Lautem, Liquiça, and Viqueque)
- i) Renovation of Warehouses/Workshops (Viqueque, Lospalos, Suai, Oecussi)
- j) Renovation of 65 Sub-district Administration Buildings
- k) Renovation of the Presidential Office
- l) Renovation to Establish a National Archives Building
- m) Renovation of MFAC Offices
- n) Renovation of MCT Offices
- o) Renovation of MoH Offices
- p) Renovation of MAF Offices
- q) Renovation of Ministry of Labor and Solidarity Offices
- r) Construct a New Central Bank Building

Program 5: Public Education and Training

- a) Planning Principles Training at National and District Levels
- b) Planning principles Training at Sub-District and Village Levels
- c) NGO and Government Workshops on Urban and Rural Planning

Table 15.2: Public Works Performance Indicators

Objectives	Performance Indicators
1. Reduce housing shortages in urban centers through improved planning and regulation in support of national policies.	<ul style="list-style-type: none"> • Urban Land Use Plan Completed • Urban Development Controls Implemented • GIS Utilised for Integrated Planning • Assessment to Reduce of Housing Shortage
2. Improve housing facilities in urban slum areas through planning, public contracting, engineering services, and cooperative support for poverty reduction.	<ul style="list-style-type: none"> • Urban Land Use Plan Completed • Urban Slum Areas Reduced • Assessed Access to Public Facilities • GIS Utilised for Integrated Planning • Assessment of Reduced Slum Population
3. Structural development of essential public services while minimising adverse ecological and environmental effects.	<ul style="list-style-type: none"> • Percent Increase in Household Access to Public Utilities • Assessment of Improved Urban Health Environment • Reduction in Environmental Hazards
4. Engineering services for the design and implementation of public buildings, government staff housing.	<ul style="list-style-type: none"> • Percent of Public Buildings Engineered and Reconstructed • Percent of Government Staff Adequately Housed
5. Improvement of spontaneous housing settlements through planning, design, and implementation of micro infrastructure utilising community participation	<ul style="list-style-type: none"> • Improved Living Conditions Assessed • Settlement Areas Planned • Extent of Community Participation • Micro Infrastructure Designed/Implemented
6. Urban development planning and control systems in Dili and district capitals.	<ul style="list-style-type: none"> • Urban Development Plan Assessment Implemented • Dili and District Capital Plans Completed • Development Controls in Place
7. Human resource development with a sustainable staff of technical experts and capabilities for management.	<ul style="list-style-type: none"> • 100% Staffing for Management • 100% Engineering and Technician Targets • Achieve 100% District Supervision Levels

ROADS, BRIDGES AND FLOOD CONTROL DIVISION

15.18 The Division of Roads, Bridges, and Flood Control (DRBFC) is primarily concerned with regulation of roads and roadway reserves, management of tenders and maintenance contracts on roads and easements (including environmental concerns of related development), planning and legal classification of roads, coordination of traffic regulations with the MCT, and the hydrology and soil mechanics of bridge and adjacent roadway development.

DRBFC Objectives

15.19 Guiding principles under the department mandate coupled with similar principles established within this Division largely determine DRBFC objectives. Specifically, the Division has responsibilities to assure all citizens of parity in road and transport access within development constraints, and also to ensure the needs of national security and defence are accommodated in roads, bridges, and flood control activities. The Division will face constraints but will seek to fulfil the following objectives.

To identify the national district and rural road network essential for the support of economic and social development.

To initiate policies within a legal and regulatory framework for order of the territory that improve quality of life, encourage private enterprise, and assist those with access and safety, particularly in impoverished areas.

To develop roads, bridges, and topologies of flood controls that provide environmental protection and further reverses existing ecological damage.

To ensure development and regulation for the safe circulation of transport.

To ensure transport infrastructure that meets national defence imperatives

To establish technical standards for a national road network.

To preserve the existing road assets as the first priority through sustainable maintenance and long-term management plans for support systems.

To establish an institutional structure and develop technical and administrative capacity of Timorese staff to manage, maintain and improve the road network.

To implement sustainable strategies for the maintenance of rural access roads.

To establish and implement sustainable erosion control measures to prevent damage to physical Infrastructure and economically valuable property.

Constraints, Problems and Issues

15.20 The most significant immediate constraints should be viewed as opportunities for the Division and other government agencies to strengthen the existing poor structure of the legal and regulatory environment of East Timor. In addition, the constraints faced in human resources and lack of local technical skills can be viewed as an opportunity to create new jobs and greater professional capacity in the nation. Some constraints, however, are not immediately controllable

and represent barriers to effective program implementation. Several key points are emphasised below.

- a) **Legislation.** Agreement on roles and responsibilities between the MWPW and MAF are needed to protect and improve the environment around roadways, bridge sites, and riverbanks. Concurrent environmental protection regulations are essential. Legislation that defines road reserves, drainage easements, and access to land for construction and maintenance will also be required. And regulatory guidelines are needed on utilisation of natural and mineral resources.
- b) **Human resources.** The flood control activity cannot be pursued without recruitment of experts or external (donor or contractual) assistance. The nation does not have these core capabilities to recruit in the near term. Requirements in particular include hydrologists, geologists and soil mechanic experts, and environment specialists. Equally important, there is no local indigenous capability to train specialists or to provide the mentoring required.
- c) **Support systems.** Procurement systems and logistic are inefficient, and the ability to provide private sector support is nascent. In effect, there is not sufficient equipment or private contractors to pursue many of the priority projects, and little capability to maintain road, bridges, or conservation facilities. Regional offices and communications are problematic, and there is little capability to provision or equip the districts for rural road and bridge development. The types of equipment employed in East Timor, and their respective technologies, are far less than optimal.

DRBFC Strategies

15.21 Policy and legislative initiatives will be pursued through the Land and Property Unit, and in conjunction with the MCT and the MAF (particularly the Director of Forestry). These liaisons are essential for an integrated strategy of development to address a broad range of cross-cutting issues relating to land use, roadways, water rights, forestry and mineral appropriations, and regulations for roadway utilisation, vehicles, and coordinated water and sanitation development. Creation of a road classification system will also be a strategic coordination process with other ministries.

15.22 An Inter-departmental commission will be established for land transport regulations, oversight responsibilities for traffic, and vehicular safety. In addition, there is a role for NGOs and external expertise, including socio-cultural interests and those most able to address rural population problems and poverty reduction, to address infrastructure priorities within the context of community development and environmental protection.

15.23 The Division will develop human resource capabilities within its limitations and seek recruitment for higher skills when possible, but in the near term, the Division will continue to rely on existing (in progress) projects under international donors and activities being pursued under TFET funds that bring to East Timor the necessary technical experts. Over the five-year planning period, the Division will seek to create the local capabilities for sustained training and mentoring.

15.24 A strong priority will be placed on private sector contracting and outsourcing, maintaining internal oversight for tenders and continued monitoring. The Division will seek cooperative assistance to develop the technical standards required for road building, maintenance, inspection, materials management, bridge engineering, flood controls and district

water resource utilisation, and conservation as it applies to national roadway plans and respective urban road and street development.

15.25 A priority will be placed on reconstructing and expanding the main national road network, thus reaching well into the districts and rural areas, but also supporting industrial development initiatives and the priorities of airport and seaport facilities. Only emergency work will be carried out on sub-district and feeder roads in the budget period, and any periodic maintenance or capital works on urban roads must be addressed outside CFET or existing TFET project allocations.

15.26 Multilateral and bilateral donors require, as a priority, to ensure funding for periodic maintenance programs, and realistic plans funding upgrading programs and new capital projects for bridges or flood control projects. Consequently, the Division must be part of a broader ministry effort to secure infrastructure development assistance, and to those ends, the Division will develop appropriate scenario plans for systematic capital development with long-term funded maintenance programs.

DRBFC Programs & Projects

15.27 The Division does not have specific responsibilities for “institution building,” yet it will play a vital role in achieving the agreements under the ODG for natural resource utilisation, responsibilities for roadway and river areas, and cooperative work with Divisions concerned with water, sanitation, and environmental protection. The Division as it is now structured also is part of on-going projects previously funded (TFET I and II), yet these will not be oversight responsibilities of other directorates. With that said, the DRBFC will focus technical projects under two mainstream programs, and one program of public safety designed to become a standing process. These are summarised below:

Program 1: Road & Bridge Rehabilitation and Maintenance

15.28 First priorities during the early stages of this planning period are for road and bridge maintenance. There are several projects well underway, each with TFET funding, and several with preliminary interest for donor support. Secondary priorities concern road and bridge upgrading with long-term plans capable of networking the country with effective and safe ground infrastructure to serve the entire population.

Projects

- a) Road Maintenance for Current Requirements (TFET)
- b) Small Bridge Maintenance and Replacement (TFET)
- c) Road Maintenance in Core Network and Districts (2002-2007)
- d) Major Maintenance, Re-alignment, Resolving Slips & Washouts (2002-2003)
- e) Casa and Natarbora Bridges (2002-2004)
- f) Bridge Causeway Construction (2004-2007)
- g) Periodic Maintenance of Core Network and Districts
- h) Cooperative Planning for Urban and Rural Development for Road & Street Access

- i) Upgrading and Widening to Extend Core Network and District Transport

Program 2: Flood Control and Erosion Prevention

15.29 Flood control and erosion prevention are issues interdependent with water and sanitation, agriculture and forestry, and environment agencies. Development must be coordinated, and Division projects represent two yet-to-be planned project areas.

