
Labor Market issues in Timor-Leste

Current state, prospects and challenges

May, 2013

Social Protection Unit

Human Development Sector Unit

East Asia and Pacific Region



Document of the World Bank

TABLE OF CONTENTS

EXECUTIVE SUMMARY	iii
BACKGROUND.....	vi
1. THE LABOR FORCE IN TIMOR-LESTE: CURRENT STATE, PROSPECTS AND CHALLENGES.....	1
Labor structure.....	1
2. HUMAN INFRASTRUCTURE.....	6
Education and skills.....	6
3. WAGES.....	9
4. KEY GROWTH SECTOR: AGRICULTURE	14
Agricultural productivity – Current situation and prospects.....	14
5. BUSINESS ENVIRONMENT	18
Conclusions	19

TABLES

Table 1. Labor force statistics – Timor-Leste vs. S. E. Asia & the Pacific	2
Table 2. Composition of employment.....	3
Table 3. Youth labor statistics.....	4
Table 4. Youth Labor Force Participation Rates, 2011	5
Table 5. Minimum wages: Levels, and as % of GDP/capita (select countries)	11
Table 6. Status in employment: Rural sector*	16
Table 7. Main activity of working-age population in rural areas.....	17

FIGURES

Figure 1. Age distribution of household population of Timor-Leste.....	vii
Figure 2. Projected percentage change in some subpopulations from 2005 to 2015, 2025, and 2050, Timor-Leste.....	viii
Figure 3. Sectoral shares (%) of employment.....	1
Figure 4. Dependency ratios, 2010	4
Figure 5. Budget Allocations for Education and Health (%).....	7
Figure 6. Minimum wages as % of average wages, 2008: Select countries.....	10
Figure 7. Sectoral shares of employment and output, 2010.....	15

ACRONYMS AND ABBREVIATIONS

BMI	Body Mass Index
DHS	Demographic and Health Survey
EGRA	Early Grade Reading Assessment
EGMA	Early Grade Mathematics Assessment
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
GER	Gross Enrollment Rate
IMF	International Monetary Fund
ILO	International Labor Organization
IVA	Industry Value Added
MoE	Ministry of Education
MoF	Ministry of Finance
LFS	Labor Force Survey
LFPR	Labor force participation rate
OECD	Organization for Economic Cooperation and Development
PF	Petroleum Fund
S.E Asia	South East Asia
USAID	United States Agency for International Development
UNMIT	United Nations Integrated Mission in Timor-Leste
UNTAET	United Nations Transitional Administration in East Timor
USD	United States Dollar

ACKNOWLEDGEMENTS

This note was funded by the Social Protection TF095667 and was prepared by Nithin Umapathi (Task Leader, EASHS) and Malathi Velamuri (Consultant) under the overall guidance of Xiaoqing Yu (Sector Director, EASHD). At various stages this study benefitted from extensive comments from Pamela Dale (SP Specialist, EASHS) and Lena Lepuschuetz (JPA, EASHS). This note benefited from helpful discussions with Hans Anand Beck (Senior Economist, PREM), Fabrizio Bresciani (Senior Agriculture Economist, EASIS), Phillip Young (Agriculture Consultant, EASIS) and Michele Zini (Economist, EASHS). Many thanks to Maitreyi Das who peer reviewed the report. The team was assisted by Maya Razat in formatting. The findings, interpretations, and conclusions expressed herein do not necessarily reflect the views of the Board of Executive Directors of the World Bank or the Government they represent.

EXECUTIVE SUMMARY

Among the different developmental priorities in Timor-Leste a policy focus on the jobs agenda for improving living standards and social stability is crucial. Currently, over 44% of the population below is 15 years of age. This has two critical consequences for the country. Firstly, it implies a high dependency ratio; currently, there are 96 people outside the working-age range for every 100 people in the working-age range. This places tremendous burden on formal and informal safety nets. Secondly, this means that 470,000 individuals will be ready to enter the labor market anytime over the next 4 to 18 years. This represents a huge demographic opportunity, and a serious challenge in terms of building the requisite capacity to absorb all these future workers into productive employment.

While unemployment rates are very low, large-scale underemployment in both rural and urban sectors is pervasive. The majority of workers are in informal or vulnerable employment and only 29% of employment is wage-based. Timor-Leste's employment-to-population rates are significantly smaller than the corresponding rates for South East Asia and Pacific. The discrepancy is particularly notable with respect to female employment rates. A massive demographic bulge, low employment and labor force participation rates imply that the effective dependency rate is much higher than 96%. Thus, employment opportunities have to increase much faster, both to engage greater numbers of the current working-age population as well as to absorb the rapidly growing population. The risks and consequences of a large number of unemployed youth in fragile environments are severe as the experiences of the Middle East, Uganda and Rwanda bear testimony to.

