

TIMOR-LESTE

SYSTEMATIC COUNTRY DIAGNOSTIC

Pathways for a New Economy and Sustainable Livelihoods



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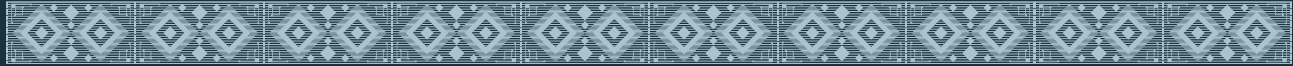
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LIST OF ACRONYMS

| | |
|----------|---|
| ASEAN | Association of Southeast Asian Nations |
| ATM | Automatic Teller Machine |
| AUD | Australian Dollar |
| BCG | Bacillus Calmette-Guerin |
| BCTL | Central Bank Timor-Leste |
| CPF | Country Partnership Framework |
| CPI | Consumer Price Index |
| CRM | Climate Risk Management |
| DB | Doing Business |
| DHS | Demographic Health Survey |
| DNRS | Diresaun Nasional Reinsersaun Social |
| DPT | Diphtheria, Pertussis, Tetanus |
| DRM | Disaster Risk Management |
| DRTL | Democratic Republic of Timor-Leste |
| EAP | East Asia Pacific |
| EAPD | East Asia Pacific Developing |
| EITI | Extractive Industries Transparency Initiative |
| ESI | Estimated Sustainable Income |
| FAD | Fish Aggregating Devices |
| FAO | Food and Agriculture Organization |
| FAOSTAT | FAO Statistical Database |
| FRETILIN | Revolutionary Front for an Independent East Timor |
| GDP | Gross Domestic Product |
| GDPPC | Gross Domestic Product Per Capita |
| GoTL | Government of Timor-Leste |
| Ha | Hectare |
| ICAO | International Civil Aviation Organization |
| ICOR | Incremental Capital-Output Ratio |
| IDR | Indonesian Rupiah |
| IFC | International Finance Corporation |
| IMF | International Monetary Fund |
| JAHSR | Joint Annual Health Sector Review |
| JME | Joint Malnutrition Estimates |
| JPDA | Joint Petroleum Development Area |
| Kg | kilogram |
| Km | kilometer |
| LGBTI | Lesbian, gay, bisexual, trans and/or intersex |
| LHS | Left Hand Side |
| LMIC | Lower Middle Income Countries |
| LNG | Liquefied Natural Gas |
| LPG | Liquefied Petroleum Gas |
| MCIE | Ministry of Commerce, Industry, and Environment |
| MmBTU | Million British Thermal Unit |
| MoF | Ministry of Finance |

| | |
|---------|--|
| MSS | Ministry of Social Solidarity |
| Mt | Metric Ton |
| NEET | Not in Employment or Education |
| NGO | Non-governmental organization |
| NIR | Net Intake Rate |
| PCRAFI | Pacific Catastrophe Risk Assessment and Financing Initiative |
| PD | Democratic Party |
| PF | Petroleum Fund |
| PIM | Public Investment Management |
| PNG | Papua New Guinea |
| PPP | Purchasing Power Parity |
| REER | Real Effective Exchange Rate |
| RHS | Right Hand Side |
| RMB | Renminbi |
| SCD | Systematic Country Diagnostic |
| SDP | Sustainable Development Plan |
| SEPFOPE | Sekretariu Estadu ba Politika Formasaun Professional no Empregu |
| SERVE | Servico de Registo e Verificacao Empresarial |
| SLM | Sustainable Land Management |
| SPI | Shared Prosperity Index |
| SWP | Seasonal Workers Programme |
| TFR | Total Fertility Rate |
| TL | Timor-Leste |
| TLSLS | Timor-Leste Survey of Living Standards |
| UN | United Nations |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNFPA | United Nations Fund for Population Activities |
| UNICEF | United Nations International Children's Emergency Fund |
| UNTAET | United Nations Transitional Administration in East Timor |
| UN WPP | United Nations World Population Projections |
| US | United States |
| US\$ | United States Dollar |
| WB | World Bank |
| WBG | World Bank Group |
| WDI | World Development Indicators |
| WGI | Worldwide Governance Indicators |
| WHO | World Health Organization |
| WTO | World Trade Organization |



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EXECUTIVE SUMMARY

This first Systematic Country Diagnostic for Timor-Leste identifies key priorities to sustainably achieve the World Bank Group (WBG) twin goals of eradicating extreme poverty and boosting shared prosperity in Timor-Leste. The Systematic Country Diagnostic, or SCD, is a tool introduced by the WBG in 2014 to provide a robust, analytical basis upon which to base WBG programming, and which may contribute more broadly to policy discussions and development effectiveness in the specific country context. The Timor-Leste SCD presents a key set of priorities towards achieving the twin goals along three pathways: i) continuing to invest in human capital and improved service delivery; ii) sustained economic growth and private sector job creation; and iii) sustainable management of both the natural environment and public finances.

The outlook for Timor-Leste hinges on whether the country can continue to consolidate developmental gains, or becomes subject to the various destabilizing risks inherent in a fragile state. Timor-Leste has made great strides towards securing lasting peace and stability over the last fifteen years, having improved security and living standards and begun the long process of strengthening institutions and raising capital levels in the country. When Timor-Leste became the first new sovereign state of the 21st century in May 2002, all public infrastructure including roads, ports and airports, water and sanitation systems, and government facilities were either non-existent, destroyed or severely dilapidated. There were also severe shortages of human capital; few Timorese had government experience, or were equipped with adequate skills for professional services or business, and the general level of formal education of the population was very low. And Timor-Leste's institutional frameworks were exceptionally weak, with the country having undergone a series of markedly different institutional regimes in recent times. Extreme poverty and hunger were widespread and conflict and violence were ongoing threats. Today, Timor-Leste is a more peaceful, democratic nation yet poverty levels remain very high, and in a context where a new national compact to secure peace and inclusion is only just emerging, there remain elevated risks that may thwart further development progress, or even tend to move the country backwards.

The overwhelming imperative for action is clear, with Timor-Leste experiencing very high levels of extreme poverty, hunger and child malnutrition as well as low levels of formal education. More than 40 percent of the population are estimated to lack the minimum resources needed to satisfy basic needs in Timor-Leste, based on the latest Survey of Living Standards (2014/15), and 30 percent of the population still live below the \$1.90 a day international poverty line. Coupled with this, various surveys indicate that half of all children suffer from stunting due to a lack of adequate nutrition, and calorie consumption across the population is very low.

Timor-Leste will need to foster a private sector that can create jobs for its fast-growing working age population. Over the last decade, Timor-Leste has been able to create jobs, but this has largely been due to expansion of the public sector. Both a need to level off public sector expansion and an acceleration in working age population growth beginning now – 15 years after independence – mean that supporting the development of sustainable jobs in the private sector is now more urgent than ever, to take advantage of the potential of a demographic dividend to accelerate growth and prosperity, and to avoid the possible negative social impact of a large and growing number of unemployed youths and adults.

While Timor-Leste has succeeded in saving the proceeds of its natural resource endowment, the key challenges now are to ensure that these fiscal resources are not squandered, and the natural environment is preserved as an important economic and social resource for future generations.

Thanks to petroleum resource development, and the government's astute management of petroleum revenues, Timor-Leste now has a sizeable financial reserve to support development. Yet it faces risks and difficult decisions in how to spend this money in the most effective way to support both rapid and sustainable development. With limited institutional capacity, there are risks that spending too much money too quickly will lead to wasteful spending which does not have the intended impact. Aside from petroleum resources, a range of measures show that ecological depletion is proceeding in Timor-Leste at an alarmingly rapid rate, and government will need to stem destruction of forest and mangrove, loss of biodiversity, and degradation of land, to limit negative impacts on livelihoods and social risks in the future.

In a young country with a fast-changing political and social landscape, there is a need to focus on improving institutions that create the enabling environment for good policy-making, economic prosperity and inclusivity. The development of public institutions that enable the private sector, provide public services, and are accountable is a long process that needs to be sustained over time. In Timor-Leste, a resource-rich country, there is a heightened risk that institutional development may become stalled by entrenched interest groups and rent-seeking. This SCD seeks to present recommendations that will help to make best use of the opportunities that exist for Timor-Leste to achieve its development objectives as rapidly and as efficiently as possible. While certain institutions, such as democratic and security mechanisms, have improved rapidly, in many other areas there is far less progress and institutions are either lacking, ambiguous or unenforced. The impact of this institutional fragility manifests itself in weak public service delivery mechanisms and a private sector that is yet to show vitality. The 2017 World Development Report on Governance and the Law highlights the criticality of institutional development and how political economy should be integrated into development programs, particularly for countries like Timor-Leste that seek to make the transition out of fragility.

The Pathways and Priorities for Action

Conceptual Framework



The SCD presents a prioritized set of reform areas, set along three pathways towards achieving the twin goals. These priorities reflect the results of a multi-stage process to identify the key constraints to achieving the twin goals. The conceptual framework for the SCD is summarized in the figure above, and builds on a growth diagnostic approach, adapted to focus on poverty and shared prosperity, and incorporating a broad range of quantitative and qualitative analysis. The three pathways each reflect thematic areas of policy, and are mutually reinforcing. All three of these pathways are interconnected, and significant progress is, therefore, required to make progress in sustainably achieving the twin goals and associated development outcomes. The final aspect of the SCD is to subject the identified reform areas to a prioritization process, which seeks to identify the highest-priorities in each pathway, based on a set of criteria designed to ensure the maximum impact on the goals as soon as possible.

The diagnostic is conducted mindful of existing development trajectories and opportunities in Timor-Leste, and presents the strengthening of institutional frameworks as a cross-cutting theme which is a key enabler for all three pathways. In considering Timor-Leste's short, medium and long-term prospects, it is important to recognize and factor in the historical perspectives that have shaped the country's development trajectory to where it stands today. Many – if not most – of Timor-Leste's main development challenges are rooted prior to independence in 2002 and the initial conditions at this turning point in its history. Many of these challenges are well-recognized and are being addressed, but the scale of the challenge of ensuring economic development is inclusive, and sustainable, means that developing capable and accountable institutions, processes and policies, together with human capital takes time. A key cross-cutting theme that emerges from the SCD is the need to continue, and accelerate, the pace of institutional development, which is judged to be of critical importance across many different areas. The SCD also highlights opportunities which place Timor-Leste in a stronger position to achieve its development goals – namely a significant, though finite, fiscal resource to support development, and the recent emergence of general peace and security and absence of widespread violence or threat of violence throughout the country.

I. Continuing to Invest in Human Capital and Improved Service Delivery

Access to public services is improving, but Timor-Leste still faces huge public health and education challenges. Chronic malnutrition remains stubbornly high and is amongst the most severe in the world, though while other health outcomes are poor, some are improving markedly. Rural populations still report very low levels of access to, and use of, health services. While access to basic services has improved, it is not always fit for purpose and resourced properly. On paper, primary education has been extended to all, but a confusing array of languages and poor attendance mean many pupils are not gaining an education, while secondary education enrollment and completion is low. At the root of the persistent social development challenges, limiting opportunities for many Timorese, is chronic poverty that is starkly manifested through high levels of hunger and malnutrition. Poverty, hunger and associated ill-health fundamentally inhibits households from making investments necessary to access opportunities; good health and adequate education. Restricting the capacity of the government to address these problems is a weak system of allocating and delivering resources to local service delivery units, with long delays in budget and frequent stock-outs common. The Government operates generous social assistance programs, which do not directly target the most vulnerable. The program (Bolsa de Mae) which does target the poor provides only very small payments. As a result, overall social assistance spending is not having the significant impact on reducing poverty and inequality it could be having. Gender equality is relatively well reflected in law, but prevalence of violence against women remains extremely high, and women have more difficulties to access economic resources. Prioritizing the reduction of child

malnutrition, planning and financial management of service delivery provision and the extension of a targeted social protection program, is expected to have a strong impact in supporting the achievement of the twin goals.

The prioritized policy areas under this pathway are:

- Better supporting frontline services with adequate, timely and appropriate resourcing
- Addressing malnutrition requires an integrated program, a critical component of which is addressing water and sanitation deficiencies in rural areas
- Continuing to scale-up targeted social assistance programs to tackle poverty now
- Ending gender-based violence

II. Sustaining Economic Growth and Private Sector Job Creation

Timor-Leste needs to develop new engines of growth powered by the private sector to continue its upward development trajectory. From a low level of development, Timor-Leste has grown quickly with the aid of petroleum revenue, but the current dependency on a public sector financed by finite petroleum wealth is not sustainable and it will be necessary to develop substantial new markets to support jobs and a sustainable revenue base for public services. Timor is dependent on trade, yet with very low domestic exports. While Timor-Leste is less likely to see opportunities arise in internationally competitive, low value added industries, it should seek to develop new international markets for its goods and services which effectively compete on quality or brand value. There are several small existing markets that could be scaled up (such as certain agricultural commodities) or new economic sectors that could be developed, for instance, tourism.

To ensure the private sector in Timor-Leste grows and reaches its full potential, the government has an essential role to play. Successive governments have highlighted the priority of rebuilding Timor-Leste's connective infrastructure. New investments are needed in aviation, ICT and certain parts of the road network, but in making these investments, robust investment planning should ensure value-for-money, while upkeep of the growing stocks of new public infrastructure assets will need to be planned and budgeted for. An economic policy that focuses on continuing to remove critical, nationwide constraints for business to operate more easily, developing sound sectoral regulatory regimes and investing resources in key sectors in partnership with private companies, will enable the private sector to lead the way in market development, with the public sector providing an essential, facilitating and regulatory role. An improved enabling environment – economic, legal and regulatory – for business is expected to support more domestic and foreign private investment, which will in turn create jobs and incomes for Timorese. This will also facilitate private sector solutions where increased commercial financing maximizes the impact of public resources, instead of the public sector directing resources into specific sectors or firms that may never become viable. In providing sustainable livelihoods, Timor-Leste will also have to balance the need to develop new markets which will take some time, and to improve prospects for the majority of the population, who are still mostly in the subsistence agriculture sector, as soon as possible.

The prioritized policy areas under this pathway are:

- Identifying an economic strategy to sustainably increase private sector growth
- Strengthening the legal foundations of a market economy
- Increasing productivity in agriculture, fisheries and forestry
- Developing multi-purpose, appropriate and resilient connective infrastructure

III. Sustainable Management, of Both the Natural Environment and Public Finances

There is a high risk that Timor-Leste's development gains could be undermined by the need to consolidate the budget in future, while the natural environment which is critical for livelihoods is subject to substantial stress. The government's current fiscal stance entails significant risks by running down fiscal assets now with the aim of economic growth spurring a sustainable budget position in the future. Risks need to be mitigated as far as possible, which involves careful and strategic planning of the intended transition, gradual development of domestic revenue mobilization capacity, and efficient use of fiscal resources, to ensure they meet the objective of sustainable growth and financing. The vast majority of Timor-Leste's livelihoods are currently directly dependent on natural resources and the environment, and these assets can support new and improved sustainable livelihoods in the future – notably higher-yield agriculture and tourism. But in an already precarious ecological environment of a small island, poverty, conflict and resource extraction have led to rapid environmental degradation. In addition, Timor-Leste's fragile ecosystems endure relatively severe weather variations. A focus on protecting and strengthening natural assets and environmental systems will help reverse this trend, reduce the risk of future conflict, and ensure these valuable sources of livelihoods are maintained.

The prioritized policy areas under this pathway are:

- Managing public finances carefully to avoid a damaging fiscal cliff
- Managing natural landscapes, seascapes and ecosystems as valuable, sustainable resources

Cross-Cutting Theme of Strengthening Institutional Frameworks

A common theme to all three pathways is the process of continued institutional development in Timor-Leste. Notwithstanding the gains that have been made since independence, institutional fragility remains at the core of many of Timor-Leste's biggest challenges, and a recognition of where these fragilities exist and how to address them in an appropriate and sustainable way will be an important enabling factor in achieving real progress in each of the pathways. Institutions in this context are referred to pragmatically as the set of organizations, laws, rules, practices and systems overseen or implemented by the state that are used to structure society, enforce law, and deliver public goods and services. Throughout the SCD, specific cases of institutional weakness are highlighted, which for example include the need to improve the capacity of the justice sector to resolve commercial disputes in addition to enforcing criminal justice and developing the efficiency of public resource management to enable higher quality public services to be delivered nationwide, and also to strengthen frameworks to ensure the sustainability of natural resources, such as fish stocks, forests, soils and watersheds, amongst many others.

INTRODUCTION

The Systematic Country Diagnostic (SCD) is an analytical report prepared by World Bank Group (WBG) staff as part of its country engagement model launched in 2014. The objective of the SCD is to identify the most critical constraints and opportunities facing a country in accelerating progress toward the WBG twin goals of ending absolute poverty and promoting shared prosperity in a sustainable manner (see Box 2), the mission the WBG has committed to helping all its member countries achieve.

The SCD presents evidence and recommendations that are supportive of achieving both the WBG's twin goals and national development objectives. Timor-Leste's vision for development was set out at independence, as cited in the box below, and continues to be guided by the Timor-Leste Strategic Development Plan 2011-2030 (SDP).

BOX 1. TIMOR-LESTE'S VISION FOR DEVELOPMENT

- A democratic country with a vibrant traditional culture and a sustainable economy.
- A prosperous society with sufficient food, shelter, clothing and security for all its people.
- All towns and villages with access to adequate and appropriate roads, transport, electricity and communications.
- All East Timorese to be literate, skilled and participating in the economic, social and political life of the Nation.
- Increased productivity in all sectors, creating job opportunities for all.
- Living standards and services improved and income fairly distributed.
- Stable prices for goods and services with sound and sustainable management of natural resources.
- A Nation justly applying the Rule of Law, and managing the economy and finances efficiently and transparently.
- The government, private sector, civil society and community leaders fully responsible and accountable to the people.

Source: "Timor-Leste 2020, Our Nation Our Future", cited in Timor-Leste Strategic Development Plan 2011-2030, Government of Timor-Leste.

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The preparation of the SCD has involved commissioning a series of background papers, working with existing literature and data sources, and consulting with relevant authorities, representatives from the private sector, civil society and development partners. The SCD is based on a large amount of background analytical work and consultation. This has included commissioning a series of background papers on specific sectors to inform the analysis of the SCD, including a Risk and Resilience Assessment (formerly known as a Fragility Assessment). A core team based in the capital Dili and elsewhere, consisting of representatives of all the global practices in the World Bank

and the International Finance Corporation (IFC), have contributed to the analysis. A series of public consultations have been held on the SCD in Timor-Leste, focused on improving the analytical rigor and testing the preliminary results with different groups of practitioners. Finally, the work of the SCD was complemented by other development partner work underway, including a new Millennium Challenge Corporation (MCC) Constraints Analysis and a new Asian Development Bank (ADB) Private Sector Assessment.

The WBG will use the SCD as an input towards the preparation of its Country Partnership Framework (CPF) for Timor-Leste, which will aim to bring to bear the full resources of the WBG to support key development objectives in Timor-Leste. The SCD is therefore intended to be a reference point for consultations with the Government and other stakeholders on priorities for WBG country engagement. It is intended to help the country, the WBG and other development partners to establish a dialogue to focus their efforts around goals and activities that have high impact and are aligned with the twin goals.

BOX 2. THE WORLD BANK GROUP'S TWIN GOALS

The Twin Goals were adopted by the WBG in 2013 to guide its work. The goals are:

- Eliminate extreme poverty: Reduce extreme poverty in the world to less than 3 percent by 2030;
- Boost shared prosperity: Foster income growth of the bottom 40 percent of the population in each country;

both of which are to be achieved in a sustainable way.

The SCD is not limited to areas or sectors where the WBG is currently active or expects government demand, and it aims to be of value to a wider group of relevant stakeholders. The SCD seeks to identify areas that will have the biggest impact on ending absolute poverty and boosting shared prosperity in a country, whether or not the WBG is or will be engaged in these activities. By not limiting the scope of the analysis, the SCD can stimulate an open and forward-looking dialogue between the WBG, member governments and the broader public and private sectors, with a focus on what is important for the country's development agenda rather than the WBG's areas of engagement.

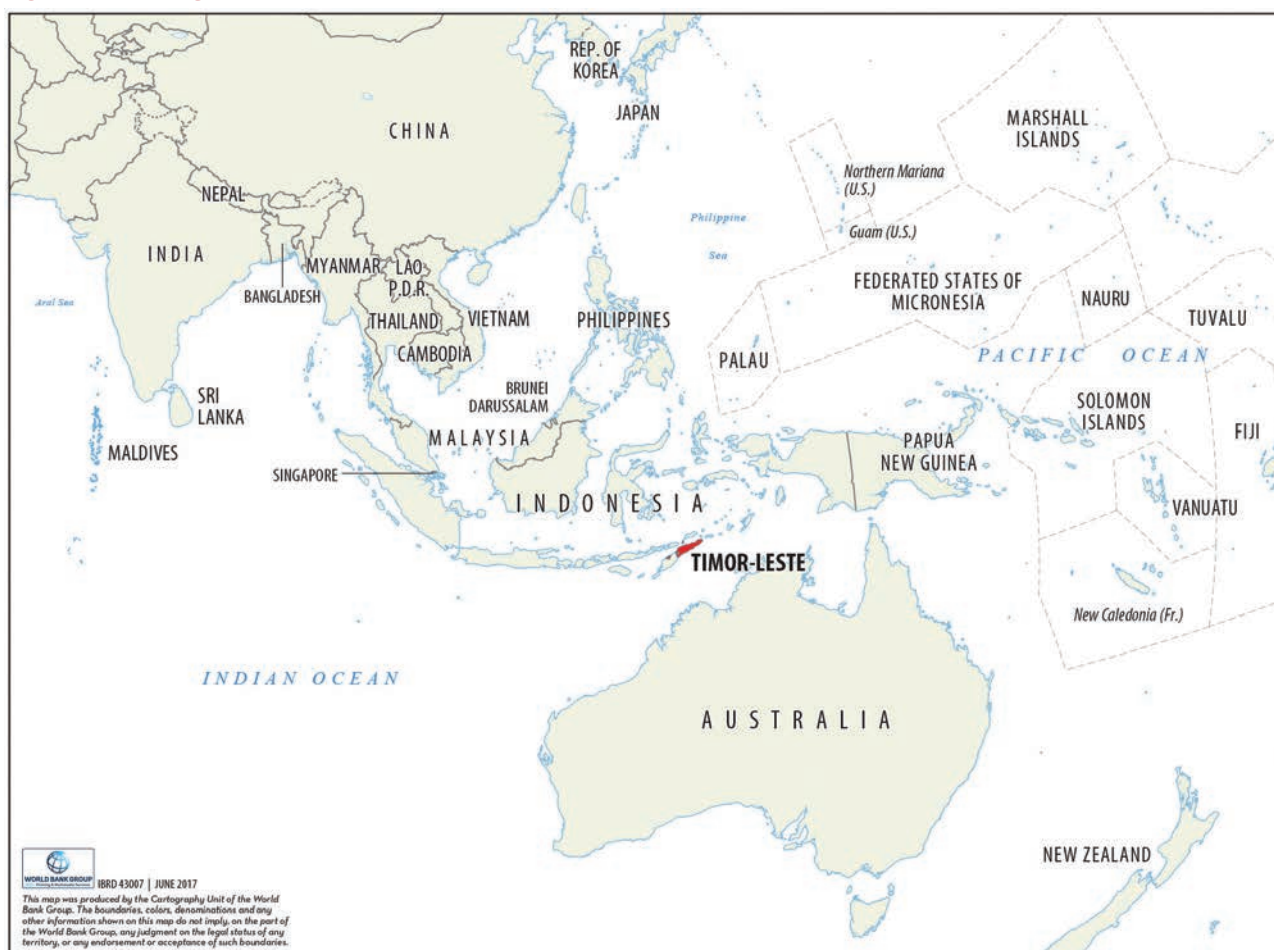
The document is structured as follows: A high-level assessment of the context for the SCD lays out some key factors that influence the SCD, and describes economic, political and demographic trends. This is followed by a poverty profile which uses the latest data to present an assessment of the twin goals – poverty and shared prosperity – and identifies key drivers of addressing poverty and inequality. This is followed by the detailed diagnostic, which is set against the three pathways. The final section of the SCD presents the results of the prioritization exercise and summarizes priorities.

COUNTRY CONTEXT

Historical, Geographical and Political Context

Timor-Leste is a diverse, small island nation located on the edge of South-East Asia. A former Portuguese colony, previously known as East Timor, Timor-Leste neighbors Indonesia and Australia. With a population of 1.2 million people, Timor-Leste occupies the eastern half of the island of Timor in the Timor Sea, which connects with the Pacific Ocean to the East, Indian Ocean to the West, and South China Sea to the North via the Java Sea (see Figure 1), and includes two additional small islands (Atuaro and Jaco) and Oecusse, a small coastal enclave in the western half of the Timor island. The terrain of the country is mountainous and it has a tropical climate with distinct wet and dry seasons. Measuring 14,874 square kilometers, it is approximately the size of Northern Ireland and has 706 kilometers of coastline. One quarter of the country is classed as agricultural land and only 2.5 percent is urban land. Forest coverage is 47 percent, and this has fallen by more than 10 percent in the last 15 years. Population density is relatively low, although rapidly increasing. Most Timorese live in the western portion of the country, which includes Dili. There are 32 indigenous languages still spoken as mother-tongues in Timor-Leste today, with only 30 percent speaking the national language Tetum as a mother-tongue: a further 55 percent speak it as a second language (Census 2015). As much as 98 percent of the population is reported as being Roman Catholic, with only 0.5 percent reporting a faith other than Christianity.

Figure 1. **A Regional View of Timor-Leste**



Timor-Leste is the newest country in Asia and, after South Sudan, the world's youngest nation.

Between 1702 to 1975, the territory – comprising modern Timor-Leste – was continuously occupied by Portugal.¹ When Portugal underwent an internal revolution in 1974, it effectively abandoned its Timor territory. The local population, led by the Revolutionary Front for an Independent East Timor (FRETILIN), declared independence on November 28, 1975. Ten days later, on December 7, Indonesia invaded and annexed Timor-Leste. Timorese people vigorously opposed Indonesian rule, mounting a resistance movement that would span three decades. Over the course of Indonesian rule, it is estimated that up to 200,000 Timorese died, or one-third of the total population at the time, making this one of the deadliest wars in modern history. On August 30, 1999, the Timorese people overwhelmingly voted for independence in a Population Consultation through a process administered by the United Nations (UN). Following a period of UN administration, on May 20, 2002, the Democratic Republic of Timor-Leste (DRTL) formally regained its long-awaited independence.

The legacy of a long, devastating and recent conflict remains, despite Timor-Leste making good progress in nation-building since its independence.

The formation of the new country was accompanied by a near-total collapse of both the public and private sectors. Prior to independence, public services were in a poor state of repair, with limited road coverage, of which 60 percent was in poor condition, and there was very limited water supply and no sewage systems. Action by withdrawing Indonesian forces meant that 70 percent of government buildings were destroyed immediately after the vote for independence, telecommunications and electricity networks were substantively destroyed, and all equipment was either removed or destroyed at airports and ports. There were few Timorese with significant experience of government, while the number of professionals and the general level of formal education of the population was extremely low. From 2002 to 2006, the nation struggled to accelerate development progress, lacking much of the state apparatus, capacity and resources needed to do so. Over the period, sporadic outbreaks of violence continued, and dissatisfaction with government grew, culminating in an attempted coup in 2006 and widespread violence that led to the internal displacement of 150,000 people and the resignation of the then Prime Minister, Mari Alkatiri. Following the cessation of violence, a new UN peacekeeping mission was established, and Kay Rala Xanana Gusmao took over as Prime Minister. Since that time, security in the country has steadily improved, with disturbances confined to the activity of small scale conflict between 'martial arts' gangs in urban areas.

Aside from a dearth of physical and human capacity, Timor-Leste's fragility is evident in gaps in policy and institutional frameworks.

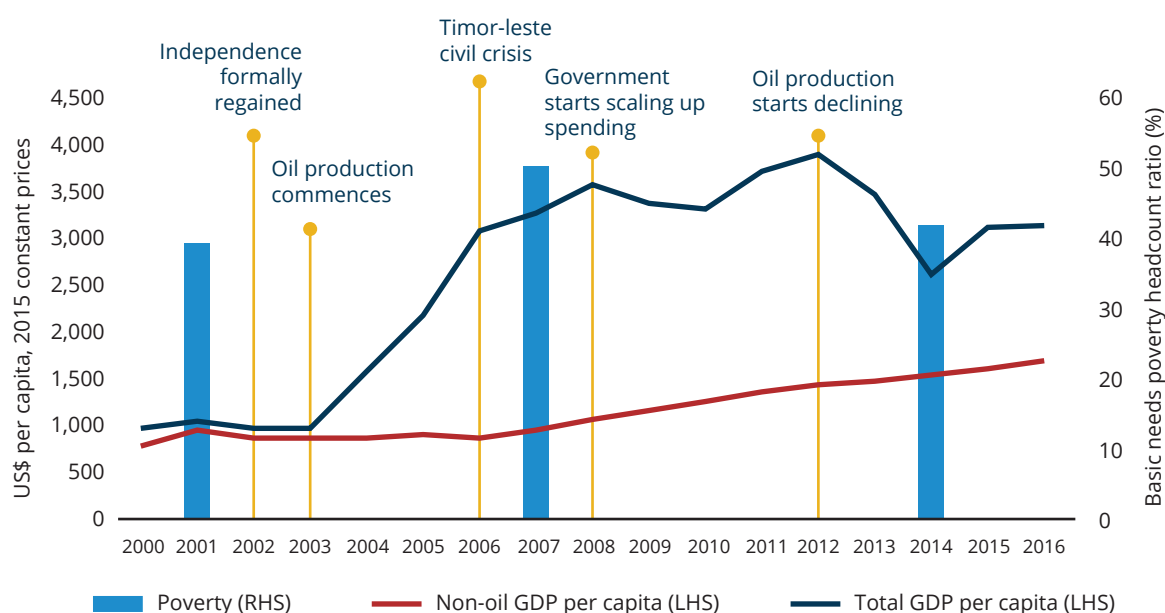
As a young country, Timor-Leste faces a long task of building institutional capacity and policy frameworks that are either not in place, or out-of-date and inherited from previous governing regimes. Institutional and policy ambiguity and incoherence is apparent in many sectors, but is most evident in public service and public financial management, sectoral regulation and the ownership and use of economic assets, such as land and financial credit. Not only do weak institutional frameworks impede the capacity of service delivery to function adequately and the ability of the private sector to develop, they also reduce the scope for the development of capacity-building, which is much more difficult in an ambiguous institutional environment.