Projects

- a) Flood Control Emergency Plan for Endangered Roads and Bridges
- b) Flood Control and Erosion Prevention Systems Planning
- c) Flood and Erosion Control Bridge and Site Structures

Table 15.3: Roads, Bridges and Flood Control Performance Indicators

Objectives	Performance Indicators
1. Identify and plan the national district and rural road network	<ul style="list-style-type: none"> • Plan completed and approved • Assessed road access to population
2. Initiate policies within a legal and regulatory framework	<ul style="list-style-type: none"> • Laws enacted and regulations approved
3. Develop roads, bridges, and topologies of flood controls	<ul style="list-style-type: none"> • Number of road closures • Number of new roads and km. • Area of new and repaired pavement • Number of water retaining walls/culverts • Reduction in flood damage
4. Development and regulation management for the safe circulation of transport	<ul style="list-style-type: none"> • Assessed accident and damage rates • Dili and District traffic plans completed • Percentage of projects on time • Percentage of projects within budget
5. Establish transport infrastructure that meets national defence imperatives	<ul style="list-style-type: none"> • Assessment of defence access needs met • Access to security posts
6. Establish technical standards for a national road network	<ul style="list-style-type: none"> • Number of days per year road closure • Percentage of population with all-weather access to road utilisation • Percent of road meeting vehicle load capacities • Cost ratio of maintenance
7. Implement capital improvements to the road network	<ul style="list-style-type: none"> • Achieve capital funding for roadways • Achieve capital funding for flood control

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-managed water and sanitation facilities.
- c) To facilitate at a National level the safe disposal of sewage and wastewater in urban areas.

- 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 infrastructure-related legislation. This is essential to address during the first two years of the plan, resulting in a legal basis for design and planning of water and sanitation systems in concert with road building, bridge work, flood control, and

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 interdependent 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 focus on specific projects are noted below.

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
- c) Capital Works and Upgrading of Wastewater Collection and Treatment 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

RESEARCH AND DEVELOPMENT DIVISION

15.45 The newly created Division of **Research and Development** under the MWPW will address a broad range of studies and pursue regulations on standards and norms for construction and materials, building codes, fire retardant treatments, and quality controls in support of departmental activities.

Research and Development Division Objectives

15.46 As a new Division, Research and Development will support the efficient operation of all Divisions under the MWPW. It will play an important role for operational planning, procurement, assessments, support for the Director General to manage assets, and working with inter-ministry commissions for both rural and urban development. The Division's primary objectives are as follows.

- a) To ensure effective financial planning and budgeting through database management and control systems.
- b) To provide effective support for human resource assessments, capacity-building support materials, technical research, and project costing and management.
- c) To develop effective procurement processes including those for civil works equipment and services, to support initiatives under each of the technical Divisions.
- d) To provide the system processing methods and controls required for management of public works assets.
- e) To provide research support for, and liaison with, contractors and donors for development of technical standards of all public works activities.

Constraints, Problems and Issues

15.47 Legislation will remain a constraint until the integrated activities of the ministries and various commissions empower public works administration to regulation utilities and the various requirements for infrastructure development. As a new Division, R&D also has no explicit budget allocation and lacks facilities, laboratory equipment, and technical staff. It currently exists in name only and will evolve with the public works and infrastructure plans. Two additional points should be emphasised as follows.

- a) In order to launch the Division, staff members are needed but not yet authorised, to include a Civil Engineer and experienced Laboratory Technician.
- b) The Division also will require a research workshop to design and create pilot construction projects for the technical Divisions, and a laboratory for material and construction testing. These are special-use facilities that may only be possible through donor support or outsourcing in the short term.

Research and Development Division Strategies

15.48 The Division will form a commission with representatives from academia, the Architect Association, Civil Engineering Association, Builders Association, Tradesmen Association, and selected NGO's to review legislation and various models of technical standards required in

public works. These will include, for example, a draft Building Code prepared by the State Government of Victoria for East Timor, feasibility for a variety of international standards for adaptation in East Timor, and roadway and flood district construction standards modelled on other Southeast Asian nations.

15.49 The Division will work closely with meteorology and utilise data from the GIS to support infrastructure research and planning, and pursue private consultants and contractors to design, test, and facilitate appropriate project proposals for materials, construction, and maintenance operations. The Division will essentially be a planning, research, and oversight function for the next several years, and in the long term, perform similar roles with greater technical participation as laboratories, staff capacity, and facilities evolve.

15.50 With limited funding and high demand for services, the Division will rely on external private consultants and experts, seeking external funding for assessment and research projects apart from the recurrent budget or support through the ODG. Specific requests for research and development intervention from technical Divisions will be supported through the requesting directorate.

Research and Development Division Programs and Projects

15.51 As a new Division without specific authorisation for portfolio development, the planners have put forward two programs with only illustrative projects that should be expanded significantly once empowered to pursue activities. All program and project initiatives are supporting endeavours for the entire public works department.

Program 1: Development of Appropriate Technology

15.52 Concurrent with legislation and regulations on housing and construction standards, urban and rural planning, town and community development, and the various projects under roads and maintenance programs, Research & Development programs are essential to identify the best and most appropriate technologies for East Timor. This is a challenge in terms of the topography and climatic conditions.

Projects

- a) Research on Bamboo Materials for Housing and Construction
- b) Research on Concrete, Blocks, and Natural Materials
- c) Assessments on Composites
- d) Research on Alternative Building Materials and Designs
- e) Technical Assistance for Adaptation of International Recognised Building and Construction Methods, and for Known Road and Bridge Designs

Program 2: Material and Construction Testing

15.53 This program has essentially one focus, which is to support technology research and the requests from any other Division for controlled laboratory testing. This would extend to natural and manmade materials, and to prototype fabrications. Testing would represent quality control, stress factors, endurance characteristics, water retention factors, fire retardants, and many other physical considerations for public works activities. As the new Division begins, operations are expected to be basic and restricted to priority public works efforts. These activities will also be

constrained until the scientific and technology knowledge is available to conduct more sophisticated procedures. Initial projects are proposed below:

Projects

- a) Construction material stress and utilisation testing
- b) Alternative materials testing for strength, durability, and fire safety
- c) Environmental Assessments for Potential Toxicity and Threats to Public Health

Table 15.5: Research and Development Performance Indicators

Objectives	Performance Indicators
1. Ensure effective financial planning and budgeting with database management	<ul style="list-style-type: none"> • Administrative systems and databases tested and effective
2. Support for human resource assessments, capacity-building support materials, research for technical criteria, and project costing and management models	<ul style="list-style-type: none"> • Assessment models in use and effective • 100% on time provision of solicited research • Project costing model completed
3. Develop effective procurement processes for civil works equipment and services, to support initiatives under each of the technical Divisions	<ul style="list-style-type: none"> • Database procurement system effective • 100% of on-time procurement requests • Reduction in backlog for logistics • 100% sourcing for technical Divisions
4. Provide the systems processing methods and controls required for management of public works assets	<ul style="list-style-type: none"> • Building codes and standards implemented • 100% compliance of codes and standards • Construction standards implemented • 100% compliance for public works
5. Research support and liaison with contractors and donors for development of technical standards of all public works activities	<ul style="list-style-type: none"> • Material testing laboratory established • Alternative technologies models researched • Donor liaison office established • Reliable contractor process established

DIVISION OF ENERGY (MINISTRY OF ECONOMIC AFFAIRS & PLANNING)

15.54 The Division of Energy is maintained as a separate functional directorate under the MEAD, and it essentially consists of the electric power generating authority for East Timor. The power authority was created under the UN and transition government, and the Division of Energy represents the administrative linkage for official development of public power capacity. The power authority itself, EDTL has been established as a state-owned enterprise, required to be financially autonomous, recovering its costs of operation and investment from electricity charges. Currently EDTL is jointly operated as a semi-autonomous authority with UN support and joint management.

15.55 EDTL is receiving a high level of subsidy and having difficulty in progressing towards its target of financial self-sufficiency. Authorities have been unable to establish an effective rate structure, many users are not metered, and the metering system is not reliable. Those problems are complicated further by difficulty in collecting tariffs, illegal bypassing or system tampering, and the reluctance to cut off power to users or block power utilisation. Demand for electricity exceeds supply and will continue to rise more rapidly than new supply can be provided under current operating capabilities. Also, the installation of effective metering systems and a comparable system of effective maintenance and expansion must be addressed. Finally, essential improvements are needed to manage the power sector, enforce an effective collection regime, provide accountability for procurement of source fuels and supplies.

