



**STRATEGIC  
DEVELOPMENT  
PLAN 2011-2030**

**REPÚBLICA DEMOCRÁTICA DE TIMOR-LESTE**

Foreword



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## Chapter 1 INTRODUCTION

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### 1.1 OVERVIEW

Timor-Leste's development strategy reflects the expressed wishes of the people of Timor-Leste based on self-realized independence within a robust democratic state and protected by the Constitution of the Democratic Republic of Timor-Leste. The Strategic Development Plan (SDP) described in this document defines a path to implement the national strategy during the period of 2010-2030. The Strategic Development Plan consists of six chapters: (1) Introduction; (2) Macroeconomic Framework; (3) Development Stages; (4) Sectoral Activity Framework; (5) Spatial Framework; and (6) Institutional Framework and Governance.

The Introduction chapter presents five important topics, i.e., Vision of the Timor-Leste Economy in 2030; Framework of Action to 2020; Public Investment Plan to 2015; Public Financing to 2015; Macroeconomic Framework; Institutional Framework. The second chapter elaborates the macro-economic framework with an emphasis on fiscal and monetary policy. The Medium Term Expenditure Framework (MTEF) will be introduced as an approach to link between both policies and is simulated in the macro-economic model and projection. The third chapter presents the next development stages as a smooth continuation with the previous development effort with a more comprehensive and organised programmes. Detail of the comprehensive programmes is then elaborated in the fourth chapter, sectoral activity framework. This chapter might question the what and why: what the plan for each sector and its reasoning to propose them. Whilst this fourth chapter describes the sectors in-depth separately, the fifth one links and integrates them in not only spatial but also temporal domain. This chapter is likely to answer the where and when of the plan would be conducted and implemented. The last chapter describes who and how to implement all development plans.

Developing nations have vital choices in defining the path from poverty and fragility to a robust, prosperous, and progressive society. The chosen path must be

harmonized within the region, applicable to the country context and based on the physical and cultural fabric of the country.

The SDP reflects those choices for Timor-Leste.

Since independence in 2002, the nation's economic and political policies have been based on serving the immediate needs of the people, consolidating security and stability, and establishing a diplomatic and cooperative presence in the region, and providing the foundations for nationhood by building the institutions of the State, in coordination with neighbors and international partners.

The core economic strategy has been marked by the formation and initial implementation of sound economic and fiscal policies that have delivered Timor-Leste an average of double-digit economic growth in the last three years and have improved conditions for the people through sector reforms and the launch of significant investments in the economy. Importantly, the new oil gas sector has been successfully initiated. Timor-Leste, in 2010, is on the verge of a decades-long period of rapid economic advance.

The long-term economic and political strategy is firmly based on strengthening the pillars of the State that will create and uphold a long lasting **National Identity**, unique and exclusive to Timor-Leste, by fostering a shared value system based on civic participation, and that translates the nation's shared values into tangible long-lasting benefits for all of its citizens.

Timor-Leste achieved independence through a strong sense of self-determination, following hundred years of colonization, 24 years of occupation, and three years of UN tutelage. The same principle of self-determination will be applied to nation building and economic development, through a long-term strategic development model that reflects the will and aspirations of the people of Timor-Leste.

As a young, post conflict, a low-income country, Timor-Leste needs to implement a unique, country-specific strategy to bring prosperity for the people. Timor-Leste is a nation that has risen from foreign domination and violent destruction to a dynamic and democratic society, with a rapidly growing, if still fragile, economy. The future success of Timor-Leste will be defined by four core principles:

### 1. Political

As a post-conflict, newly independent, and democratic country, Timor-Leste has gained the capacity to think strategically and creatively. Now those very same characteristics that brought independence must be utilized and channeled into a nation building and economic development. The chosen development path should inspire change, support bold action by the citizenry, breed confidence about the future, and more importantly, create a strong sense of national cohesion. The SDP, we believe, offers such a path, designed to garner the consensus and participation of the people.

### 2. Economic potential

Timor-Leste has valuable natural resources, including one of the most vital commodities in the global market, oil and gas. If developed with prudence, the petroleum sector can help to build the foundations of a viable, sustainable and vibrant economy. The hydrocarbons sector will provide substantial revenues for decades, which can be invested in the people and infrastructure of the country. Timor-Leste's proven wealth per capita is now \$55,660 (2005), higher than Indonesia (\$13.350) and Malaysia (\$55.326).<sup>1</sup>

### 3. National integration

Timor-Leste is a small country with a land size of 15,000 square kilometers and population of 1.2 million. Because of the small size and population, Timor-Leste is in a favored position to fast track economic development. Connectivity is the key. Rapid development will be promoted by integrating national markets through roads, power, and telecommunications, and by connecting Timor-Leste with regional and global markets.

### 4. Dynamism

As a young population and a new country, Timor-Leste is ready to grasp new opportunities and to accept dynamic change. Our population will master the technologies of the 21<sup>st</sup> century -broadband, Internet, advances in agriculture and energy -and will thereby speed economic growth and development.