This labor market issues note takes a broad descriptive stock of labor demand and supply challenges, sources of growth and government's agenda in Timor-Leste. It suggests three major policy priority areas: 1) current status of human capital in the country and prospects for building skilled and healthy workforce 2) wage structure and policies and 3) agriculture as the key sector for employment growth.

A first priority towards building a skilled, domestic workforce for the future is to enable children to reach youth in good health and with adequate education. Timor-Leste is lagging in a range of

social and economic indicators linked to the Millennium Development Goals. While Timor-Leste's policy of providing free primary and secondary schooling appears to be bearing some encouraging results in enrolment rates, the current quality of education remains poor.

The review of wages in Timor-Leste shows that average wages are too high relative to productivity (and skills), limiting labor demand. At USD 174 per month (LFS, 2010), average wages in paid employment seem remarkably high, representing 95% of the GDP *per employed person*. The benefits of high wages in the formal sector accrue to very few workers, predominantly in the public sector. The United Nations Transitional Administration in East Timor (UNTAET) set an informal minimum wage for the country, of USD 85 per month in 2009. This level is too high, in terms of average wages as well as relative to the GDP per capita. Importantly, it does not protect low-income workers, since only 29% of the workforce is in wage-based employment. The government reviewed the minimum wage policy in 2012 and increased the new minimum wage to USD 115 per month, to be paid 13 times a year.

A cross-country comparison of minimum wages to GDP per capita reveals that Timor-Leste is an outlier; Timor-Leste's minimum wage is 207% of GDP per capita, relative to that of comparison countries with ratios between 18% and 37%. High minimum wages would adversely affect employment, with disproportionate consequences for vulnerable groups like the youth and women workers, whose unemployment rates are already significantly higher in Timor-Leste, relative to other developing countries. It would also severely hamper the ability of the private sector, which is already very small, to expand and gainfully employ a growing workforce. Moreover, it would render Timor-Leste uncompetitive in international markets, relative to its wealthier neighbors like Vietnam and Cambodia.

While a truly inclusive national social security system with appropriate levels of benefits is desirable, the current legislation on minimum wage and plans to expand the application of the current civil service pension law to private employers is likely to strain the environment for jobs and provide protection to a small number of formal sector workers. Thus, the importance of getting the social protection policies and labor regulation right cannot be over-emphasized.

Agriculture is the mainstay of the economy, contributing 28% to the GDP, 90% of exports (mainly coffee) and over 50% of total employment. Subsistence farming is the main source of livelihood for 75% of the population. But Timor-Leste ranks very high on the global hunger index. Productivity in agriculture is very low; agriculture employs approximately 50% of the labor force but produces a mere 20% of output, and is clearly far less productive than the industry or services sectors or compared to other countries in the region. Yet, agriculture is the major and most certain path to food security, economic diversification, and job growth.

The manufacturing and service sectors are too small to absorb the burgeoning workforce. A stronger focus on agriculture has the potential to not only to absorb the rapidly growing population but to also bind the social fabric of the nation together by strengthening food security and limiting Timor-Leste's exposure to volatility in world commodity. Until a viable private sector emerges in the urban areas, only the agricultural sector has the potential to employ the large numbers of current and potential workers in the medium term.

Timor-Leste requires large-scale foreign investment, given its limited capacity to generate domestic capital. Thus, policies to induce an investment-friendly climate in order to stimulate large inflows of foreign capital and broaden the industrial base would help foster a viable urban private sector that will create employment opportunities for the urban population. Currently, Timor-Leste provides weak protection to foreign investors; it scores very low on the investor protection index, relative to some other developing countries. These factors raise the transactions costs of doing business, and discourage business activity.

The report presents a series of key facts supporting the above mentioned employment binding constraints and briefly considers some of the related policy implications with at least two aims, first to serve as an anchor for a multi-sectoral discussion on prioritizing technical assistance to the Timor-Leste government and secondly to discuss with the government how these facts will affect their policy options.