¹ During World War II, Japan seized Portuguese Timor (1942-1945). At the end of the war, the territory was returned to the Portuguese.

Economic and Fiscal Developments Since Independence

Economic performance in Timor-Leste's early years was weak and poverty levels increased, but there was a step-change in 2007. Over the years 2000 to 2007, average annual real GDP growth was 2.4 percent per year, and with a fast-growing population, real GDP per capita declined. Following the civil crisis in 2006, 50 percent of the population were estimated to be in poverty, up from 40 percent in 2001. But from 2007 to 2016, GDP growth performance changed markedly: Average growth per year was 6.5 percent and real GDP per capita rose by 4 percent per year on average. At the heart of this reversal in economic trend was a change in government policy, to massively scale up public expenditure, particularly on infrastructure projects and cash transfers. This increased spending was made possible with financing from the newly established Petroleum Fund (PF), and with parliamentary approval, the government was able to draw down large amounts of the resources held in the Fund. A summary of key indicators and dates are shown in Figure 2.

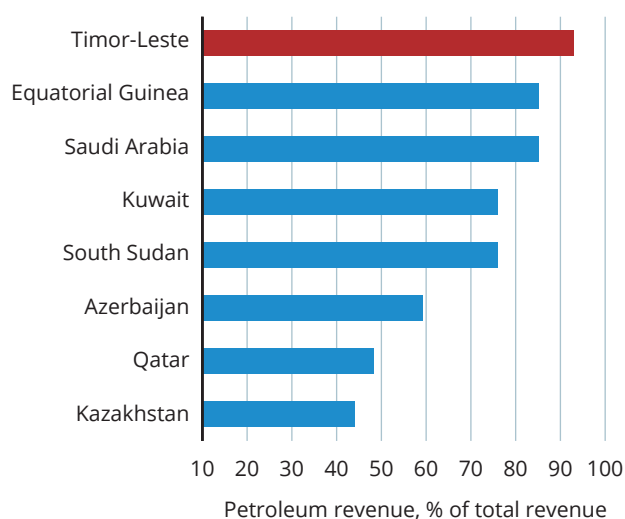
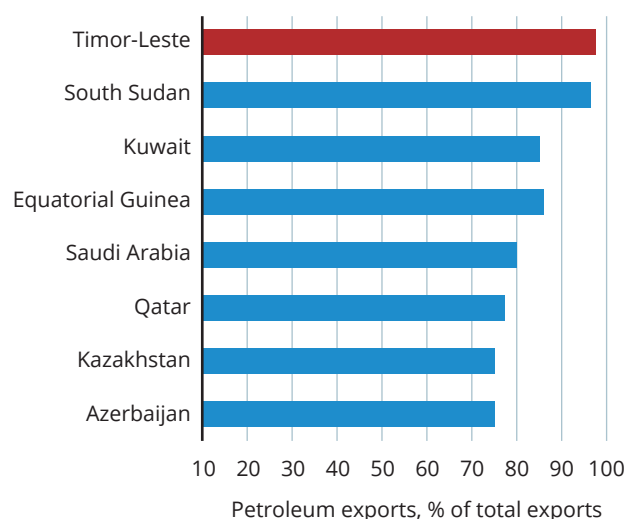
Figure 2. **Annotated Timeline of Economic Performance**



Sources: GoTL and WB staff estimates

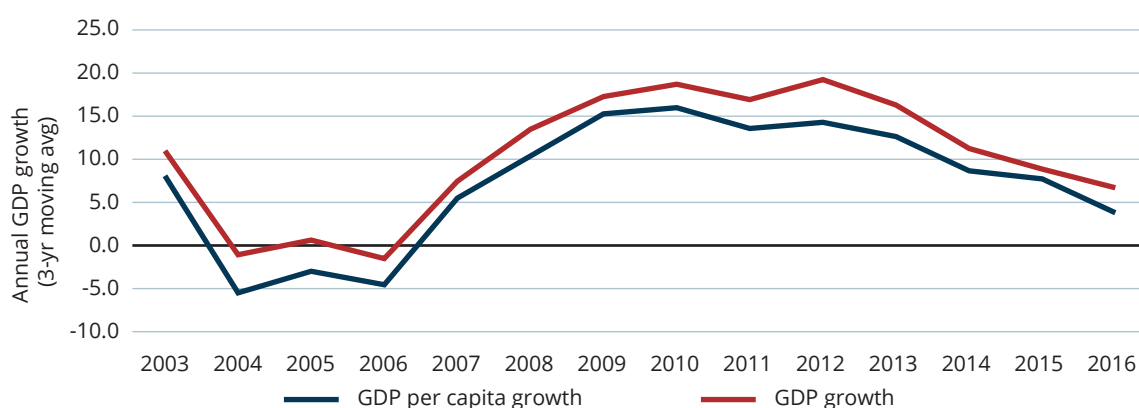
Notes: Non-oil GDP excludes offshore oil production

As oil production commenced in the 2000s, Timor-Leste quickly became one of the most oil-dependent countries in the world. Shortly after its independence, Timor-Leste struck an agreement with Australia to exploit oil and gas reserves in the Timor Sea, which separates the two countries. While sovereignty of the area of sea is disputed, the 2002 Timor Sea Treaty established the “Joint Petroleum Development Area” (JPDA), a regulatory framework to facilitate commercial production, giving 90 percent of the area’s petroleum revenues to Timor-Leste and the rest to Australia. With little other economic activity spurring growth in Timor-Leste, the offshore oil and gas sector became by far its largest source of income, and at its peak made up over 90 percent of exports and 95 percent of government revenues (Figure 3 and Figure 4); a greater dependency than post-conflict, oil-dependent nations such as South Sudan. Against this backdrop, Timor-Leste also became one of the first countries in the world to be compliant with the Extractive Industries Transparency Initiative (EITI), presenting annual national EITI reports since 2008.

Figure 3. **Dependency on Petroleum for Revenue Receipts**Figure 4. **Dependency on Petroleum for Export Receipts**

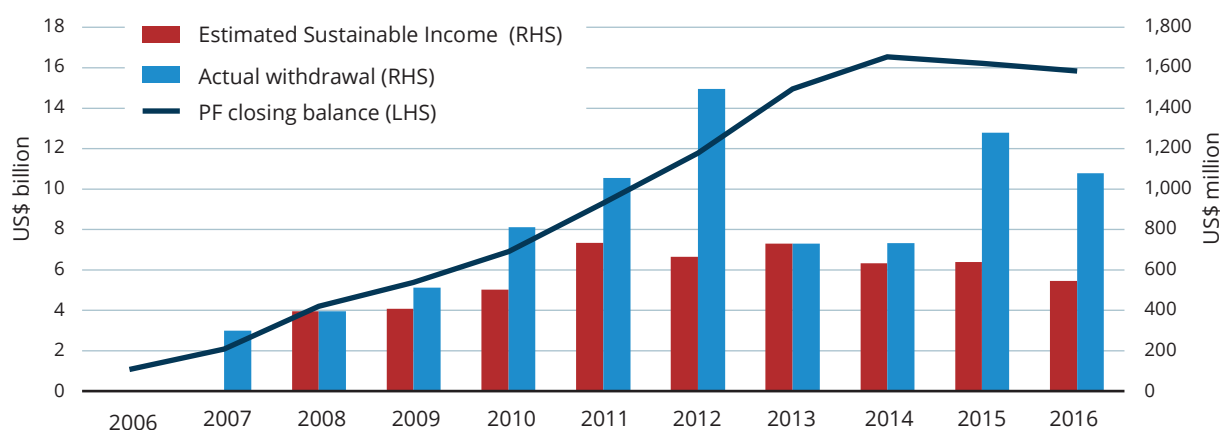
Source: WB WDI, IMF Article IV and GoTL National Account; Note: Average for all countries 2013-2015

Higher levels of GDP have been bought with oil revenues, but petroleum production is now running out, and GDP is levelling off. Timor-Leste was successful in securing a good share of the proceeds of petroleum production and saving it for the benefit of current and future generations. However, the decline in production, combined with a rapid expansion of public spending risks its depletion and underscores the need to plan for a post-oil economy. When the Petroleum Fund Law was passed it was designed to establish the PF as a perpetual fund, providing the government with continual budget financing of 3 percent of total expected petroleum revenues each year (the Estimated Sustainable Income or ESI), except in exceptional circumstances where more could be drawn down if it was in the national interest. The incoming government in 2007 took the decision to scale up spending beyond what the ESI could finance to speed up the pace of development. GDP growth in the years following 2006 reflected this scaling up of public spending from a low base, and this high growth tailed off once public spending stabilized at a new level, evident in falling average growth rates since 2012 (Figure 5). Over the same period, production from existing oil and gas wells has begun to decline as Timor-Leste's largest oil and gas field, Bayu-Undan approaches depletion as early as 2021. As a result, the balance of the PF, which peaked at around US\$16.7bn in 2014, has begun declining (Figure 6). As the capital is eroded and investment earnings fall, the PF balance will fall increasingly quickly if the fiscal deficit remains large.

Figure 5. **GDP Growth Rates**

Source: GoTL

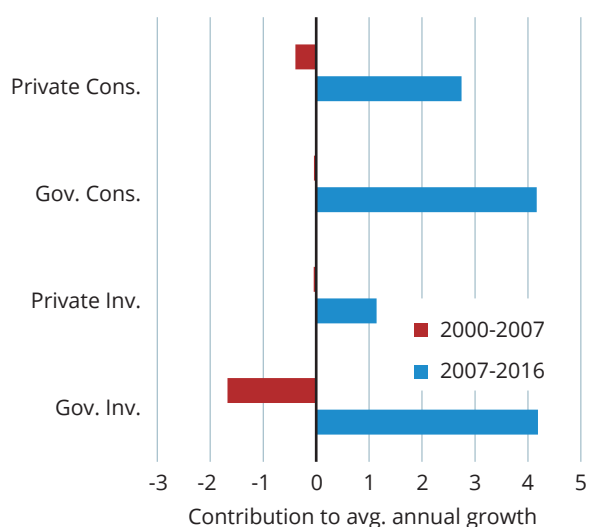
Figure 6. Petroleum Fund Trends



Source: BCTL and Ministry of Finance

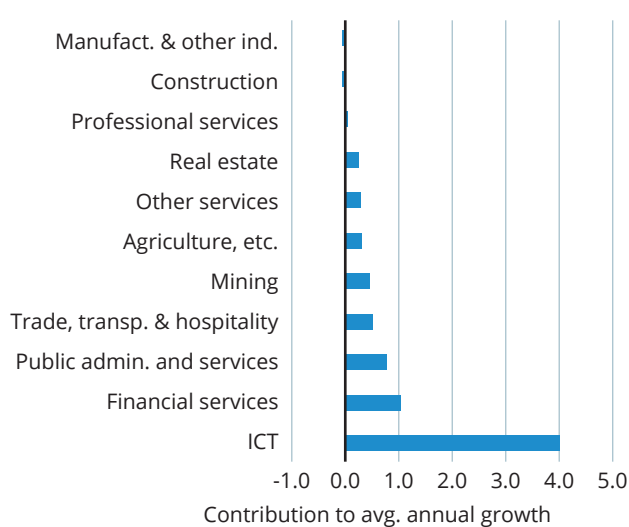
The underlying driver behind recent economic growth is public sector spending, although the private sector is beginning to show some signs of life. Compared to the period up to 2007, when growth was stagnant and government spending fell following an initial UN-led spending spike, both government investment and consumption have grown strongly since 2007 (Figure 7). However, private consumption has also contributed significantly to growth. Much of this is likely explained by second-round effects of increased government spending, particularly increases in cash transfer programs. While the public sector, or sectors serving the public sector such as construction, have grown most strongly, there has also been growth in other service sectors and agriculture. Manufacturing has not grown at all (Figure 8). Private investment too has started to make a significant contribution to growth in the latter period, although still small relative to the public sector. Services (excluding those closely related to the public sector) have added an average of 3.2 percent annual growth since 2007, accelerating from an average of 1 percent before that time.

Figure 7. GDP Growth by Main Selected Expenditure Component



Source: GoTL

Figure 8. GDP Growth by Production Sector (2000-2016)



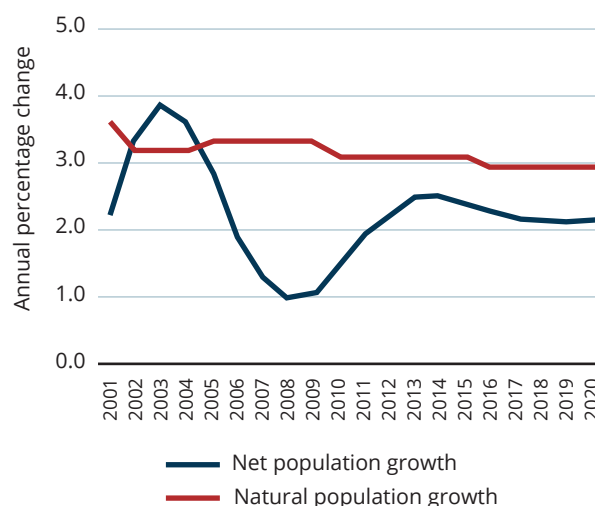
Climate and Disaster Risks

Poverty and limited natural resources mean that the people of Timor-Leste have very limited capacity to cope with disasters, extreme weather and the effects of climate change. Timor-Leste is vulnerable to natural hazards including strong winds, landslides, earthquakes, tsunamis, and to a lesser extent cyclones and regional volcanic activity. The country is also exposed to climate hazards such as floods, flash floods, drought, sea-level rise, storm surge and heavy rainfall. More than 20,000 people were adversely affected and more than 10,000 houses were damaged by natural disasters in Timor-Leste over the 10 years to 2011. Earthquakes and cyclones alone are expected to lead to losses equivalent to US\$5.9m per year (in 2010 prices) on an annualized basis. While drought is not very frequent, in the last few years, an accentuated El Nino/La Nina cycle has exacerbated drought conditions, adding to the impacts of soil erosion and watershed degradation. Annual mean temperature has increased about 0.016°C per year and is likely to increase up to 1°C by 2040, while sea levels have been rising at around 9mm per year (which is much higher than the global average) and overall annual rainfall has decreased. The impact of disasters and extreme weather events can wipe out livelihoods, especially where there is an absence of risk-mitigation measures and resilience. In fact, while Timor-Leste's hazard exposure is not extraordinarily high by global standards, with 42 percent of its population living below the poverty line, its lack of coping capacity and its vulnerability are high. In the next 50 years, Timor-Leste has a 50 percent chance of experiencing a loss exceeding US\$88m and more than 300 casualties, and a 10 percent chance of experiencing a loss exceeding US\$530m and more than 2,100 casualties. Climate shocks and hazards are expected to aggravate poverty, food insecurity and malnutrition. According to the GAIN vulnerability index, Timor-Leste is the 19th most vulnerable country to the impacts of climate change worldwide. There are some structures and policies in place currently that guide disaster and climate risk management for Timor-Leste, and national hazard assessments have been carried out reasonably recently (in 2012 and 2013), but institutions lack resources to cope with such problems.

Demographic and Jobs Diagnostic

Since independence, Timor-Leste has had extraordinarily high fertility rates and experienced rapid population growth, but these rates are now falling and population growth is slowing. Timor-Leste's total fertility rate (TFR) was 7.1 children per woman at independence, the fifth highest rate in the world. By 2007, the TFR was 5.7, still very high. Recent data based on the 2015 Census and 2016 Demographic and Health Survey (DHS) shows a downward trend in TFR has continued; in 2015 it stood at 4.3 children per woman. As this trend continues, fertility rates in Timor-Leste are expected to approach a level similar to other lower-middle income countries (LMICs), and the TFR is projected to reach 3.3 by 2020, only moderately higher than the LMICs forecast in 2020 of 2.7 children per woman. Such

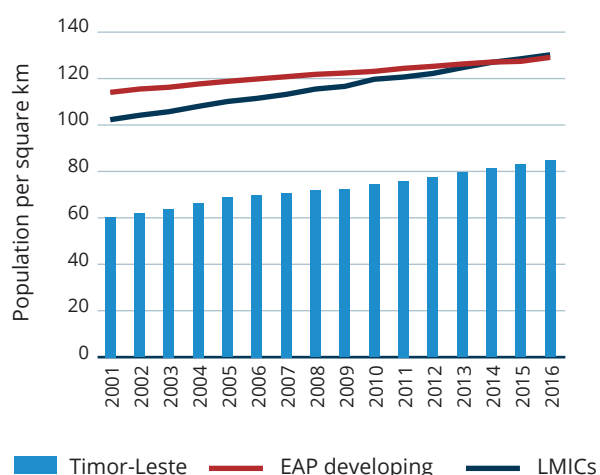
Figure 9. Population Growth



Source: UN WPP 2017

trends are reflected in a declining natural population growth (births minus deaths), which was 3.6 percent at Independence, but if projected to have fallen to 2.9 percent by 2016 (Figure 9). Despite rapid population growth over the period, Timor-Leste is still a relatively sparsely populated country, with average population density well below the average level of lower-middle income countries (Figure 10).

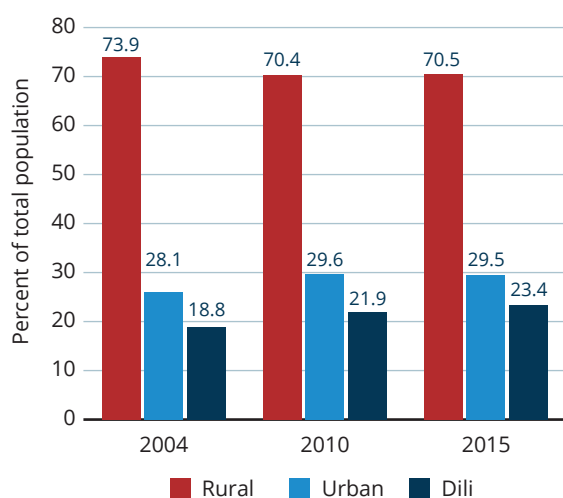
Figure 10. Population Density



Source: UN WPP 2017

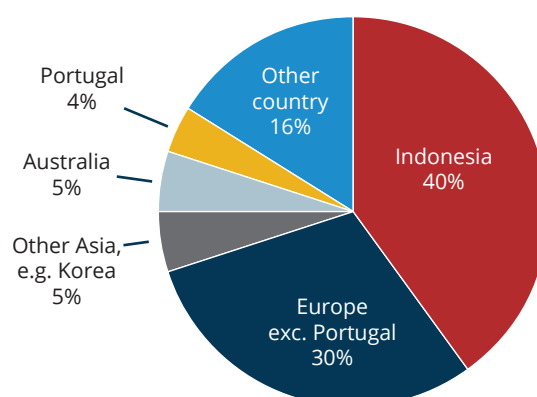
Leste each year. The trends in internal migration show continued movement towards Dili between 2004 to 2015 (Figure 11). Population levels in rural areas seem to have stabilized since 2010, indicating people are leaving secondary urban centers, such as Baucau, Maliana, Suai, Lospalos, Ermera and Pante Macassar in Oecusse. The proportion of Timorese household members reported to be living abroad has increased from 11,500 in 2010, or 1.1 percent of the domestic population, to 18,100 in 2015, 1.6 percent of the domestic population (Figure 12). The largest groups of overseas Timorese can be found in Indonesia and Europe, which make up 75 percent of all overseas household members. Other significant populations are in 'other Asia', which is likely to mostly correspond to South Korea because Timor-Leste is part of their migrant worker program, as well as Australia. About two-thirds of overseas household members are working, and around a third study abroad. It is also worth noting that these figures probably under-represent the total number of Timorese nationals living abroad, as those who are not considered part of a current household in Timor-Leste are not captured in the data.

Figure 11. Internal Population Distribution



Source: GoTL Census publications, various years

Figure 12. Population Living Abroad

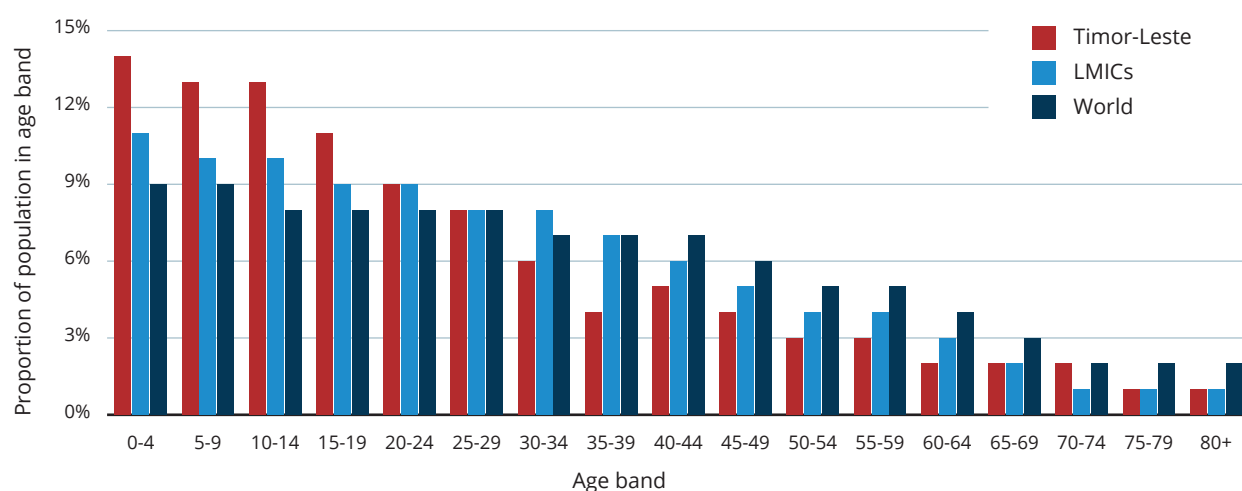


Source: Census 2015

Note: Household members living abroad in 2015

The population of Timor-Leste is very young, and in the next few years the working age population will grow rapidly and dependency ratios fall, raising the prospect of a demographic dividend if the conditions are right. More than half of Timor-Leste's population is under 20 years old (Figure 13). With fertility rates falling, this young generation will enter the labor force over the next 20 years, increasing the proportion of working age to non-working age population. Dependency ratios – the proportion of people not of working age to those of working age – are expected to fall to levels in line with other LMICs and to below the level of advanced economies (Figure 14). If these people are ready to enter the labor market, and with sufficient prospects for employment, this increase in the working age population relative to dependents could support a demographic dividend, increasing incomes per capita and economic growth rates. On the other hand, a growing working age population without access to employment opportunities would not provide such a dividend, and increased unemployment and inactivity could become a worsening problem for the country.

Figure 13. Population Distribution

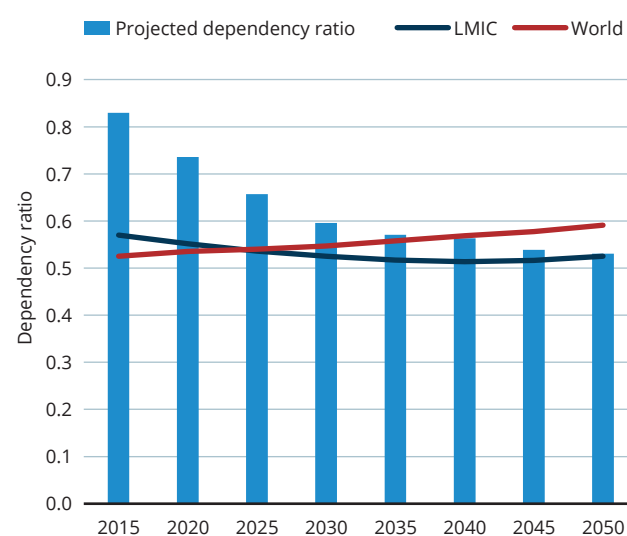


Source: UNFPA 2017

Underlying labor market trends show an overall increase in productive activity, with the informal agriculture sector gradually declining, and post-15 education participation growing rapidly. There are no recent labor force surveys (latest is 2013), which, combined with high-levels of informality, makes it challenging to present a comprehensive picture of employment. Census-based measures of employment, including subsistence agricultural activity, indicate that 60 percent of the working age population was employed in 2004, falling to 49 percent in 2010 before rising again to 53 percent in 2015. While a lower proportion of the working age population were working in 2015, this is not necessarily a bad thing if they were instead staying on in education, and over the same period, the proportion of people aged over 15 in education more than doubled. Accounting for this trend, the proportion of people who were not in employment, education or training (NEET) has fallen from 21 percent in 2004

to 19 percent in 2015 (Figure 15). But the trend is very different for men and women, with a smooth

Figure 14. Dependency Ratios



Source: UN World Population Projections 2017

Note: Working-age population (15-64) to non-working age population

decline in activity for men, and what looks like a sharp fall in agricultural work for women in between 2004 and 2010. Labor market data is particularly difficult to interpret for women, with a large number switching from 'agricultural work' to 'household work' in the 2010 Census when, in practice, women would probably continue to do both. The data presented in Figure 16 takes account of this issue by including 'household work' as productive activity when calculating the NEET ratios, and shows a clear trend of decreasing inactivity rates for both men and women over the period. Further work would be warranted to try to understand labor market dynamics, including understanding the change in household agricultural activity over time and average wages in the formal and informal sectors.

Figure 15. Labor Force Participation Rates, 15-64 Year Olds

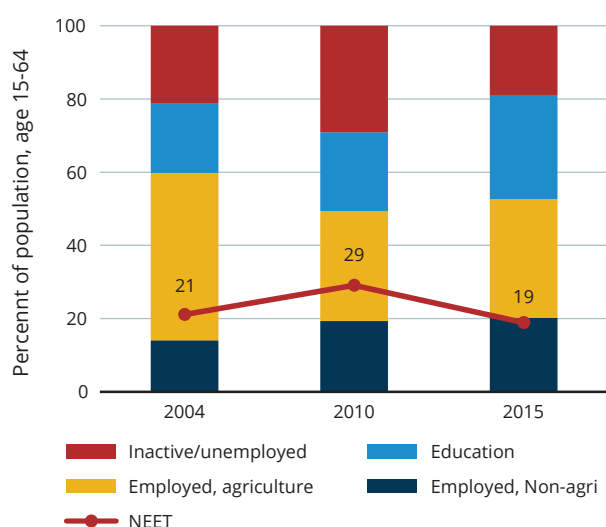
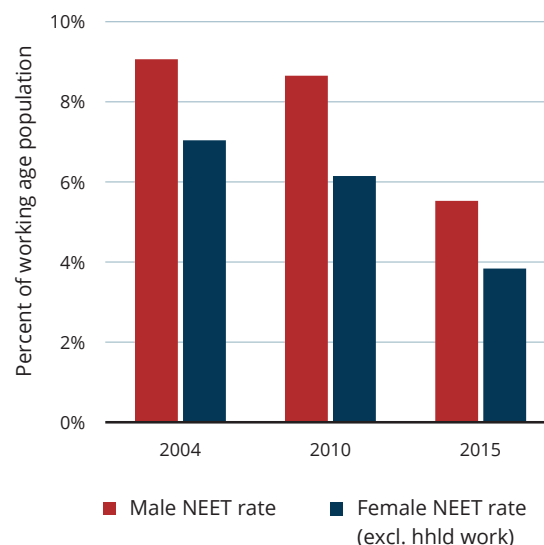


Figure 16. Economic Inactivity by Gender



Source: Census publications, multiple years

Note: These figures do not necessarily use conventional definitions. "Economic inactivity" includes unemployment, discouraged workers, those who are sick or disabled, and those not working for undefined reasons. The RHS figure reports a NEET definition for women that excludes those who report 'household work' as an economic activity.

Job creation has been primarily a product of public sector expansion, underlying the importance of economic diversification to generate jobs in the future. Between 2004 and 2015, the working age population has grown by 157,000 or 30 percent. But at the same time, 15,000 fewer people are working in agriculture, while other parts of the economy created 63,000 jobs. Two-thirds of these non-agricultural jobs have been created in the public sector². Around 20,000 jobs were created in the non-agricultural private sector, on average just under 2,000 per year. Most of this new employment over the last five years was in the construction and retail and wholesale service sectors, especially around 2011 when the government issued a large number of new construction contracts. It is likely much of this employment is closely linked to public sector contracts. Table 1 presents gender-disaggregated labor market indicators.