<sup>1</sup> World Bank. Timor-Leste: Country Environmental Analysis, July 2009, [http://siteresources.worldbank.org/TIMOR-LESTE/Resources/TL\\_CEA\\_18Aug09\\_Tetum.pdf](http://siteresources.worldbank.org/TIMOR-LESTE/Resources/TL_CEA_18Aug09_Tetum.pdf)

## 1.2 CHALLENGES

As a young and poor country, Timor-Leste also faces several critical challenges. None of them are unsolvable, but all must be addressed. The SDP is the vehicle.

1. **Urban-rural and regional imbalances** are inevitable in a fast-changing and hydrocarbon-rich economy. The SDP needs to adopt strategies to promote development in both rural and urban areas to prevent regional and social imbalances from reaching destabilizing levels.
2. **Shortage of skilled human resources** in the key sectors of education, health, agriculture, industry, and services will have to be overcome to achieve economic success. Therefore, the SDP puts education and training at the very core of the strategy.
3. **Fragile institutions** of the state will have to be strengthened so that the government can provide key services and act as a strong partner to the private sector. One of the core goals of the SDP is to build implementation capacity. E-governance can play an important ancillary role, by connecting the citizenry with the government through online tools.
4. **Post-conflict mentality** is a collective reality that cannot be ignored when a nation has endured the severity of losses, faced the realities of past injustices, and experienced generations of conflict. This painful legacy is not often included when considering strategic planning. The SDP must mobilize the collective will and consciousness of the population, including the hopes built up during decades of struggle, to fulfill the goals of independence and self-determination within the context of the Timorese experience.

The people of Timor-Leste have shown resilience from crisis to crisis before and since 2002, and this resilience has been reinforced by the fact that Timor-Leste's economy has grown on average at double-digit rates the past three years. This rapid growth has been possible in part because of a concerted effort by the government to increase public investment and transfers to vulnerable groups using the increased revenues from the petroleum sector.

The recent rapid economic growth coupled with a relatively long period of stability and the pillars of strength unique to Timor-Leste (political, economic potential,

national integration, and dynamism) provide a strong foundation for sustained economic development in the future.

The year 2010 represents a watershed year. Timor-Leste has entered a period of rapid, double-digit growth, extended stability, and growing confidence. Collectively Timor-Leste is able to declare the motto of the day **Adeus Conflito, Benvindo Desenvolvimento (Good Bye Conflict, Welcome Development)**.

Timor-Leste launched its first National Development Plan in 2002 with a vision to create a democratic and prosperous society in 2020. The Plan set objectives and outlined development strategies to achieve those objectives. Eight years later, it is time to revisit and update the plan.

The new SDP is based on the belief that Timor-Leste can achieve economic growth at double-digit rates throughout the coming decade and beyond, and thereby converge with upper-middle-income countries within the next twenty years. In short, Timor-Leste can and should fast track its post-2010 economic development.

There is abundant economic opportunity for Timor-Leste. The following goals are achievable by 2030, and many may be achieved by 2020:

- Every child has access to free, compulsory and mandatory education through Grade 12;
- All Timorese are literate;
- All citizens have access to primary health care;
- No child perishes because of inadequate water supply, malnutrition, or lack of health care;
- Every citizen has the opportunity to acquire new skills based on 21<sup>st</sup>-century technologies, such as wireless broadband, high-yield agriculture, and cutting-edge health care delivery;
- Extreme poverty is eradicated through universal access to public services, ample job opportunities, and economic development in all regions.

The Strategic Development Plan offers a Vision to 2030, a Framework of Action to 2020, and a Public Investment Plan to 2015. The aim of the SDP is to combine an inspirational outlook with a specific timetable, and a set of key performance indicators and objectives that can be benchmarked for progress.

The Strategic Development Plan (SDP) is developed with a long-term economic vision for Timor-Leste: By 2030, Timor-Leste will have joined the ranks of upper-middle-income countries, having ended extreme poverty, eliminated the economic gap with the emerging economies of ASEAN, and fostered a democratic and environmentally sustainable society.

The next decade (2011-2020) will focus on creating the basic conditions for development in all areas: infrastructure, education and training, health, agricultural productivity and food self-sufficiency, sustainable urbanization, and development of key industrial and service sectors.

The second decade (2021-2030) will build on these foundations, to ensure that Timor-Leste is globally competitive, part of the global information economy, and building a quality of life and environmental sustainability for all future generations.

We underscore key aspects of the political and social context in which sustainable economic development will take place:

- Timor-Leste will have a democratic and inclusive government based on the rule of law, respect for human rights and participation of all citizens in economic, social and political activities;
- Timor-Leste will foster equitable development between population groups (rich and poor) and areas (rural and urban);
- The state and the population will have respect for, and preserve, the values and culture of the various groups comprising Timor-Leste society;
- Timor-Leste will be a tolerant society sensitive to race, religion and creed;
- Timor-Leste will be an environment of creativity and innovation.

### 1.3 VISION OF THE TIMOR-LESTE ECONOMY IN 2030

Timor-Leste enters 2010 as a low-income economy with strong middle-income potential.