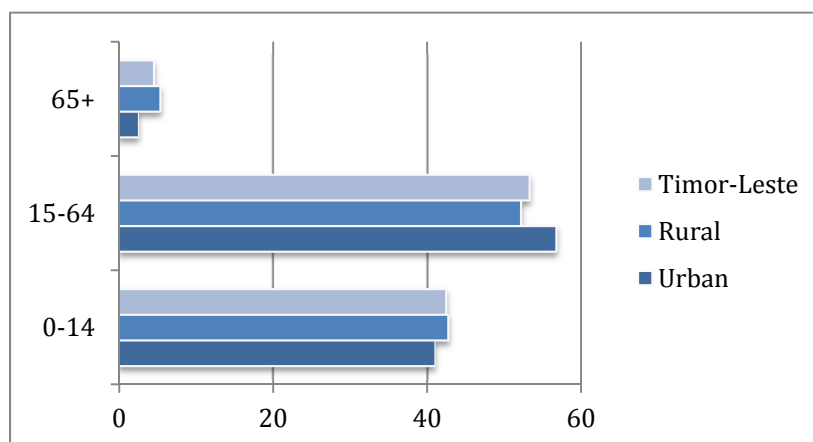
BACKGROUND

Among the different developmental priorities in Timor-Leste a concerted focus on the jobs agenda for improving living standards and social stability is critical. The country has made substantial progress toward restoring political stability and building institutional capability since 2007. However, Timor-Leste faces an appreciable risk that in the coming years, growth in the workforce will far outpace growth in employment. For employment growth to keep pace with population growth, the country needs to address the difficult challenges of low productivity, an underdeveloped agriculture, developing the non-oil private sector, and improving the capacity of administrative and public sector institutions.

A meaningful discussion about a jobs agenda requires a strong country context informed by its level of income, demography, geography, economic structure and other key features of the socio-economic landscape. The purpose of this note is to broadly identify the set of issues that affect the employment situation in Timor-Leste. The note takes stock of the current situation using the most up-to-date data available and an extensive literature review to examine core labor market indicators and constraints spanning agriculture, skills, demographic changes and labor market regulation. It aims to stimulate cross-sectoral discussions within the Bank and government consultations to engender support for policy priorities.

Timor-Leste is a unique country with the majority of the population below the age of 21 (Census, 2010). It also has one of the highest birth rates in the world (2.41% population growth) with over 44% of the population below 15 years of age (Timor-Leste Census, 2010). The challenges of employing this rapidly expanding urbanizing population are also immense. This means that over 470,000 individuals are likely to enter the labor market anytime over the next 4 to 18 years. While this demographic dividend is expected to continue until 2030 (World Bank, 2012) representing a potentially huge demographic window of opportunity for the country, it also remains a serious challenge in terms of building the requisite capacity to absorb all these future workers into the job market.

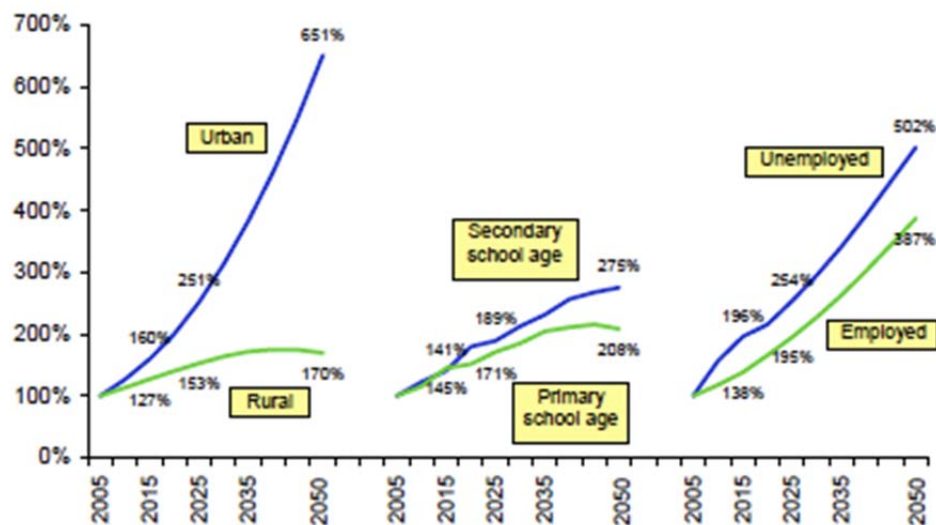
Figure 1. Age distribution of household population of Timor-Leste



Source: Timor-Leste LFS, 2010

Job creation has to increase much faster, both to engage greater numbers of the current working-age population as well as to absorb the rapidly growing population. Projections indicate that even if the number of available jobs doubles in a decade, the number of unemployed individuals will increase by 150 percent. According to demographic projections based on a moderate growth scenario, the population of Timor-Leste would grow by 80% in 2025, relative to its 2005 level. The population will not age considerably by then, with 40% still younger than age 15. The urban population will grow rapidly, and by 2025, will be 2.5 times its level in 2005. The rural population will grow more slowly, but is still expected to increase 50% by 2025 (“Policy note on population growth and its implications”, World Bank, 2008).