² Broadly defined to include NGOs, donor agencies and state-owned enterprises

Table 1. Labor Market Summary Statistics

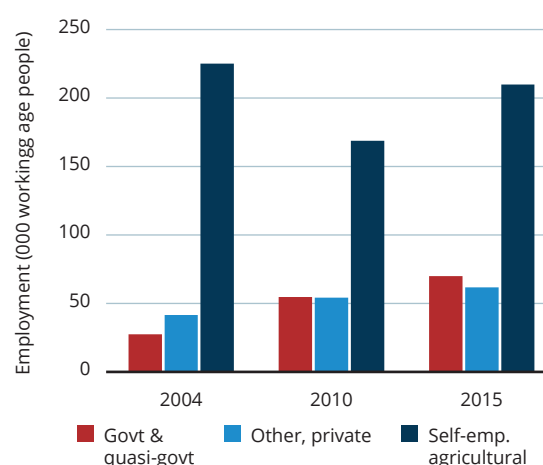
| | 2004 | | 2010 | | 2015 | |
|---|------|--------|------|--------|------|--------|
| | Male | Female | Male | Female | Male | Female |
| Percentage of working age population (age 15 to 64) | | | | | | |
| Employment | 68.4 | 52.1 | 66.1 | 32.3 | 61.4 | 43.7 |
| Formal | 10.6 | 4.6 | 22.3 | 9.1 | 18.7 | 8.4 |
| Public sector | 8.6 | 2.7 | 13.5 | 5.9 | 14.5 | 7.0 |
| Private sector | 2.1 | 1.9 | 8.8 | 3.2 | 4.2 | 1.3 |
| Informal | 57.7 | 47.5 | 43.8 | 23.2 | 42.7 | 35.4 |
| Agricultural | 51.4 | 40.7 | 39.6 | 20.1 | 36.6 | 28.0 |
| Non-agriculture | 6.3 | 6.8 | 4.2 | 3.1 | 6.1 | 7.4 |
| Education | 21.1 | 17.3 | 22.9 | 20.3 | 30.1 | 26.8 |
| Household work | 0.3 | 24.1 | 2.4 | 41.2 | 3.0 | 25.7 |
| Inactive or unemployed | 11.2 | 7.0 | 8.7 | 6.1 | 5.5 | 3.8 |

Source: Census publications, multiple years

Employment rates in the non-agriculture sector are higher for men, and steadily increasing for women. While male non-agriculture employment has been volatile, highest at the time of the 2010 Census and since falling again, the female employment rate has been steadily increasing from 11 percent of the female working age population in 2004 to nearly 15 percent in 2015. According to the 2015 Census, 54 percent of people working in wholesale and retail are women (many of whom are informal market sellers – formal sector data show a much lower ratio of women), 47 percent of health workers are women and 39 percent of employees in education are women. Public administration including defense is 31 percent women. These are all sectors that have grown substantially. Male-dominated sectors such as construction have also grown, although small-scale construction employment may have peaked around 2010 which would account for a subsequent fall in male employment since then.

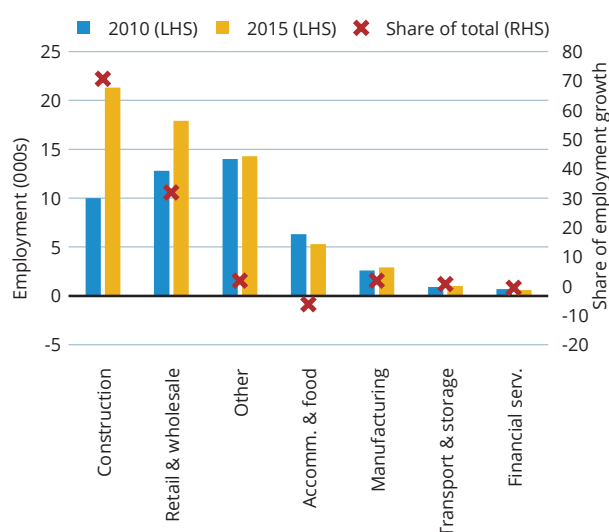
Employment rates in 2015 vary considerably between districts, with Dili having by far the highest inactivity rates. The employment rate – both agricultural and non-agricultural – is highest in Oecusse (Figure 19). Excluding Dili, there is a range of 16 percent between the district with the highest employment rate (Oecusse) and the lowest (Lautem) in 2015. Most of this is explained by differences in agricultural activity, where Oecusse has the highest (46.8 percent of working age population) and Lautem has the lowest (33.7 percent). But non-agricultural employment, including government jobs, varies considerably as well, with a 7 percent difference between the district with highest non-agricultural employment (Covalima) and the lowest (Ermera). Dili presents a radically different picture, with a much lower total employment rate, at 41 percent, of which less than a quarter is in subsistence agriculture.

Figure 17. Employment by Broad Sector



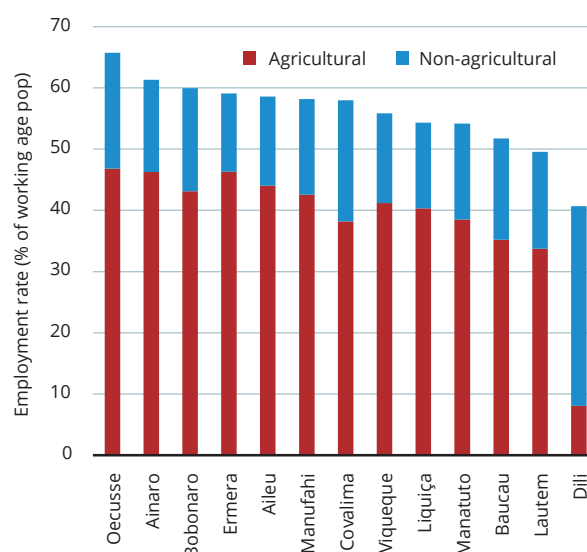
Source: Census publications, multiple years

Figure 18. Private Sector Formal Employment



Source: Business Activity Survey, 2015

Figure 19. Total Employment by District



Source: Census 2015

Governance Frameworks

Timor-Leste is a civil law, democratic country with a ceremonial president and unicameral National Parliament, elected local majors – *Suco Chiefs* - and a growing civil society. Timor-Leste has a civil law system which is strongly influenced by the legal system of Portugal, and similar to other Lusophone countries. The direct sources of law are rules determined by the Constitution and legislative mechanisms regulated through it. UNTAET legislation and Indonesian law in force before 25 October 1999 are also direct sources of law. The Constitution provides for international treaties and agreements as a direct source of law, without the need for national legislation. Customary law is also a recognized part of the legal system. Since there are a number of direct sources of law, notably law under Indonesian occupation, UNTAET laws and Timorese laws post-independence, the interaction and application of laws is quite complex and has been subject to some uncertainty at times³. The parliament is composed of 65 legislators with five-year terms who are voted for based on a party list system. Separate elections are held for the National Parliament and for electing the President. The political party that wins the most seats, or establishes a majority coalition, forms the executive branch of government. Leaders of each of the 442 villages known as Sucos (equivalent to a small village or homestead) are also directly elected every five years. Finally, while there is limited capacity, particularly at the local level, there are some parts of civil society that support a democratic voice and accountability. National Non-Governmental Organizations (NGOs), such as Lao Hamutuk (translated as “we walk together”) and others, engage with national leaders and the international community in economic and political debate. NGOs are coordinated under an umbrella organization FONGTIL (NGO Forum Timor-Leste) which also supports joint advocacy, information sharing, and facilitates capacity development.

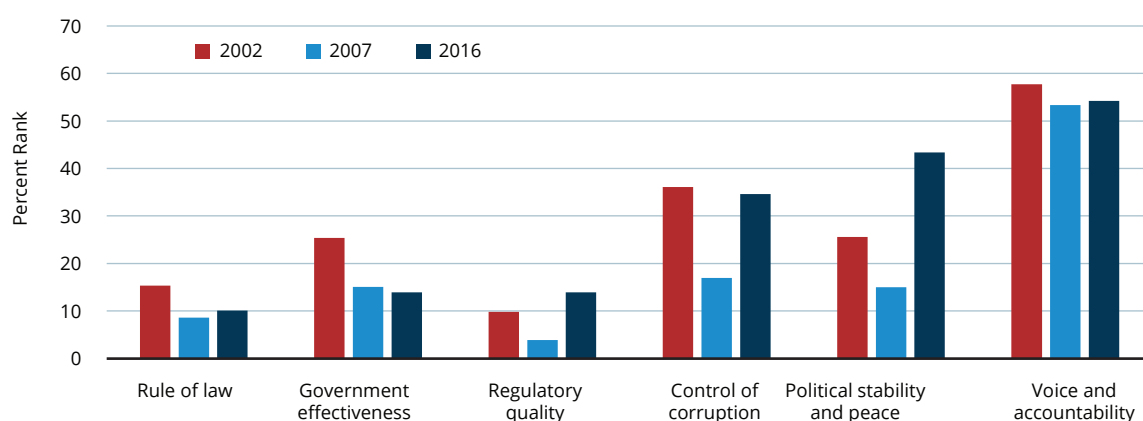
Timor-Leste suffers from very weak governance frameworks for the application of the rule of law and public service provision, although civil liberties, political rights and stability are relatively well established. Freedom House, a research and advocacy non-governmental organization (NGO) on democracy, political freedom and human rights, ranks Timor-Leste as being “partly free” based on its strength of political rights, while the civil liberties and press freedom indices are on the margin of being

³ Almeida, B. 2017

assessed as “free”. Similarly, the Worldwide Governance Indicators (WGI) rank Timor-Leste relatively highly on “voice and accountability”. The country has made gains over time in the WGI governance indicator of “political stability and absence of violence” (Figure 20). Timor-Leste ratified the United National Convention against Corruption in 2008 and passed a law establishing an anti-corruption commission in 2009, which is relatively active. While control of corruption is also assessed to have improved since 2007, being around the 30th percentile of countries, it is not particularly strong. The Natural Resource Governance Institute considers Timor-Leste’s overall natural resource management institutional framework to be “weak”. The elements of governance where Timor-Leste is assessed to be weakest in the WGI are “rule of law” and “government effectiveness”: These weaknesses are reflected in many other institutional assessments. It is of some concern that Timor-Leste has been moving backwards in its ranking for these indicators, and “regulatory quality” is also weak. The sources of these weaknesses are linked to a weak legal and judicial system, gaps in legal frameworks for secure property and contract rights, and weaknesses in managing government financial and public administration systems.

The land law approved in 2017 provides a modern legal framework that enables security of land ownership, but there are concerns over the possible impact on rural communities. While customary rights are mentioned in the new law, there is a lack of provision on how communities’ rights will be protected. Farmers are aware of their families’ custodial land rights, indicating that traditional systems of land control and management persist. The law aims to formalize informal property rights through registration. Several land title systems were created under both colonizers, which, combined with customary systems, have generated a history of competing land claims. State ownership of land is contentious, and insecure and unclear land ownership are frequent drivers of conflict. In the context of a fragile rural environment, there have been civil disorders related to land tenure and access. It is estimated that 10 percent of Timor-Leste’s land remains disputed. However, the evidence on the extent of land disputes in present day Timor-Leste and their impact on economic activities and community is relatively weak and further work in this area would be warranted, given the importance of the area to Timorese livelihoods and current government efforts to improve land titling.

Figure 20. **Governance Trends Over Time**



Source: World Governance Indicators, various years

Democratic accountability is well established in law, but in practice personality politics limits the space for contestability and a vibrant parliament. Since independence, governments have been led by either of the two major parties – Fretilin and CNRT – with the two parties consistently led by the same figurehead. In 2015, CNRT invited all parties with seats in parliament, including Fretilin, to form a government of national unity, affording them a number of ministerial positions, including the Prime Ministership. This left the country without an effective opposition party in Parliament. The 2017

parliamentary elections saw a high voter turnout of 75 percent and led to five parties securing seats in Parliament. The overall share of the vote for the two main parties fell from 67 percent to 59 percent, with Fretilin securing a marginally higher vote than CNRT. The resulting government formed by Fretilin both marked a change in governing party and the first time Timor-Leste has had a minority government, with the government coalition of Fretilin and the Democratic Party (PD) holding 30 seats out of 65.

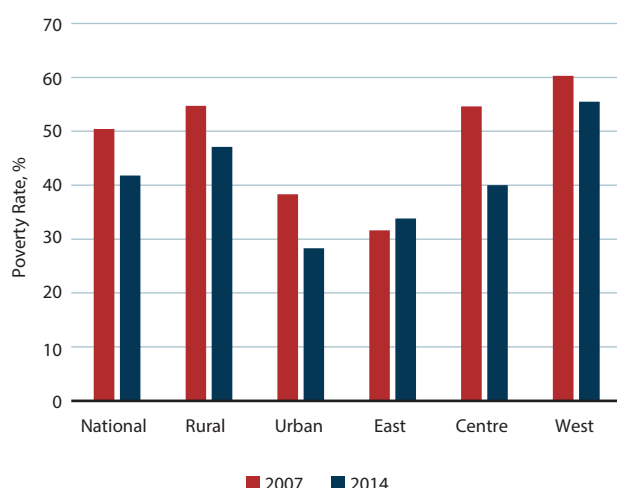


Image Credit: Susanna Rossi

POVERTY PROFILE

Progress Against the Twin Goals

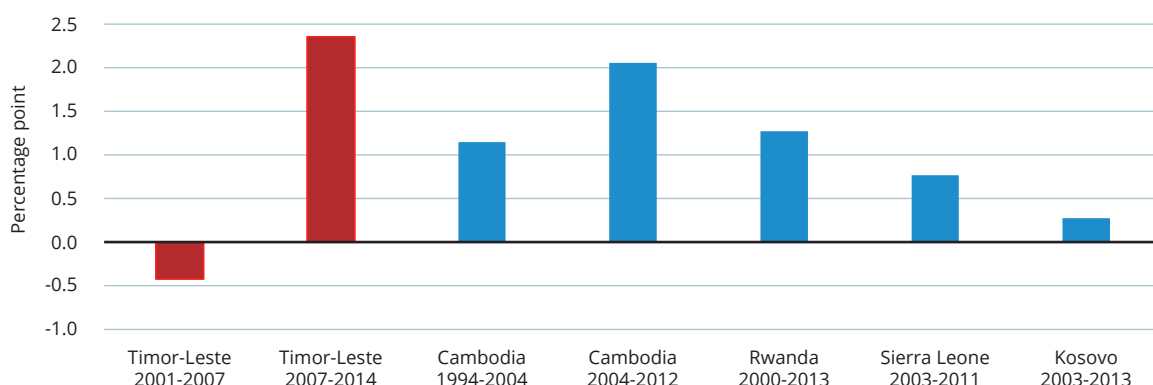
Figure 21. **Poverty Rate at National Poverty Line, 2007-2014**



Source: Timor-Leste Survey of Living Standards (TLSLS) publications

Though poverty in Timor-Leste has fallen substantially since 2007, two in five people still live below the poverty line. Estimates from the latest living standards survey show the poverty rate based on the national poverty line fell from 50.4 percent in 2007 to 41.8 percent nationwide in 2014 (Figure 21), which means there are fewer people in poverty, even accounting for population growth over the period. Measured using the internationally comparable poverty line of US\$1.90 per day (2011 Purchasing Power Parity⁴, poverty in Timor-Leste declined even more rapidly, by 16.9 percentage points from 47.2 percent in 2007 to 30.3 percent in 2014. Timor-Leste's progress in poverty reduction has been comparable to that of other post-conflict countries, which often include an acceleration of progress after an initial phase of state-building (Figure 22).

Figure 22. **Annual Poverty Reduction at US\$1.9 (2011 PPP)**



Source: WB WDI

In terms of geographical distribution, however, poverty-reduction progress has been uneven across the country. Poverty is a highly rural phenomenon, with 80 percent of the poor living in rural areas. The Central region has experienced the fastest fall in poverty. Despite having the lowest poverty rate, between 2007 and 2014, poverty in the Eastern region increased slightly. Poverty incidence remains highest in the Western region, and particularly its rural areas. While most of the poor are concentrated in rural areas, the single largest cluster of poor people can be found in Dili, where around 15 percent of the poor live (80,000 people). Poverty is higher in rural areas, at 47 percent (390,000 people) compared to 28

⁴ While the national poverty line serves best for monitoring country's poverty and hence policy making for alleviating poverty, it varies from country to country. For the purposes of international comparisons, the international poverty line of US\$1.90 per day at 2011 Purchasing Power Prices (PPP) is used. This international poverty line is equivalent to \$1.33 per day in 2014 Timor-Leste prices.

percent (100,000 people) in urban areas. Over half (53 percent) of all Timor-Leste's poor are in the Central region, the most populated area, which includes Dili and the district of Ermera. The other 28 percent of the poor reside in the West and 19 percent in the East.

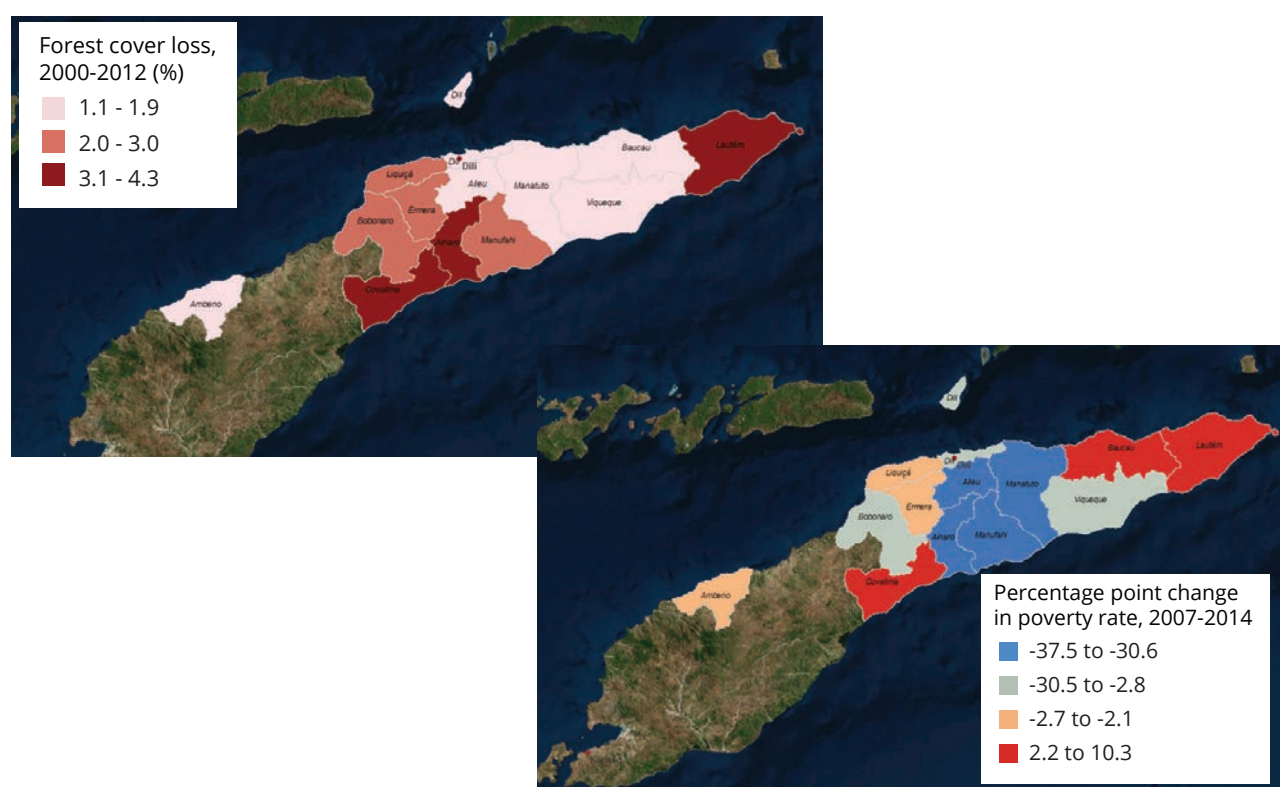
Poverty incidence is highest among households comprising seven or more members and with a high number of dependents. Poor households on average have more children aged under 15 years old and more working-age household members. While the average number of income-earners in poor households is about 29 percent higher than for non-poor households, the dependency ratio (i.e. the proportion of non-working-age to working age household members) amongst the poor is about 50 percent higher than the non-poor (Table 2). The average poverty incidence of households with seven members or more is 56 percent, compared to only half that -- 28 percent -- for those households with six or less members (Table 2). This suggests that household size is closely associated with poverty incidence.

Table 2. Household Size and Dependency Ratios 2014

| | Poor | Non-Poor |
|-------------------------------------|------|----------|
| Avg no of members, age <15 | 3.26 | 1.65 |
| Avg no of members, age 65+ | 0.26 | 0.34 |
| Avg no of dependents (Age<15 & 65+) | 3.53 | 1.99 |
| Avg no of income earners | 2.20 | 1.71 |
| Dependency Ratio | 2.06 | 1.33 |
| Avg household size | 7 | 5 |

Source: TLSLS 2014 Publication

Figure 23. Rates of Forest Cover Loss and Poverty



Source: WB staff using TLSLS data (2007 and 2014) Hansen et al data (2015)

In municipalities where forest cover loss is high, poverty rates are also higher. Between 2000 and 2012, the municipalities of Covalima and Lautem had an annual forest cover loss at the rate of 3.1-4.3 percent, the highest amongst districts of Timor-Leste. Poverty data from 2007 to 2014 also show higher poverty rates in these municipalities. This suggests high livelihood dependence of the community on the land and forest resources in these remote municipalities. If the government is unable to sustainably govern and manage the distribution of natural resources, like forests, there is an increased risk that conflicts, including episodes of violence, can emerge when communities struggle over access to increasingly scarce resources.

Female-headed households are less likely to be poor than male headed-households. In 2014, fewer than one in 10 households in Timor-Leste were female-headed. Poverty incidence amongst this small group of female-headed household is only 27 percent, substantially lower than poverty incidence amongst male-headed households (42 percent). This marks a significant change from 2007, when the poverty incidence for both female- and male-headed households was similar. This change is likely to be driven by a larger share (44 percent) of female-headed households now being remittance recipients compared to 23 percent for male-headed households. Nonetheless, the prevalence of remittances being received in female-headed households is higher amongst the non-poor households (48 percent) than the poor households (22 percent). Moreover, female-headed households tend to have fewer household members, with on average two fewer household members than male-headed households.

The reduction in monetary poverty is mirrored by improvements in other measures of living standards. Between 2007 and 2014, there were notable increases in ownership of certain consumer durables. Ownership of mobile phones, for example, increased by 56 percent, while ownership of televisions grew by 23 percent, and ownership of motorcycles by 17 percent. With more of the population having access to electricity, there have also been some increases in the ownership of appliances such as fans and electric rice cookers, particularly in urban areas (Figure 24).

Figure 24. **Proportion of Household Ownership of Durables, 2007-2014**

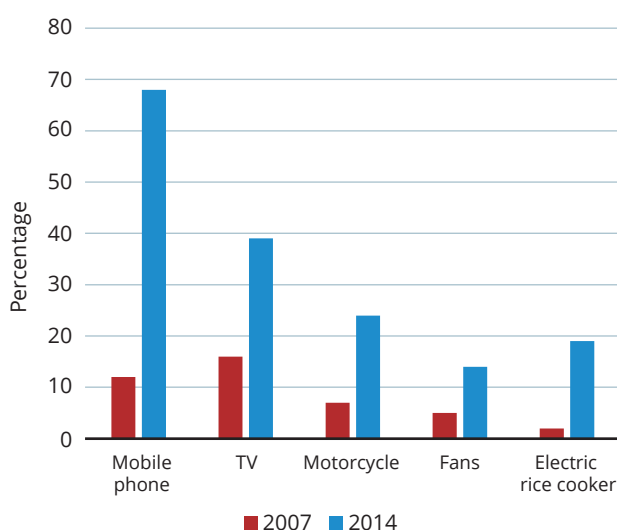
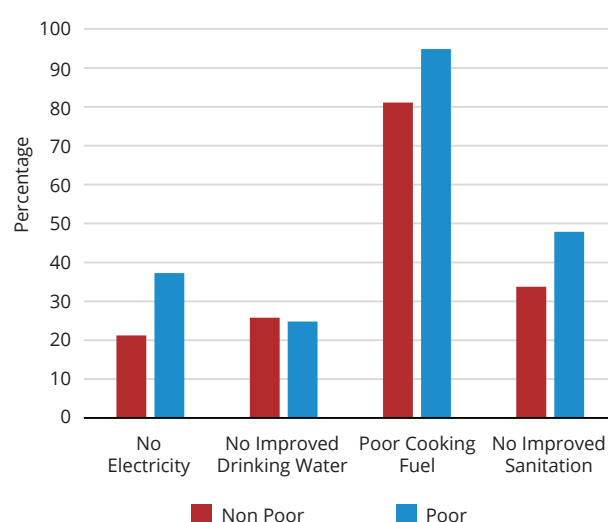


Figure 25. **Proportion of Households with Deprivation in Basic Amenities, 2014**



Source: TLSLS publications

Many Timorese still lack access to basic amenities. As of 2014, about 90 percent of the population still use dung, wood or charcoal for their cooking fuels, which is damaging to the health. While around 65 percent of non-poor households have access to improved sanitation facilities, nearly half of the poor have not. Similarly, even though access to electricity has doubled between 2007 and 2014, around 40 percent of poor households still live without access to electricity. Moreover, one-quarter of households still do not have access to safe drinking water (Figure 25).

While household consumption of food increased overall between 2007 and 2014, food expenditure in poor households decreased and the diversity of their diets deteriorated. Across both poor and non-poor households the average number of calories consumed per person has fallen. Over the period, it is possible that inflation, particularly for non-food items, has put pressure on the volume of food consumed, leading to a calorie intake reduction. Measures of diet diversity⁵ show that while there has been some improvement in diet diversity in rural areas, there has been a deterioration in diet diversity in urban areas. At the same time, the diet diversity of the poor has declined, so that whether the poor are in urban or rural areas, they are not on average benefitting from improvements in diet.

Box 3. A Picture of Poverty in Timor-Leste

The typical poor household is situated in a rural area of Timor-Leste, engaged in agriculture, surviving on resources equivalent to \$34 per person per month^a (or \$1.10 a day). The household head has attained no more than primary education. Seven people live in the house, and they do not own any household assets such as a car, motorbike, refrigerator, radio or television. The household cooks on an open fire using wood, charcoal and dung and depends on a small amount of livestock and subsistence agricultural crops for their livelihood. Their land is a 3km walk from the nearest road. The typical home is a dwelling made of wood or bamboo, with a metal roof and a compacted earth floor. While there are no improved sanitation facilities, there is access to a protected water source or rainwater. Children are not able to attend school regularly due to the demands of agricultural and household work.

^aIn 2014, current Timor-Leste prices.

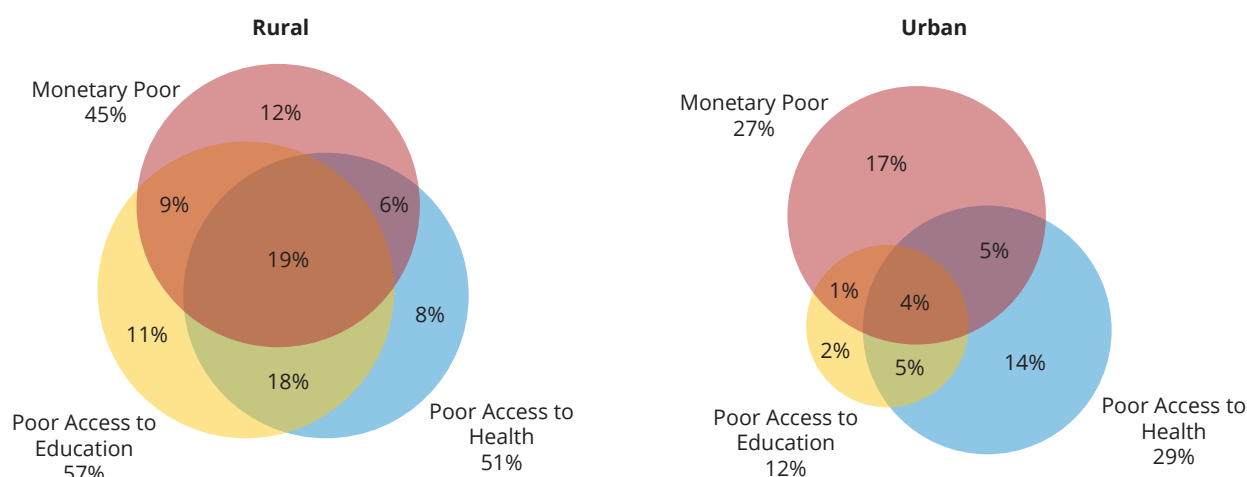


Image Credit: CRS/Jen Hardy

Since 2007, income growth for the bottom 40 percent of the population has not quite kept pace with the rest, indicating a lack of shared prosperity. Since 2007, real consumption per person in Timor-Leste has increased modestly, by 1.43 percent per year, on average. Real consumption per-capita for the bottom 40 grew more slowly, at the average rate of 1.35 percent per year. As can be seen from Figure 27, the poorest decile grew at the lowest rate of only 1.06 percent per year while the richest 10 percent enjoyed consumption growth of 2.12 percent per year on average. This pattern of growth resulted in a slightly worsening of inequality overall, with the Gini index moving from 0.28 in 2007 to 0.29 in 2014, although this is still low by international standards. There is also evidence of a lack of shared prosperity, with the poorest 40 percent falling further behind the rest, as indicated by a shared prosperity index of 0.95 (where 1 reflects growth of bottom 40 income on par with the average).