DIVISION OF ENERGY OBJECTIVES

15.56 The Division of Energy has expanded the vision statement to include a mandate to create and maintain reliable and affordable power supplies. Ultimately, the power authority will meet the needs for electricity throughout East Timor, thus supporting economic productivity and quality of life for all citizens, and pursue indigenous resources to displace imported fuels. This is a long-term objective. In the near term, the Division will focus on development in Dili and key population or industry development areas at the lowest possible cost to consumers. Objectives include the following

- a) To ensure an enabling legal and regulatory environment for an autonomous power authority accountable for resource management and national power provisions.
- b) To sharply reduce subsidies to the power sector to a sustainable level through introduction of equitable but universal user charges for electricity.
- c) To establish a transparent and auditable system of procurement and supply utilisation with effective cost-recovery planning and development oversight.
- d) To develop a self-sufficient management capacity for the power sector.
- e) To complete installation of effective metering systems and provide for security of those systems in Dili, and as power systems expand, to district users.
- f) To develop national self-reliance in power generation by exploiting indigenous energy resources such as natural gas, solar, and hydro as economically feasible.
- g) To ensure coordination among government, donor, and private sector interests for expenditures on power development over long-term planning horizons.

DIVISION OF ENERGY CONSTRAINTS, PROBLEMS AND ISSUES

15.57 Many of the current constraints facing the sector are reflected in the objectives the Division hopes to achieve over the planning period, but most notable are funding requirements for all capital improvements and the high cost of recurrent maintenance and human resources. Without legal empowerment, no agency of government can pursue meaningful initiatives. Particular points to consider are as follows.

- a) **Operational limitations.** High and unsustainable subsidies to the sector will continue to retard capital development and threaten future programs of maintenance and capital expansion that rely on predictable levels of income generated equitably from end-user tariffs. These problems will continue to hamper service capabilities and the provision of reliable electricity services.
- b) **Management.** The Division is capable of its existing oversight responsibilities, but does not have the technical depth for strategic power planning or for pursuing alternative forms of power generation. Capacity development is essential, and within the near term, indigenous staff must be able to supplant the technical expertise of existing donor and UN supported positions.
- c) **Power generation technology.** There is no medium- or long-term power system development planning framework that captures the technical or capital asset requirements for a viable electric power generating capability. Further, there is an assumption of public sector (state-owned) power resources without consideration of benefits that could be achieved by private sector investment or BOT development under long-term contracts.

DIVISION OF ENERGY STRATEGIES

15.58 The Division of Energy will pursue a strategy of providing power capacity through quality systems of physical distribution and reliable delivery services. This will require a staged process of development, initiated through empowering legislation that enables an autonomous EDTL to fully function, and consequently, to be fully accountable. A comprehensive legislative framework is needed that will be pursued under a high-level steering committee, assuring public and private participation, to include appropriate donors and transitional interests, and to protect the national interests of homeland security which vitally depends on reliable power capabilities.

15.59 Recognising that in the near term neither the Division nor the government can meet the demand of power development, the Division will prepare feasible outlines for medium and long term plans for current and future government, and for existing and potential donors who support East Timor's efforts. In every instance, consideration will be given to the potential to involve private sector interests in power sector development, investments, and new initiatives for electric generation and distribution.

15.60 During the planning period, and perhaps well into the future, the Division will pursue initiatives that explore alternative forms of electric power generation, such as using gas resources, hydropower, solar energy, or perhaps another form or combination of fuels. Progress rests heavily on the ability of the power authority to reach the poorer regions and more distant districts to support agricultural and industrial development.

15.61 The Division will seek the means to legally enforce revenue collection from consumers, and the systems to support a fair and impartial process. In addition, the Division will study the potential for models of differentiated rates that would assist the most needy households,

providing small and rural enterprises with power access, and that can moderate severe disparities in power utilisation. Regulations will be implemented to resolve non-payment, disconnect procedures, and illegal tampering.

DIVISION OF ENERGY PROGRAMS AND PROJECTS

15.62 The Division has one focal concern of supplying reliable and sufficient electric power to the nation. Assuming the current structure of EDTL, that overarching requirement will be accomplished through three programs, each with projects or activities to be completed in the short or medium term within the planning mandate.

Program 1: Institutional Development

15.63 Institutional development is concerned with organising services and management of sector's activities. It is also concerned with planning for transition to a quasi-public or autonomous agency operated by contract or through a regulatory body.

Projects

- a) Final Comprehensive Legislation for an Autonomous Power Authority
- b) Investment Framework for Management of Power Infrastructure
- c) Formalise Steering Committee and Board of Directors for EDTL
- d) Develop Manpower Structure for National and District or Rural Power Stations
- e) Power Sector Assessment for Long-Term Private Ownership or Management

Program 2: Improvement of Services

15.64 Operational challenges must be met through a series of projects with attention to internal services administration and maintenance of assets. In addition, the sector is concerned with medium-to-long term expansion, staffing, and support services.

Projects

- a) PMU Coordination for TFET-funded Operational Services
- b) Amend and Implement Tariff Directive for Effective Enforcement Activities
- c) Electricity Meters Installation and Repairs in Dili
- d) Public Relations to Strengthen Enforcement of Non-payment and Vandalism
- e) Administrative Handover and Systems Transfer at Comoro Power Station
- f) Computer Systems and Information Technology Upgrade
- g) District and User-based Cost Assessment and Consumer Survey
- h) National Power Development Plan for Energy Resources and Services
- i) Capital Development Plan for Rural and Disadvantaged Support Systems

- j) Investment or Donor-supported Plans and Proposals for Rural Development, Social Priority Programs, and Intervention for Poverty Reduction Programs

Program 3: Capacity Building

15.65 Capacity building will occur on two levels. First, projects will be directed toward enhancing existing service capabilities and training local staff. Second, the EDTL will pursue recruitment and appropriate donor-supported technical assistance.

Projects

- a) Establish a Long-term Manpower Plan for District and Rural Development
- b) Revise Existing Salary and Wage Structures within the Existing System
- c) Recruit Locally and Train for Positions, including District Expansion
- d) International Mentoring for Management & Technical Staff Development
- e) Technical Team Job Development and Power Management Specialists

Table 15.6 Division of Energy Performance Indicators

Objectives	Performance Indicators
1. Sharply reduce subsidies to the power sector to a sustainable level	<ul style="list-style-type: none"> • Reduced percentage of subsidies to budget • Increased collection rates and enforcement • Percent of budget self-generated
2. Establish a transparent and auditable system of procurement and supply utilisation with cost-recovery planning	<ul style="list-style-type: none"> • 100% audit and procurement tracking • Increased rate of cost-recovery from users
3. Develop a self-sufficient management capacity for the power sector with demonstrated power capacity and services	<ul style="list-style-type: none"> • 100% staffed with qualified technicians • Percent of distribution system as planned • Hours per day of public power supply in each power centre served
4. Complete installation of metering systems and provide for security of those systems in Dili, and as power systems expand, to district users	<ul style="list-style-type: none"> • 100% of business, public buildings, and registered household with meters • 100% of users officially subscribed in Dili and district capitals
5. Develop national self-reliance in power generation by exploiting indigenous energy resources such as natural gas, solar, and hydro	<ul style="list-style-type: none"> • Percent economically-viable indigenous energy sources in total generation mix • Assessed appropriate alternative power generation in all districts
6. Ensure coordination among government, donor, and private sector interests for expenditures on power sector development	<ul style="list-style-type: none"> • Percent invested by private sector and percent by public sector on capital assets • 100% target achieved for capital asset development

DEPARTMENT OF COMMUNICATIONS AND TRANSPORT

15.66 The ODG manages five directorates that comprise the infrastructure sector responsibilities under the Minister of Communications and Transport. These directorates (Divisions) are addressed individually in following sections. Overall, the Department fulfils a senior management and coordination role to support all five Divisions, specifically in respect of capacity building, legislation and regulations, and support for recruitment, procurement, and external liaisons. This represents internal services with managerial responsibilities that follow below.

- a) To ensure development of infrastructure services through the Divisions for land, air and sea transport, telecommunications, postal services, and meteorology.
- b) To create sustainable conditions for support of private sector development and public sector initiatives among all constituent ministries.
- c) To provide focal support for generating an enabling environment of legislation and regulation required for operational mandates throughout the ministry.
- d) To promote employment opportunities through effective management of this ministry's directorates.
- e) To coordinate and support efforts to develop technical specialisation and knowledge within the Divisions and through the ODG.

DIVISION OF LAND TRANSPORTATION

15.67 The Division of Land Transportation is the official body for vehicle registration and vehicular traffic regulation. Its responsibilities include vehicle registration, vehicle inspections, issuance of number plates, foreign and domestic vehicle documents, conduct driving examinations, issue driving licenses, and maintain inventories of public and private transport vehicles.

Division of Land Transportation Objectives

15.68 The Division is a “service” function under a regulatory regime, and as such, is significantly understaffed. Staff are capable but not well-educated nor well-trained, and consequently, even after reorganisation, the Division faces substantial capacity building and recruitment challenges. The Division has focal objectives related to its service mandate and the specific activities of land and vehicle regulation as follows.

- a) To create the service infrastructure with competent and sufficient staff to support the growing demand for land transport services.
- b) To create sustainable regulatory processes for ensuring safe vehicular utilisation, effective traffic control, and appropriate licensing and registration of all vehicles.
- c) To coordinate service requirements with those of road building, urban and rural roadway construction, and infrastructure systems that can achieve the national objectives of economic growth and poverty reduction.