Figure 2. Projected percentage change in some subpopulations from 2005 to 2015, 2025, and 2050, Timor-Leste



Source: Policy note on population growth and its implications in Timor-Leste, World Bank, 2008

These challenges require a multi-pronged approach to address the objective of balanced and sustainable growth - policies that will promote ‘labor-intensive’ growth, and raise the incomes of the poorest individuals. As witnessed by recent events in the Middle-East and from Uganda and Rwanda, the consequences of not addressing youth idleness can be staggering. Against this background the note summarizes directions for discussions on social responses to several pivotal challenges faced by Timor-Leste.

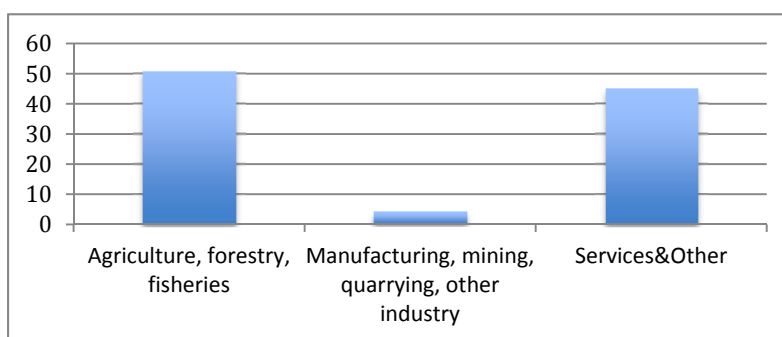
The rest of the note is organized as follows: Section 0 begins with a brief description of Timor-Leste’s labor structure, followed by a summary of the current status of human capital (education, skills and health) in the country, and the prospects and challenges in building a skilled and healthy workforce. Section 3 summarizes the wage policies in the country using comparisons with other countries where relevant. Section 4 makes the case for agriculture as the key sector that will contribute to future growth and prosperity. The business environment plays a big role in the creation of jobs in the private sector. Section 5 discusses the factors that currently hinder the growth of a sizable non-oil private sector in Timor-Leste.

1. THE LABOR FORCE IN TIMOR-LESTE: CURRENT STATE, PROSPECTS AND CHALLENGES

Labor structure

Timor-Leste, like most low-income countries, is characterized by a dual economy, in that a non-agricultural sector (industry and services) coexists with a sizable agricultural sector.

Figure 3. Sectoral shares (%) of employment



Source: LFS 2010.

The labor market comprises three distinct sectors: (a) a large rural (agricultural) sector that is prone to a marked seasonal pattern of employment, and is characterized by a significant share of self-employed persons and unpaid family workers; (b) a formal urban sector, consisting predominantly of micro and small enterprises, and larger state-owned enterprises, producing both tradable and non-tradable goods; and (c) a distinct informal urban sector, that has emerged largely as a result of accelerated rural-urban migration and the labor surplus that this migration has generated in the cities, particularly in Dili, Maliana and Baucau.

Table 1. Labor force statistics – Timor-Leste vs. S. E. Asia & the Pacific

(figures for S.E.Asia and the Pacific in parentheses)

	Males	Females	Both sexes
Emp/Pop Ratio (%)	54.4 (77.5)	25.7 (54.6)	40.2 (65.9)
Unemp rate (%)	3.1 (5.2)	4.6 (5.2)	3.6 (5.2)
LFPR (%)	56.0 (81.7)	27.0 (57.6)	41.6 (69.5)

Source: Timor-Leste LFS, 2010; Global Economic Trends, 2011, ILO

In Timor-Leste, 40% of the working-age population is employed, a rate significantly smaller than the corresponding rate of over 65% for the South East Asia (SE Asia) and Pacific region. The male employment rate is twice as high as that of females, with each of these rates again smaller than the corresponding rates of 78% and 55% for the region, respectively. Labor force participation rates (LFPR) are again significantly lower in Timor-Leste, relative to the SE Asia and Pacific region. The discrepancy in the female LFPRs is particularly notable. This implies that the actual dependency ratio (the number of dependents to the number of those in employment among the working-age population) is a lot higher than the 96 (Figure 4), that is based on the shares of the non-working age to the working-age populations.

While unemployment rates are very low in Timor-Leste, this is a consequence of large-scale underemployment in both rural and urban sectors; in Timor-Leste 29% of employment is wage-based compared to 43% in the East Asia and Pacific region (WDR, 2012). For developing countries like Timor-Leste, the large share of informal employment and ‘vulnerable’ employment are more useful indicators of the weakness of the labor market than the size of the unemployed.