⁵ The Household Diet Diversity Score and the Women's Diet Diversity Score.

Figure 26. Access to Education and Health, 2014

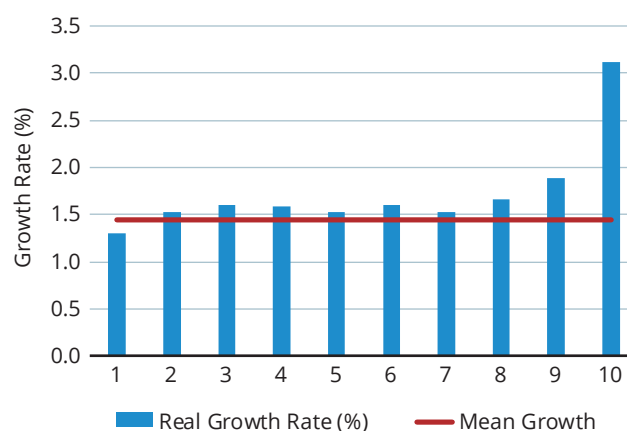


Source: TLSLS publications

More prevalent is inequality of opportunity in terms of access to education and health, particularly among poor households in rural area.

Education is a key instrument to promote socio-economic upward mobility. Similarly, health services, especially in the early years of children's development, are crucial to support healthy and productive growth. Yet many poor households live relatively far from health facilities and a secondary school. In rural areas, 57 percent of poor households live more than 4 km away from the nearest secondary school and 51 percent of poor households live more than 2 km away from a health clinic. Overall, about one-fifth of households in rural areas are poor and also experience relative difficulty in accessing both secondary school and healthcare facilities. This is in sharp contrast to households in urban areas, where only 4 percent of those that are poor lacking access to secondary education and health services (Figure 25).

Figure 27. Annualized Real Consumption Per-Capita Growth, 2007-2014, by Household Decile



Source: TLSLS publications

Drivers of Poverty Reduction

Education is associated with reduced levels of poverty, with returns to higher levels of education beginning to become evident.

In 2007, only 14 percent of household heads had completed secondary school, with only 2 percent completing any form of tertiary education. Over the ensuing seven years, this picture has improved, with more than 20 percent of household heads now having attained senior secondary or tertiary education (Figure 28). Those households where their head has a senior secondary level of education are now considerably less likely to be poor (Figure 29). However, over 50 percent of household heads and around 70 percent have no more than primary education.

Figure 28. **Distribution of Population by Education of Household Head (%)**

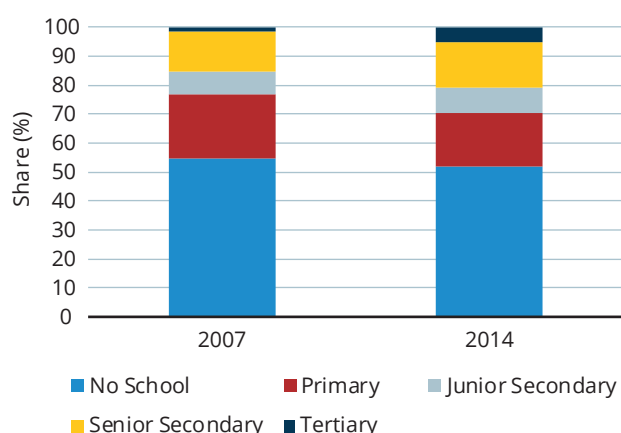
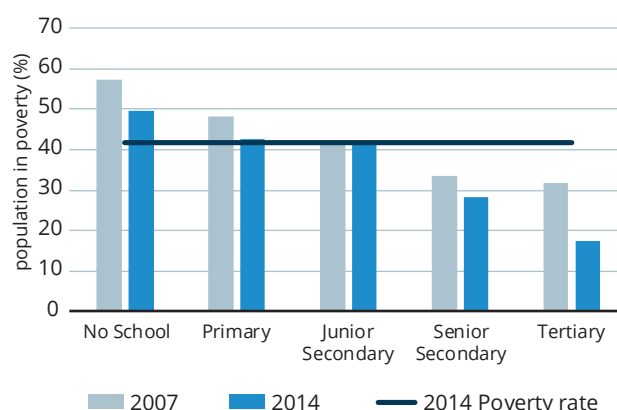


Figure 29. **Poverty Rates by Education of Household Head**



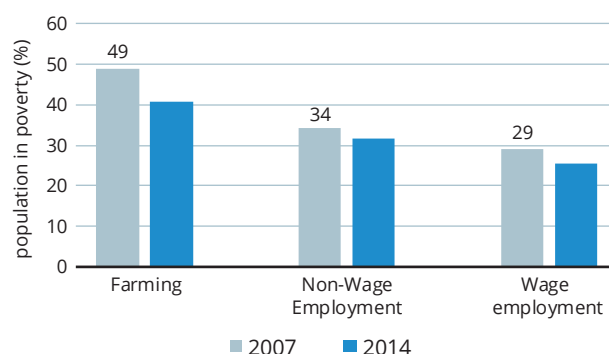
Source: TLSLS publications

Note: Primary education is the first 6 years of formal school. Junior secondary is 7th to 9th years, while senior secondary is 10th to 12th years.

Poverty prevalence by livelihood category closely mirrors rural-urban disparities.

Agriculture, especially subsistence farming, is an important sector for most Timorese, and for the poor especially. However, the share of poor households engaged in farming declined from nearly 90 percent in 2007 to 78 percent in 2014. Consequently, the incidence of poverty amongst households engaged in farming decreased from 49 percent in 2007 to 41 percent in 2014. Over the same period, households who have wage income or non-farm cash income also experienced a decline in poverty (Figure 30). Poverty incidence is highest in those households where children under 15 are reported to be engaged in farming (60 percent) and/or doing household work (57 percent). The poverty incidence amongst working age (15 to 60) individuals who report no economic activity is 50 percent, slightly higher than those who report farming activity (41 percent).

Figure 30. **Poverty Incidence by Type of Employment, 2007-2014**



Source: TLSLS publications

Both poor and non-poor households are often heavily reliant on subsistence agriculture and livestock. However, the location of the land owned by poor households, on average, is 3 km away from road access, compared to 2 km for that owned by the non-poor. The type of crops harvested by poor and non-poor agricultural households are broadly similar. Maize and cassava are the two most commonly grown crops followed by banana, sweet potato, taro and squash. Around 6 percent of non-poor and 7 percent of poor households grow coffee – the nation's most significant export other than petroleum – while only 3 percent of agricultural households grow lowland rice. Animal husbandry is an important livelihood across much of Timor-Leste with the majority of poor households owning animals such as pigs and chickens. Livestock is also a source of value, and poor households tend to have far fewer animal, particularly high-value animals such as cows, goats and sheep. Between 2007 and 2014 there was no noticeable national increase in the proportion of households owning livestock, but some increase in the

average number of livestock amongst those who own them (Figure 31). On the other hand, the average area that a household farms increased. Rural poor households who were on average working a 0.5 hectare plot in 2007, now on average work 0.75 hectares, around 50 percent more, and only slightly less than the average plot size of non-poor households, which has stayed around 0.9 hectares.

Figure 31. Average Livestock Owned by Poor/ Non-Poor Households in 2014

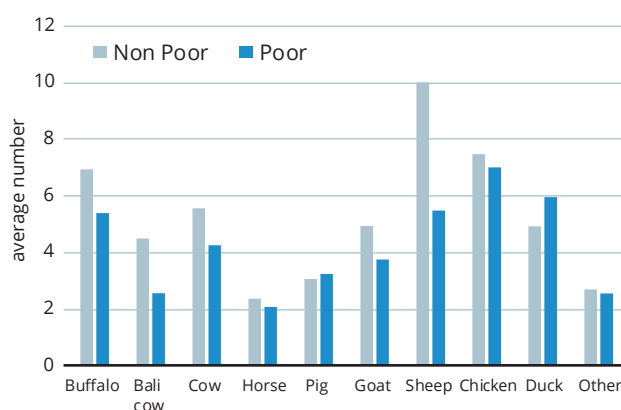
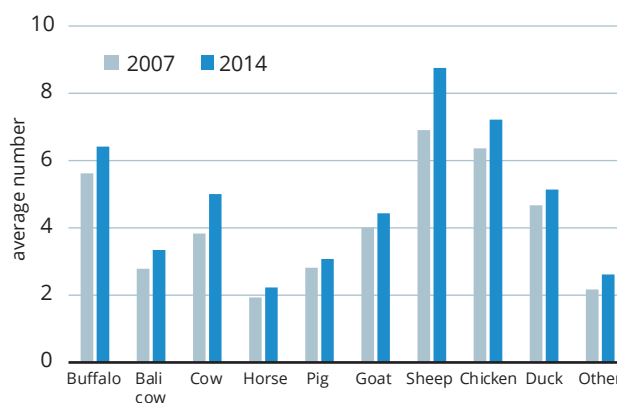


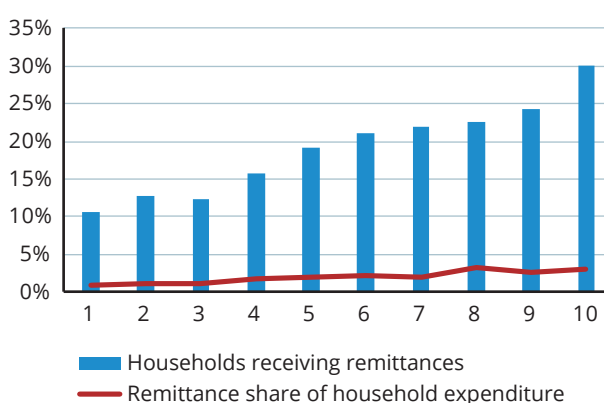
Figure 32. Average Livestock Numbers



Source: TLSLS publications; Notes: Both figures relate to averages amongst households that own livestock.

Government social protection programs provide much-needed cash, but those most targeted at the poor are also the least generous. Timor-Leste's cash transfer programs are mostly categorical and are not explicitly designed to target poor households, with the exception of *Bolsa da Mãe*, launched in 2008. As a result, Timor-Leste's main cash transfer programs (*Bolsa da Mãe*, Elderly Pension, Disability Pension and Veterans Pension) are not reaching large numbers of the poorest households. *Bolsa da Mãe* provides a monthly cash supplement of between \$5 and \$15. Around 16 percent of the population receive *Bolsa da Mãe* payments (or 23 percent of families with children), with poor households more likely to be in receipt of these payments (18 percent) than non-poor (14 percent). Approximately a quarter of the population live in households where at least one member receives the government 'elderly pension', available for all those above the age of 60. This benefit rate is US\$30 per month. Around 40,000 Timorese live in households where a member receives the 'disability pension' which is also US\$30 a month. Finally, 70,000 people live in households where a member receives the 'veteran pension' – a benefit available for veterans of the resistance to Indonesian occupation. Eligibility and the benefit value is subject to assessment and can vary between \$275 to \$575 per month.

Figure 33. Household Remittance Receipt, 2014, by Household Decile



Source: TLSLS-3, 2014

Remittances are a source of income for one in five households, and receiving households tend to be non-poor. In 2014, about one in five households reported receiving remittances, with a higher proportion amongst non-poor households (22 percent) than poor households (12 percent). The highest proportion of remittance recipient households was found amongst the wealthiest decile (Figure 33).



Image Credit: João Galamba

PATHWAYS: MOVING FROM PROBLEMS TO PRIORITIES

In considering Timor-Leste's prospects, it is important to recognize the ongoing dynamic of development in a very young nation. As a new nation, many – if not most – of Timor-Leste's main development challenges stem from its pre-independence history and the initial conditions at independence. Many of these challenges are well-recognized and are being addressed, but the scale of these challenges inevitably means that development – of institutions, capital and policies – takes time and Timor-Leste is undergoing this process. The analytical framework and prioritization of the SCD accounts for processes of development already underway, and seeks to focus on areas where new or additional effort may be warranted.

While Timor-Leste has already overcome a series of constraints that have enabled development gains to be made, focus on a new set of constraints is needed. In emerging as an independent nation, Timor-Leste secured the right to determine its own governance and development trajectory. After some years of instability, Timor-Leste is now a more peaceful and secure country. Security challenges and risks still exist, but the prevailing environment is no longer one of conflict and significant risk of violence. Timor-Leste now has access to a large fiscal resource to support development, overcoming – at least in the short-term – a major constraint which many other countries face. In achieving gains in these areas, the government and nation have been able to move from a discussion about a long list of problems to one about opportunities to build on progress made so far, and it is to this discussion that this SCD aims to provide a contribution.

Figure 34. **Conceptual Framework**





Image Credit: World Bank

The SCD sets out key priorities that are expected to have the greatest positive impact to support poverty elimination and shared prosperity. The SCD identifies three pathways, each of which is critical to achieve progress in advancing achieve national development and the twin goals. The three pathways group priority actions that will collectively support major development objectives. But the pathways are also inter-dependent, and balanced progress in all three is needed in order to support integrated development progress. These three pathways are:

- I. Continuing to invest in human capital and improved service delivery
- II. Sustained economic growth and private sector job creation
- III. Sustainable management, of both the natural environment and public finances

I. Continuing to Invest in Human Capital and Improved Service Delivery

The building blocks of improved human development, such as primary education, maternal and child healthcare and targeted social protection, are being put in place but Timor-Leste still faces huge public health and education challenges. Chronic malnutrition remains stubbornly high and is amongst the most severe in the world. On other health outcomes, such as maternal health, Timor-Leste also performs relatively poorly but is making relatively rapid progress. Rural populations, in particular, report very low levels of access to health services, and when they try to go to a health clinic, either the staff or the necessary medical supplies are not available. Though on paper, primary education has been extended to all, a confusing array of languages and poor attendance, and often poor quality teaching, mean that many pupils are not gaining an adequate education, while secondary education enrollment and attainment remains relatively low. At the root of ongoing social development challenges is persistent poverty and hunger, which limits the ability of households to make longer-term investments in health and education, and a weak system of allocating and delivering resources to local service delivery units, with long delays in budget and frequent stock-outs common. Prioritizing the reduction of child malnutrition, planning and financial management of effective service delivery as well as the extension of targeted social protection programs are all expected to have a strongly positive impact in supporting achievement of the twin goals.

While still high, Timor-Leste has achieved good progress in bringing down child and maternal mortality rates. Maternal and child health indicators have improved in Timor-Leste at a relatively rapid rate since independence, with both surpassing the average for LMICs by 2015 (Figure 35 and Figure 36). However, mortality rates are still much higher than in the rest of the EAP developing region, with one in twenty children born in Timor-Leste not expected to survive past five years old. Approximately 42 percent of all deaths of women aged 15-49 are related to pregnancy.

Figure 35. Maternal Mortality

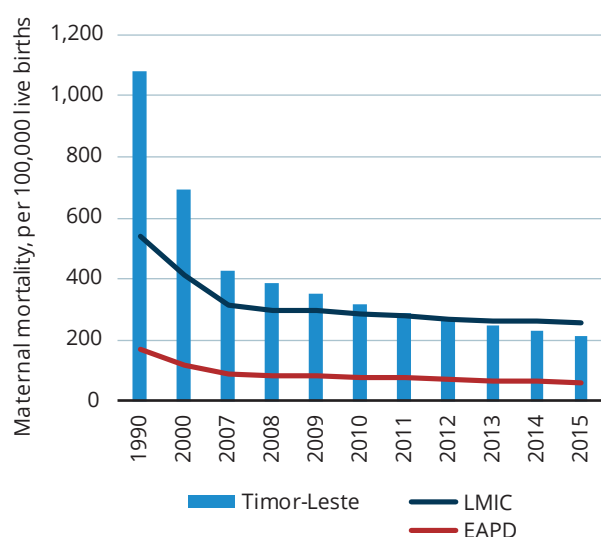
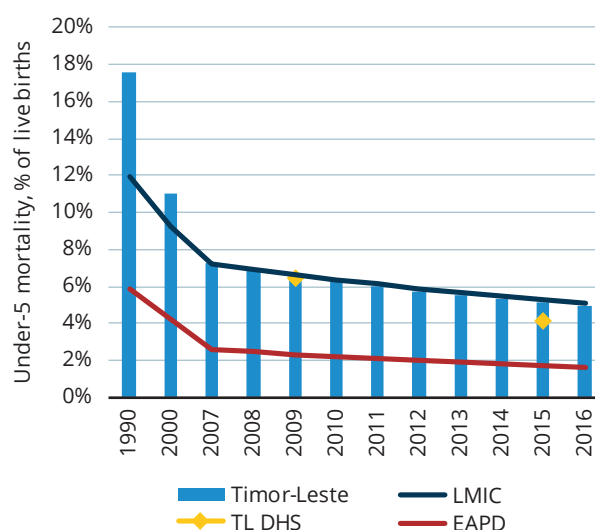


Figure 36. Under-5 Mortality

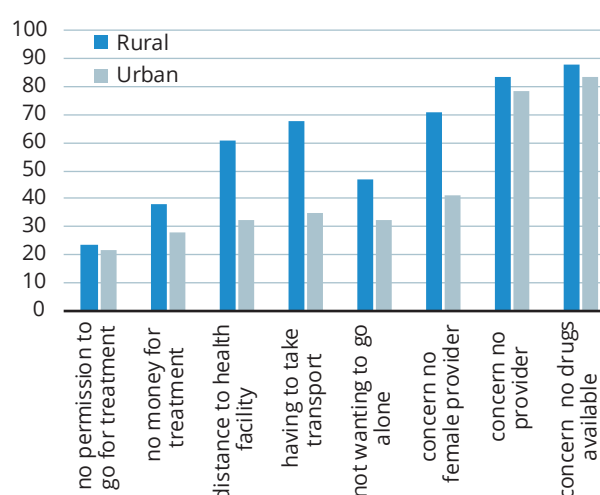


Source: WB WDI and DHS publications; note: Latest DHS data are preliminary, and not yet factored into modelled estimates

Driving these improvements has been an expansion of healthcare services, which have been most effective in improving access in urban areas, but nationwide improvements are lagging. Over the six years from 2010 to 2016, the proportion of births attended by a skilled birth attendant has increased, but is still relatively low in rural areas. From just under 60 percent of births in urban areas in 2010, this figure increased to 87 percent by 2016. While well up from 21 percent of rural births in 2010, rural births attended by a skilled birth attendant are still low at 45 percent of rural births in 2016. Births at a health facility show a similar disparity between urban births (84 percent) and rural births (34 percent) in 2016. A high proportion of both urban and rural households cite concerns about a lack of skilled staff and pharmaceuticals at public healthcare facilities as reasons for not attending them (Figure 37). However, rural households seem to face even greater challenges, with most pointing to problems of long distances to health facilities and lack of transportation, as well as a lack of female providers as major constraints to being able to use public healthcare facilities. Basic vaccination coverage for a one-year old has also not shown a marked improvement since 2007, with rates of measles, DPT, Hep-B and BCG immunization all still below the average for LMICs, and worryingly a number have shown signs of decline during the last few years.

Timor-Leste has one of the highest rates of child stunting - chronic child undernutrition⁶ - in the world. Not only does child stunting in Timor-Leste remain at a critical level, it shows little sign of improving. The country faces the most serious challenges in the stunting prevalence among children aged under 5 years old, while wasting and underweight are also at high levels. Between 2007

Figure 37. Reasons for Not Using Healthcare Services



Source: DHS 2010

Note: Cited by respondents who said they did not seek health care when sick

⁶ Stunting is a condition of chronic undernutrition, while wasting is acute undernutrition. Stunting is height-for-age below minus two standard deviations from the median of the reference population. Wasting is weight-for-height below minus two standard deviations of the median of the reference population. Underweight is weight-for-age below minus two standard deviations from the median of the reference population.

and 2014, there was a significant decrease in wasting and underweight amongst children under 5, but stunting prevalence remains high (Figure 38 and Figure 39). The percentage of underweight children went from 49 to 32 percent during this time, and the percentage of wasted children roughly halved, from 25 to 12 percent. However, the prevalence of stunted children changed only slightly, from 54 percent to 49 percent. Timor-Leste has reduced the prevalence of underweight status among children at a faster pace than other LMICs in the Southeast Asia region, such as Vietnam, Cambodia and Myanmar (Table 3), while Indonesia, Timor-Leste's closest neighbor, had a similar underweight prevalence in 2007 as in 2013. On the other hand, Timor-Leste experienced a much slower rate of reduction in the prevalence of child stunting over the period compared to these countries. The rate of stunting declined at a rate of 0.66 percentage points per year, the third slowest rate out of these seven countries, even though the problem is most severe in Timor-Leste.

Figure 38. Stunting Prevalence

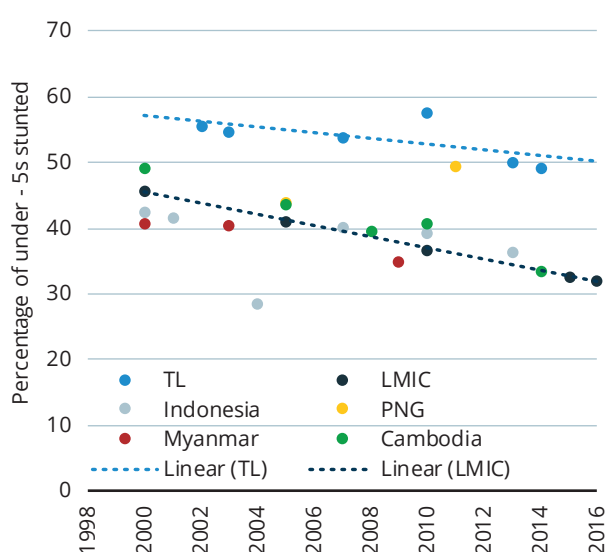
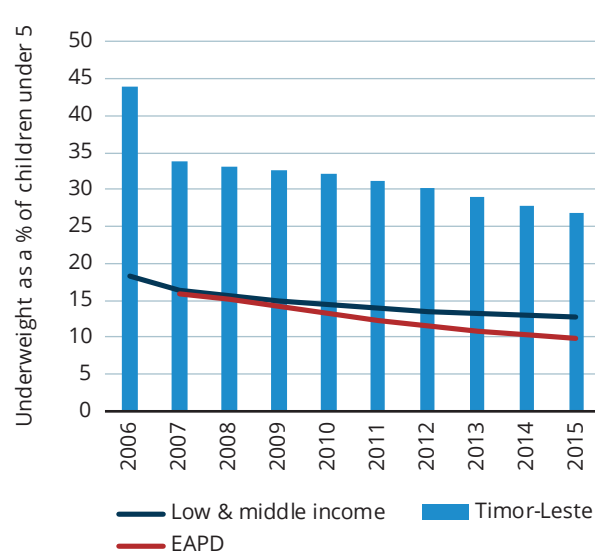


Figure 39. Underweight Prevalence



Source: WB WDI and TLSLS 2014

Both the education attainment levels of the population and the schooling system are undergoing a major transformation, and policy will need to be geared towards continuing to strengthen educational frameworks and responding to skills demand. Timor-Leste was able to raise primary school enrollment to near-universal levels by 2011 (Figure 40), although census and survey data indicates reported school enrollment is considerably lower⁷. Secondary school enrollment is also steadily rising and by 2015 almost reached the average level of 59 percent for lower-middle income countries, with Timor-Leste at 56 percent. The proportion of household heads with some level of schooling has risen from 50 percent in 2007 to 70 percent in 2014. Adult literacy rates are also improving, increasing from 38 percent in 2004 to 51 percent by 2007 and 64 percent by 2014 (Figure 41). Gender gaps remain at some levels of education, but are declining. Literacy rates for women were measured in 2015 to be lower than for men (60 percent compared to 65 percent literacy) but the gap has halved since 2010. The number of girls attending primary school is almost the same as boys, with the primary gender parity index⁸ at 0.99, having improved from 0.92 since 2004. More girls than boys are in secondary school, with the index at 1.07 – higher than the LMIC and EAPD averages and indicating a more serious problem with boys not

⁷ Estimates from the 2015 Census provide a lower estimate of 72 percent net enrollment, although the definition of enrollment is not necessarily aligned with official statistics.

⁸ The gender parity index is defined as the female ratio of (in this case, the primary net enrollment rate) over the male ratio.

attending secondary school, rather than girls. No recent data are available on tertiary gender parity but in 2010 women were less likely to enroll in tertiary education than men. Resourcing of the education sector has grown significantly with almost 300 new primary schools constructed between 2006 and 2011. The number of lower secondary facilities has also increased significantly, nearly doubling from 150 in 2007 to 283 schools by 2015. The number of upper secondary facilities is far less, but has increased over the period too. Increased staffing has kept pace with rising attendance and student-to-teacher ratios are not excessively high and have fallen in recent years, standing at 30 for primary and 25 for secondary, close to the LMIC average.

Table 3. Trends In Malnutrition Indicators in Selected Countries

| | Period | Start | End | Average GDP Per Capita Growth | % Point Reduction Per Year | % Point Reduction Per GDPPC Growth Point |
|------------------------------|-----------|-------|------|-------------------------------|----------------------------|--|
| Height for age (stunting) | | | | | | |
| Philippines | 2008-2013 | 32.3 | 30.3 | 3.6 | 0.40 | 0.11 |
| Vietnam | 2006-2013 | 32.8 | 19.4 | 4.8 | 1.91 | 0.40 |
| Myanmar | 2003-2009 | 40.6 | 35.0 | 5.5 | 0.93 | 0.17 |
| Timor-Leste | 2007-2014 | 53.9 | 49.3 | 5.8 | 0.66 | 0.11 |
| Lao PDR | 2006-2011 | 47.5 | 43.8 | 6.0 | 0.74 | 0.12 |
| Cambodia | 2008-2014 | 39.5 | 32.4 | 4.1 | 1.18 | 0.29 |
| Indonesia | 2007-2013 | 40.1 | 36.4 | 4.4 | 0.62 | 0.14 |
| Weight for age (underweight) | | | | | | |
| Philippines | 2008-2013 | 20.7 | 19.9 | 3.6 | 0.16 | 0.04 |
| Vietnam | 2006-2013 | 26.1 | 12.1 | 4.8 | 2.00 | 0.42 |
| Myanmar | 2003-2009 | 29.6 | 22.6 | 5.5 | 1.17 | 0.21 |
| Timor-Leste | 2007-2014 | 48.5 | 32.4 | 5.8 | 2.30 | 0.40 |
| Lao PDR | 2006-2011 | 31.6 | 26.5 | 6.0 | 1.01 | 0.17 |
| Cambodia | 2008-2014 | 28.8 | 23.9 | 4.1 | 0.82 | 0.20 |
| Indonesia | 2007-2013 | 19.6 | 19.9 | 4.4 | -0.05 | -0.01 |

Source: WHO-UNICEF-World Bank Joint Malnutrition Estimates (JME) 2016, Timor-Leste Survey of Living Standards (TLSLS) 2007, TLSLS 2014, WB WDI

Figure 40. Net Enrollment Rates in Primary and Secondary Education

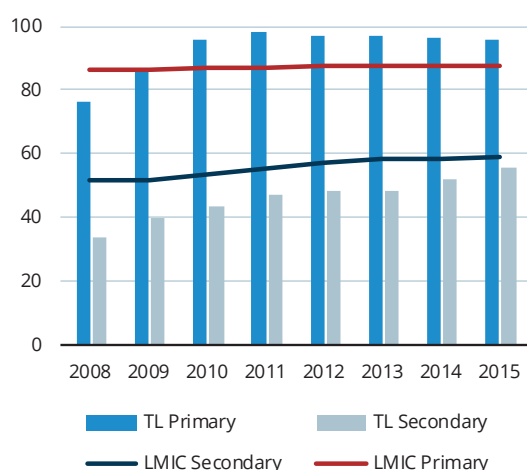
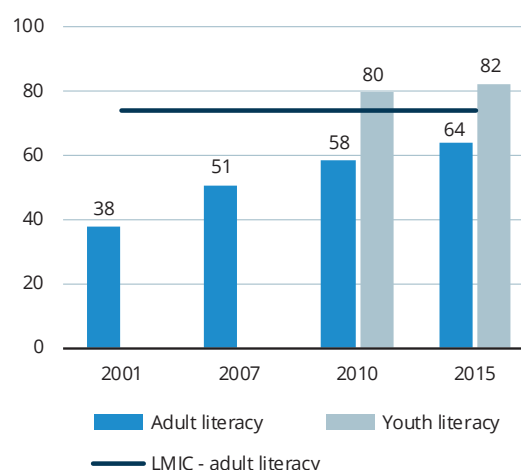


Figure 41. Literacy Rates



Source: WB WDI

But many children fail to make the most out of their primary education, and the system is plagued by absenteeism, high repetition rates, and low absorption of learning, exacerbated by a multitude of different languages. From the first day of school, children face challenges in understanding materials in Portuguese, unrelated to their mother-tongue (of which there are dozens in Timor-Leste), with an added challenge of learning Tetum, the second national language. Demands of household and agricultural work, difficult or long walks to and from school and illnesses and death in the family are all causes of frequent absenteeism and drop-outs, with an underlying problem that families continue to perceive a lack of value in getting an education. Early grade reading assessments between 2009 and 2017 have shown improvement, particularly since the introduction of a new primary curriculum which establishes instruction in Tetum rather than Portuguese for the first years of schooling, although the roll-out of the new curriculum is still underway. 16 percent of grade one pupils passed a reading comprehension test in 2017, compared to 7 percent of same-aged pupils in 2009. 39 percent of grade two students passed the same test in 2017, compared to 29 percent in 2009.