- d) To resolve the problem of saturation of major road arteries through improved accessibility for outlying and remote population areas.
- e) To reduce import dependence on oil by using alternative public transport and improving energy efficiencies of vehicles permitted to register in East Timor.
- f) To provide employment opportunities within the Division through effective job development and capacity building programs.
- g) To pursue optimal models of regulation and technical knowledge from established and comparable land transportation systems, incorporating these into East Timor.
- h) To implement a national public safety program for driving and maintaining all road vehicles through driver awareness campaigns and public information services.
- i) To formulate regulations with traffic and vehicular rules governing safe and legal vehicle operation, and enforcement capabilities with appropriate penalties.
- j) To establish an effective policy for public transportation fees and charges, and a retention fund for these revenues for enhanced public transportation.

Constraints, Problems and Issues

15.69 The Division faces several constraints that cannot be easily resolved, and several challenging problems to address. These are not within the unilateral control of the Division or the ministry, but require joint efforts by several government agencies, with technical support and assistance. The following points should be considered.

- a) **Physical infrastructure.** Physical disparities of road development exist, and there are remote pockets of population without vehicles, trucks, or farm equipment. With the Division centralised in Dili, there is little capability of reaching isolated districts (e.g., Viqueque and Oecussi). The physical infrastructure of roads and bridges will not reach into remote areas soon.
- b) **Traffic systems.** Physical infrastructure will restrain service such as effective street markings, intersection traffic control systems, signage, and resolution of commercial traffic in congested areas. This is particularly acute in Dili where port traffic is situated in the centre of the capital, and there is no organised public bus transportation terminal or organisation of routes.
- c) **Control and regulation issues.** Not all vehicles are registered and there is no vehicle inspection or safety control facility. These are minor requirements, yet crucial to meeting objectives such as controlling emission standards, improving safe urban and rural road utilisation, and regulating safe driving practices. These constraints also prevent the Division from controlling contraband vehicles, ensuring public safety, and providing reliable public transportation.
- d) **Funding and revenue diseconomies.** Individual modes of transport do not always pay for their costs, and cost-effective modes of public transport are available only in selective high-density areas. This leads to dysfunction of the internal market and distorts competition within the transport system.

Division of Transportation Strategies

15.70 The Division will pursue a comprehensive and integrated national transport planning system to ensure efficiency and competitiveness of land transport providers and users. This will require inter-agency and multi-Divisional efforts with the Department of Public Works and both air and sea transport planners. Ultimately, this is a strategy of optimising scarce infrastructure development funds to generate an integrated transportation system that can be sustained on a national scale.

15.71 An integrated transport policy will include urban and land-use planning policies that can encourage innovative approaches to congestion, unsafe roads, and better public transport. The Division will pursue initiatives, such as improving mobility caused by unbalanced public transport routes between home and work and long-term social and education changes such as staggered working hours in congested areas, alternative school hours to avoid overcrowded roads, and school bussing when it becomes feasible. The Division will also pursue alternative means of commercial transport, such as promoting both public and private sector development of coastal sea and inland waterway shipping and off-peak commercial road traffic.

15.72 The Division will focus heavily on improving road safety. Road accident victims and subsequent human and material costs cannot be calculated. The Division will seek to create the capacity within its ranks to realistically assess accident rates and costs, and then strive to reduce those costs and incidents over the ensuing years. This will be part of a strategic of public safety awareness and information campaigns.

Division of Transportation Programs and Projects

15.73 The Division programs are concerned with three general issues: institutional and staff development, traffic management, and vehicular regulation and safety. Each of these are bound up with priorities under road, bridge, and flood control activities.

Program 1: Institutional and Staff Development

15.74 This program focuses on internal administrative functions and effectiveness of staff in Dili and the districts for vehicular services and traffic management.

Projects

- a) Legislation in Urban and Rural Road and Vehicle Utilisation
- b) Regulations for Vehicle Registration, Inspections, and Traffic Enforcement
- c) Recruiting and Training, Technical Capacity for Vehicle Inspection and Safety
- d) Capital Improvements, Equipment, and Vehicles

Program 2: Traffic Management

15.75 Traffic management includes operations for traffic planning, urban saturation issues, coordinated road and bridge projects, and environment protection.

Projects

- a) Street and Road Planning for Urban and District Capitals

- b) Urban Signage and Road Network Traffic Mapping
- c) Procedures for Emergency or Disaster Traffic Routing
- d) Saturation Assessments and Coordination for Port Services
- e) Environmental Standards for Vehicle Fuel, with Regulations on Emissions

Program 3: Vehicular Regulation and Safety

15.76 This program represents on-going activities more than projects that will ensure public safety, reduce accidents, and generally enhance all vehicle operations.

Projects

- a) Accident and Traffic Incident Studies
- b) Accident Prevention and Auto Safety Inspection Initiatives
- c) Public Awareness Campaign on Safe Driving
- d) School Programs on Vehicle and Pedestrian Traffic Safety

Table 15.7: Division of Land Transport Performance Indicators

Objectives	Performance Indicators
1. Create the service infrastructure with competent and sufficient staff to support the growing demand for land transport services	<ul style="list-style-type: none"> • 100% of basic law completed by 2003 • 100% staffing levels achieved and sustained • Regulations and enforcement implemented
2. Create sustainable regulatory processes for ensuring safe vehicular utilisation, traffic control, and licensing and registration of all vehicles	<ul style="list-style-type: none"> • 60% of sector policies defined in 2002 • 100% of policies implemented by 2003 • Traffic control supervision 100% by 2004 • National licensing 100% by 2003 • Traffic plans completed with Roads Division
3. Coordinate service requirements with those of road building, urban and rural roadway construction, and infrastructure systems	<ul style="list-style-type: none"> • Signage and traffic control in Dili completed • Roadway hazard rural signage completed
4. Resolve the problem of saturation of major road arteries through improved accessibility for outlying and remote population areas	<ul style="list-style-type: none"> • Integrated road/port access plan by 2003 • Vehicle load/road-use requirements by 2003 • Percent of nation with access to safe roads • Reduced travel time to clinics and schools

5. Reduce import dependence on oil by using alternative public transport and improving vehicle energy efficiencies	<ul style="list-style-type: none"> • Improved bus and public conveyances • Reduced emissions with new standards for vehicle inspection and licensing
6. Provide employment opportunities through effective job development and capacity building programs	<ul style="list-style-type: none"> • Increased local district & rural staff • 100% training coverage for all staff in relevant technical areas
7. Establish optimal models of regulation and technical knowledge from established and comparable land transportation systems	<ul style="list-style-type: none"> • Plans and models from regional nations acquired and compatibility approved • Compliance with international standards for road and traffic safety
8. Implement a national public safety program for driving and maintaining all transport vehicles by creating driver awareness campaigns	<ul style="list-style-type: none"> • 100% of population with access to public safety regulations • 100% of schools with road safety and driving safety programs for relevant youth • Public media safety campaign instituted
9. Formulate regulations for traffic and vehicular rules governing safe legal vehicle operation, and enforcement	<ul style="list-style-type: none"> • Assessment process for accidents and traffic incidents implemented • Reduced accident and traffic incident rates
10. Establish an effective policy for public transportation fees and charges, and a retention fund for these revenues	<ul style="list-style-type: none"> • Affordable public transport fees established • Rural system for public transport and fees • Fund established for retention and road use fees, public transport revenues

DIVISION OF SEA TRANSPORTATION

15.77 The Division of Sea Transportation is the administrative authority for port, dockside, and waterway development. With UN support, the war-related damage has been the highest priority, yet the port authority is entering this first national planning period with only rudimentary facilities, a weak legal mandate for regulation of port and shipping activities, and a slim profile of experienced technical staff. Port progress has occurred primarily through the Emergency Infrastructure Rehabilitation Project implemented under TFET funding, and bilateral funding from Japan.

15.78 Significant rehabilitation work is ongoing to repair existing wharf facilities, extend the container terminal, pave loading and storage areas, provide security walls, improve expediting systems, and train select staff members. However, port and sea shipping regulations have not been prepared, tariffs remain in question, and there are concerns regarding coastal environmental and port protection, safety, access and traffic patterns of port container services, and administration of the Division.

Division of Sea Transportation Objectives

15.79 The Division has enthusiastic objectives. Some reflect projects and existing activities that are donor-funded or under bilateral assistance. Others focus on institutional development and capacity building in maritime law and procedure. These objectives are as follows.

- a) To develop a code of commercial maritime law.
- b) To conclude ratification procedures on behalf of East Timor for principal maritime conventions on maritime safety and maritime transport.
- c) To achieve ratification on behalf of East Timor of the United Nations Convention on the Law of the Sea.
- d) To establish a registry of shipping for East Timor.
- e) To establish a modern system of port taxes and tariffs with effective enforcement capabilities that preclude contraband and corruption.
- f) To pursue enactment of the law on public maritime domain in conjunction with the MEAD, and with the MoJ.
- g) To establish a public passenger sea transport service between Dili and Atauro, and between Dili and Oecussi.
- h) To create a plan and institute a policy for regulation of national coastal traffic.
- i) To achieve a national capacity for essential survey & inspection procedures, and thereon, for certifications regarding ship conditions, materials safety, and hazards.
- j) To train and develop East Timorese in special maritime studies abroad.
- k) To improve port container and bulk handling while reducing congestion at Dili.
- l) To provide the facilities and services required to situate the Naval Defence Force at the Port of Hera in concert with the government's priorities.
- m) To complete current projects and rehabilitation activities on schedule with Japanese bilateral and multilateral assistance.
- n) To assess and subsequently implement an effective system of fire prevention and both port and maritime fire and damage control.