Table 2. Composition of employment

(% of those employed in each category)

	Informal employment¹	Vulnerable employment²	Inactivity rate (%)³
Timor-Leste	17.8	69.9	57.4
Urban	20.0	42.1	57.7
Rural	16.9	80.3	58.5
Males	13.5	65.9	43.0
Females	26.5	78.5	72.2

Source: Timor-Leste LFS, 2010

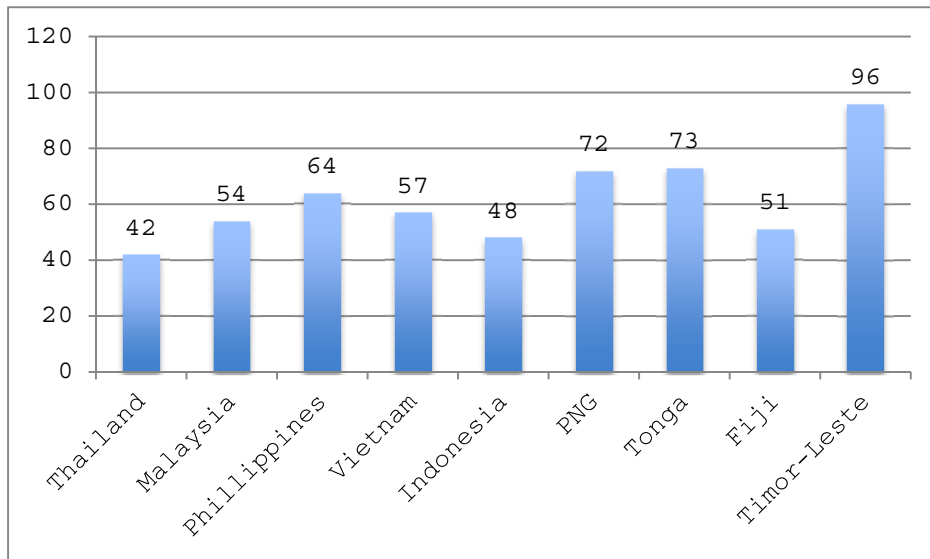
Timor-Leste has a very high dependency ratio of 96, relative to other countries in the region. This is a consequence of the very high share of people below 15 years of age; there are 96 people outside the working-age range (below 15 and over 64) for every 100 people in the working-age range. This implies a huge burden on the current working-age populace, and places tremendous pressure on social protection policies.

¹ In the Timor-Leste Labor Force Survey, 2010, individuals are classified as working in the informal sector in either their main or secondary job if the following 2 criteria are both satisfied: (a) fewer than 5 persons work at their place of work; and (b) either their status in employment is 'contributing family worker' or the person has a different status in employment and the place where they work is not registered with the Ministry of Justice or the Ministry of Tourism, Commerce and Industry. Also, because of the difficulty of defining informal sector activities in the agricultural sector, the informal sector has been defined only in respect of non-agriculture.

² Among those employed, those in vulnerable employment include own-account workers or contributing family workers. These people are unlikely to have any guaranteed salary each month, and will probably not have any job security.

³ The currently inactive comprise all those who are studying or doing housework, as well as others such as the elderly and disabled who are not available for work. It also includes selected marginal groups such as: those who thought they had a job or business but have not been paid during their absence; self-employed seasonal workers; wage employees who cannot be sure of returning to work within 6 months, and those not working for technical or economic reasons who cannot be sure of returning to work within 3 months.

Figure 4. Dependency ratios, 2010



Source: World development indicators, World Bank

Timor Leste’s labor force statistics for youth are particularly troubling. Youth have low labor force participation rates, low employment rates and high unemployment rates. To gain a perspective on how problematic these numbers are, we compare Timor-Leste’s youth labor statistics with those of other regions.

Table 3. Youth labor statistics

Age-group	LFPR (%)	Emp/Pop ratio	Unemp rate
15-19	6.0	5.3	10.7
20-24	25.0	21.7	13.3
25-29	47.4	43.7	7.9

Source: TL LFS, 2010

The country’s youth labor force participation rates are among the lowest globally, standing at around 17 percent and 10 percent among 15-24 year-old men and women respectively, relative to the corresponding global averages of 56 percent and 41 percent. They compare even worse against the regional averages for South-East Asia and the Pacific. The large number of youth in

the Timor-Leste will continue to add pressure on the labor market over the coming years. Tackling the youth unemployment challenge will require a dual focus on creating employment opportunities, and ensuring youth have the right skills for the jobs being created.