Public data may understate the severity of absenteeism and out-of-age schooling, which make it much more difficult to effectively teach and perpetuates a cycle of “low quality” education. Repetition, or children needing to repeat a year due to failure to show sufficient learning, is a serious problem, with the average repetition rate in primary school 16 percent, compared to only 2 percent in other LMICs and less than 1 percent in developing EAP. Official data reported via UNESCO indicate that 19.3 percent (2014/15) of primary students are overage. However, household survey data covering the same period gives a different picture, with 66 percent of primary students recorded as being overage in 2014. In 2015, the net intake rate (NIR)⁹ for first year primary was 51 percent, lower than the level in benchmarks such as lower-middle income countries (63 percent) and developing EAP (67 percent). Reliable data on absenteeism is difficult to find, but the limited empirical data that does exist suggests this is a widespread problem. In 2014, the TLSLS-3 reported a net attendance rate of 82 percent, but this figure may be overstated by respondents. There is often an incentive to overstate primary school attendance, which is linked to conditional cash transfer payments. A spot survey in 2012 found absenteeism on average of 34 percent, and 50 percent in some districts (Ainaro, Aileu and Ermera). The time taken to travel from home to school is a significant contributor to absenteeism, with children who have to walk more than 30 minutes more likely to not attend school. Survival profiles indicate that for every 100 children entering the first year of schooling, only 77 reach the 6th grade, 67 reach the 9th grade and 61 complete the 12th grade. Surveys of parents indicate that economic reasons account for many children dropping out. The latest household survey shows households, on average, spend US\$57 a year per primary school child, which includes costs of school uniforms, other school supplies and transport. These cash requirements are likely to be a severe burden on poor households. There are also often opportunity costs for the poor of increased education attainment for their children, with many needed to help with family agricultural work or household duties, which are most acute in lower-income households. Illness is also a common reason for school dropouts and marriage or engagements were also cited for female dropouts. Insufficient attendance of not only students but teachers has also been identified as a reason for ineffective education and repetition.

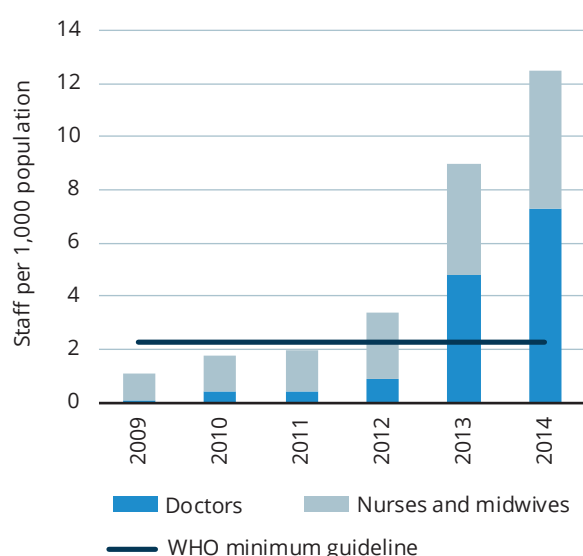
Better Supporting Frontline Services with Adequate, Timely and Appropriate Resourcing

Lack of accessible health and education services in rural areas, and doubts about the quality of service nationwide, are major factors constraining greater use of services. Health and education services are still inaccessible to many, with lack of access particularly prevalent amongst the poor, who tend to live in rural areas and lack access to transportation. The TLSLS-3 indicated that, in 2014, the

⁹ The NIR is the total number of pupils of official primary school entrance age who are enrolled in primary education, as a percentage of the total population of that age.

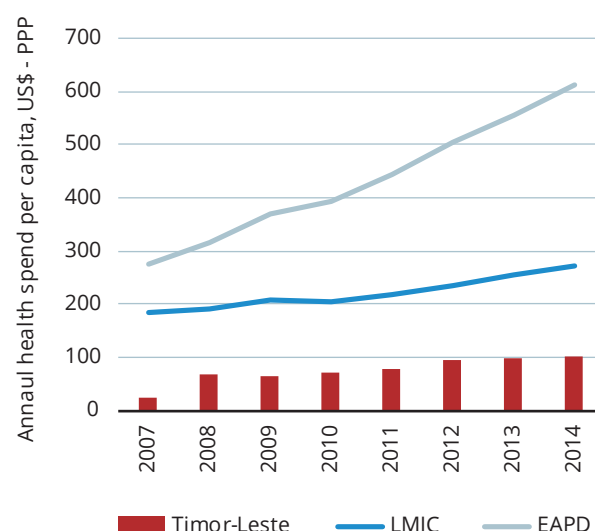
average walking time for a poor household to the nearest health facility was 42 minutes, compared to 35 minutes for a non-poor household. The walking distance to a secondary healthcare facility was 75 minutes for poor households on average and 59 minutes for non-poor. There are indications that access is improving in some respects, although there are still mismatches in staffing of health facilities and a lack of equipment and supplies. The model of primary healthcare provision has recently changed from use of a limited number of “Integrated Community Health Services” with a significant amount of community outreach using mobile units, to a model based on a larger number of fixed health posts which have increased professional staffing. While in 2014, there were 227 health posts, the government has recently scaled up resourcing and as of 2017 there are 312 health posts, which means average distances to reach a health post should have fallen. As noted, there has also been recent scale-up of basic education facilities. Latest data indicate there are sufficient numbers of doctors assigned to health posts to have one for every facility. Yet there is less than one midwife for every two health posts, and only 194 nurses to cover health posts. Figure 42 illustrates the growth in health service staffing. Facilities should be staffed with staff that have been assessed to meet the requirements to fulfill their role and have the skillset that is needed.

Figure 42. **Public Health Service Employment Rates**



Source: MoF JAHSR

Figure 43. **Health Spending Per Capita**



Source: WB WDI

Notes: Includes both public and private spending

To get the value from these investments, systems of public service delivery, especially in rural areas, need to be made more fit-for-purpose. Much of the scale-up of ambition to provide universal basic social services is recent, and essential components of the public service delivery system are still to be made fully effective. Systems for budget management, procurement and human resourcing need to be made more responsive to service delivery needs. While health spending per capita has grown in past years in Timor-Leste, it remains low compared to other developing countries (Figure 43) and further resources, deployed appropriately, would improve service delivery quality. However, in addition to ensuring adequate resources, it is essential that systems are in place to ensure budgets are executed in a timely way, and that resource allocation is aligned across different programs and time as needed. At present, there are significant shortcomings relating to both central laws and systems and sectoral institutions. For instance, repeated delays in approving the annual budget on time mean that money is often not available until three months after the start of the year. While a system is outlined in law to deal with this problem, it seems to not be used in practice. Assessments of skills and capacity for in-line

staff illustrate significant gaps, and the public administration struggles to recruit sufficiently skilled staff and manage performance. In the absence of skilled staff, consultants and advisors are widely relied upon. Procurement requirements are not well understood, and may not be well-suited to the needs of small-scale service delivery. As a result, critical items like pharmaceuticals and other medical supplies are frequently out of stock at health facilities. Within the health sector, the lack of reliable stock monitoring and cold chain for safe storage and transportation of items such as blood and vaccinations exacerbates the problem of stock-outs.

Addressing Malnutrition Requires an Integrated Program, a Critical Component of which is Addressing Water and Sanitation Deficiencies in Rural Areas

Stunting is caused by multiple factors including lack of access to health services and poor dietary intake, but a critical driver in Timor-Leste is illness due to poor water and sanitation. Stunting rates are estimated to have fallen most in urban areas, while in rural areas, stunting has fallen little, if at all. Improved diet diversity, increased calorie consumption, post-natal care and increased breastfeeding are all important in systematically addressing malnutrition. To rapidly and sustainably address the causes of malnutrition, Timor-Leste will need to concentrate efforts on addressing a range of contributing factors which are intrinsically linked to more effective primary healthcare and improved livelihoods. One of the most important drivers is improved health services for mothers and children, including more effective programs of ante-natal and post-natal care, child vaccinations, health checks for mothers and children and breastfeeding support that are both easily accessible and are covered under the previous priority area. Increased availability and adoption of nutrient-rich foods through agricultural productivity improvements, food fortification and poverty-targeted cash transfers are also important and addressed in other priority areas. But multivariate analysis indicates that while socio-economic factors and food availability are factors contributing to stunting, amongst the strongest factors associated with stunting are poor sanitation and lack of access to health facilities. Children in households with treated drinking water were 10 percent less likely to be stunted, and where there was a flush toilet, 4 percent less likely. Children who were reported to have had a diarrheal illness in the previous month were 4 percent more likely to be stunted. Children who had not received any recommended vaccinations were 10 percent more likely to be stunted.

Figure 44. **Access to an Improved Water Source**

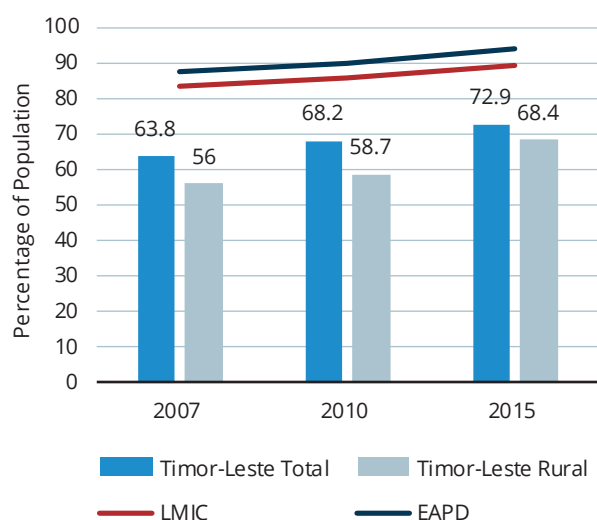
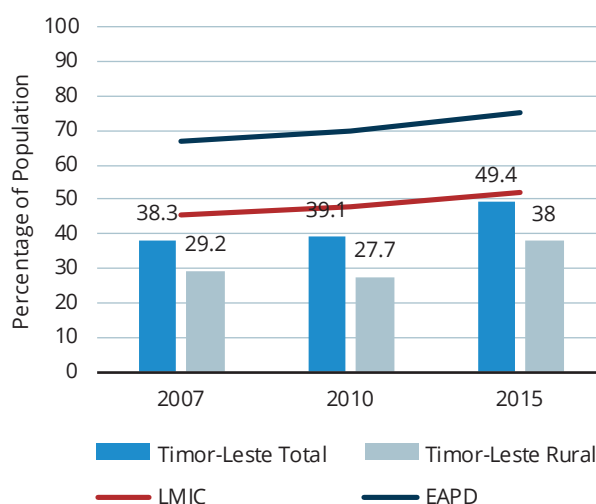


Figure 45. **Access to Improved Sanitation Facilities**



Source: WB WDI and 2015 Census

Water and sanitation has improved, but many households still lack access. While access to an improved water source has improved over time, it still lags behind the average for lower-middle income countries, and more than 25 percent of the population lack access (Figure 44). However, improved sanitation access is far lower, at less than 50 percent nationwide and less than 40 percent in rural areas (Figure 45). Without proper arrangements for sanitation, open defecation is a common practice, especially in rural areas. As noted above, lack of improved sanitation facilities is a defining characteristic of poor households in Timor-Leste. Poor water and sanitation facilities and practices tend to disproportionately affect women and girls¹⁰. As a result, it is important to ensure that women have a central role in planning, decision-making, monitoring and oversight for the sector, and doing so should help to ensure that development objectives are met with appropriate solutions.

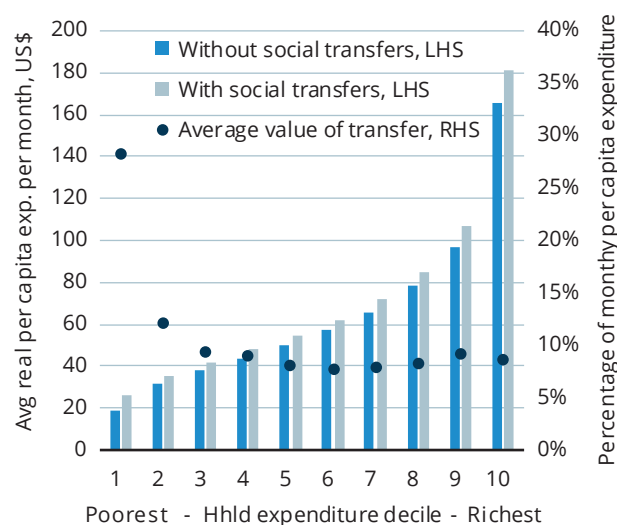
Continuing to Scale-Up Targeted Social Assistance Programs to Tackle Poverty Now

The government is well-placed to deploy resources through better targeted social protection programs which have an immediate impact on poverty-reduction. A chronic and in some cases, seasonal, lack of resources is at the heart of the high levels of poverty in Timor-Leste and for those households struggling to survive, investments in better health, education and employment can fall by the wayside. The government already operates a number of social protection and assistance programs. Bolsa da Mãe, as previously mentioned, is a conditional cash transfer payment of between US\$5 and US\$15 a month that targets poor and vulnerable households with children, expending around US\$10m a year in 2014 and 2015, reaching approximately 50,000 households and supporting health and education outcomes for children. The other main social protection programs are the veterans, old age and disability pensions. The veterans' pension is by far the most generous and is around 10 times larger than Bolsa da Mae, averaging about US\$100m a year, with monthly benefits for around 30,000 veterans ranging from US\$ 276 to US\$ 575 per month. The old age pension and disability pension benefit levels are both US\$ 30 per month. While the old age pension is wide in coverage (over 90 percent of those aged 60+ are covered), the disability pension covers less than 20 percent of the total disabled population. The government also has a program of school feeding and below-market price sale of rice to selected retailers and households.

Figure 46. **Beneficiary Incidence of Selected Social Protection Programs**



Figure 47. **Pre- and Post-Benefit Income Distribution**



Source: TLSLS 2014

Notes: Adjusted to reflect pre-transfer expenditure

¹⁰ "Gender in Water and Sanitation", 2010. Water and Sanitation Program.

Overall, Timor Leste's social protection programs are poverty and inequality reducing but spending is not very effective. If the existing suite of social programs, both targeted and non-targeted, were to be removed poverty and inequality would be approximately 7 percentage points and 1.4 Gini points higher, respectively, than they are today. However, as shown in both Figure 46 and Figure 47, non-poor households also receive social protection programs, so expenditure would be made more effective in reducing both short and long term poverty and inequality if targeting was improved. Based on TSLS data, the poorest 10 percent, with an average real per capita expenditure of just US\$26 per month, receive on average US\$7 in social protection transfers per month. At the same time, the richest 10 percent receive more than double that -- US\$15 on average per month. While transfers received by the poor represent a significant share of their expenditure (28 percent on average), the transfers received by the non-poor are a much smaller share of their average expenditure (9 percent). On the whole, while the current suite of social protection programs attempts to address key risks over the life-cycle, transfer values for key programs are too low, while targeting accuracy is weak. Significant poverty and inequality reduction as well as fiscal efficiency gains would arise from addressing both issues.

Expanding the coverage, generosity and incentives of conditional social protection programs like Bolsa da Mãe will both help to reduce poverty immediately, and support other critical development priorities by providing incentives. The Bolsa da Mãe program has been scaled up to reach more households, but many poor are still not receiving the program, and payments are too small to significantly reduce poverty. As part of a systematic approach to tackle the causes of poverty, extending existing social protection programs such as Bolsa da Mãe to reach all poor households, and ensure they have an adequate level of resources, will strongly support households to make best use of the limited resources that they do have. Bolsa da Mãe coverage has grown from 7,000 households at its inception in 2008 to more than around 50,000 households in 2014 and 2015. Out of a total of 210,000 households, Bolsa da Mãe reaches about 23 percent of all households. However, not all of these recipient households are poor and targeting outcomes show significant leakage to non-poor households, which could be addressed by conducting an updated local validation exercise of the targeted beneficiary list and then refining it via a reasonably objective targeting mechanism such as a proxy means test. Bolsa da Mãe's benefit levels are less than half the benefit levels of the non-contributory old age and disability pensions. A recent study estimated that through raising the transfer amount from the current approximately 5 percent to 10 percent of total household budget, the program could reduce poverty incidence by about 11 percent¹¹. Enhancing conditional programs such as this will also help to effect behavioral change that can accelerate human capital improvement and other key development objectives. The presently low benefit levels may not be enough to offset the costs of children attending secondary school and the opportunity cost of not working, particularly for older children. Revision of the transfer size would increase the program's adequacy and effectiveness in reducing poverty directly and further incentivize beneficiary households to ensure their children finish school, while increased accuracy in targeting conditions such as children attending school, children and mothers attending health clinics will improve the program's effectiveness.

Ending Gender-Based Violence

Gender equality is relatively well reflected in law and political representation of women at the national level is good. Basic legislation to enshrine non-discrimination based on gender is in place in Timor-Leste, with the Constitution explicitly highlighting gender in prohibiting discrimination and Timor-Leste has ratified the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW). Labor laws mandate non-discrimination based on gender in hiring and there exists legislation

¹¹ World Bank (2015) Assessing the Bolsa da Mae Benefit Structure. Unpublished policy note.

criminalizing domestic violence¹². Life expectancy at birth for women in 2015 is 70.36 years, 3.57 years higher than for men – about the same differential as for LMIC countries on average and the life expectancy for women in Timor-Leste has been growing faster than for men in recent years. Laws mandating a minimum level of female candidates has helped to ensure relatively high levels of representation in the national parliament – 38.5 percent of seats have been held by women since 2012, up from 29 percent previously, and double the average in EAPD and LMICs. Women do not enjoy similar representation at the lower levels of government, with 4.7 percent of Chefi Suco (equivalent to village head) women, although here too representation has been steadily increasing from 1.6 percent in 2004, aided by progressive legislation requiring at least one woman to stand for election in every Suco.

But despite the law, in practice women face serious problems of gender violence and lack of access to economic resources. A recent comprehensive survey showed that 47 percent of ever-partnered women¹³ aged 15-49 had experienced physical and/or sexual violence in the last 12 months; a higher level than previously thought existed in Timor-Leste and double the average prevalence of violence against women of this age group in LMICs. Violence against women and people who are lesbian, gay, bisexual, transgender, and/or intersex (LGBTI) not only undermines welfare, increases justice and healthcare needs, it also incurs social and economic costs.

II. Sustaining Economic Growth and Private Sector Job Creation

Timor-Leste needs to develop new engines of growth to continue its positive development trajectory. From a low level of development, Timor-Leste has grown quickly with the aid of petroleum revenue, but this is not sustainable and now it will be necessary to develop substantial new markets to support more and better jobs and a sustainable revenue base for public services. There are several small, existing markets that could be scaled up, such as in agriculture, or new economic sectors developed, such as tourism. But an essential balancing act for the public sector is to encourage private sector investment, both domestic and foreign, while avoiding investing large amounts of public resources in specific sectors or firms that may never prove to be viable. An economic policy that focuses on continuing to remove critical, nationwide constraints for business to operate, developing sound sectoral regulatory frameworks and investing resources in sectors in partnership with private companies will enable the private sector to lead the way in market development, with the public sector providing an essential, facilitating role. In providing sustainable livelihoods, Timor-Leste will also have to balance the need to develop new markets, which will take time, and the imperative to improve prospects for the majority of the population, who are mostly in the subsistence agriculture sector, as soon as possible.

Identifying an Economic Strategy to Sustainably Increase Private Sector Growth

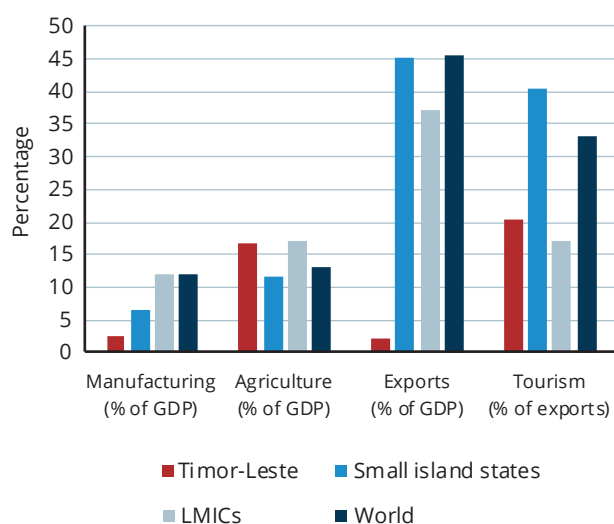
As a small market, sustained economic development will rely on external demand, although recent government fiscal stimulus may have helped to provide an initial spur to private sector development. With the exception of offshore oil and gas, there are few pre-existing growth sectors other than those driven by the public sector. For a small, fragile, resource-dependent country, this is not an unusual policy challenge. With 1.2 million people, Timor-Leste lacks the critical mass to support a domestic demand-driven development strategy, which makes accessing external demand critical. Small states are typically more reliant on exports, and particularly service exports such as tourism (Figure 48). While the cost-effectiveness of recent expenditure policy is a major concern discussed elsewhere, the effects of such a stimulus to demand may be helping to catalyze early-stage development in some

¹² The 2010 Law Against Domestic Violence.

¹³ This includes women who have ever been married, lived with a man or a currently engaged in a relationship with a man.

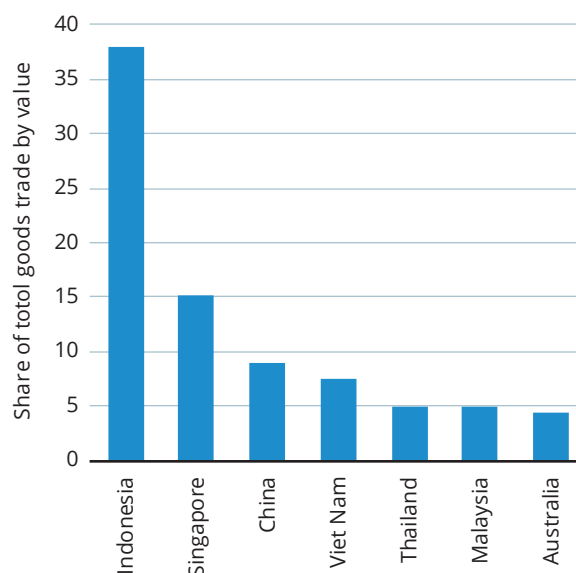
sectors. Rents arising from the oil and gas sector, which have been distributed through elevated public sector employment, benefits and public construction contracts, have led to robust growth in imports but also non-tradable service sectors, which may in turn facilitate the development of more sustainable markets, such as tourism, which requires a minimum level of domestic market development.

Figure 48. **Economic Sectors by Class of Country**



Source: “Find my Friends” tool, WB

Figure 49. **Timor-Leste’s Major Trading Partners**



Source: COMTRADE and WB estimates

Timor-Leste is less likely to see opportunities arise in internationally-competitive, low value-added industries, such as basic manufacturing, even with possible future accession to the World Trade Organization (WTO) and the Association of Southeast Asian Nations (ASEAN). A number of factors combine to make entering these markets difficult. The scope for economies of scale and agglomeration benefits in Timor-Leste is limited by its small size, while remoteness from foreign supplies increases the unit cost of inputs through higher transport costs. While appropriate investment and policy attention can help to bring these costs down, it will take considerable time, and as a small country, even at a high stage of development Timor-Leste will be likely to continue to have a higher cost base. Accession to the WTO and ASEAN, which are both under discussion at present, could have a range of impacts depending on the negotiated outcomes. It is likely Timor-Leste will benefit from a lowering of tariffs for its potential exports, especially within the ASEAN community. However, Timor-Leste already benefits from low or tariff-free access to large markets, notably the European Economic Community under the ‘Everything but Arms’ trade framework. Further broadening of tariff-free access, while a positive step, is unlikely to be a driver of export growth alone. Timor-Leste import duties and overall effective tax rates on imports are low by international standards. Moving to tariff-free access will have a marginal effect on lowering the cost of imports, which may support improvements in local consumers’ and businesses’ purchasing power, but make it more difficult for domestic producers to compete with low-cost imports.

For Timor-Leste, accessing small segments or ‘niches’ of external markets can be transformational.

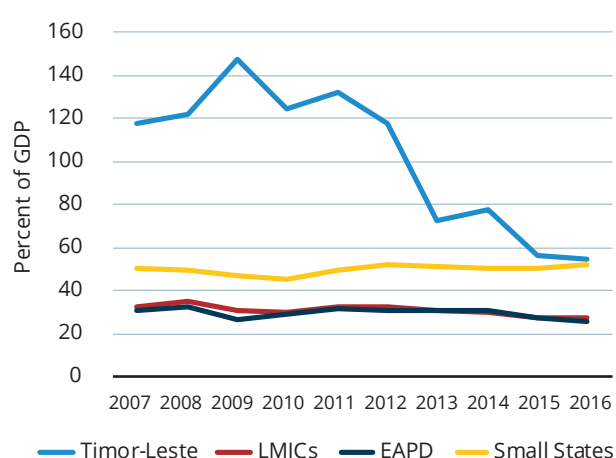
The advantage of small size is that even a small fraction of large external markets can improve the lives and livelihoods for Timorese people. Niche markets are diverse, and are usually characterized by economic rents. However, these rents need not be of the kind derived from natural resource extraction. In addition to tourism (elaborated in the next paragraph), other successful niche markets can be based on marketed cultural or brand value, where products are differentiated and carry a premium due to their

origin – examples include Fiji water and Samoan-branded Body Shop products. Finally, there are niche products that are differentiated by their high-quality: examples include premium-grade crops like coffee and vanilla, where there is clearly quality differentiation.

Tourism is a robust driver of job creation and economic development, as well as a source of foreign exchange in many countries similar to Timor-Leste, where cultural richness and environmental beauty attract visitors. The Timor-Leste National Tourism Policy (2017) is clear in emphasizing the critical importance of tourism in shaping the development fortunes of the nation. To be competitive, Timor-Leste needs to offer a visitor experience that is at least as good as that of rivals in a similar category. Objectively, Timor-Leste has the environmental and cultural assets to develop a competitive offering with potentially the most species-rich coral reef in the world, frequent marine megafauna movements close to the coasts (e.g. thirteen recorded cetacean species, manta rays, and whale sharks), terrestrial forests with unique wildlife, and picturesque mountains. The realization of the tourism potential requires effective planning informed by a better understanding of how offerings can be tailored to the market demand and of the constraints to competitiveness and private sector investments. Developing a marketable product will require not only a stronger policy framework and infrastructure investment planning, but will also require that the natural assets be adequately protected to preserve their economic value (e.g. national parks, marine protected areas, and wildlife protection).

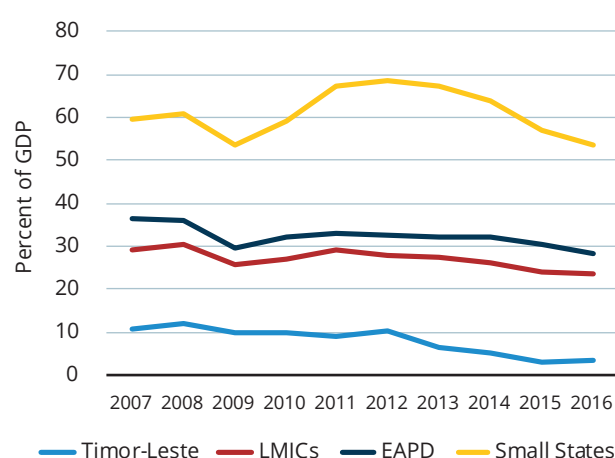
As a small island state, Timor-Leste is dependent on trade, but its domestic exports, not including oil and gas, remain very low. Coffee is the country's only other significant export. While small states tend to be more trade-intensive than larger countries, Timor-Leste stands out as having a particularly high import dependency in past years as the economy developed almost from scratch. What is notable is that the import-content in GDP has steadily fallen since 2012 (Figure 50), especially driven by a reduction in services contracted by government and construction and maintenance services. As of 2015, Timor-Leste's import bill was down to 58 percent, not much higher than the small state average of 49 percent. On the other hand, Timor-Leste's exports are far lower than benchmarks for other countries, and have in fact been declining as a proportion of GDP over time (Figure 51). Timor-Leste's major trading partners are the ASEAN nations, China, and Australia. Almost 40 percent of Timor-Leste's total trade in goods was with Indonesia between 2012 and 2014, with Singapore, China and Vietnam making up a further 30 percent of trade (Figure 49).