Constraints, Problems and Issues

15.80 The Division of Sea Transportation faces similar constraints to all other Divisions concerning inadequate funding and insufficient human resources. There is an urgent need for staff recruitment and training to provide the Division with highly skilled technical and maritime specialists, which are now temporary provided by UNTAET. In addition, the port is entirely reliant on private and foreign-owned companies for cargo portage and handling. What access there is to domestic equipment is largely supported through UNTAET assistance. In effect, East Timor has little cargo support capability. This is further complicated by limited telephone and information systems.

15.81 The Port of Dili has basic ship-to-shore communications, but with limited range and inadequate security. This reflects a general lack of service infrastructure, which includes the lack of effective port security, fire-fighting capabilities, handling of hazardous materials, and maritime and port safety procedures.

Division of Sea Transportation Strategies

15.82 The Division will initially concentrate on institutional development creating the legislative framework for an effective maritime authority. Development of principal port legislation includes creation of a public institute “Administration of the Ports of East Timor, IP” with respective statutes. This must reflect an appropriate administrative structure for the Ports Authority of East Timor and Maritime Administration.

15.83 The Division will manage planning, project design, and tendering for competitive private sector development of port facilities, coordinate port services, and implement development plans for expanded port operations, including viable fire fighting and marine rescue operations at Dili, and expand services to secondary ports. Establishing a Shipping Registry will be critical to port control.

15.84 Strategic development will occur in phases, first with completion of rehabilitation projects and bilateral assistance projects. During this early development phase basic port services at the ports of Suai and Oecussi will be initiated, followed by those at Caravel and Com. Development of regional ports will be linked to the maritime coastal transport system to be implemented over a period of four years. Recruitment and capacity building for human resource maritime skills will be essential for providing new public services, designing development projects, and administering shipping and commercial sea transport systems, and to replace UNTAET staff.

Division of Sea Transportation Programs and Projects

15.85 The Division is concerned with port development and sea transport as projects rather than programs. Projects are described under program headings for clarity.

Program 1: Institutional Development

15.86 East Timor must develop the legal framework for a port authority with the regulatory capability of shipping, registry, and inspections. There also is a requirement for effective administration and ship-to-shore communications with qualified staff.

Projects

- a) Develop a Code of Commercial Maritime Law
- b) Ratification of Maritime Conventions on Safety and Transport
- c) Ratification of United Nations Convention on the Law of the Sea.
- d) Establishment of a Registry of Shipping
- e) Enactment of Law on Public Maritime Domain
- f) Policy for Regulation of Coastal Traffic
- g) Survey & Inspection Procedures, Certifications on Material Safety and Hazards

Program 2: Port Rehabilitation and Development

15.87 Existing projects focus on rehabilitation under recurrent and bilateral funding. These and proposed projects are concerned with rebuilding, security, and facilities.

Projects

- a) Dili Port Operations
- b) Container Handling and Storage Enhancement
- c) Dili Port Emergency Infrastructure Rehabilitation Project
- d) Japanese Assistance Project for Facilities and Port Improvements Dili
- e) Oecussi Passenger Ferry Operation
- f) Rehabilitation of Secondary Ports

Program 3: Port Services

15.88 Many new services are needed for docking, loading, and expediting, but most are in planning stages. Several projects for required services are proposed here.

Projects

- a) Port Taxes and Tariffs Project
- b) Security Enforcement to Preclude Contraband and Corruption
- c) Port Planning for Strategic Passenger and Cargo Services
- d) Distribution and Land Route Congestion at the Port of Dili
- e) Public passenger sea transport, Dili and Atauro, and Dili and Oecussi
- f) Naval Defence Force at the Port of Hera

Program 4: Capacity Building

14.88 Staff management and technical capabilities are necessary to attain the service levels required. Several projects are in progress and several are proposed.

Projects

- a) Technical Port Management and Maritime Administrative Studies Abroad
- b) Staff Training and Development in Safety and Fire Fighting
- c) Assistance Programs for Training and Standards on Hazardous Materials, Shipboard Safety, Inspections, and Disaster Procedures

Table 15.8: Division of Sea Transport Performance Indicators

Objectives	Performance Indicators
1. Develop commercial maritime law	<ul style="list-style-type: none"> • Code completed by 2003
2. Ratification procedures for principal maritime conventions on maritime safety and maritime transport	<ul style="list-style-type: none"> • Ratification achieved by 2003 • Conventions on safety implemented by 2003
3. Ratification of the United Nations Convention on the Law of the Sea.	<ul style="list-style-type: none"> • Ratification achieved by end of 2002 • Conventions promulgated by end of 2002
4. Establish a registry of shipping	<ul style="list-style-type: none"> • Registry completed by end of 2002
5. Establish a modern system of port taxes and tariffs with effective enforcement capabilities that preclude contraband and corruption	<ul style="list-style-type: none"> • System approved and implemented by end of 2002 • Enforcement staff and control systems in place by 2003
6. Enactment of the law on public maritime domain in conjunction with the MOE&P and MOJ	<ul style="list-style-type: none"> • Joint regulations by end of 2002 • Enforcement procedures enacted and Published by 2003
7. Establish passenger sea transport service between Dili and Atauro, and between Dili and Oecussi	<ul style="list-style-type: none"> • Dili to Atauro service established by 2003 • Dili to Oecussi service established by 2003
8. Plan and institute a policy for regulation of national coastal traffic	<ul style="list-style-type: none"> • Plan drafted by end of 2002 • Plan for total coastal traffic instituted in 2003
9. Achieve a national capacity for survey & inspection procedures, and certifications for ship conditions, materials safety, and hazards	<ul style="list-style-type: none"> • Ship survey & inspection regulations passed • Inspection staff recruited or contracted 2003 • Materials safety inspection system 2003 • Hazardous handling systems in place 2003
10. Achieve access to proper training and development for Timorese in special maritime studies abroad	<ul style="list-style-type: none"> • 100% of human resources required for technical port operations educated and certified by 2004
11. Improve port container and bulk handling while reducing	<ul style="list-style-type: none"> • 100% of regional ports operational by 2005

congestion problems at the Port of Dili	<ul style="list-style-type: none"> • Dili port congestion resolved by 2003 • Container port handling improved by 50%
12. Situate Naval Defence Force at Hera	<ul style="list-style-type: none"> • Comply with defence requirements by 2003
13. Complete current projects and rehabilitation activities on schedule with Japanese bilateral and multilateral assistance	<ul style="list-style-type: none"> • Projects completed on time and in budget • 90% rehabilitation by 2004, 100% by 2005 • Land infrastructure at Dili completed 2003 • Tibar, Hera, Sufi repairs completed 2003 • Ports of Com and Oecussi remodelled 2004
14. Assess and implement an effective system of fire prevention and both port and maritime fire and damage control	<ul style="list-style-type: none"> • Assessment completed by end of 2002 • Port of Dili fire and emergency systems to international standards by 2003 • Secondary fire and emergency systems 2004

DIVISION OF CIVIL AVIATION

15.90 Nine airfields in East Timor were constructed during the Portuguese era, but with no history of a national air carrier or infrastructure for air hub cargo or maintenance capabilities. Reconstruction has focused on the Comoro Airport and development of safety operations for passengers and cargo. Baucau and Suai airports are also under rehabilitation. The Division's main development objectives in the near-term are to complete rehabilitation and to implement staff training programs.

15.91 Pacific Architecture Engineering operates two airports outside Dili under the UN in Baucau and Suai. Airports in Oecussi, Los Palos, Viqueque and Maliana are operated by UNTAET. An Airport Master Plan is being developed for each airport, and together with the transition, this will provide a compliance structure for an international standard accounting system within an East Timor Civil Aviation Authority.

15.92 Legislation is in draft form on basic Aviation Law and expected to be finalised and enacted by the end of the year 2002. This will be the foundation for the organisation and structure of ETCA, which will then be able to maintain an official relationship with International Civil Aviation Organisation based on compliance with the Civil Aviation International Convention (Chicago Convention). However, the Division will be dependent on donor assistance with contracted services until 2004.

15.93 The transition to a competent and fully operational East Timor authority will require three general phases. The first is the current emphasis on rehabilitation and training. The second is concerned with expansion of facilities and transition toward a certified civil aviation authority.

And the third is the integrated development of air transport and cargo capabilities to sustain long-term growth.

Division of Civil Aviation Objectives

15.94 The Division's objectives extend the vision of the Civil Aviation authority, which is to attain excellence in aeronautical services, establish membership in the ICAO, and provide quality airports and air services. The Division's strategic objectives are:

- a) To attain a high standard of safe and efficient passenger service.
- b) To establish effective air cargo systems for international and national transport.
- c) To generate a reliable staff with qualifications required to ensure safe and effective airport operations comparable to the best airport facilities in the region.
- d) To establish the reliable and secure systems needed for an efficient mail and postal expediting hub and internal national postal support services.
- e) To establish an appropriate financial system that allows the civil aviation administration to recover its full costs of operation.
- f) To promote and maintain a favourable environment for development with confidence among the Division staff and throughout the integrated civil aviation structure.
- g) To provide the ground facilities required to support military air and land priorities.
- h) To support national development priorities and poverty reduction initiatives through indigenous staff recruitment, training, employment, and district services.