Table 4. Youth Labor Force Participation Rates, 2011

	<i>Males</i>	<i>Females</i>
World	56.3	40.7
Developed Economies & EU	49.7	45.6
Central& S.E. European (non-EU) and CIS	49.8	34.6
East Asia	59	61.6
South-East Asia & Pacific	59.3	45.1
<i>of which: Timor-Leste*</i>	17.2	9.9
South Asia	57.6	23.4
Latin America & Caribbean	62.6	42.7
Middle East	46.7	13.1
North Africa	47.0	19.6
Sub-Saharan Africa	55.9	51.4

* for 2010

Source: Global Employment Trends for Youth 2012, ILO, and TL LFS 2010

The country’s reliance on expatriate workers, who constitute a significant share of the urban workforce, is an additional challenge. International agencies operating in Timor-Leste employ a large number of foreigners. The number of foreign advisors now in the government is also significant. “Increasingly, government officials say their staffs are becoming demoralized by the number of expatriates in their organizations, signaling that government staff really cannot do anything by themselves.” (Dennis de Tray, “Bridging state capacity gaps in situations of fragility”, OECD, 2009).

2. HUMAN INFRASTRUCTURE

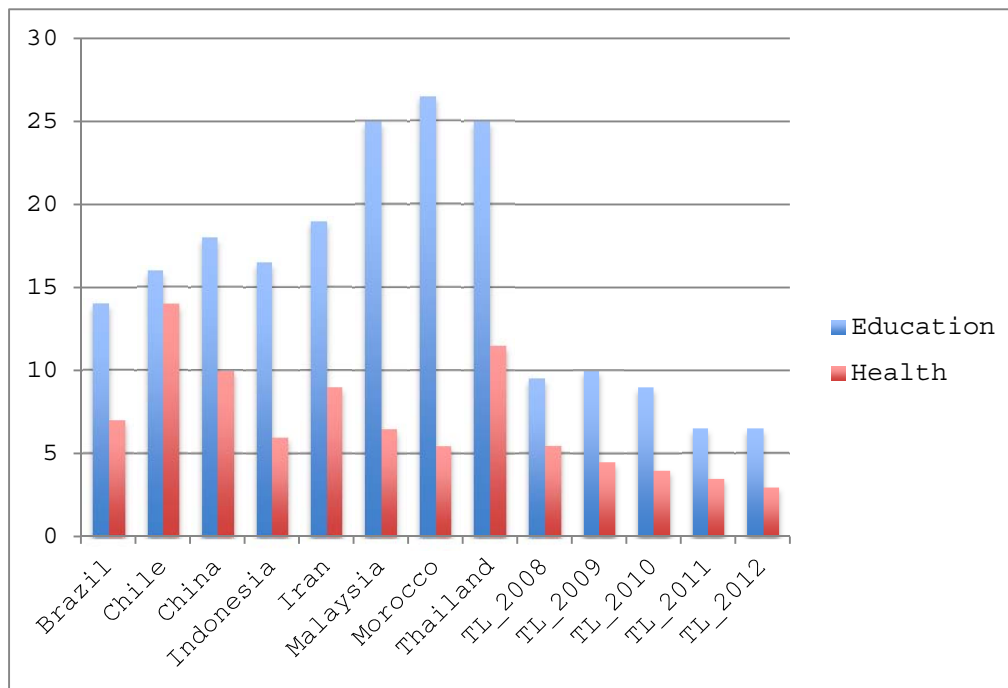
Timor-Leste is lagging in a range of social and economic indicators linked to the United Nations' Millennium Development Goals (MDGs).

Education and skills

Around 40% of the working-age population has no formal educational attainment (Timor-Leste LFS, 2010). The education infrastructure was destroyed in the violent conflict following independence. Rural areas have no access to higher education; a lot of rural-urban migration is driven by higher education, including university education in Dili, and secondary education available primarily in urban areas. Only about 50% of school-aged children complete primary school and achievement levels are very low. On average it takes a child nearly 12 years to finish his/her primary education, presumably due to early childhood developmental disadvantages manifesting through a very high grade repetition rate (16% according to the UN Development Assistance Framework (UNDAF) 2009-2013 for Timor-Leste).

A first priority towards building a skilled, domestic workforce for the future is to enable children to reach youth in good health and with adequate education. International research on development of human capabilities has underscored the importance of investments in early childhood development particularly targeted towards disadvantaged children and their families as such investments are not easily remediable over the lifecycle (Heckman, 2011). Yet, current spending on education and health appears inadequate to achieve this objective. The following graph reveals that budget outlays for education and health are much smaller than those of other developing countries.