Traditionally, Timor-Leste has been largely a subsistence agriculture economy, with a dispersed rural population living near the poverty line. Small cash-crop sectors, such as coffee, have traditionally provided some households with monetary incomes in rural areas, though a significant proportion of households have produced for own-consumption and have lacked any steady or predictable cash



incomes. Moreover, infrastructure has been weak, compounded by the difficulties of transport and communications in a mountainous topography.

By 2030, these conditions will have changed markedly. The economy will be modern and well diversified, with a high quality infrastructure of roads, power, ports, and telecommunications. Subsistence agriculture will have been replaced by commercial, smallholder agriculture. Timor-Leste will be self-sufficient in food, and will be producing a range of agricultural products for world markets including staples, livestock, fruits and vegetables and other cash crops, forestry products, and fisheries products.

The petroleum sector, including oil and gas production, and downstream industries such as petrochemicals, will provide a significant industrial base to the economy. Other light industry, such as food processing, apparel, handicrafts and cultural items, printing, furniture making, and others will complement heavy industries. Services will dominate employment, in sectors including tourism, health, education, trade, entertainment, and public administration.

Timor-Leste's tradition as a rural economy will have changed markedly. Well over half of the population will live in urban areas, where the service economy flourishes. Dili will be the lead city of the country, with perhaps one-fifth or even one-fourth of the total population. Other cities will also be thriving. The urban centers will be the hubs of business operations, key services such as health and education, and transport hubs for trade and tourism. Timor-Leste will attract a multitude of visitors from Asia and beyond, as a business and tourism destination, and a destination for university students. The country will be highly adept at the leading information and communications technologies, with a deep penetration of broadband Internet and latest generations of technology.

Timor-Leste will be proud and supportive of its magnificent biodiversity and natural environment. It will take steps to adapt to, and be resilient to, long-term climate change, for example by fostering large-scale use of irrigation to protect agriculture from fluctuations in rainfall. Precautions will be taken to prevent loss of lives and property from floods and extreme storms that may accompany a changing climate. The tourism and petroleum sectors will be developed with great attention and protection of the natural environment, so that development does not compromise the natural beauty or the ecosystem functions of the country.

Timor-Leste will be an upper-middle income country no later than 2030, with the gap closed with today's richer neighbors, such as Indonesia, Thailand, and Malaysia. We recognize that these countries are decades ahead of Timor-Leste in their current development. They pursued highly successful development plans during the time when Timor-Leste faced occupation, destruction, and an ongoing struggle for independence and nation building. Yet Timor-Leste now has a remarkable chance to narrow, and even close, the development gap by 2030. This is because of Timor-Leste's strong advantages: a young, vibrant and dynamic society; an ability to develop a state-of-the-art infrastructure; and a significant petroleum economy, which will not only provide a direct economic boost but will also provide government revenues for key public investments in human capital and infrastructure.

### **Special aspects of Timor's Petroleum Wealth**

Timor-Leste's economic situation is already extraordinary because of its newly developed oil-and-gas income. Oil and gas earnings of Timor-Leste jumped from around \$175 million in 2004 to around \$2,280 million in 2008. As a result, the Gross National Product (also called the Gross National Income) rose from around \$500 million in 2004 to around \$2,900 million in 2008, and to approximately \$2,000 million in 2010. (The modest decline from 2008 to 2010 reflects the decline in world oil prices since the peak in 2008.) As of 2010, Timor-Leste's non-oil GNP is approximately \$670 per capita and the oil GNP is approximately \$1,870, though perhaps the oil GNP will end a bit higher this year if global oil prices remain strong<sup>2</sup>.

If we measure the growth of GNP in constant prices, taking into account inflation in Timor-Leste, the total GNP in Timor-Leste has risen by a factor of around 4 since 2004, roughly 32 percent growth per year. Oil GNP rose roughly tenfold, and non-oil GNP rose by approximately 1.7-fold, or 9 percent per year since 2004. The result is a country that has a middle-income GNP, of approximately \$2,100 per capita, yet with living standards still of a low-income country, roughly at \$600 per capita. The main reason is that Timor-Leste's oil wealth has not yet been significantly invested in the non-oil economy, and consumption of oil earnings have remained limited (roughly one-fourth of the annual oil revenues). A major aspect of the Strategic

<sup>2</sup> Figures are based on calculation and assumption used for budget 2010. Updated calculation would be available in the end of August 2010 for budget 2011 [note: this SDP draft is the April 2010 version]. As an example the oil revenue from Bayu Undan that is used here is \$1,244. This figure might be higher since the global oil prices remain strong.

Development Plan, therefore, is to invest the oil revenues in the economy, in order to boost living standards, non-oil GNP per capita, and productivity.

Timor-Leste's oil wealth, and hence the calculation of "Estimated Sustainable Income" (or ESI) that can be consumed sustainably from the oil revenues, is conservative by standard calculations. The ESI has been calculated based on only one field, the Bayu-Undan, while Timor-Leste has already proved another field of comparable size (Greater Sunrise), and has solid geological prospects for many more fields in all three zones of the country: the Joint Petroleum Development Area (JPDA) with Australia, Timor-Leste's exclusive jurisdiction offshore zone, and the terrestrial zone, where many oil and gas seeps give strong evidence of significant petroleum deposits. Moreover, the ESI calculation regarding Bayu-Undan has also used conservative assumptions (for example, completion of production by 2023) that underestimate the ultimate recoverable petroleum wealth of the field.