Constraints, Problems and Issues

15.95 The most serious constraint will continue to be the imbalance of supply and demand of airport operations. In order to achieve the level of quality and safety envisioned for airports, and subsequently to achieve the revenue levels required to sustain airport facilities and services, a "critical mass" is required for qualified staff and the operational infrastructure. Specifically, quality and safe service levels cannot be achieved incrementally but must be attained through substantial capital development.

15.96 There is a substantial market for air cargo if it can be cost-effective and efficient. There are no credible facilities for air cargo with scale economies to justify a profitable air cargo system at present, and the capital development of such a facility is well beyond funding capacity over the term of this planning period.

15.97 East Timor must become a cost-effective destination for tourist travel and international business development. Consequently, the main airport and key regional airports must achieve the quality and service efficiencies to support tourism and trade activities. At the same time, airport development will be significantly dependent on tourism and trade development. Neither can progress very quickly in isolation.

Division of Civil Aviation Strategies

15.98 The Division will pursue a three-stage strategy that begins with implementation of existing rehabilitation and training projects to achieve the basic operational structure required for

a civil aviation system. This will include passage of enabling legislation and drafting the regulations needed for quality, safety, and financial operations. A system of airport fees and appropriate service taxes will be introduced during this stage as the revenue base for operational cost recovery. The Division will seek bilateral agreements in the area of air transport with countries in the sub-region with the objective of establishing reciprocal legal arrangements for national operators.

15.99 The second phrase will be strategic development of district airports, generating the critical mass for quality and safety needed for passenger and cargo services that can support internal trade, transport, and postal services. During this stage, it is anticipated that the Civil Aviation authority will attain membership in the ICAO and ratify necessary agreements for regional cooperation in air services.

15.100 The third stage will be an integrated strategy of commercial air services development with cooperative endeavours that include tourism, trade, business, cargo, and ground support development. Many of these linkages will be pursued at the outset of this planning period but can only be realistically initiated when the airport facilities and qualified staff operations have attained the “critical mass” required to participate.

Division of Civil Aviation Programs and Projects

15.101 Programs are focused on priority issues of Comoro Airport operations, rehabilitation, and support facilities. The East Timor Civil Aviation Authority is also concerned with institutional development as a sustained authority for passenger and cargo services.

Program 1: Institutional Development

15.102 Institutional development is concerned with legislative framework for an Aviation Law and transition from UN operational management to East Timor authorities. In addition, a structure of fees and assessment must be developed, and East Timor must establish regional and international relationships for air services.

Projects

- a) Enactment of Aviation Law
- b) Organisation and Structural Development for East Timor Civil Aviation Authority
- c) Regional Affairs for Air Service and Cargo
- d) Membership in the ICAO
- e) ICAO Compliance Regulations and Practices

Program 2: Comoro Airport Operations

15.103 This program provides for the safe and efficient operation of Comoro Airport in accordance with ICAO standards. With the approaching end to the Memorandum of Understanding, responsibility will shift from UNTAET and the Government of Portugal to an East Timor Civil Aviation Authority requiring changes in services, fees, facilities, administration, and safety.

Projects

- a) Comoro Runway Overlay Rehabilitation
- b) TFET Project 1 Comoro Runway Structural Evaluation
- c) Bilateral Project 1 Training/Supervising Staff for Comoro
- d) Multilateral Civil Aviation Authority assistance for Operations
- e) Air Traffic Control, Navigational Lighting, and Communications
- f) Airport Emergency Procedures, Fire Fighting Facilities
- g) Airport and Customs Security
- h) Infrastructure and Ground Maintenance
- i) Finance and Administrative Systems Development

Program 3: Improvement of National Services

15.104 A second phase of airport development late in the current planning period will build on core of services and capabilities at Comoro. District air services and cargo will continue to be privately contracted but expanded, including capacity development.

Projects

- a) Runway Development and Rehabilitation
- b) Directional Guidance and Navigation Support Systems
- c) Aircraft Maintenance and Support Facilities at Comoro and Regional Airports
- d) Fees and Tariffs on Cargo and Passenger Services
- e) Air Cargo and Postal Facilities
- f) National Plan for Air Routes and Private Support Facilities
- g) Communications, Air Controller Systems, and Emergency Procedures Systems
- h) Fire Prevention and Fire Fighting Systems

Program 4: Capacity Building

15.105 Substantial training and staff development has been taking place through bilateral projects and UNTAET/ETTA activities. Programs for continued training, specifically in highly technical areas and critical emergency situations, are only now in planning stages. The East Timor authority has been heavily reliant on donor and international assistance, which will continue to be necessary.

Projects

- a) Bilateral Project 1 Training & Supervising Staff
- b) Air Controller Training and Certification
- c) Emergency Services and Fire Fighting
- d) Administration and Airport Management
- e) Ground Maintenance

Table 15.9: Division of Civil Aviation Performance Indicators

Objectives	Performance Indicators
1. Attain a high standard of safe and efficient passenger service	<ul style="list-style-type: none"> • Maintain 100% incident and accident free air and ground operations • Join ICAO by year end 2002 • Compliance with ICAO Guidelines by 2003 • Civil aviation laws and regulations 100% enacted and approved by end of 2003
2. Establish effective air cargo systems for international and national transport	<ul style="list-style-type: none"> • 100% rehabilitation of Dili facilities by 2005 • 90% of cargo facilities renovation by 2002 • Create mobile off-loading and conveyer cargo and passenger systems by 2003
3. Generate a reliable staff with qualifications required to ensure safe and effective operations	<ul style="list-style-type: none"> • 80% of ground and CA staff recruited and trained by end of 2002 • 100% of staff hired and trained by end 2003
4. Establish the reliable and secure systems needed for efficient mail & postal expediting	<ul style="list-style-type: none"> • With Post Office, establish fully secure and efficient air mail and post by end of 2002 • Establish with Post Office and postal ministry fees for all postal handling and shipping by 2003
5. Establish an appropriate financial system that allows full cost recovery of operations	<ul style="list-style-type: none"> • System implemented database with donor support by 2003 • Fee structure and budgeted system by 2003

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| 6. Promote a favorable environment for development with confidence among the Division staff | <ul style="list-style-type: none"> • 80% of development studies completed 2002 • 100% of assessment developments by 2005 • 100% training for ICAO and Civil Aviation laws and regulations |
| 7. Provide ground facilities required for military air and land priorities | <ul style="list-style-type: none"> • Compliance with military requirements as specified and maintained |
| 8. Support national development priorities and poverty reduction initiatives through staff recruitment, training, employment, and air-assisted district services | <ul style="list-style-type: none"> • Public promotion and competition for main and secondary air service locations • Private contractor requirements for capable local hiring and training • Coordinated support program for air service to rural airports and access to population |
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TELECOMMUNICATIONS (SUB-SECTOR TO DIVISION OF TELECOMMUNICATIONS AND POST)

15.106 Telecommunications represents a part of the Division of Telecommunications and Post, and is treated here as a sub-sector (postal services are treated separately below). Like most ground-based telephonic communication systems, there are five components to manage: buildings and exchange facilities; technical operating systems; external transmission networks including towers, wires, and reception equipment; installation and maintenance equipment; and administrative services. The existing system began post-1999 with 60-to-90 percent of all physical telecommunications infrastructure severely damaged or destroyed; less than 10 percent was maintained well enough to be put into service with severe staff shortages.

15.107 Today public services are provided through an Australian telecommunications company under a short-term contract subject to renewal. Most telephone services are mobile, although a limited land line network has been installed. UNTAET maintains its own stand-alone system that may be withdrawn as the UN mandate expires. The main challenge facing the telecommunications sector is to provide basic services to all districts and thereby ensure realistic access to telecommunications for all citizens.

Telecommunications Objectives

15.108 Although early transition efforts have focused on rehabilitation projects, the extent of damage often has meant starting from scratch to rebuild capacity with the communications support needed for the country to operate at a very basic level. Attention will now be directed toward legislative initiatives, investments, and expanded operations, which reflect the main objectives for the planning period. These are:

- a) To complete ongoing restoration projects of telecommunications infrastructure and culminate the transition training and development programs.

- b) To initiate currently planned projects for controlling radio frequency electro-magnetic emissions in the country and other functions of the Communications Regulatory Authority.
- c) To attain by mid-2003 the implementation of a telecommunications network with the capacity to satisfy the minimum telecommunication needs of the nation.
- d) To extend basic telecommunication services to all districts by the end of 2004.
- e) To promote the formation a sufficient number of Internet Service Providers to realistically serve all of East Timor by the end of 2002.
- f) To create a regulatory and fiscal authority, the Communications Regulatory Authority for control of radio frequency electro-magnetic emissions and standards.
- g) To build capacity to the level of self-sufficient management and technical operational control by the end of 2003.
- h) To complete legislative guidelines and operating standards for telecommunications by the end of 2002, and to obtain approval for national implementation thereon.
- i) To pursue capacity building and recruitment programs that ensure the sector has well-qualified staff in telecommunications and information technology.
- j) To institute a supervisory and coordination process for district operators and service technicians.