Figure 5. Budget Allocations for Education and Health (%)



Source: UNDP Human Development Reports, and Timor-Leste State Budgets

Over 45% of women report having no educational attainment. Low educational attainment of mothers puts pressure on the education system to reach out to this vulnerable group through its non-formal education programs. It also makes the current formal school system critical in educating the next generation since many children from rural households (with the predominant share of women with no formal education) do not have a conducive home environment for learning (Education Sector Issues Paper, World Bank, 2012). Increasing access to education is also an effective channel for attacking poverty.

Timor-Leste’s policy of providing free primary and secondary schooling appears to be bearing some encouraging results, with enrolment rates from basic to secondary education increasing by 38% between 2002 and 2010, and the number of teachers more than doubling over the same period. These trends have led to an improvement in the student-teacher ratio. Currently, nearly 70% of the student body is enrolled in basic education, with 62% of the teaching force assigned to this level (Education sector issues paper, World Bank, 2012). Timor-Leste’s tertiary education sector is expanding fast. Over 27,000 students were enrolled in tertiary education

institutions in 2011 (Education sector issues paper, World Bank, 2012). But the current quality of education remains poor, as measured by various criteria (student performance on standardized assessment tests, availability of textbooks etc).

Skills learnt in educational institutions appear to map poorly into what is required in the workplace. Existing 3-year formal training courses in both post-school and technical high school settings are poorly valued by employers but the unit costs of provision are high, and have significant budget implications (Enterprises, workers and skills in urban Timor-Leste, World Bank, 2005). Urban firms identify supply-side factors as major barriers to development of a more skilled workforce. Lack of funding is a common barrier to acquiring skills. However, in the case of manual and service workers, and less so for technical/professional and administrative workers, there also appears to a serious shortage of suitable courses and training organizations (Enterprises, workers and skills in urban Timor-Leste, World Bank, 2005).

3. WAGES

The review of wages in Timor-Leste shows that average wages are too high relative to productivity (and skills), limiting labor demand. At USD 174 per month, average wages in paid employment seem remarkably high, representing 95% of the GDP *per employed person*.⁴ If non-wage benefits are included, the cost of employment to GDP per employee is likely to be 100% or even more, suggesting that the value of all that is being produced by workers is perhaps just about sufficient to compensate them, and is not generating any surplus.

The benefits of high wages in the formal sector accrue to very few and have not helped to overcome inequality. According to Timor-Leste Social Survey estimates, in 2007, about half of the Timorese population lived below the basic needs poverty line of USD 0.88 per person per day (Timor-Leste: Poverty in a young nation, 2008, World Bank). This clearly indicates that only a small fraction of the working age population in Timor-Leste contributes to the high average wage of USD 174. Thus, the distribution of incomes in the country is highly dispersed.

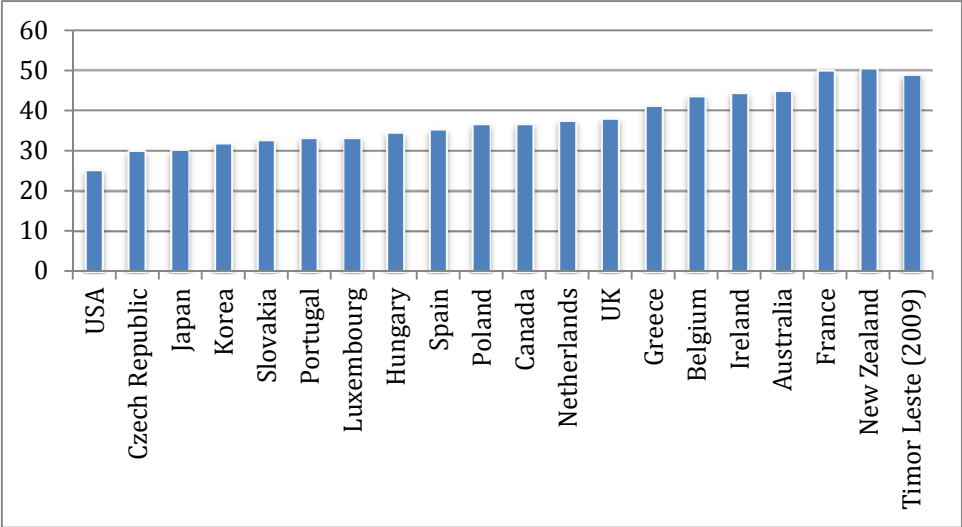
High minimum wages do not adequately protect low-income workers. A concern about not allowing an individual's well-being to fall below a certain minimum level determines a country's minimum wage policy. Thus, in most countries, the minimum wage is set at a level close to the estimated poverty line. The minimum wage in Timor-Leste was informally set at USD 85 per month in 2009, by the United Nations Transitional Administration in East Timor (UNTAET).⁵ While this was not legally binding, it had a 'lighthouse' effect and set the benchmark for wages in the formal sector, particularly in the civil service. In 2007, the basic needs poverty line was estimated at USD 0.88 per person per day, representing (in December 2007 prices), the typical cost of attaining 2100 calories per person per day and meeting basic non-food needs (Timor-Leste: Poverty in a young nation, 2008, World Bank). This is equivalent to USD 26.4 per month in 2007. Even at an inflation of 10% per year, the living wage would only be USD 32 per month in 2009, about 38% of the informal minimum wage.