Figure 50. Imports of Goods and Services



Source: WB staff estimates, WB WDI, and GoTL

Figure 51. Exports of Goods and Services



Source: COMTRADE and WB estimates

Note: Oil shipments from the JPDA are not included here as part of exports

Labor migration affords greater opportunities to earn income and gain experience for Timorese workers. Both migration around the country, and international migration, will be important mechanisms to match workers with opportunities. Although the majority of people are concentrated in rural areas, about 10 percent of the population in 2013 migrated to urban centers where expected wages are up to 5 times higher than in rural areas. Between 2010 and 2015, around 75,000 people, most of working age, left Timor-Leste, which benefits from a number of international agreements which facilitate overseas work – notably as part of migrant worker programs with Australia and South Korea. Participation in these schemes has been growing, with for instance, Timor-Leste now being the third most popular source country after Tonga and Vanuatu for migrant workers under the Australian program. Many Timorese are eligible for a Portuguese passport, which enables them to live and work across much of Europe and other countries that have labor mobility agreements with the European Union. Remittance data for 2015 estimating the value of remittances for three main countries of international labor migration is shown in the Figure 52^{14,15}. Timor-Leste has been included in Australia's Seasonal Worker Programme (SWP) since its inception in 2012. Under this scheme, workers are permitted to work on a seasonal basis in Australia for up to 6 months at a time. For Timorese workers, the average amount taken home after a single season is 6,502 Australian dollars.¹⁶ Timor-Leste has also been included in Korea's Employment Permit System since 2006. Timor-Leste has sent 1,886 workers to Korea up to June 2015 of whom 240 have returned and 1,546 remain in Korea. The workers go for a period of three years, but may extend to a maximum of 4 years and 10 months.¹⁷ However, the vast majority of seasonal migrants are men (87 percent according to a recent SEPFOP survey) and overall the 2015 census indicates that over 70 percent of overseas household members are male, and so these routes at present do not offer gender-balanced opportunities. While many women may tend to be the primary care-giver for their family and less likely to migrate, other countries in the region, such as the Philippines, have been effective in boosting opportunities for female migration, and a policy focus on female-centric migration routes may help to expand the set of opportunities for both men and women.

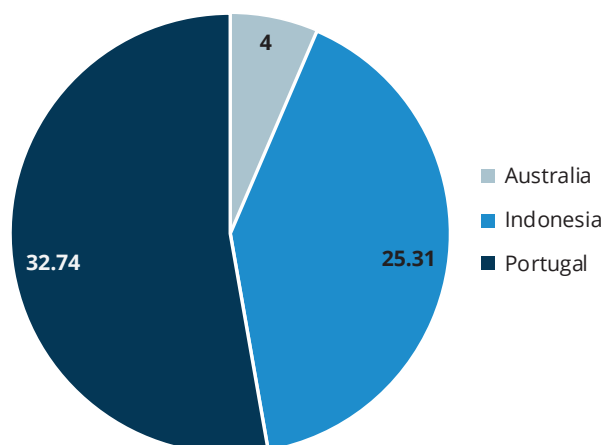
Prospects for further mineral and petroleum exploitation remain uncertain, and it is quite possible they will never become economically viable. Since independence, Timor-Leste has benefitted from considerable oil and gas production from fields in the Timor Sea. Its most valuable oil and gas field has been Bayu-Udan, which has yielded liquid petroleum gasses of condensate, butane and propane, but this field has now almost run dry, and production is expected to cease altogether by 2021. Of the two other fields that have been exploited, Kitan ceased production in 2016 and Elang-Kakatua in 2006. There is only one other proven reserve, known as Greater Sunrise, but its commercial development remains an uncertain prospect. This development field, mostly outside of the JPDA, has been long delayed by an ongoing maritime boundary dispute between Timor-Leste and Australia. However in August 2017, following conciliation discussions mediated by the UN, both parties announced an end to the dispute and to prepared a new treaty to demarcate the maritime boundary between the two countries. This important step could facilitate the commercial development of the Greater Sunrise field, but in the current severely depressed global oil and gas market, and an as-yet known sharing agreement between Timor-Leste and Australia, the prospect and benefits of such a development remain highly speculative.

¹⁴ UNICEF (2015) Timor-Leste Migration Profile.

¹⁵ National Statistics Directorate (2013) Timor-Leste Household Income and Expenditure Survey 2011.

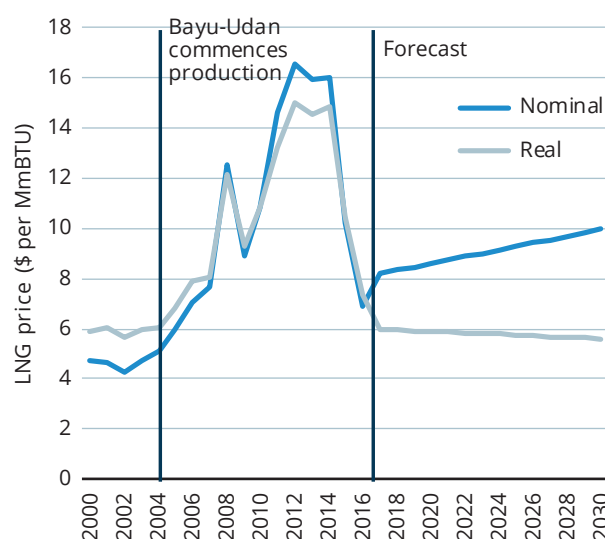
¹⁶ Government of Australia (2017). The Seasonal worker programme. Accessible from: <https://www.employment.gov.au/seasonal-worker-programme>

¹⁷ Wigglesworth, A & Fonseca, Z (2016). Experiences of Young Timorese as Migrant workers in Korea. Paper for presentation at the 2016 Australian Aid conference.

Figure 52. **Selected Bilateral Remittance Flows, US\$m**

Source: WB (2017) Bilateral remittance matrix

Note: Estimates for other significant source countries, including South Korea and the UK, are not available.

Figure 53. **LNG Price Trends**

Source: WB Global Economic Prospects, June 2017

Future mineral rents from Greater Sunrise and other prospects should be seen as a 'positive surprise' in the event that they come about, but significant public funding should not be sunk into projects that may never be realized. Oil and gas prices are set to remain subdued for some time, and LNG prices, in particular, now sit at their lowest level in 10 years due to a supply glut (Figure 53). There remains considerable uncertainty about when prices will move back up, but most market observers see the LNG market tightening sometime between 2020 and 2025. As a result, the market is very different as compared to when Bayu-Udan began being developed, when prices were climbing and were soon to reach unprecedented levels. At present, LNG markets are coping with a glut in supply as newly built capacity triggered by earlier high prices comes on stream. Very few new projects are being sanctioned and those that have been approved since 2013 are generally lower cost projects, such as US-based brownfield developments, whereas Greater Sunrise, in common with similar Australian fields, would be a higher-cost project. Assuming territorial disputes affecting Greater Sunrise are settled imminently, any decision to sanction development of the LNG project would rest on the timing of the market tightening and the project's competitiveness versus other LNG projects. The lead time to complete such a project is some three to five years, assuming no permitting and negotiation delays. Thus, even in the very best case scenario it is difficult to see how revenues from Greater Sunrise would be available to the Government before the late 2020s.

Any future petroleum receipts should be used to support broad economic diversification, whereas efforts to subsidize the development of an onshore petroleum industrial base may not be sustainable. The strong revenue framework for existing petroleum production has been a major boon for the country, and has been instrumental in affording the country opportunities to spur development nationwide. Any future development should aim to replicate this successful model, which also allows companies to extract oil and gas as efficiently as possible, thereby increasing revenue due to the country. Efforts to direct the business model to include more domestic value-addition is likely to come at a cost of foregone revenue, and the economics of projects would need to be considered carefully to ensure they are financially sustainable.

Strengthening the Legal Foundations of a Market Economy

The private sector in Timor-Leste remains small, largely informal and underdeveloped, and there are indications of increasing barriers to entry for foreign-owned firms. The country has yet to make a shift from a subsistence economy to a market economy. Even though 70 percent of the population lives in rural areas, agriculture only accounts for 17 percent of non-oil GDP. As of late 2016 there were around 7,600 registered business entities¹⁸ employing 63,300 people. This equates to fewer than 10 percent of the working age population. Nearly all registered businesses operate in Dili. Businesses are increasingly owned by Timorese rather than international owners. In 2014, 58 percent of businesses were locally owned, and by 2016 had risen to 70 percent. This is partly attributable to Timor-Leste's growing young population, but also a result of domestic preference in government contracting. Today most new businesses registered are owned by people under the age of 30, and the majority of foreign business owners operating in Timor-Leste are either Indonesian or Chinese.

Micro and small enterprises (MSEs), which employ fewer than 10 people, dominate the thin private sector. While MSEs account for two thirds of businesses, they only account for 27 percent of private sector employment. Two thirds of businesses in Timor-Leste are micro enterprises, employing fewer than 10 people, although they only account for 27 percent of private sector employment. The small number of larger firms, defined as those with more than 50 employees, are a major source of employment, accounting for 37 percent of total private sector jobs.

The impediments to business entry and ongoing activity are wide-ranging and severe. While Timor-Leste has made some notable gains in reducing barriers to doing business during the last decade, such as in making it easier to start a business and to pay taxes, there are still key constraints that make doing business very challenging and mark Timor-Leste out as one of the more difficult places to operate a business in the world. The biggest constraints identified by business are political instability, corruption and access to finance. The incidence of bribery is higher than the regional average – in a recently conducted survey 81 percent of firms cited that they are expected to give gifts to secure government contracts (compared to 47 percent in the EAP region and 29 percent worldwide). Firms are also expected to give gifts to operate (import license, operating lease, construction permit) and receive basic services such as electrical and water connections. Related to this issue is the lack of transparency of government policy-making. Weak institutional capacities generally breed a culture of inefficiency and unproductivity at the firm level, given the absence of appropriate checks and balances. In 2016, Timor-Leste ranked 175 out of 190 economies in the world on the Doing Business (DB) survey, just below Liberia and Syria. While Timor-Leste has made progress in some areas over the past 10 years, this has not kept pace with progress in the rest of the world, and Timor-Leste has actually moved further away from best practice over the period, with its overall “distance-to-frontier” score declining over the last 10 years (Figure 54). The decline in Timor's assessment occurred over the period 2013 to 2016, and was most affected by measured increases in the cost and time taken to set up a new electricity connection and the time and cost of importing and exporting. Those areas that are important for doing business where Timor-Leste scores least well are: registering property; resolving insolvency; and enforcing contracts, while getting credit and dealing with construction permits also score relatively poorly (Figure 55).

Although there are a good number of commercial banks, borrowing costs are high and there is limited access to finance. There are five commercial banks in Timor-Leste, four of which are branches of international banks and one government-owned. Despite some improvement in the last few years,

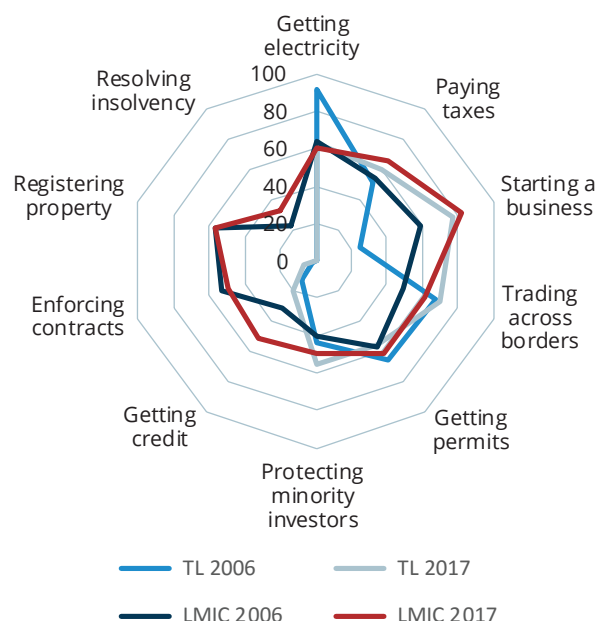
¹⁸ This is the number of firms officially recognized by government statistics, and is based on firms that are registered for taxation and active. The estimate of the number of firms from the business registration database, SERVE, is considerably larger, but may include duplicate registrations and firms that are not active.

these banks collectively have a very limited network which is mostly limited to Dili. In 2015, there were 6.7 automatic teller machines (ATMs) per 100,000 people, compared to 20 on average in lower-middle income countries and around 25 in the rest of the EAP developing region. Deposit-lending spreads are also very high, above 12 percent in 2015, around double what they are on average in other LMICs and EAP developing countries.

Figure 54. **Ease of Doing Business, Overall Distance-to-Frontier Score**



Figure 55. **Ease of Doing Business, Distance-to-Frontier Scores by Component**



Source: Doing Business Survey, multiple years

A lack of a clear system for land titling and registration is a major impediment to starting a business, as well as having a knock-on impact on increasing the cost and reducing the availability of credit. No effective system is in place for property registration in Timor-Leste, and in the context of a large amount of overlapping and customary land claims, there are severe impediments for any business attempting to register property and a disincentive to invest in property. Without clear land title, including land leasing arrangements, land can also not be used as collateral against loans, which immediately cuts off access to one of the most commonly used and cost-effective forms of financing for small loans. The government is, however, working to address these issues and has recently completed a nationwide cadastral survey and approved the first national Land Law, which was made effective on June 1, 2017. Although a lot more needs to be done to develop functioning systems of land registration, this constitutes an important step towards improving access to land for economic purposes.

Women are disproportionately excluded from access to finance and decision-making over land assets activity. While women's rights to inheritance and land are established in law, in practice only a small proportion of land claims (customary or formal) are made by women. In most parts of the country, usage rights to land are passed on in a family through inheritance, usually through the male line, so women generally only have access to land through their association with male family members. Exceptions are in Bobonaro, Manufahi and Covalima, where land rights are reportedly passed on matrilineally. Women also tend to be disadvantaged in the division of poverty in the event of a divorce. Statistics from BNCTL indicate that access to finance through micro-finance schemes is also much lower for women than for men.

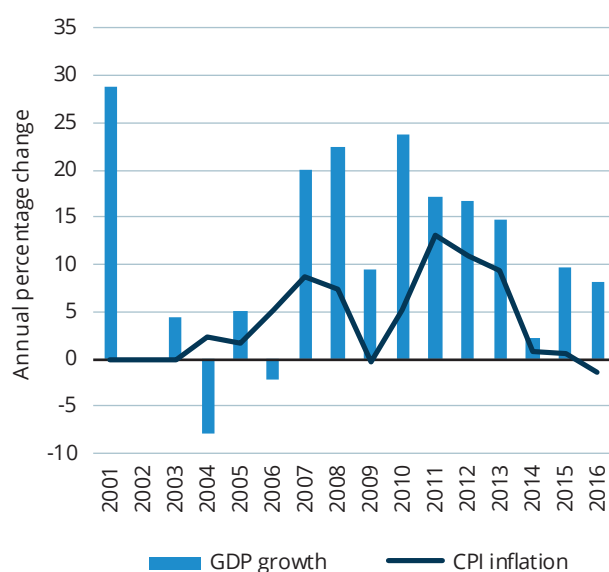
Basic laws and systems to support sound national contract enforcement, payment and financing systems will help businesses to start-up and grow. The Enabling Environment for Sustainable Enterprises survey for 2016 identified weak legal enforcement as the main reason for banks to maintain high interest rates. Contract dispute resolution takes an inordinate amount of time, with weak judicial capacity exacerbated by limited legislative frameworks. There is no dedicated commercial court. While the 2011 Civil Code contains legislation relating to commercial contracts, there are significant gaps and the institutions to implement it effectively are not in place. The latest Doing Business Survey indicates a commercial lawsuit takes 3 ½ year to complete, and costs are far higher as a percent of the claim than the EAP average. While a national payments system law was passed in 2015, the needed implementing regulations and systems are not yet developed, with a manual financial transaction clearing system still in place. Building up capacity to maintain commercial dispute settlement systems and addressing legislative gaps would support businesses to operate in Timor-Leste with more security and confidence. Lack of insolvency and bankruptcy laws are a blockage to creating functioning credit markets and enabling entrepreneurs to take risks. This presents challenges for many business owners, as well as institutions such as banks. In the absence of a process to complete insolvency procedures, firms that experience financial difficulties are less able to restructure, and creditors face uncertainty about recoverability of debts. Banks and other creditors are much less willing to extend finance, because of the uncertainty around whether they can recover debts. In a similar vein, extended coverage of the national credit registry will help manage risks and ultimately lower finance costs.

Maintaining an Appropriate Macroeconomic and Exchange Rate Framework

Timor-Leste has, to date, put in place the right frameworks and policies to support a stable macroeconomic environment. GDP declined in 2003 and 2004 and since then has been positive. Prices have similarly been relatively stable, peaking twice – in 2007 following the civil crisis and due to a spike in rice prices, and again in 2011 following the scale up of fiscal spending, and significant increases in domestic food prices (Figure 56). But on both occasions, inflation has not exceeded 15 percent year-on-year, and has slowed again in subsequent years. Two decisions have been key to supporting a positive macroeconomic framework to date. First, the adoption of the US dollar as the official currency has radically reduced the volatility and macroeconomic risk compared to an alternative scenario where Timor-Leste had chosen to operate an independent currency. Secondly, the strong fiscal framework surrounding petroleum revenues has meant that 100 percent of receipts have been accounted for in the PF, enabling the government in principle to smooth out spending, although this has not been the case in practice.

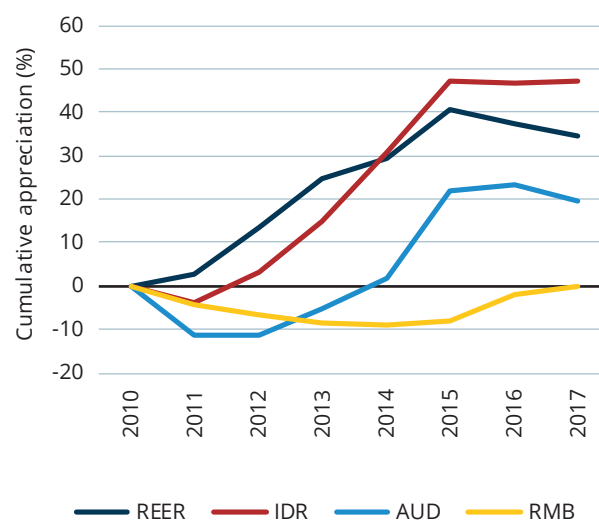
The cost of stability has meant accepting exchange rate changes that may not be in line with Timor-Leste's domestic conditions, and which may have hurt competitiveness. Over the last five years, the US dollar has appreciated significantly against many of Timor-Leste's main trading partners, such as the ASEAN countries, while high inflation in 2011 to 2013 raised the domestic price level in Timor-Leste. As a result, Timor-Leste's Real Effective Exchange Rate (REER) has appreciated by more than 40 percent since 2010 (Figure 57). This means that over the period, imports have become cheaper, but Timor-Leste has become less competitive in export markets. While this may not be a major issue for the country's current main exports, petroleum products and coffee, which are both denominated in US dollars in international markets, it may be a significant constraint to businesses that are attempting to develop new export-oriented activities, including service export markets such as tourism. The latest IMF Article IV assessment (2017) estimates that the exchange rate is overvalued by between 26 and 44 percent based on different external balance assessments.

Figure 56. Annual Changes in GDP and Consumer Prices



Source: GoTL

Figure 57. Exchange Rates Indices



Source: WB staff estimates, OANDA, UN-COMTRADE

Notes: Nominal bilateral exchange rates against the US\$ and Timor-Leste's Real Effective Exchange Rate Index.

Looking ahead, Timor's good track record of macroeconomic stability may be under threat. Fifteen years after independence, Timor-Leste has achieved little progress in achieving a sustainable economic and fiscal model, and continues to rely on a model of spending finite reserves. Timor-Leste's PF has reserves of over US\$15bn, but is being depleted, and as new petroleum revenues cease and earnings from the Fund decrease, the balance will fall increasingly rapidly in years to come. This affords Timor-Leste only a limited amount of time to bring its public finances into balance, and with an underdeveloped domestic economic base, few taxes and a high level of public expenditure, it faces considerable challenges in doing so. As the risk of this fiscal cliff comes closer, it is likely to reduce the likelihood of achieving the country's economic objectives as businesses will be averse to invest given the prospect of disruptive economic and fiscal contraction in the near future.

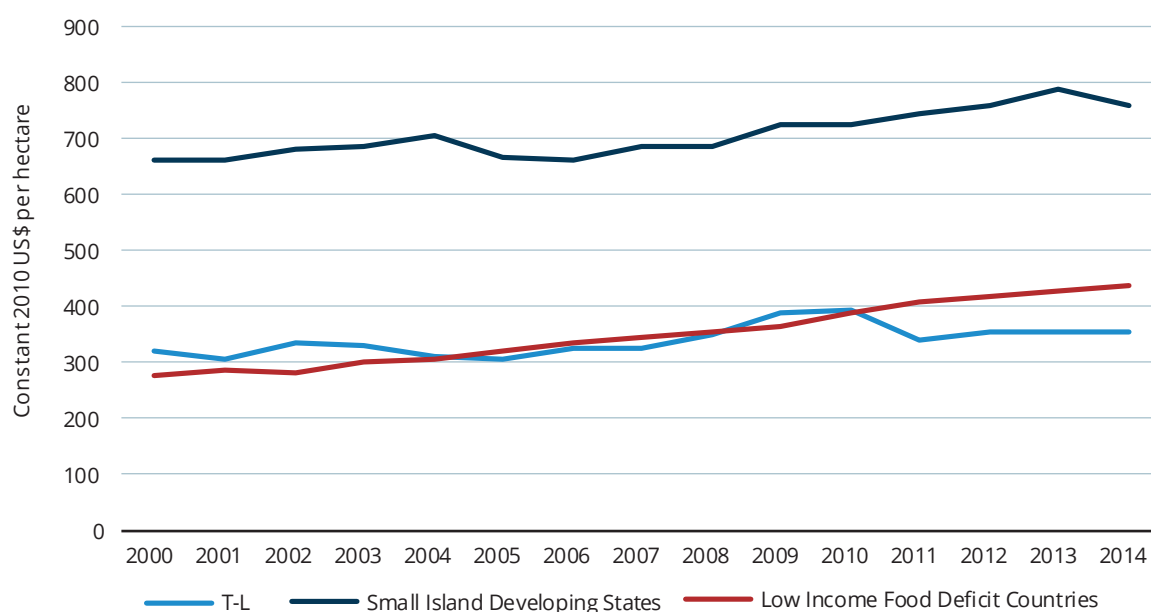
Increasing Productivity in Agriculture, Fisheries and Forestry

The vast majority of the poor will continue to depend on agriculture for the foreseeable future. Eighty percent of poor households were dependent on agriculture in 2014, compared to 90 percent in 2007. The main crops grown by agricultural households are maize (87 percent), cassava (80 percent), sweet potato (69 percent), vegetables (65 percent), coconuts (64 percent), and beans (63 percent). Around 47 percent of household grow coffee, 47 percent are involved in timber, and 44 percent in rice production. An even higher proportion of households, 87 percent, keep livestock of some kind, of which 82 percent rear chickens. The same percentage, 82 percent, rear pigs, while 30 percent of households have cattle and 25 percent own goats. Over the longer term, and as the pace of urbanization continues, people gain improved education and enjoy an increase in living conditions, it is likely that people will take opportunities in other sectors and agricultural dependency will fall. However, in the foreseeable future, agriculture will continue to be inextricably linked to the well-being of poor households in Timor-Leste.

Agriculture in Timor-Leste is challenged by a natural environment that is not conducive to farming across much of the country. With a rugged mountainous landscape, nearly half of the country is estimated to have a slope of 40 percent or more. The steep hills and shallow soils are particularly susceptible to erosion. Soils are alkaline and generally poor, having low water-retention capacity, with small areas of alluvial soils in the river valleys and flat lands along the coasts that are suitable for

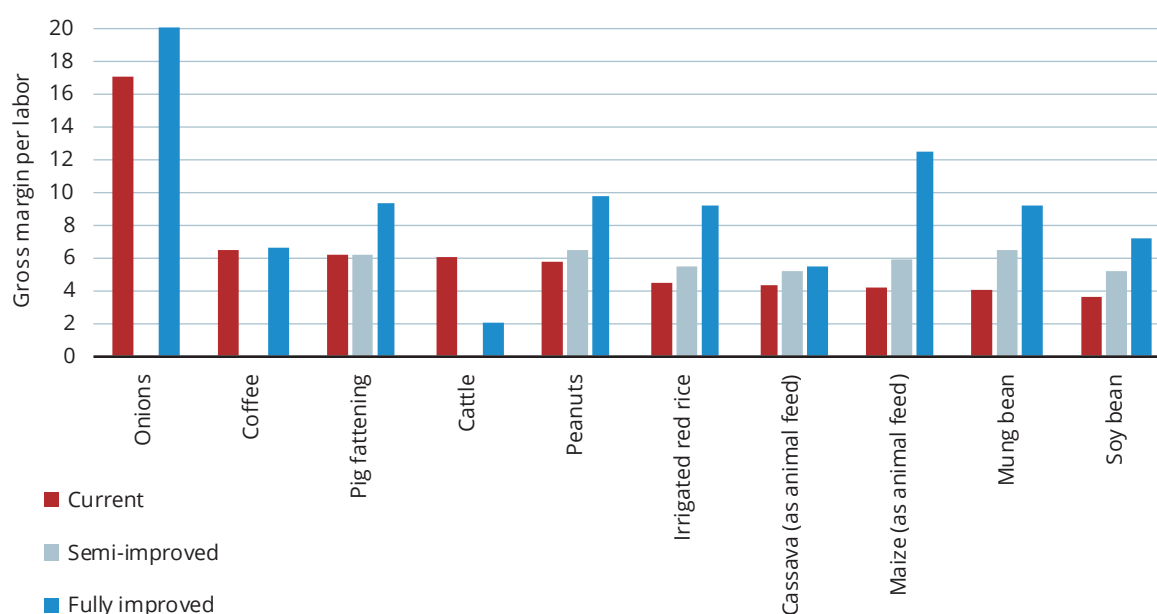
conventional agricultural practices. Farming is difficult, and plots are small – 0.9 hectares (ha) on average – due to the terrain, as rocky soil or mountains surround patches of arable land. From the potentially available land for cultivation farmers are only able to utilize a fraction, due to tough terrain and land clearing difficulties. Timor-Leste's geography enables 155,000 ha for arable land or just over 10 percent of its total land area. The fertile, volcanic soils of Bali do not extend to Timor-Leste, and instead the soils are less fertile limestone and metamorphosed marine clays. Because Timor-Leste is mountainous, soil run-off and erosion is common. Water access is limited by seasonal patterns. Heavy tropical deluges often cause flooding because of the relatively steep and short river systems. The country is also prone to frequent and recurrent droughts (especially during El Nino years) as was observed in 2015 and 2016.

Figure 58. Value of Agricultural Production per Hectare



Source: FAOSTAT

Figure 59. Gross Margins per Labor-Day



Source: TOMAK

The productivity of most agricultural activities is very low, leading to a significant food deficit and low levels of agricultural exports. Value of yield per hectare in Timor-Leste is well below other small island developing states and has fallen below even the average for other low-income food deficit countries in recent years (Figure 58). Timor-Leste produced an estimated 64,000 metric tons (Mt) of maize and 65,000 Mt of rice in 2015 – 30 percent below the five-year average due to the effect of El Nino in 2015 and well below the country's estimated requirement of these staples of 245,000 Mt. Production of tubers was 68,000 Mt in 2014 and production of pulses was 10,000 Mt in the same year. Coffee is the only significant export commodity (aside from petroleum products) and the unique Timorese Arabica Robusta hybrid variety is well-regarded as an organic, single-source product. It has been earning between US\$10m and US\$20m annually. Water availability is a chronic problem in most parts of Timor-Leste, and irrigation is very limited. Similarly, there is only negligible use of fertilizer and pesticides, which means yield is lower than it otherwise would be, but the vast majority of produce is organic. The use of improved seed varieties is low, but has increased for some crops as a result of recent development programs.

Certain crops are more well-suited to the conditions in Timor-Leste, although these have not necessarily been the focus of agricultural development efforts to date. Generally, yields per hectare for various types of pulses and beans are on par with other countries in South-East Asia, whereas productivity for other crops and livestock is much lower than regional benchmarks. Historically, Timor-Leste was producing and exporting significant amounts of mung bean, although this has been declining. Many pulses are also very nutrient-rich and would strongly support greater diet diversity and reduced malnutrition if consumption increased. Gross margin analysis indicates feasible technological and practice improvements for mung and soya bean could at least double the return per labor-day (Figure 59). However, the focus of government programs in recent years has been on raising production of paddy rice and wheat, including by commissioning large-scale irrigation schemes to support rice production. While measured yields for these crops have increased, they remain far below the levels of major producers in the region. In addition to low tariffs, the government also supports a subsidy for imported rice, which means that locally produced rice is not competitive, and there are indications that the investments in irrigation are being under-utilized. A previous government's drive to improve mechanization has had similar low returns. The government issued thousands of tractors freely around the country with the aim of improving productivity and extending cultivated areas, but without training, clear targeting or provisions for maintenance, the tractors were little used and quickly fell into disrepair.