Constraints, Problems and Issues

15.109 Telecommunications is a capital-intensive industry and will require high levels of investment to finance the development of infrastructure. As with other sectors, the sector faces human resource shortages and attention to capacity development. Perhaps the most important consideration is the topology of East Timor that poses major constraints on land-based tower-and-wire development.

15.110 Under current operating constraints and the realities of funding, staff capabilities, and potential support from international donors, incremental development of land-based wire telephone systems and current-generation PABX systems may be the only option. This should not prevent the sector (and the donor community) from considering the cost-benefit trade-off of pursuing the latest technological systems.

Telecommunications Strategies

15.111 The highest priority after current rehabilitation projects are completed is to establish the legislative framework for regulating telecommunications. The Division will pursue laws and operating regulations to become an autonomous agency in terms of self-financing, and in the long-term, create an impact fund capital development.

15.112 The sector can achieve its objectives best through a BOT contract with an experienced major private international company. This would entail contracting with government backing with a 20-25 year amortisation and BOT completion horizon. This would permit state-of-the-art telecommunications development from the start of the contract, consistent and thorough training of local technicians and administrative staff, and a full transparent telecommunication system with rapid capital development. Under the BOT contractor, optimal use of local human and

material resources would be realised with a final “handing over of keys” to an already-competent staff. This strategic approach would fully meet the component parts of a domestic strategy that would address all five aspects of telecommunications.

15.113 If a BOT strategy cannot be implemented, the Division must plan independent programs for each of the five components – buildings and exchange facilities, operational systems, external network infrastructure, equipment and maintenance, and staff capabilities. The Division will address these components within its programs.

Telecommunications Programs and Projects

15.114 The directorate has several program areas but few individually identified projects apart from overall operations. Two priorities stand out. The first is concerned with establishing the regulatory authority. The second is concerned with maintaining appropriate operational contracts until government can negotiate a major investment for private telecommunications development through a build-operate-transfer process.

Program 1: Regulation

15.115 The Communications Regulatory Authority will be fully established and empowered as the government regulator of all communications services in East Timor.

Projects

- a) Public and Private Policy Development
- b) Radio Frequency Electro-Magnetic Emissions and Standards
- c) Regulations Pertaining to Post and Internet

Program 2: Telecommunications Operations

15.116 The rehabilitation of national services will continue with systematic transition of assets and infrastructure services from UNTAET as East Timor progresses.

Projects

- a) Rehabilitation of Towers, Lines and Exchanges
- b) Capital Upgrade of Equipment and PABX
- c) Provision of Customer Service Centre
- d) Maintenance of Facilities and Transmission Distribution Systems

Program 3: Capacity Building

Projects

- a) Recruitment and Staff Training in Administrative Services
- b) District Operations Training and Staffing of Exchanges
- c) Maintenance Workshops and Skills Development

Table 15.10: Telecommunications Performance Indicators

Objectives	Performance Indicators
1. Complete ongoing restoration projects and culminate transition training and development programs	<ul style="list-style-type: none"> • 100% restoration of Dili infrastructure by 2003 • 50% of service to rural areas complete in 2003 • 100% of training initiatives completed by 2003
2. Initiate controls for radio frequency electro-magnetic emissions	<ul style="list-style-type: none"> • 100% completed projects by 2003
3. Implement a telecommunications network with the capacity to satisfy the minimum telecommunication needs of the nation	<ul style="list-style-type: none"> • Network implemented by July 2003 • Network districts and populated areas by 2004 • Install 75% of planned public telephone booths in capital by 2002, 100% by end of 2003 • 100% of rural telephone booths end of 2004
4. Extend basic telecommunication services to all districts by 2004	<ul style="list-style-type: none"> • Expansion of basic telecommunications services to all districts by end of 2004
5. Promote sufficient Internet Service Providers to serve all of East Timor	<ul style="list-style-type: none"> • Target coverage of all subscribers by 2004
6. Create a regulatory and fiscal authority, the Communications Regulatory Authority (CRA)	<ul style="list-style-type: none"> • Enabled and operational by end of 2002
7. Build capacity to the level of self-management, operational control	<ul style="list-style-type: none"> • Complete all Dili/district staff training by 2004 • Qualified maintenance staff recruited by 2004
8. Complete legislative guidelines and operating standards	<ul style="list-style-type: none"> • Complete slate of regulations by end of 2002 • Draft regulations for operation standards 2002
9. Pursue capacity building and recruitment programs	<ul style="list-style-type: none"> • Sector staff can meet self-sufficiency in information technology and telecom technical advancements
10. Institute a supervisory and coordination process for districts	<ul style="list-style-type: none"> • Implemented in district capitals by end of 2002 • 100% of urban/rural areas participate by 2003

POSTAL SERVICES (SUB-SECTOR TO DIVISION OF TELECOMMUNICATIONS AND POST)

15.117 Postal services are currently operating in eight districts following early transition support for reconstruction and bilateral assistance from Portugal. The remaining districts are serviced by road through infrequent routes by existing staff. A large part of the population has no

easy access to postal services, nor can they afford to use mail services. In Oecussi, an agency operates mail service in a UNTAET building, and the UN has supported airmail and government-related postal services.

15.118 Although governmental approval has been given for expanded district services, the regulations needed for postal services administration have not yet been developed. This plan is an early step to generate comprehensive postal services with enabling postal policies that provide efficient and affordable services to everyone.

Postal Services Objectives

- a) Repair the postal infrastructure to provide basic postal services within the current program framework for rehabilitation.
- b) Recruit, train and enable postal staff to be able to offer high quality services currently being developed and planned for long-term expansion.
- c) Increase the quality of postal service coverage, extending the range of service to communities that have not yet been incorporated to the postal map.
- d) Create community agencies with the objective of delivering to all a range of general services. These will be public-funded activities under the postal authority.
- e) Establish “peoples stores” as private, fee-based services in rural areas to provide postal contract systems coordinated with public works and other agencies for mail transactions, banking networks, and various forms of transfer payments.
- f) In the long term, pursue a postal financial intermediation process, and if approved and consistent with banking laws yet to be developed, provide various cash and demand accounts, payment capability, and certain approved lending.
- g) Initiate professional training and development to enhance human resource capacity among postal officers.
- h) Pursue alternatives for postal administration, including scenario plans for a fully private, quasi-governmental, and fully public postal service.

Constraints, Problems and Issues

15.119 The major constraints are those that face all other sectors, namely lack of funding to generate the capital improvements required for a national postal service, and insufficient human resources capable of administering the postal service or operating the district services. Virtually all other limitations stem from these two situations, including lack of equipment, unreliable service, poor (or no) access for much of the rural population, and the inability to support other government functions.

15.120 In the near term, and perhaps well into the future, development costs and the operating costs of maintaining district offices with decent access to postal services will far exceed revenues. A regime of rates must be competitive on an international scale, yet also be domestically modest so that a vast majority of citizens can afford to use the mail as its means of communication and various transactions.

Postal Services Strategies

15.121 Because postal services were nearly totally destroyed, it is necessary to gradually develop new services throughout the country. The strategy will be incremental development as the Division continues as a public postal authority. However, the Division will study alternatives for private postal services or a quasi-governmental agency through joint-contractual agreements.

15.122 The first phase of development will be carried out with the support and financing of CTT-Correios of Portugal, allowing the re-establishment of postal flows and the creation of postal centres in Dili, Baucau, and Oecussi. During this stage (through 2003), a central national postal sorting and forwarding office will be established. During phase two (through 2007), the challenge will be to widen postal services, branching out from the district capitals to realistically provide access to all areas of the population. Access will still be limited for many rural households, but the aim is to at least provide access through small agencies or private service points.

15.123 Clearly, a priority will be to develop proposals for bilateral or multilateral assistance with essential capital improvements and with capacity development and human resources. In addition, the Division will seek technical assistance to develop planning scenarios for privatisation of postal services or a quasi-government agency.

Postal Services Programs and Projects

15.124 The Postal sector has three program areas, each with several projects that require resources and support activities throughout the five-year planning cycle. The ultimate aim of the programs is to restore 90 percent of the infrastructure and be able to provide the full range of postal communications services required, with realistic access to all populated areas, by the end of the planning period.