The SDP treats the future prospects of the petroleum sector as follows. We assume that current petroleum upstream revenues of around \$1.6 billion per year could rise to \$2 billion per year by 2030, given other fields from the three zones come on stream and oil prices continue to rise. In addition, we assume that a petroleum-based downstream industry -LNG, petrochemicals, refineries, fertilisers and other petroleum based sectors will add value of another \$2.5 billion per year to the domestic economy.

The total petroleum-based economy, upstream plus downstream, is therefore estimated at \$4.5 billion per year by 2030. The assumption is reasonable given Timor-Leste's favorable geology and the expectation of strong world energy demand in the coming twenty years.

We assume that as a result of major public and private investment in human capital, infrastructure, and strategic sectors of the non-oil economy such as agriculture and tourism, the non-oil economy can grow on average 11.4 percent per year between 2010-2020 and 7 percent per year between 2020-2030.<sup>33</sup> The current \$770 million per year would become roughly \$12.3 billion. Adding the

<sup>33</sup> Economic growth is calculated based on constant price values instead of current price's. Based on constant prices the non-oil national product is \$455 million in 2010. This value is equal to \$770 million in current price base. With an average growth 11.4 percent per year between 2010-2020 and 7 percent between 2020-2030 the projected constant prices GDP would be \$2.6 billion and is equal to \$ 12.3 billion in current prices.

petroleum sector (upstream \$2 billion plus downstream \$2.5 billion) and the non-petroleum economy, we expect national income to grow from \$2.5 billion in 2010 to \$16.8 billion in 2030.

This rate of growth is familiar to emerging economies in Asia that have had even less "catching-up" potential than Timor-Leste. Of course this high, sustained growth is dependant on continued political stability, high world oil prices, successful future development of the petroleum sector, and successful investment of petroleum income in the human capital, physical infrastructure, and strategic sectors of the country.

It is anticipated that Timor-Leste's population will grow at a rate of 2.5 percent per annum during 2010-2030. The total population will therefore increase from 1.1 million in 2010 to around 1.8 million in 2030. The economic forecast therefore is that per capita income will rise from \$2,200 in 2010 to around \$9,300 in 2030, a rise in per capita income of 17 percent per annum. Even in non-oil incomes the figures are also convincing, from \$770 in 2010 to \$6,200 in 2030. This level of income would put Timor-Leste among the *high-middle-income countries*.

#### 1.4 FRAMEWORK OF ACTION TO 2020

The vision to 2030 requires a detailed framework for action that spells out how the vision can be achieved. The SDP framework, to the year 2020, is based on the following principles:

- A mixed economy based on complementary actions by the public and private sectors, determined by comparative advantage
- A strong public investment program that is complementary to the promotion of private investment
- A determination to build a well-diversified economy, with important dynamism in agriculture, industry, and services, supported by Timor-Leste's strong cultural heritage
- A strong commitment to human capital, recognizing that the people of Timor-Leste, much more than the land, minerals, and petroleum, are the ultimate source of wealth of the country
- Open trade and attraction of foreign direct investment (FDI), with expectations for success in petroleum, tourism, fisheries, finance, telecommunications, and other promising sectors

- Strong international economic relations, including membership in ASEAN, close relations with the Lusophone countries (Portugal, Brazil, and African countries), and strong cultural and political links throughout the developing and developed world
- Sound prudential regulation and step-by-step development of the banking sector
- Maintenance of macroeconomic stability through careful budget policy and commitment for the foreseeable future to the dollarization policy

The framework of action aims to build the economy through a three-pronged public investment program -human capital, infrastructure, and sector development -that will induce a significant rise of private investment. Private capital will be encouraged domestically, especially in small and medium enterprises, as well as in the form of foreign direct investment, by ensuring that Timor-Leste is hospitable and competitive to investment in key sectors, such as petroleum and tourism.

**Human capital investment** includes six pillars: health, nutrition, primary and secondary education, vocational training, higher education, and research and development. Timor-Leste will build a publicly financed primary health system accessible to all. This system will require around four percent of (rising) GNP in public outlays the two decades ahead, meaning expenditures of around \$100 per person per year in 2010, and rising to at least \$350 per person per year by 2030. Timor-Leste will intensify nutritional programs, especially for young children, in the coming years to break the cycle of poverty and under-nutrition that robs children of their physical and cognitive potential during an entire lifetime.

Timor-Leste will undertake a concerted strategy of school construction and teacher training, to ensure universal secondary school completion through grade 12 by the year 2020. This will require the opening of teachers colleges and an intensive effort to expand multi-lingual education in the schools in the coming decade. Universal attendance in school will be mandatory up through grade 9, and all schools will provide meals as part of their learning environment.