Technological and practice improvements could substantially improve yields, and greater focus on agricultural extension services may be effective in increasing adoption of these methods. It has been shown that introducing legumes into a rotational cropping system along with cereals could improve soil fertility through increased nitrogen-fixing and reduce weed cover. Increased use of improved seed varieties also has the potential to improve productivity. Coffee yields are extremely low, as much of the tree stock is senile and in need of replacement. Investment in new tree stock, along with improved pruning and farm management practices has the potential to triple coffee yields, while although this would also require more intensive labor, returns to labor would not increase by much. The agriculture facilitation sector is overwhelmingly publicly-driven in Timor-Leste. As such, government is instrumental in supporting subsistence farmers, yet there are relatively few extension workers for a country dependent on agriculture where improvements in practices can bring significant returns. In 2015, there were 542 extension workers employed by the Ministry of Agriculture, Forestry and Fishing which suggest just over one extension worker per Suco (or small village area), covering on average 277 rural households each. While this cover of agricultural workers is not especially low, difficult access to rural communities due to poor roads, and a lack of operational budget for fuel and maintenance of vehicles, means extension workers are not as effective as they should be. Women and men both participate in agricultural work, with women tending to focus more on post-harvest operations including crop-processing, storage, seed

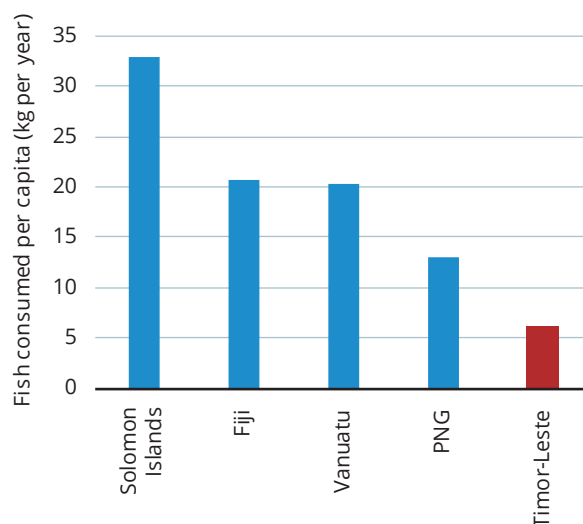
selection and product sale. Farmer groups, which are more likely to consist of men than women, are the most frequent beneficiaries of agricultural extension services such as free inputs and advice. As a result, women tend to be excluded from receiving agricultural assistance at first hand.

Poor processing, storage and transportation of agricultural products exacerbate shortages and lead to low value added and high wastage. Post-harvest losses are high, with for instance, 32 percent of the crop of maize and 30 percent of the rice crop lost on average. The most common causes are weevils and rats, while mould is also a problem. A significant proportion of food (e.g. 11 percent of maize) has been found to contain aflatoxins arising from mould, which can be particularly harmful to children. Many of these issues could be addressed through the use of appropriate post-harvest processing and storage equipment. Poor access is also a major impediment to getting produce to market, with roads especially unusable during the wet season, and slow and costly to move product on at other times.

For a small island nation, fishing is relatively uncommon, due to a combination of cultural norms, and limited technology and know-how to fish beyond the narrow reef.

Fishing activities in Timor-Leste mainly consist of paddle-boat fishing on the reef, small-scale gleaning and a small but growing aquaculture sector. Commonly caught fish include sardines, garfish and mackerel, as well as reef fish such as parrotfish and soldierfish. According to the latest census, only 5 percent of households engage in fishing and 2 percent own or jointly-own a boat. These engagement rates are far lower than in other island countries at a similar income level. Solomon Islands, for example, has around 80 percent of households engaged in fishing. Seventy percent of Timorese households that do fish use wooden boats or basic canoes, and 20 percent use motorboats. Average fish consumption in Timor-Leste is very low, at just 6.1 kg per head per year (in 2011) compared to more than double that level in countries like Fiji, Papua New Guinea, Vanuatu and Solomon Islands (Figure 60) and more than 20kg per head per year on average worldwide. One reason is that exploitation by local fishers remains mainly restricted to the reef area around Timor-Leste, which is very small. Unlike other small island countries, in traditional Timorese narratives and discourse (excluding Atauro Island), the sea is represented as the space of the wild and the unknown, and Timorese have maintained more land-based livelihood strategies. In certain communities throughout the country, consuming seafood is even culturally forbidden (*uma adat*, similar to the concept of taboo). Prospects for commercial fishing are currently unclear, because of a lack of information of stocks in Timorese waters.

Figure 60. Fish Consumption



Source: FAO, 2016

Fish is even more prone to post-catch losses than agricultural produce, and storage and preservation improvements would be critical in improving the marketability of fish. While there is no data available on the amount of fish spoilt due to inadequate or lengthy storage and transport in Timor-Leste, globally FAO estimates 27 percent of landed catch is lost, and this figure is likely to be higher in Timor-Leste. Traditionally, fish is consumed fresh and an estimated 75 percent of fish is sold fresh. However, 90 percent of fishers do not have access to ice, and in high temperatures all year round, fish spoils very quickly. As a result of poor transportation and lack of cold storage, the market for fresh fish is mostly confined to the local area where it is caught. Forty percent of fishers preserve fish, using salting methods learnt through family tradition.

Limited reefs cannot sustain significant fishing, yet simple improvements to fishing methods could boost sustainable near-shore pelagic catches and improve income and employment in the sector for both women and men. While artisanal fishers lack the boats, equipment and know-how to effectively fish in the open ocean, near-shore fish aggregating devices (FADs) have been shown to radically increase catch, and reduce pressure on the reef. Recent FAD trials off Atauro Island in Timor-Leste have led to an increase in catch of up to 400 percent compared to a typical catch on the reef. Catches mainly consisted of small semi-pelagic species like mackerel (scad) which have healthy stocks. This has been achieved without the need for changes to fishing gear or methods. Increases in landed catch volumes, accompanied by improved storage, transportation and/or preservation would not only help increase income for fishermen – who are primarily men – but would generate new opportunities in the post-catch value chain in which women play an important role.

Forest coverage is high but declining, and existing agro-forestry includes high-value tree stocks. Timor-Leste's topography is well-suited to developing agro-forestry products. The country's rich sandalwood resource was a prime reason for trade and early colonization before it was depleted. Teak and sandalwood stocks covering about 10,000 hectares were replanted during Indonesian times and are nearing maturity, with one area of teak wood cut and exported in 2012, with an export value of over US\$10m. Large areas of cleared land would be suitable for new plantings. Over a third of households rely on planted timber trees mainly as firewood for cooking. But despite these managed areas, destruction of natural forest is a serious issue. Widespread traditional 'slash and burn' agricultural practices also contribute to rapid deforestation and soil degradation.

Developing Multi-Purpose, Appropriate and Resilient Connective Infrastructure

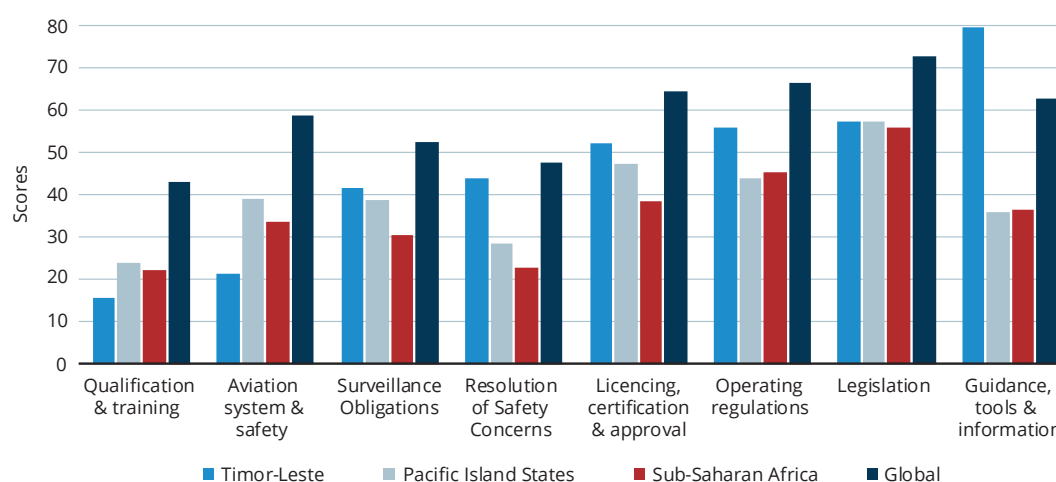
As a small island state, developing efficient connective infrastructure to move people, goods and information is key to supporting the development of a range of economic prospects, in addition to direct social benefits. Given Timor-Leste's early stage of development, it is difficult to predict with certainty what industries and commercial activities will develop many years from now, and attempts to do so are often fraught with failure. But investments in basic infrastructure, including roads, ports, fiber-optic connectivity and the international airport, are likely to be critical investments in the near term, because they flexibly support and enable a wide-range of economic activities, and are valuable in improving access to markets and services for communities. Infrastructure such as this has broad, diffuse benefits – bringing down costs and encouraging public service delivery, labor market access and entrepreneurship. Despite significant policy attention, relatively few new national all-weather roads have been completed in Timor-Leste, with approximately 150 kilometers (km) of national road reconstructed in the last five years, compared to 360km that was in need of immediate resurfacing at the beginning of the period. The most recent assessment of road conditions, conducted in 2015, indicated that there was still more than 350km of national road in poor or very poor condition, suggesting that work to date has only just keep pace with deteriorating road condition in other areas, with little to no maintenance being carried out.

While the government has made major investments in the electricity sector, lack of access to electricity is still a distinguishing factor of poverty, and the energy sector is inefficient. Large fiscal outlays have been sunk into the energy sector and have led to the development of a national generation network and national grid. Despite these gains, nearly half of poor households still lack electricity connections and reaching these people will be important in reducing poverty. Secondly, electricity generation, which is operated by a government agency, is inefficient with large excess generation being wasted and unnecessarily expensive fuels being used. A number of opportunities in the sector exist to increase the positive economic and social impact, while limiting fiscal costs.

Planning of investments based on evidence and principles of value-for-money, asset management and maximizing of expected benefits are essential to make sure limited resources have the intended impact. With a large public investment program and limited experience in government and the private sector of planning and implementing construction projects, Timor-Leste faces a challenge to ensure funds are spent wisely and efficiently. In doing so, adoption of simple but effective principles of public investment management (PIM) are key – to prepare appraisals of projects in advance, make them public and consult on them – as well as measures for project selection, prioritization and implementation monitoring. Whole lifecycle costs and asset management plans should be built into projects from the beginning to maximize the economic life of the asset, while expected benefits should be based on a logical assessment of economic and social benefits. It is through a rigorous process of planning that the country can be most confident that good intentions are translated into real impact on the ground, and avoid the risk of underutilized or excessively costly investments.

One sector which has potential, but is constrained by international and domestic connectivity, is tourism. While Timor-Leste has potential for tourism development, a significant constraint is poor connectivity. With around 55,000 visitors (by air) in 2015, the existing market in Timor-Leste is very small, and comparable to Pacific islands countries like Tonga and Samoa which are up to 10 times smaller in terms of population. Furthermore, most of these international visitors do not visit for dedicated tourism purposes, but are often internationals living and working in Timor-Leste, Timorese diaspora, or people visiting family and friends in Timor. A recent survey found that fewer than one in five visitors were visiting 'on holiday', thereby equating actual annual tourist numbers to around 10,000. However, all international visitors bring value to the country in one form or another, and business travelers, expats and diaspora may form part of a flexible tourism development strategy. The same survey found that business travelers made up 56 percent of arrivals and a quarter of total visitor spending in Timor-Leste. Timor-Leste is accessible to nearby tourism markets, and is adjacent to large, mature destinations, such as Bali which saw 4.5 million arrivals in 2016 of which more than 1 million were from Australia. A small fraction of visitors deciding to visit Timor-Leste, which is a 1 ½ hour flight away, instead of or in addition to Bali, would dramatically boost Timorese tourism. Just 1 percent of total current Bali visitors, or around five percent of Australians, deciding to visit Timor-Leste would roughly double the existing visitor numbers by air. Timor-Leste already has multiple daily flights from Bali and Darwin with three flights a week from Singapore.

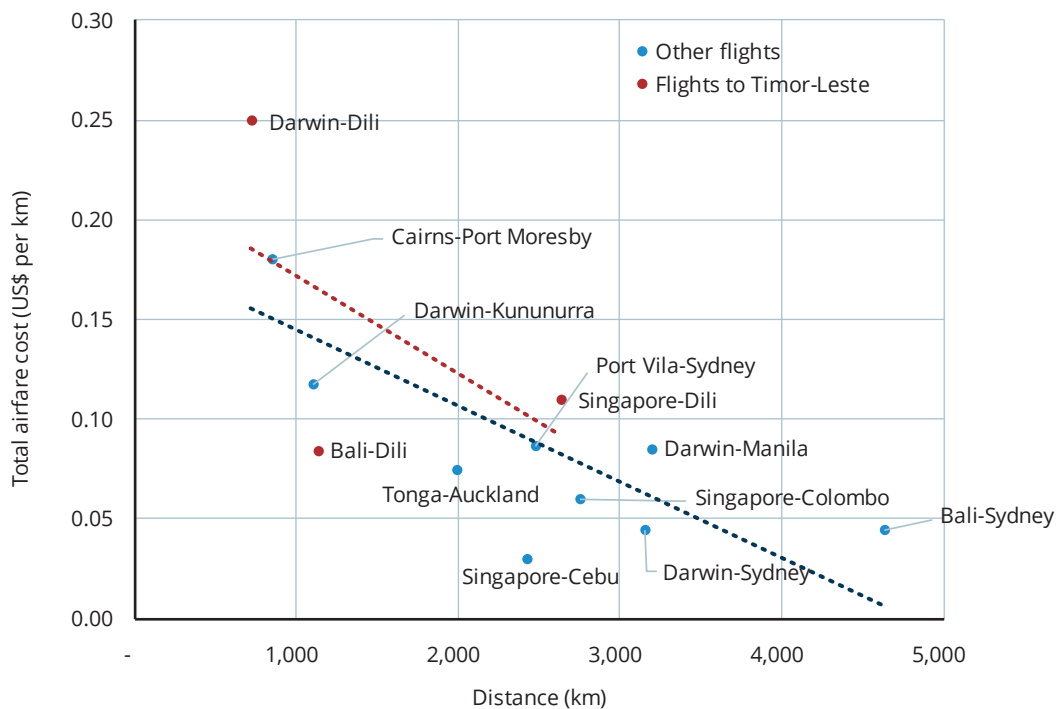
Figure 61. ICAO Standards Chart



Sources: ICAO; notes: Full ICAO category names in order shown in chart are as follows: Technical Personnel Qualification and Training; State Civil Aviation System & Safety Oversight; Surveillance Obligations; Resolution of Safety Concerns; Licensing, Certification, Authorization and Approval Obligations; Specific Operating Regulations; Primary Aviation Legislation; Technical Guidance, Tools & Provision of Safety-Critical Information

To help markets that rely on air connectivity, such as tourism, the efficiency and regulatory standards compliance at the main international airport in Dili should be improved. A clear constraint which not only impedes tourism, but acts as an impediment to a range of economic activities dependent on international mobility, is the international airport and civil aviation regulatory framework. In the absence of full international regulatory compliance and adequate infrastructure and services, the willingness of airlines to serve a destination are lower and costs are higher. Average flights costs to Dili from destinations other than Indonesia are well above comparators (Figure 62). Dili's international airport lacks some international certifications such as air navigation and operator certificates in accordance with International Civil Aviation Organization (ICAO) standards (Figure 61). Lack of full compliance with international standards increases airlines' operating costs, such as insurance, and the risk premium for flying to Timor-Leste. At the same time, the capacity and services at the airport are limited and a well-planned development could lower costs to both the operator and airlines, as well as introducing opportunities for job-creation at the airport, such as increased commercial space. Improvements in air connectivity will also act to facilitate potential future high-value niche exports, such as certain kinds of perishable organic agricultural exports.

Figure 62. **Regional Aviation Costs**



Sources: Skyscanner.net; KAYAK

Notes: Airfare estimates based on lowest cost, most direct routes, inclusive of all charges; averaged over four months

III. Sustainable Management, of Both the Natural Environment and Public Finances

There is a high risk that development progress could be undermined by the need to consolidate the budget in future, while the natural environment which is critical for livelihoods is subject to substantial stresses. The government's current fiscal stance entails significant risks by running down assets now in the hope that economic growth will create a sustainable budget position in the future. Risks need to be mitigated as far as possible, which involves careful planning for an economic and fiscal transition, and efficient use of fiscal resources, to ensure they go as far as possible. The vast majority of Timor-Leste's livelihoods are currently directly dependent of natural resources and the environment, and these assets can support new and improved sustainable livelihoods in the future – notably agriculture and tourism. But in an already relatively precarious ecological environment of a small island, poverty, conflict and resource extraction have led to rapid environmental degradation. A focus on preserving and strengthening ecosystems will help to reverse the trend and ensure these valuable sources of livelihoods remain.

Managing Public Finances Carefully to Avoid a Damaging Fiscal Cliff

Government expenditure has grown rapidly over the last decade. Adjusting for inflation, total expenditure has grown by 12 percent on average per year between 2008 and 2016, which was almost double the rate of real GDP growth, and compared to flat domestic revenues. Capital spending has been the fastest growth component of expenditure and has made up the bulk of this growth. Major spending items have been used to finance development of new electricity sector installations and network, national, urban and regional roads, seaports, dedicated onshore oil and gas industry infrastructure on the south coast of the country and devolved capital spending in the autonomous region of Oecusse. The largest recurrent spending item is transfers, particularly veteran's pensions and old age pensions. Wages and salaries, while having growth at about 5 percent a year since 2008, remain relatively lower at about 10 percent of total expenditure.

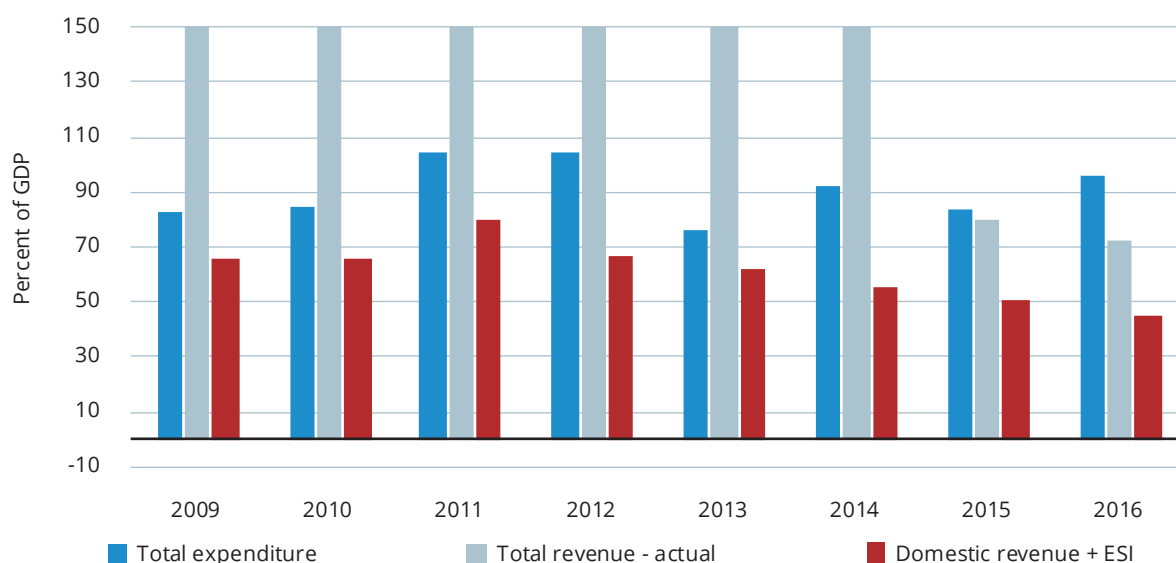
To date, public services in Timor-Leste have been mostly financed by development funds and petroleum resources, but as Timor develops and petroleum resources are depleted, both financing sources are in decline. Domestically-sourced revenues have remained scant throughout Timor's history, financing on average only 10 percent of total expenditure and showing no sign of increase in that proportion over time. Development grants were crucial in support of Timor-Leste's early years of development, and financed on average 75 percent of government expenditure between 2002 and 2006. Since then they have been eclipsed by petroleum revenues, and by 2016 only accounted for 8 percent of expenditure. These resources tend to be concentrated in sectors such as education, health, roads infrastructure, agriculture, security and defense. Petroleum receipts, which at their peak were three times the size of the annual budget, now only account for less than half total expenditure (considering petroleum taxes and earnings from the PF as revenues) with the deficit financed by drawing down on the assets.

The ending of petroleum production has starkly illustrated the dilemma the country now faces. Over the past decade, petroleum revenues have been flowing in, building up the balance of the PF to almost US\$17 billion. This represents a far larger wealth than was originally expected, as Timor-Leste has benefitted from a production peak that coincided with peak oil and gas prices globally. But that time has ended and as both prices and production levels have collapsed, revenues have fallen 20-fold from their high in 2012 to US\$200m in 2016, and are expected to cease altogether by 2021. Over the last decade, government spending has been above the level indicated as sustainable by the Petroleum Fund Law –

domestic revenue plus the Estimated Sustainable Income. As petroleum taxes declined, starting in 2015, the government also began spending more than it earns from all sources (including domestic revenue, residual petroleum receipts and earnings from the PF), with an overall budget deficit emerging of over 30 percent of non-oil GDP in 2016 (Figure 63). This means that the net assets of the government (the PF less loans) began falling in 2015, and as the PF balance declines and asset returns fall, the overall deficit position will deteriorate further.

Without a carefully managed economic and fiscal transition, Timor-Leste is heading for a damaging fiscal cliff. One of the greatest tools at Timor's disposal to rapidly transition from a fragile, conflict-affected state to a prosperous, middle-income country is its accrued oil wealth. Yet the mismanagement of this asset also poses the greatest risk to Timor-Leste's development ambitions. Since 2007, the government has adopted a stance of spending the PF now to accelerate the development of the country and create new drivers of growth, instead of one of using the PF as an asset for perpetual, but more gradual, fiscal stimulus. The success of the government's strategy rests on its ability to spend these resources in a way that does indeed spur private sector growth, and for the public finances to move back into balance as the stimulus is withdrawn and domestic revenue increase. Should either of these conditions not be fully met by the time the PF money is depleted, the fiscal adjustment that would likely be required would be very disruptive, both to the economy, and to public service provision.

Figure 63. **Government Expenditure & Revenue**



Source: GoTL

Notes: Large revenue values not fully shown on the chart.

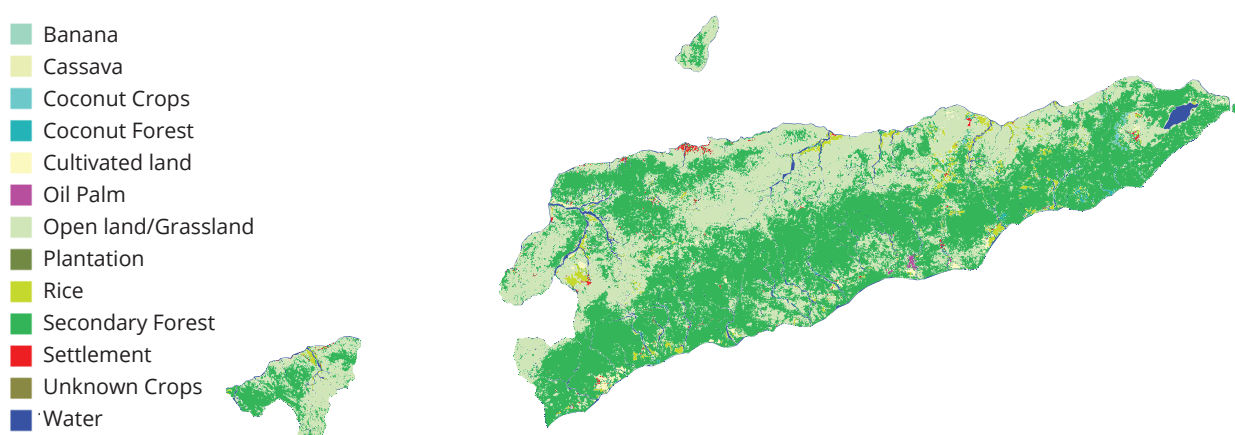
It is essential that the country establish new, sustainable drivers of growth, and fiscal resources are preserved until that time. Long-term simulation analysis suggests that Timor-Leste would need to maintain an average real GDP growth rate of 6 to 7 percent over the next 15 years, increasingly driven by exports of goods and services, private consumption and investment, in order to build the levels of economic activity needed to maintain a similar level of real current expenditure per capita and feasibly be able to avoid a sharp fiscal contraction. Such sustained periods of high growth are rarely seen worldwide, yet given the low level of initial development and the potential resources the government has at its disposal, this may not be a completely infeasible goal for Timor-Leste. However, the challenge of achieving this level of private sector development would require careful planning and execution of a national economic policy, aiming to achieve the maximum return over time for the finite public resources invested in productive capital.

Even with very strong economic growth, Timor-Leste must start to develop revenue mobilization systems now to avoid a hard landing, while leveraging private sector development financing may help to reduce fiscal pressure as well. Even with a rapidly growing private sector as outlined above, the Government will inevitably reach a fiscal cliff if it does not begin to implement a domestic revenue mobilization framework as soon as possible. Domestic revenue mobilization frameworks have remained rudimentary. Total revenue collection has not exceeded 11 percent of GDP, tax administration capacity is weak, there is no value-added or general sale tax and most revenues are collected through final withholding tax and excise duties. With petroleum receipts now ceasing, the public finances are beginning to rely on capital drawn down from the PF to finance the budget. As that capital declines, the return from the PF will fall, necessitating even large capital drawdowns, leading to an exponential drop in assets. The domestic revenue component of a sustainable fiscal transition is a critical component which is time-sensitive. Raising domestic revenue early will help to delay, if not avoid, depleting fiscal assets, allowing the time needed for an economic transition to take place. While there has been relatively limited involvement of the private sector in supporting public service delivery to date, recent experience such as the leverage of around US\$130m of private financing for a public-private partnership to develop Tibar Bay container seaport illustrates the potential for the private sector to play a role in delivering services and reducing fiscal pressure on the government accordingly.

Managing Natural Landscapes, Seascapes and Ecosystems as Valuable, Sustainable Resources

While Timor-Leste has most obviously benefitted from its fossil fuel resources, sustainable natural resources will now become more important, and should be sustainably managed. Mineral and oil deposits form only a small part of the economically-valuable natural environment, and despite a long history of prospecting, it remains unclear if the exploitation of any of these resources will be economically viable. On the other hand, the vast majority of the population relies on natural ecosystem services to support agriculture, fisheries, forestry and hunting. Increasingly, the value of the natural environment of Timor-Leste may also become an economic asset through its use in sustainable tourism. There are in addition a wide-range of essential services that the natural environment provides that support resilience to disasters and climate change.

Figure 64. Land Use Map



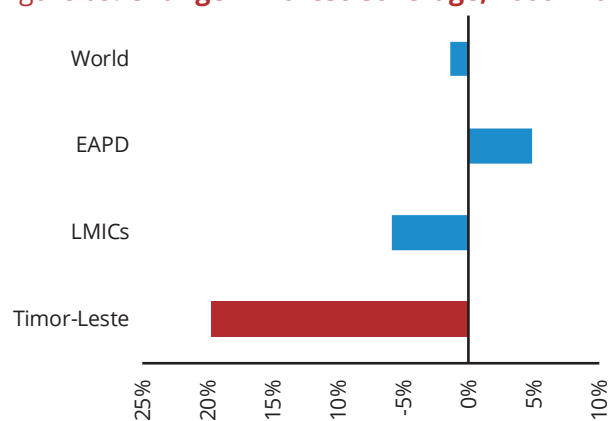
Source: PCRAFI.SPC.INT

There is a significant amount of topographical diversity in Timor-Leste. The features of this topography – coral reefs, tropical dry and moist forests, mountains and wetlands – are important for not only the ecosystem of Timor-Leste and potential areas of economic growth and contributions to food security and nutrition, but as a global public good. At the same time, the forested, mountainous terrain makes transporting commodities throughout the country difficult.

Surface water flows are highly variable from wet season peaks, which bring flash floods carrying large volumes of sediment, to low flows in the dry season. The tropical monsoon climate has a strong influence on the hydrology of Timor-Leste, creating river systems with extreme flow variability. Along with the steep topography and poor land management practices, catchment soils are often exposed and vulnerable to high rates of erosion. Many groundwater aquifers are vulnerable to rainfall changes as a result of climate change. The potential yield of groundwater supplies in Timor-Leste varies based on the hydrogeological setting, location and elevation. Localized aquifers in the mountain areas and the inter-granular alluvial aquifers along the coast, when associated with small river catchments, are most vulnerable to changes in rainfall. Increasing soil carbon through healthier forests, would increase the water storage capacity of soils, leading to a slower release of runoff and mitigate flooding and drought risks.