Program 1: Restoration and Development

Projects

- a) Renovation of District Capital Offices
- b) Restoration of Central General Post Office in Dili
- c) Installation of Street Post Boxes in Urban Centres
- d) Initiation of Mail Pick Up and Delivery
- e) Mobile Post Office Program

Program 2: Human Resource Capacity

Projects

- a) Recruitment for Public Service Staffing
- b) Training of District Staff and Delivery Personnel
- c) Contracting Private Rural Carriers and Access Services

Program 3: Innovations and Expansion

Projects

- a) Postage Stamp Printing and Distribution
- b) Vehicle Acquisitions for Rural Services
- c) Electronic Service Centres
- d) Establish Postal Banking Services

Table 15.11: Postal Service Performance Indicators

Objectives	Performance Indicators
1. Repair the postal infrastructure to provide basic postal services	<ul style="list-style-type: none">• 30% completed by end of 2002• 70% completed by end of 2003• 100% completed by end of 2005
2. Recruit, train and enable postal staff to be able to offer high quality services	<ul style="list-style-type: none">• 30% staffing level achieved end of 2002• 70% recruited and trained by end of 2003• 100% human resource competency and staffing level by end of 2005
3. Increase the quality of postal service coverage, extending services to communities that have not yet been incorporated to the postal map	<ul style="list-style-type: none">• General Post Office and district offices with electronic counter services by end of 2003• Rural postage and counter service coverage 90% by end of 2003• Street post boxes installed in Dili, 2003• District capital street post boxes by 2003• Mobile Post Van services by end of 2002• Rural home or core point delivery and pick-up initiated in 2003• Urban route pick up and delivery 100% by end of 2003
4. Create community agencies with a range of general services for suburbs and districts	<ul style="list-style-type: none">• 50% of all regional offices or kiosks operated under public service staff by end of 2003• 50% of mobile services by adjunct staff contracts
5. Establish “peoples stores” as private sector, fee-based services for rural areas	<ul style="list-style-type: none">• 50% of rural postal services in private enterprise stores with extended fax, phone, copy, and other services plus postal

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| 6. Create a postal financial intermediation process consistent with banking laws to provide various cash and demand accounts, payment capability, and certain approved lending | <ul style="list-style-type: none"> • Legal mandate achieved by end of 2002 • 50% of banking or extended services offered by end of 2003 • 100% coverage in sector post offices by end of 2005 |
| 7. Ensure professional training and development to enhance human resource capacity among postal officers. | <ul style="list-style-type: none"> • Annual participation problems with 100% attendance by all staff in training • Special course/workshops supervision and management for all eligible, 100% annual |
| 8. Pursue alternatives for postal administration, including a fully private, quasi-governmental, and fully public postal service | <ul style="list-style-type: none"> • Draft business plan for privatisation or quasi-public administration by end of 2002 • Proposal approved for implementation in 2003 |
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DIVISION OF METEOROLOGY

15.125 The meteorological sector is in the process of being completely rebuilt as virtually all material infrastructure and instrumentation that existed prior to 1999 was destroyed. Current staff members were never part of the previous technical or administration cadre. In effect, meteorology is a new ground-up Division, and it has defined its responsibilities and core functions of the directorate as follows.

- a) Providing advice to the Government on climatic conditions and forecasts.
- b) Monitoring weather and seismographic data for advance alerts of hazards.
- c) Providing atmospheric information and forecasts for road transport, the armed forces, agriculturalists, and public dissemination.
- d) Providing timely alerts to the nation of potential natural disasters.

Division of Meteorology Objectives

15.126 As an extension of the sector vision, the Division of Meteorology will ensure adequate services for weather forecasting and seismology throughout the country utilising advanced technology and methods that will guarantee precision and quality in forecasting comparable to developed countries of the region. Primary objectives are as follows.

- a) To maintain and develop the national network of meteorological and seismological monitoring and warning systems.
- b) To ensure study and training by Division technical and scientific staff at national and international levels in the areas of meteorology and seismology.
- c) To assure timely and accurate delivery of services in the areas of meteorology and seismology to all government agencies.

- d) To implement a system of information for relevant conditions in East Timor that can be transmitted to international counterparts.
- e) To develop international relations and cooperation in the areas of meteorology and seismology to better inform East Timor of relevant conditions within the region.
- f) To develop the appropriate physical means of monitoring and communicating information on meteorological conditions (targeted for end of plan-year 2003).
- g) To establish the human resource capabilities for using instruments and monitoring systems for meteorology and seismology (targeted for end of plan-year 2003).
- h) To attain the necessary level of management and administration for the Division through recruitment and training (by year-end 2002).
- i) To define programs and procedures for technical assessments and monitoring, thus establishing the systems for forecasting and analyses (by year-end 2002).
- j) To complete a network of observation and warning stations with operational services required for national meteorology service (by year-end 2004).
- k) To establish the means of collaboration with environmental constituents to monitor climatic changes vital to the protection of the natural environment.

Constraints, Problems and Issues

15.127 With total destruction of the infrastructure and destruction of all meteorological instruments, the capital funding requirements are exceptional. Lack of skilled staff and both scientific and technical expertise will impede progress toward achieving the Division's objectives. Without adequate systems or procedural policies, East Timor is fully dependent on other countries for weather forecasts, which provide no emergency alert capabilities. Communication systems in East Timor cannot be adequately employed for alerts or weather transmission to government agencies, military, district or rural areas, or the public at large. Without having a credible level of monitoring and forecasting, East Timor cannot be part of a larger reciprocal regional network of such services, thus remaining hostage to whatever climatic conditions occur.

Division of Meteorology Strategies

15.128 The strategy of the Division has two main thrusts. The first is to simply build (from scratch or by rehabilitating what can be redeemed) the meteorological infrastructure of basic observation, monitoring, and information forecasting networks. This will have an early stage (completed by 2004), and a latter stage of national expansion of observation points and services (extending through the planning period and beyond). This is largely a "capital development" component but will be mirrored by a capability building effort to recruit and train Division staff and local technicians.

15.129 The second component concerns pervasive activities that begin now and will extend throughout the planning period. This includes regulatory planning and Division structuring of communications, emergency procedures, and rapid-response alert systems. These systems and networks will define the scientific and technical staffing patterns that evolve over the next few years.

15.130 Neither component to the strategy is feasible without first having approval through enacted laws and regulations for a national meteorological service, and the support for recurrent operating budgets. The Division's director general will subsequently be responsible for securing these enabling approvals and budgets while providing administrative oversight to the proposed strategic initiatives.

15.131 It is safe to assume that capital assets and technical expertise required are not in East Timor, nor can they be attained without international assistance. Therefore, the Division will organise a round table meeting with a view to obtaining international support for the development of the sector following approval of this development plan. The Division will seek direct technical assistance for both development and operations over the course of the planning period, sufficient to ensure membership in the World Meteorological Organisation, and to sustain a high level of quality services.

Division of Meteorology Programs and Projects

15.132 Building the service from the ground up requires attention to three program areas, but no specific projects beyond implementing the programs summarised below.

Program 1: Operational Infrastructure

15.133 The combined efforts of construction and equipment installation will proceed to achieve a basic capacity for all services by the end of 2002, and be fully functional by the end of 2004. Expansion will then target district stations and equipment. Part of this program will be to identify policies required for emergency procedures, alerts, and communications concerning all meteorology and seismology circumstances. Instrumentation must be obtained through international assistance and installed and maintained under international certification standards.

Program 2: Capacity Building

15.134 Concurrent with infrastructure development and equipment installation, local staff will be recruited and trained to achieve 50 percent of targeted capabilities by the end of 2002 and fully competent skilled staff by the end of 2004. External technical assistance through donor programs is assumed to be needed for higher level technical and scientific positions, thus complementing local staff with the service levels required for forecasting, international cooperation, and developing emergency alert systems.

Table 15.12: Division of Meteorology Performance Indicators

Objectives	Performance Indicators
1. Develop a national network of meteorological and seismological monitoring and warning systems	<ul style="list-style-type: none"> • 50% rehabilitated stations by 2002 • 100% of new construction by end of 2004
2. Ensure study and training by Division technical and scientific staff at national and international levels	<ul style="list-style-type: none"> • 25% of selected technical and scientific staff recruited or trained by end of 2002 • 100% staff credentialed by year end 2004
3. Assure timely and accurate delivery of services in the areas of meteorology and seismology to all government agencies	<ul style="list-style-type: none"> • 100% forecasts and communication of weather or other information delivered within time of International Meteorology Standards

	<ul style="list-style-type: none"> • Demonstrated accuracy within International Meteorology Standards
4. Implement a system of information for conditions in East Timor for international counterparts	<ul style="list-style-type: none"> • By year-end 2003, reliable telephonic linkage with instrument data to international agencies with reciprocal networks
5. Develop international relations and cooperation in the areas of meteorology and seismology	<ul style="list-style-type: none"> • Coordinated air and sea weather services on climatic conditions by end of 2003 • Subscription to international weather and climatic networks by end of 2002
6. Establish the human resource capabilities for using instruments and monitoring systems	<ul style="list-style-type: none"> • 80% local operational control by 2004, 100% by end of 2005 for instrumentation forecasting and scientific monitoring
7. Attain levels for management and administration for the Division through recruitment and training	<ul style="list-style-type: none"> • 100% staffed with administrative capabilities by end of 2002 in main centre operations • 100% in district/rural stations by end 2004
8. Define programs and procedures for technical assessments and monitoring	<ul style="list-style-type: none"> • Strategic plan defined in 2002 for scientific lab and database research • Scientific capability in staff by 2004
9. Complete development of a network of observation and warning stations	<ul style="list-style-type: none"> • Subsidiary stations for emergency disaster information, national alert system by 2004
10. Establish a public information system that supports agriculture, tourism, aeronautical, marine, military, and other requirements	<ul style="list-style-type: none"> • Specialised tourist services by 2003 • Climatic and seismology data for farmers and herders 2003 • Weather/alert system for military by 2003
11. Establish the means of collaboration with environmental constituents to monitor climatic changes	<ul style="list-style-type: none"> • Joint weather and seismology assessment procedures with environmental agency by 2003