Timor-Leste also needs an aggressive program to develop jobs skills. Currently there is considerable unemployment among high-school graduates. Soon, however, there will be intense skill shortages, as government programs and investments expand in health, education, petroleum, agriculture, and other sectors. The Government will embark on a massive public education effort to provide job skills

for today's unemployed young people, focusing both on those with a high-school education, and the many thousands of young people ages 20-30 who lost their chance for education during the conflict years. The skill training will focus on the vocational skills needed to build a modern, diversified economy, including agriculture, health care, construction (carpentry, plumbing, electrician), teaching, local public administration, and business development. Timor-Leste can also help the youth to develop culturally related activities such as native music and arts. These activities will strengthen the shared cultural heritage of the country, and promote tourism and other service-sector earnings.

Timor-Leste also needs to develop its advanced leadership in public administration, science, and business. The university sector will be key in this regard, training the future leaders of the country. While many students will train abroad, bringing back skills and knowledge that will promote Timor-Leste's long-term global competitiveness, the country must also develop its own quality and capacity in higher education, beginning with the National University of Timor-Leste. The government will invest in strengthening the curriculum and faculty of UNTL, and helping UNTL to develop global partnerships in education and research. The government will also establish a series of national research centers in strategic areas, based at UNTL and other centers of higher education.

The synergy of research and higher education has been demonstrated time and again throughout the world, and Timor-Leste will strive to place its new research capacity within the university setting. High priorities for government supported research centers include the following four areas: agriculture, petroleum and geology, public health, and biodiversity and climate.

**Infrastructure investments** constitute the second pillar of public leadership. History and the experience of our Asian neighbors make clear that successful economic development must be based on strong national infrastructure including roads, power, telecommunications, air and sea ports, and urban infrastructure. The policy framework to 2020 will ensure that Timor-Leste has quality national infrastructures in place by the end of this decade.

The road network is the starting point, since transport of people and goods is a *sine qua non* of a productive economy. Timor-Leste's road strategy, as well as its other infrastructure investments, will be based on a three-way hierarchy of investment: national, district, and community. In the case of roads, the national investments

mean a highway system; the district investments mean paved, all-weather roads linking all of the 13 districts of Timor-Leste into a coherent road network; the community roads mean all-weather roads that reach local communities.

The power grid requires a similar national reach. Timor-Leste will develop a modern power grid linking the entire country with at least 1 Giga-Watt, IGW of installed power capacity by 2020. The power grid will connect all districts, and will draw on the country's natural gas resources to power much of the national system. Local electrification may rely on off-grid technologies: solar and wind power, biogas, hydropower, and other appropriate options.

Telecommunications is another sine qua non of a modern economy. This includes a mix of mobile telephony, wireless broadband, and fiber optic cable. By 2020, all districts of Timor-Leste, including clinics, hospitals, and secondary schools should have low-cost broadband access. Much of the telecommunications backbone will be privately funded and provided, though it will be the government's responsibility to connect schools, health facilities, and other public facilities. In order to facilitate the rapid upgrading of the telecommunications infrastructure, Timor-Leste will open the sector to strong market competition, which will drive down prices and improve quality and coverage.

The seaports and airports constitute the next chapter of the infrastructure program. New seaports will be required to upgrade services in Dili, and to develop the full potential of the petroleum sector. Timor-Leste will build a full modern seaport in the south of the country to support the growing petroleum sector, both for the exploration and production phase of the industry, and also for downstream activities, including Liquefied Natural Gas (LNG) facilities, and port services for a petrochemical sector. New ports and especially airports will also be required to build the new tourism economy. The Dili Airport will need significant expansion, and new international airports will be built in the East and South in order to foster new tourist destinations and growth poles.

The final major dimension of infrastructure is safe water and sanitation, which poses major challenges both in rural and urban areas. Rural areas need to be supported with local projects to protect water supplies and provide more sanitation facilities. Urban areas, and notably Oili, need urban development plans to promote city wide water and sanitation systems that are resilient, capable of accommodating hundreds of thousands of additional users, and robust in the face

of droughts and other extreme climate events. Dili currently lacks a medium-term development plan, which will be incorporated within the SDP.

**Sector investment programs** include public investments to promote strategic sectors of the Timor-Leste economy. Even when a sector such as petroleum will be largely driven by private investment, the government still has a fundamental role to play in investments and strategies that are complementary to the private-sector economy.

There are at least three strategic sectors for economic growth in the coming two decades: agriculture, petroleum (upstream and downstream), and tourism. Each of these requires a public investment program.

The agriculture sector currently employs around two-thirds of the economically active population (perhaps 85 percent of the rural population, which constitutes around 75 percent of the total population). The agriculture sector is remarkably promising, but in the past has underperformed. There are enormous potentials in several areas: staple crops, livestock and dairy, cash crops, forestry products, and fisheries. Traditionally, Timor-Leste relied on low-input, subsistence methods in each of these areas. Staple crop yields, for example, are between 500kg and 2 tons per hectare (e.g. for maize and rice), whereas the agronomic potential is often 5-10 times higher. The problem has been the lack of improved inputs into the sector, reflected in the level of poverty of smallholder farm households.