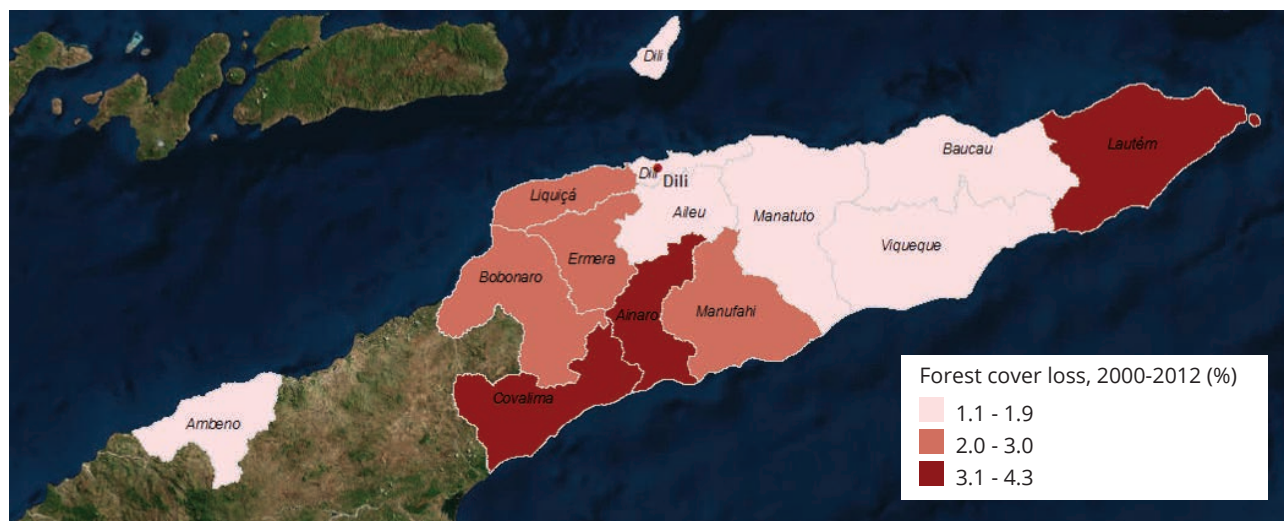
An already fragile system is undergoing further stress, with rapid deforestation and land degradation, mangrove destruction and reef depletion. Land degradation and use changes are factors limiting agricultural productivity, which remains stagnant. The wild areas of Timor-Leste were a vital resource to the population during long periods of conflict, resistance and extreme hunger. As a result, wildlife stocks were already sharply lower at independence with the natural environment suffering further damage during the conflict. Timor-Leste has suffered one of the highest rates of mangrove loss around the world, with 80 percent destroyed since 1940. Similarly, Timor-Leste has experienced rapid deforestation, losing 20 percent of its forest coverage between 2000 and 2015 (Figure 65) – a rate of more than 100 square km cleared a year, with significant clearing due to slash and burn agriculture and firewood collection. This rate of deforestation is more than twice as fast as that of Brazil and amongst the highest in the world. Forest coverage is now less than half of the land area, particularly low for a tropical, mountainous country prone to soil erosion, and based on World Bank 2009 analysis less than 25 percent of forest area remains as primary, dense rainforest. Agricultural practices such as continued ‘slash and burn’ and overgrazing of cattle are thought to be leading to further land degradation across the country, and are associated with poverty. Deforestation has been more rapid in districts that have seen increases in poverty, such as Covalima and Lautem (Figure 66). First, deforestation destroys forest habitat and its biodiversity, leading to soil erosion. This then impacts farming practices and livelihoods. Second, forest fires caused by burn-off result in loss of habitat, loss of organic matter, reduction in soil fertility, and soil erosion; leading to sedimentation of rivers; and air pollution. Third, downstream impacts extend to flooding of settlements and destruction of infrastructure; torrential river flows causing severe siltation and destruction of coastal vegetation, beaches, mangrove forests and coral reefs, leading to loss of fisheries and of potential recreational and tourism activities. Finally, with few all-year rivers, watershed management is a challenge in Timor-Leste, and land use change is contributing to reduced water availability for agricultural and household use. Causes of land degradation are described in the box below.

Figure 65. Change in Forest Coverage, 2000 - 2015



Source: WB WDI

Figure 66. **Forest Cover Loss by District**



Source: WBG staff estimates using Hansen et al (2015) and TLSLS data

Water insecurity is a key constraint for crop production and rural populations. Land suitable for rain fed agriculture is in short supply, with irrigation schemes limited. Water access is highly variable in rural areas particularly during the dry season when many wells and water sources dry up. This has major consequences for crop production, and especially horticulture, since vegetables require regular watering and are less resilient than staples. Water insecurity has also an implication for women and children who typically fetch household water and on health risks as discussed in pathway two.

Box 4. **Main Causes of Land Degradation in Timor-Leste**

1. Deforestation

- Widespread deforestation during the Indonesian occupation.
- Unsustainable harvesting of the country's most valuable tree species, notably sandalwood, ebony and redwood.
- Intensive cutting of trees for firewood.

2. Inappropriate agricultural practices

- Primarily a problem in dry land farming where vegetables are grown on steep slopes ... without any soil conservation measures.
- Shifting cultivation and slash & burn techniques in upland areas.

3. Forest fires

- Recurring wildfires on grass-covered mountain slopes.
- Many fires deliberately lit to stimulate grass growth for grazing; some lit to aid hunting.

4. Over-grazing

- Grazing animals, especially goats, roam freely through public "rangelands", rather than being "stall fed" on collected fodder.
- Introduction and spread of invasive weed species.
- Destruction of vegetation, compaction of soils, loss of soil moisture and organic matter, soil erosion from wind and water run-off.

5. Demographic pressures

Source: (Hunnam, 2009).

Globally, resource scarcity (e.g. water, forests, arable soil, wildlife) can often cause or exacerbate community conflicts, something to diligently avoid in post-conflict Timor-Leste. The decades of conflict in the past had a strong negative impact on the environment, but degradation has continued during the post-conflict period as well. Around the world, competition over limited resources combined with insufficient means to manage such competition has led to violent conflict between communities. With agriculture already negatively impacted by environmental degradation, it is important to rapidly implement equitable and transparent policies for the sustainable management and access to natural resources. Success would mitigate future risks of conflict and strengthen the government's presence in rural areas.

On the marine side, Timor Leste is part of the region's Coral Triangle with important seascapes that can support livelihoods and marine tourism. Part of the global center for marine biodiversity, Timor-Leste hosts important seascapes in the Coral Triangle. A recent biodiversity survey¹⁹ in the waters of Ataúro Island, situated 36 kilometres (22 miles) north of Timor-Leste's capital Dili, revealed that the island hosts the highest average fish diversity globally. Another assessment of Timor-Leste's marine megafauna (e.g. whales, dolphins, whale sharks, manta ray) found strong potential for a whale-watching ecotourism niche sector. From 10 sites studied in the survey an average 253 reef fish species per site were found, including one site with 315 species, the third highest globally. While off-shore pressure to this fragile ecosystem is still relatively modest given the traditional subsistence fishing, solid waste pollution may be increasing from land-based activities. In addition, these marine ecosystems could be rapidly degraded by activities like shark fishing or dynamite fishing as seen in other parts of the region – radically dropping their future potential of underpinning a tourism economy.

¹⁹ Conservation International, 18 August 2016.



Image Credit: João Galamba

SUMMARY OF PRIORITIES

A key part of the Systematic Country Diagnostic is a process of prioritization. The SCD has identified a wide range of constraints to achieving the goals of poverty elimination and shared prosperity in Timor-Leste, and policy reform areas that would help to address them. The process of prioritization in the SCD follows a number of phases. First, the diagnostic and pathways presented in this report already reflect a significant degree of prioritization in that issues which are not as clearly related to constraints in achieving the twin goals have not been discussed in the paper. However, amongst those issues which are identified, the SCD further prioritizes reform areas to try to give an indication of issues which are of the very highest priority to support poverty elimination and shared prosperity. The prioritization criteria used for this process are presented in the box below, and broadly focus on the magnitude and timing of impacts, and the certainty around and complexity of planned reforms.

Box 5. Prioritization Criteria for Recommendations of The SCD

- **Direct and indirect impact on goals:** The expected impact on reducing poverty and promoting shared prosperity, with actions more likely to ensure a sustainable increase in the welfare of the less well-off given a higher weight. Sustainability is factored into this criterion, which prioritizes areas that have a stronger impact in sustaining gains against a baseline without them being given a higher weighting. This criterion also accounts for both direct impacts and indirect impacts. Taking into account that many priorities areas are inter-related, this criterion aims to reflect the overall impact of the reform area, including its complementarities with other areas. The assessment of the potential overall impact of a specific solution would be guided by the highest rating.
- **Feasibility:** The likelihood that the proposed solutions can be implemented. This criterion considers the strength of possible constraints towards implementing a solution, such as cost, human and institutional capacity, and technical complexity. Our assessment does not include political feasibility, as the main focus of the SCD is to propose to policy makers a set of interventions that would be effective in advancing the twin goals. Policy makers themselves would be best placed to decide on political feasibility.
- **Evidence base:** Actions considered to have a stronger evidence base receive a higher rating. This covers both knowledge on the impact of a constraint and an opportunity on advancing the twin goals, but also knowledge on how to overcome a specific constraint or realize an opportunity.
- **Immediacy of impact:** The timeframe under which the impact can be expected to be realized, with priority given to solutions having an impact that can be expected more immediately, which has additional emphasis for Timor-Leste given the importance of maintaining a positive development trajectory in a fragile environment.

The following section provides summary explanation for the prioritization assessment. The following section summarizes the priority areas that have been identified in the preceding diagnostic and presents both a numerical prioritization assessment (Table 4) and description of some of the key issues that influence the prioritization. This section should be read in addition to the full diagnostic above that outlines these priority areas in more detail.

I. Continuing to Invest in Human Capital and Improving Service Delivery

Better supporting frontline services with adequate, timely and appropriate resourcing: Improving the quality and access of social service delivery, especially in health and education – which help expand the opportunities of Timorese is expected to have both strong direct and indirect effects on poverty-

reduction. A key constraint in improving service delivery is the ability for public resources to be utilized in an appropriate way for local service delivery. This is not solely about a lack of financing, but also those fundamental systems of resource allocation and utilization, such as budget formulation, warrant and payment processing, procurement, goods storage and transport and human resource management, not functioning adequately and appropriately. However, the means to address these system failures are reasonably well understood, and with sufficient planning and coordination, have a good chance to successfully address the weaknesses that are currently leading to under-provision and lack of access to services. Effective reform will require the coordinated action and support from the center of government such as the Ministry of Finance and/or Planning and the Prime Minister as well as ministers responsible for line agencies. Reform programs which involve concerted efforts across a large, decentralized group of actors, such as local level service delivery units, invariably require sustained effort over a relatively long period of time, and once improvements are realized on the ground, it will take further time for people's perceptions about services to change and demand for services to increase. Therefore, while these reforms can start to happen immediately, and some improved processes could begin to have an impact within the next 3 to 5 years, the full effects may take longer to be realized.

Upgrading the quality of public service delivery will also require a range of sector-specific actions that will be necessary complements to achieving the full gains from improved systems of resource management. In the education sector, for instance, government-wide improvements for public service management will need to be complemented by employing and deploying teachers to close gaps identified in quantity and subject matter in each level of education and continuous improvement of teacher quality, while work would need to continue on curriculum development and the most effective means of instruction and learning, especially rolling out an optimal approach to language development.

Addressing malnutrition requires an integrated program, a critical component of which is addressing water and sanitation deficiencies in rural areas: The prevalence of chronic malnutrition is at crisis levels in Timor-Leste and must be urgently addressed to improve the quality of life and capacity to effectively engage in employment and education. The program to address malnutrition is multi-sectoral and would require increased focus on nutrition, feeding and household resource availability. But an important aspect that the evidence suggests should also be prioritized in Timor-Leste is sustained improvements in sanitation and infrastructure to support basic hygiene, which is particularly important in rural areas. There are a variety of different options of sanitation improvements which should be assessed and implemented as appropriate. As part of a broader drive to eliminate malnutrition, improved sanitation and hygiene should reduce the prevalence of diarrhea, parasites and other communicable sicknesses that are important drivers of malnutrition as well as mortality. Given the range of determining factors contributing to the malnutrition epidemic that depend on local circumstances, programs should benefit from strong steering and ownership from local communities, to help address information asymmetries that Dili-based actors will invariably have, and help to ensure interventions are effective. These measures may take some time to implement, and improvements in chronic malnutrition outcomes like child stunting will only be realized over time as infants begin life in improved settings, but they are fundamentally important to tackle now to start to address a huge human development problem in Timor-Leste.

Continuing to scale-up targeted social assistance programs to tackle poverty now: A cross-cutting constraint that undermines progress in a range of areas is the extreme poverty faced in the country. However, this apparent trap can be addressed with the appropriate use of social transfer systems. By providing much needed resources in the short-term, households will have greater capacity to spend time and resources by investing in themselves and seeking opportunities. Since Timor-Leste already has a developed nationwide conditional cash transfer system, it can be scaled up and refocused quickly and

relatively easily, making this a low-risk and effective means of bringing down poverty and kickstarting a broader, people-led development process. Such a reform program would be sensitive if it entailed any drawback of commitment of support to other recipients of social transfers, such as veterans of the Independence struggle, and the design, consultation and communication of such changes should be carefully managed to ensure a fair deal for all, and that government's commitments and objectives are clearly communicated.

Ending gender-based violence: High prevalence of gender-based violence is a major welfare issue for women and an obstacle to their engagement in society. While Timor-Leste already has many of the national legal and regulatory frameworks, and indeed has successfully convicted and jailed men for domestic abuse recently, more needs to be done to change perceptions and cultural views on gender-based violence and to improved access to justice, including enforcement and application of the legal and regulatory framework. This is likely to be a slow process, and in a complex way related to evolving gender roles, including the continued focus on increasing economic opportunity to women in all sectors.

Table 4. Prioritization Matrix

| Priority area | Impact on goals | Immediacy | Evidence base | Feasibility | Overall |
|--|-----------------|-----------|---------------|-------------|---------|
| I. Continuing to invest in human capital and improved service delivery | | | | | |
| Better supporting frontline services with adequate, timely and appropriate resourcing | 5 | 2 | 4 | 4 | 50 |
| Addressing malnutrition requires an integrated program, a critical component of which is addressing water and sanitation deficiencies in rural areas | 5 | 3 | 4 | 3 | 50 |
| Continuing to scale-up targeted social assistance programs to tackle poverty now | 5 | 5 | 4 | 4 | 65 |
| Ending gender-based violence | 5 | 2 | 4 | 2 | 40 |
| II. Sustained economic growth and private sector job creation | | | | | |
| Identifying an economic strategy to sustainably increase private sector growth | 4 | 4 | 3 | 4 | 44 |
| Strengthening the legal foundations of a market economy | 4 | 4 | 4 | 4 | 48 |
| Maintaining an appropriate macroeconomic and exchange rate framework | 3 | 3 | 4 | 4 | 33 |
| Increasing productivity in agriculture, fisheries and forestry | 5 | 3 | 4 | 3 | 50 |
| Developing multi-purpose, appropriate and resilient connective infrastructure | 4 | 3 | 3 | 4 | 40 |
| III. Sustainable management, of both the natural environment and public finances | | | | | |
| Managing public finances carefully to avoid a damaging fiscal cliff | 5 | 3 | 5 | 3 | 55 |
| Managing natural landscapes, seascapes and ecosystems as valuable, sustainable resources | 4 | 2 | 4 | 4 | 40 |
| Improve national disaster risk monitoring and risk reduction capacity | 3 | 3 | 4 | 4 | 33 |

Note: Each criterion is scored from 1 to 5. An overall score is then calculated as Impact x (Immediacy + Evidence + Feasibility) to reflect the fact that the impact on the goals conditions all other criteria scores. This overall score is used to rank priorities.

Blue shading denotes top priority areas which are scored at 40 or above (out of a maximum of 75).

II. Sustaining Economic Growth and Private Sector Job Creation

Identifying an economic strategy to sustainably increase private sector growth: In tackling the challenge of developing new markets that will help to create jobs, it will be important that concerted efforts by all partners are guided by a credible and evidence-based economic strategy. The development of a clear strategy will be an important mechanism to align efforts which may otherwise be fragmented amongst different political and development actors, and base policy on a common evidence base and understanding about the constraints and opportunities for Timor-Leste. While many of the challenges faced are not sector-specific, well-reasoned government industrial policy can support the development of new sectors. By focusing on sectors which have a high chance of success, are relatively labor-intensive and have good growth potential, government and other actors can help the private sector to grow. However, given the low level of development now, such formal sectors are likely to only develop critical mass over the medium term, and as other key constraints outlined in the SCD are addressed. Economic strategies should also be sensitive to creating productive opportunities for youths and women, taking into account the trade-offs the latter face between household responsibilities and their potential to contribute to the workforce.

Strengthening the legal foundations of a market economy: Evidence shows business growth and the development of formal sectors are hindered by the lack of basic elements of commercial law and related institutions. Addressing these constraints will enable a more competitive, vibrant national business environment, and in turn improve the conditions for increased business creation and investment, key to improving prospects for growth and job-creation. Such a reform is critical to extending access to more secure rights to a larger group of people via the justice system, and by doing so, increasing security of property, contracts and access to finance beyond the small elite group of actors who have security through their position in society alone.

Maintaining an appropriate macroeconomic and exchange rate framework: The US dollar has served Timor-Leste well over the past 15 years, helping to ensure economic stability and facilitating the post-conflict transition. At present, use of the US dollar is likely to be contributing to reduced international competitiveness and over time, the country may benefit from considering alternative exchange rate mechanisms which better reflect the domestic conditions relative to major trading partners, such as perhaps a fixed basket peg currency arrangement. However, this policy area should be carefully considered, as it carries high risks if not effectively managed, and is expected to have only a medium impact on the twin goals if successful.

Increasing productivity in agriculture, fisheries and forestry: While Dili is growing, the majority of people, and especially the poor, still live in rural areas and will continue to be rural-based in the near future. It is therefore critical that to address poverty, economic interventions are effective in supporting the agricultural, forestry and fishing sector on which the poor rely. While there are a number of challenges presented by the natural environment – mountainous poor soil in much of the country and limited reef for shallow water fishing – a range of second-best options and support services can work effectively in the context. The focus should be primarily on improving productivity and processing of food and other marketable products, diversification and improvements in local food availability for rural households, and secondarily on facilitating the development of urban or export markets where they are viable and accessible.

Developing multi-purpose, appropriate and resilient connective infrastructure: The deficit of infrastructure has been recognized as a government priority for some years and while progress has been made, there continue to be gaps in key productivity enhancing areas such as international aviation, ICT connectivity and a complete national road network. Instead, the government is increasingly focusing on sector-specific infrastructure and duplicate and regional ports and airports which are less likely to yield a social return, especially in the absence of critical connective infrastructure. In this area, a transparent and evidence-based approach to project prioritization should be developed. The development of key economic and connective infrastructure will strongly support both prospects for private sector job creation and access to social services, and will have a strong complementary impact on poverty reduction.

III. Sustainable Management, of Both the Natural Environment and Public Finances

Managing public finances carefully to avoid a damaging fiscal cliff: One of the highest risks to the country's development is fiscal shock if public funds are depleted while the government budget continues to be unsustainable. While the money is unlikely to run out within the next 10 years, such a fiscal cliff will become unavoidable without action in the next few years if an unsustainable downward asset dynamic becomes entrenched. Evidence indicates that even in a best-case scenario, the government would need to begin to develop improved domestic revenue mobilization capacity immediately and slowly scale up revenues as the economy develops. These reforms are essential to avoid a sharp drawback in public services which could exacerbate poverty and contribute to greater social conflict. The advantage is the evidence base for reforms is strong, and government already has a set of fiscal reforms underway which would be an effective means of beginning to address this risk.

Managing natural landscapes, seascapes and ecosystems as valuable, sustainable resources: Those sectors that have the most potential to support the twin goals in Timor-Leste, such as tourism, agriculture and fisheries, are all reliant on the preservation and sustainable use of natural resources and ecosystem services. Yet Timor-Leste has been suffering environmental degradation at an alarming rate, further deteriorating what were already fragile systems. A systematic approach is needed to recognize the value of these ecosystem services, both in terms of their current value and potential further utilization and to integrate these considerations in legislative frameworks, development programs and practice. Given the importance of agriculture, forestry and the sea for the livelihoods of the poor, averting this degradation and rebuilding systems will have a high impact on achieving the twin goals and decrease risks of social conflict. Small-scale sustainable land and marine-based utilization of the resources will be key to sustain community livelihoods, at the same time their conservation will generate potential for the emergence of eco-tourism industry in the medium term.

Improve national disaster risk monitoring and risk reduction capacity: Timor-Leste is likely to experience relatively severe weather variation, prevalence of extreme weather events and sea-level rise as a result of climate change. It already experiences frequent high winds, drought and flood, and while its vulnerability to natural disaster is not extraordinarily high, a very low level of coping capacity and risk mitigation means that these weather events have a much greater negative impact on people than in most other countries, including on the natural resource base to support agricultural activities. Measures to support disaster risk reduction and improved coping capacity would have a significant positive impact on the twin goals over time. It is also important to point out the strong complementarities that support disaster risk reduction arising from other priorities identified, with for instance, improved food security, reduced malnutrition, scaled up social protection and more resilient connectivity infrastructure all being strongly supportive of improved capacity to cope with disasters and severe weather events



Image Credit: João Galamba

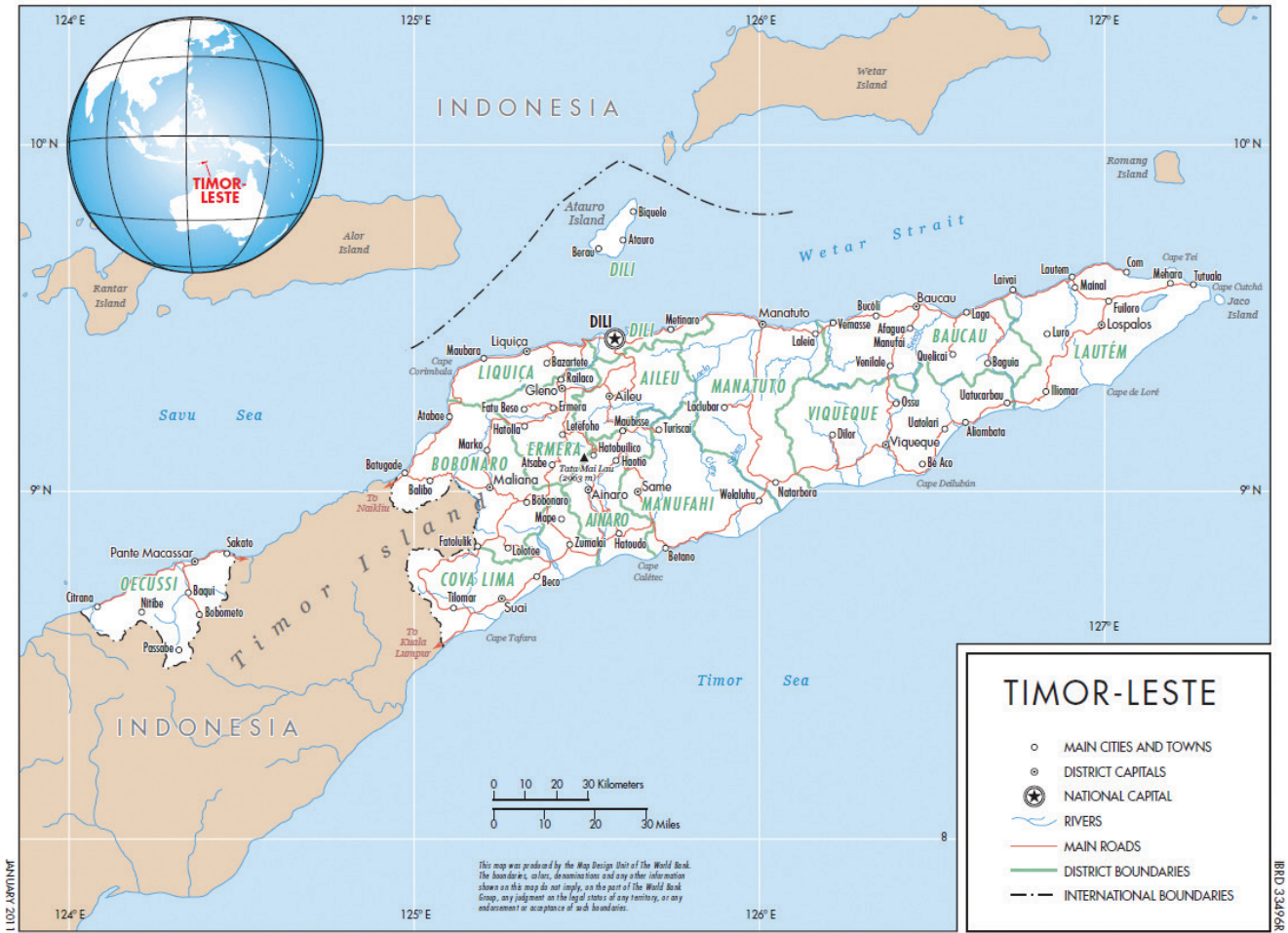
ANNEX 1:

MACROECONOMIC INDICATORS AT A GLANCE

| | 2001 | 2006 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|-------|-------|--------|--------|--------|--------|--------|
| Real sector | (annual percentage change, constant prices, unless stated) | | | | | | | |
| Non-oil GDP growth | 16.3 | -4.7 | 7.7 | 5.5 | 2.5 | 4.1 | 4.0 | 5.3 |
| Total consumption expenditure | 23.7 | 5.1 | -4.1 | 0.3 | -5.9 | 8.5 | 1.6 | 2.9 |
| of which private consumption expenditure | 12.9 | -11.5 | -5.1 | 7.1 | 3.0 | 6.0 | 2.9 | 6.0 |
| Gross fixed capital formation | 0.8 | -27.4 | 69.3 | -13.6 | -21.5 | 6.0 | -3.6 | 16.0 |
| of which private investment | 8.0 | -58.0 | -1.4 | 14.8 | 9.6 | 2.5 | -1.2 | 6.4 |
| Exports of goods and services (US \$ million) | 63.0 | 51.3 | 89.3 | 116.9 | 93.6 | 71.3 | 50.5 | 58.2 |
| Imports of goods and services (US \$ million) | 1189.3 | 407 | 1,400 | 1,406 | 1,030 | 1,132 | 904 | 933 |
| CPI inflation, annual average | ... | 5.2 | 13.2 | 10.9 | 9.5 | 0.7 | 0.6 | 1.3 |
| External sector | (Percentage of non-oil GDP, unless stated) | | | | | | | |
| Current account balance | -25.1 | 162.9 | 261.6 | 193.2 | 141.3 | 71.1 | 31.5 | -17.7 |
| Exports of goods and services | 8.1 | 9.6 | 9.2 | 10.4 | 6.6 | 5.1 | 3.1 | 3.4 |
| Imports of goods and services | 159.0 | 89.3 | 132.4 | 117.8 | 72.8 | 77.8 | 56.2 | 54.8 |
| Foreign direct investment, inward (US \$ million) | ... | 8.5 | 47.1 | 38.5 | 49.6 | 49.3 | 43.0 | 5.5 |
| NEER Index | ... | ... | 96.2 | 99.7 | 104.6 | 112.0 | 124.6 | 125.8 |
| REER Index | ... | ... | 102.8 | 113.5 | 124.8 | 129.4 | 140.6 | 137.4 |
| Government sector | (percentage of non-oil GDP) | | | | | | | |
| Overall budget balance (-ve indicates a deficit) | ... | 123.6 | 232.8 | 238.4 | 210.3 | 79.0 | -13.2 | -31.9 |
| Total Revenue | 100.4 | 183.2 | 364.1 | 364.1 | 305.1 | 189.6 | 80.1 | 72.3 |
| of which domestic revenue | 3.3 | 9.0 | 10.1 | 11.1 | 10.7 | 11.5 | 10.6 | 12.7 |
| Total expenditure | ... | 59.6 | 131.3 | 125.7 | 94.8 | 110.5 | 93.3 | 104.2 |
| Current | ... | 20.9 | 47.4 | 59.4 | 51.6 | 62.8 | 64.3 | 60.4 |
| Capital (including donor expenditure) | ... | 38.8 | 83.8 | 66.3 | 43.2 | 47.8 | 29.1 | 43.8 |
| Monetary and Financial sector | | | | | | | | |
| Credit to private sector (% change) | ... | 5.2 | 21.1 | 20.5 | 13.6 | 5.5 | 10.5 | -1.8 |
| Interest rate spread (percentage points) | ... | 16.0 | 11.6 | 11.7 | 11.9 | 12.6 | 13.3 | 12.5 |
| Memorandum items | (US\$ million, unless stated) | | | | | | | |
| Non-oil GDP, Current | 473 | 456 | 1058 | 1194 | 1415 | 1454 | 1609 | 1702 |
| Total GDP, Current | 518 | 2,658 | 5,682 | 6,671 | 5,650 | 4,045 | 3,104 | 2,521 |
| GNI, current | 661 | 1,303 | 4,596 | 4,350 | 4,170 | 3,345 | 2,805 | 2,278 |
| GDP per capita, current | 547 | 457 | 944 | 1,039 | 1,199 | 1,200 | 1,292 | 1,338 |
| Oil production (barrel oil eqv, million) | ... | 65 | 68.8 | 74.1 | 65.4 | 44.9 | 48.4 | 48.8 |
| Petroleum Fund closing balance | ... | 1,073 | 9,310 | 11,775 | 14,952 | 16,539 | 16,218 | 15,844 |
| ESI | ... | ... | 734 | 665 | 730 | 632 | 639 | 545 |
| ESI Adjusted balance (% of non-oil GDP) | ... | ... | -25.0 | -37.6 | -14.2 | -36.9 | -33.0 | -51.1 |
| Debt Stock | ... | ... | ... | ... | 6 | 22 | 46 | 77 |

ANNEX 2:

MAP OF TIMOR-LESTE



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