Timor-Leste is now ripe for a Timor Green Revolution, in which the government works with smallholder farmers to increase the use of improved inputs through targeted subsidies and the deployment of seasonal financing, modern technologies, and the benefits of cutting-edge research. Timor can become self-sufficient in rice within five years, and can become an exporter of agricultural products to the world during the coming decade.

Petroleum is the second sector, with profound transformative potential for the country. Timor-Leste will build a significant upstream and downstream industry, focusing on exploration and development, a pipeline to the mainland, and the development of a downstream industry, including LNG, petrochemicals, fertilizer, refineries and other energy-intensive operations. The experience of other small petroleum economies, such as Trinidad and Tobago, will be useful. These experiences demonstrate the high development potential of this sector.



The government will promote the national interest through transparent institutions and government led initiatives, including, the promotion of government enterprises to foster key investments.

Tourism is a third strategic sector of the economy. Timor-Leste contains magnificent and unique flora and fauna, beautiful vistas, and tremendous potential for eco-tourism, beach tourism, and cultural tourism. The country is in the middle of the world's fastest growing regional economy, and therefore a region with a booming travel and tourism sector, which Timor-Leste plans to tap. The tourist development will require major investments in infrastructure, important new public policies such as those on land and environmental regulation, and various promotional activities including tax incentives under the national investment laws.

Improving the business environment is a fundamental priority.

The overall economic framework to 2020, and beyond, rests on four interconnected pillars:

- Public investment in human capital, infrastructure, and leading sectors
- Private investment, in domestic SME, and in FDI in key sectors
- Responsible macroeconomic management and economic policies
- A sound business environment

The business environment needs improvement on several fronts including the need to reform land laws. The Government sees three types of land-reform challenges: farm land now under customary practices; urban land in need of zoning and clear property rights; and government land that can be used for public and private investment such as tourism or petroleum development. The dispute resolution system will also need strengthening, both by making the national courts more capable of handling commercial disputes and by seeking effective ways to tap into international arbitration and mediation as remedies for dispute settlement with foreign investors. All of these measures will greatly improve the ability to do business in Timor-Leste, and will encourage capital investment and job creation.

The government will also facilitate the development of the domestic financial markets, including commercial bank lending for business activity. For example, one of the goals in the agriculture sector will be to encourage banks to provide seasonal credits for farm inputs, so that farmers have a reliable commercial system to obtain

seeds, fertilizer, implements, irrigation equipment, and other critical components for farm modernization. The Government will also work to spread microfinance of all kinds, including saving accounts for the citizenry and micro-lending for small businesses.

## 1.5 PUBLIC INVESTMENT PLAN TO 2015

The SDP framework to 2020 describes the main lines of strategy for economic development.

The investment plan to 2015 lays out the five-year public investment budget that will constitute the public sector's main outlays for the first half of the decade. The public investment plan includes nine chapters: health and nutrition, education and research, roads, power, seaports and airports, agriculture, petroleum, and tourism. For each chapter, the SDP details a set of objectives such as HR training, construction, and facilities management, with timelines so that actual progress can be measured with quantitative objectives. The following provides a summary of priority areas.

### 1. Health and Nutrition

Building a primary health system at the local level by 2015, including one clinic per suco staffed by a doctor and nurse; one community health worker per 100 households; properly provisioned district hospitals, including ambulances and emergency obstetrical capabilities; national nutritional monitoring and response; national public health data system, with real-time vital statistics; infectious disease control programs for HIV/AIDS, TB, Malaria, Dengue, and "neglected tropical diseases" such as worm infections. There will also be large-scale skill training and upgrading programs.

### 2. Education and Research

Building a system for universal access and school completion to Grade 9 by 2015, and universal completion through Grade 12 no later than 2025. The SDP will support a massive training of teachers, including the implementation of a national-scale teachers college based on UNTL. The SDP will provide for scholarships for tertiary education, in Timor-Leste and abroad on a strategically targeted basis in key sectors. The Government will open four national research programs at UNTL:

agriculture, petroleum, public health, and ecology, and will invite international experts to serve on advisory boards for these centers.

### **3. Roads**

The national and district road system will be completed no later than 2020, with a substantial proportion completed by 2015. The Government program will pave at least 3,000 km of highway and district roads by 2015, based on strong domestic participation. The complete national road system will be completed by 2020.

### **4. Power**

The national power grid will be completed by 2015, linking all cities and district capitals. The power system will rely mainly on petroleum, initially heavy liquids but then transitioning to natural gas when the gas pipeline reaches Timor-Leste. Alternative energy sources including solar, wind, geothermal, and hydro will be incorporated into the national grid. The government will install at 1 GW by 2020.

### **5. Seaports and Airports**

The SDP will prepare for new bulk and LNG port facilities around the petroleum complex in the South, and expand and relocate the container port facilities in Dili. The national airport at Dili will be enlarged, and new international airports will be targeted, at least one in the east and one in the south.

### **6. Agriculture**

The SDP will ensure agriculture inputs for all smallholder subsistence farmers, including fertilizer, seed, and agriculture extension. Over time, the subsidy program will be converted into a credit system, in which private and public banks will offer agricultural finance credits to farmers who have demonstrated their creditworthiness.

### **7. Petroleum**

The SDP will promote the continued growth of the petroleum sector through promoting further exploration and development of new blocks. The government will invest in an industrial zone and port facilities in the south, enabling the nation to become an exporter of LNG and other petroleum related products. The government will actively explore the feasibility of various energy-related

downstream industries including fertilizers, other petrochemicals, steel and aluminum.

## 8. Tourism

The SDP will promote high-end beach and eco-tourism within the bounds of strict environmental standards. Tourism will be promoted through leasing public lands for resort development, improved infrastructure including an airport in the east of Timor-Leste and government promotion of Timor-Leste as a new global tourist destination.

## 1.6 PUBLIC FINANCING TO 2015

The basic framework for financing is the following. The government aims for a maximum pace of public investment consistent with: (1) efficiency of resource use; (2) avoidance of bottlenecks in implementation; (3) full transparency and accountability of outlays, including proper procurement procedures; (4) full monitoring and evaluation; and (5) completion of the investment targets for 2015 and 2020. To accomplish these objectives, the Government will pursue: (1) a multi-sector investment policy, with scale-up plans across the major sectors operating in parallel; (2) large-scale training of personnel in each major sector; (3) institutional innovations to improve oversight and implementation; (4) rigorous data collection, coupled with monitoring and evaluation; (5) frequent consultations with relevant stake holders and experts; and (6) financial prudence.

We anticipate a rate of public-sector investments during 2011-2015 in the order of 30 percent of GNP, counting outlays on public health and public education mostly within the investment budget. The rest of the public sector budget would be around 20 percent of GNP. Total public spending would therefore be in the order of 50 percent of GNP which would amount to approximately \$1 billion per year in the first years of this new decade.

Private-sector investment will add another 15 percent of GNP per year, perhaps 10 percent international investment and 5 percent domestic. With the total public investment plus the private investments, approximately 50 percent of GNP, and an incremental-capital-output ratio (ICOR) of around 5, the national investment rates would be consistent with GNP growth of around 12 percent per annum or higher.

Government revenues, including petroleum revenues, will support public spending of around \$1 billion per year, with the remainder accumulating in the Petroleum Fund. The total Petroleum Fund balance will rise between 2011-2015 to around \$9 billion from \$5.5 billion in 2010. The government intends to benchmark the "3 percent rule" to current outlays and transfers, not consuming or transferring more than the sustainable consumption level equal to 3 percent of the sum of the Estimated Sustainable Income, (ESI) calculated as the sum of the Fund balances plus estimated NPV of future Fund revenues from petroleum. The government is currently exploring options towards funding strategic public investments including withdrawing in excess of the ESI or borrowing at concessional rates.

## 1.7 MACROECONOMIC FRAMEWORK

The macroeconomic framework is predicated on a rapid expansion of the oil and gas sector, and an investment of oil and gas earnings in human capital, infrastructure, and strategic sectors of the economy. We project annual earnings of the petroleum sector growing from \$1.6 billion per year in 2010 to more than \$2 billion per year by 2015.

The non-oil economy will increase from \$670 per capita in 2010 to more than \$1,500 by 2015. The petroleum sector, including downstream industry, will increase from around \$1,500 to around \$3,000 by 2015.

The basic and salient macroeconomic points are these:

- Timor-Leste will be a very high saving, high investment economy
- The Government will supply more than half of total investment outlays
- The total investment rate of around 35 percent of GNP will enable annual growth in the order of 12 percent per annum or higher
- Timor-Leste will continue to run a substantial trade surplus and to accumulate added balances in the Petroleum Fund.

## 1.8 INSTITUTIONAL FRAMEWORK

The key question for the Government and for the nation as a whole is the capacity to scale up investment programs at the pace outlined in the SDP. This success will depend on three things: (1) an institutional framework for implementation; (2) a

satisfactory global economic and geopolitical environment; and (3) massive training at all levels of society.

The most important institutional breakthrough will be a new agency in charge of the plan design, budgeting, and implementation of the Strategic Development Plan - **the Economic Policy and Investment Agency (EPIA)**. The EPIA will serve a role similar to a national planning authority, analogous to the National Development and Reform Commission in China, the Economic Policy Unit of Malaysia, or the Planning Commission of India. The functional units of the EPIA will include: economic planning; program monitoring and evaluation; procurement and contracting; budgeting; international cooperation; and public information.

The EPIA will streamline the government's planning and implementation functions, and will be charged with negotiating contracts with domestic and external management teams to implement key functions under the SDP. The EPIA will also be responsible for capacity building under the SDP, working in close cooperation with line ministries.

The government, advised by the EPIA, will identify key strategic training needs and programs. Each sector program will involve the scale up of local capacity, through targeted training programs at home and abroad. The EPIA will also build its own staff capacity in economic planning and contract negotiations.

The EPIA will provide institutional innovations that will deliver the long-term objectives of the national Strategic Development Plan.

## 1.9 SPATIAL FRAMEWORK

In principle, regional approach considers region as a system which consists of regional formation unit, namely natural resources, artificial resources, and human activities, including political, economics, socio-cultural and national defence, which interact to form a spatial framework. By considering that region is a set of system in which human conduct their activities, the realisation of the system is reflected through the utilisation pattern and space structure which could provide direction in the development planning process which is efficient, harmonious, and sustainable.

Timor-Leste's national spatial framework is prepared to sustain Timor-Leste's vision and mission of long-term development (2020). The spatial framework will direct the

acceleration of sustainable economic growth and equitable development from national level to sucos level in a unified regional and national unity framework of the people of Timor-Leste.

The mainland area of the Democratic Republic of Timor-Leste is about 14,610 km<sup>2</sup>, with a mountainous and hilly geomorphology and topographic condition in the central part of the country stretching from east to west, then sloping towards the coast in the north and south as well as the east which is the tip of Timor Island. As a result, naturally the socio-economic activities are concentrated predominantly along the plains in the northern and southern corridor of the island of Timor, forming the agglomeration of economic activity and production that eventually grew into urban centres.

Timor-Leste's mainland area is approximately 14,610 km<sup>2</sup>, with geomorphology and topography characteristic are mountainous and hilly especially extreme in centre of country. The mountainous and hilly areas could be found along eastern to western region. The other side, lowland characteristic could be found in southern region and small part in northern region. This situation have grown all social-economic activities especially in northern and southern corridor and in turn have formed economic and production agglomeration that growing settlements distribution.

Considering the geomorphology conditions and concentration trends of economic activities in the society today, the approach for the development of the national territory of Timor-Leste must be carried out through a special approach called 'corridor' development, which is basically a regional economic development plan which extends spatially to form growth bands (ribbons), with the city development plan as the hierarchical central growth.

Two issues in the spatial framework will be addressed below.

### **1. Regional Development and Spatial Planning**

Spatial planning has to be in place to anticipate spatial issues as well as to provide development direction that is based upon specific characteristics of certain region. A high-quality spatial plan will guarantee consistency between planning, implementation and monitoring of development progress. The spatial plan has to contain (a) specific direction of development for each region (b) identify the environmental capacity, including probable natural

disasters, (c) synchronized utilization of space for various activities to achieve efficiency, (d) zoning regulation that set boundary for each sectors to ensure sustainability and environmental issues.

The ongoing challenge is reducing development gaps among regions and between urban and rural areas. This can only be addressed by increasing the welfare of people in all areas of Timor-Leste. It is not about spreading physical development but more in the effort of reducing gaps in quality of life and prosperity, both between region and in each area itself. Therefore, local resources potential and opportunities need to be identified. This is in particular on the marine resources that are not yet looked at as a major resource in Timor-Leste.

## **2. Conservation of Natural Resources and Sustainable Development**

By examining the condition of natural resources and living environments today, the identification of three crisis become clear, which are the crop crisis, water crisis, and energy crisis. These become imminent if they are not anticipated with the proper policies and actions. The three crises becomes a national long term challenge that needs to be cautiously handled so that it cannot cause any more harm for the people of Timor-Leste. The rapid increase of the population causes the ability to provide crops more and more limited. This is caused by the low productivity in agriculture products and the deterioration of the irrigation network and facilities. In another issue, the conventional agriculture practices threaten the environment and sustainability of the agriculture production system. On the other hand, the increase of agricultural lands would threaten the forests and disturb the balance in water supply. The declining forest conditions caused by deforestation that has rapidly increased and the deterioration of water sources threaten to reduce the debit in water supplies and rivers in the summer directly influencing water sources for irrigation. Meanwhile, energy consumption patterns show the dependence on non-renewable sources. The main challenge in energy providence is to increase the production ability of oil and gas while increasing national income, adding energy infrastructure to ease services to the people, and reduce the dependency on oil while increasing the contribution of gas and renewable energies such as biogas, biomass, geothermal energy, solar energy, costal energy, and wind energy.



Progress can be made by making use of (a) land natural resources (such as mining and agriculture) (b) marine resources, which is spread throughout the territorial sea, the exclusive economic zone up to 200 miles into the ocean and managing rights on offshore the ocean with more than 200 miles. Optimizing the use of marine resources for transportation fishing, tourism, and mining, can be challenge that needs to be prepared to become the backbone of the nation's economic future. The development of the marine sector in the future needs political and financial support for all shareholders, which will of course become a challenge for the whole nation.

The long term sustainability of the development faces the challenge of climate change and global warming which will affect all aspect of life. Meanwhile, the use of the various flora and fauna has not been developed optimally. The added value of the diverse flora and fauna can become an alternative resource that can be enjoyed by the current and future generations. The research, maintenance, protection, and use of the ecosystem should be an integral part in building the competitiveness of Timor-Leste.

Externally, global competition will undoubtedly become stronger with the national development in the future. The national economy will become more open so that it will directly and indirectly influence the development and growth of the areas in Timor-Leste.