⁴ Given that an unusually high share of TL's population is outside the working-age category, calculating the proportion of average wages to the GDP *per capita* seems inappropriate. Therefore, the GDP per employed person has been used.

⁵ For a comprehensive review, assessment and policy recommendations on the minimum wage policy in 2004, see Das (2004).

The informal minimum wage accounted for 49% of average wages in Timor-Leste in 2009. This placed Timor-Leste's relative minimum wage higher than that of most European countries, Canada and the U.S.

Figure 6. Minimum wages as % of average wages, 2008: Select countries



Source: Schulten (2010), ILO

The government reviewed the minimum wage policy in 2012 and set a new minimum wage of USD 115 per month, to be paid 13 times a year. A cross-country comparison of minimum wages to GDP per capita reveals that Timor-Leste is an outlier; Timor-Leste’s minimum wage is 207% of GDP per capita, relative to that of comparison countries with ratios between 18% and 37%.

Table 5. Minimum wages: Levels, and as % of GDP/capita (select countries)

Country	Minimum wage	Gross annual wage (Intl. dollars) ⁶	% of 2009 GDP/capita
Timor-Leste	USD 115/month, paid 13 times a year	6,826	207
Indonesia	500,000 rupiah/month in East Java	1,027	25
Malaysia	None nationally; 350 per month for plantation workers; raised to 700 ringgit by productivity incentives and bonuses	4,735	34
Cambodia	USD 61/month in garment and footwear industry	672	34
Thailand	Ranges from 159 Thai baht to 215 baht per day, depending on the cost of living in various provinces; set by provincial tripartite wage committees that sometimes include only employer representatives	2,293	28
Vietnam	2,000,000 Vietnamese Dong per month in the urban districts of Hanoi and Ho Chi Minh City; 1,780,000 VND per month in the suburban districts of Hanoi, Ho Chi Minh City, and several other industrial districts and towns; 1,550,000 VND per month in other major towns and districts and 1,400,000 VND per month elsewhere	1,002	34
Brazil	Approx. USD 360/month, paid 13 times a year	4,680	37
Dominican Republic	95 pesos/day for cane workers in sugar industry	1,491	18

Source: World Economic Outlook Database, October 2010, and Wikipedia

⁶ A purchasing power parity (PPP) conversion rate from 2009 - obtained from the International Monetary Fund (IMF)'s World Economic Outlook Database, October 2010 Edition - was used to convert the annual wage from national currency to international dollars.

High minimum wages would adversely affect employment, with disproportionate consequences for youth and female employment. Based on a 2004 survey of urban enterprises that were asked how they would be affected by a legal enforcement of the minimum wage of USD 85/month, 63% of informal firms and 40% of formal firms responded that it would adversely affect their decision to hire workers. A predominant share of firms that anticipated the adverse impact were owned by Timorese, and were not joint venture firms or those owned by foreigners (“Enterprises, workers and skills in urban Timor-Leste”, World Bank, 2005).

In the case of Indonesia, a 10% increase in the minimum wage is associated with 1.2 percentage point decline in industrial employment and 1 percentage point increase in agricultural employment. Other evidence from Indonesia also shows that an increase in the minimum wage reduced industrial employment, with a consequent expansion of the informal sector (Indonesia Jobs Report, 2012). A high minimum wage policy in Timor-Leste will undoubtedly choke private sector growth, if it is not already doing so. It will also increase rates of non-compliance. Such a policy will, as a consequence, increase the size of the informal sector, and have a greater impact on employment of women and youth who will tend to be pushed out of formal employment.

The high public sector wages and minimum wage are discouraging the development of a strong private sector. This is reflected in double-digit unemployment among nationals, as well as high underemployment in major economic sectors. The Harris-Todaro model of growth predicts that if the urban wage is fixed above the market-clearing level (due to institutional reasons such as minimum wage legislation or the presence of a trade union), this leads to urban unemployment. The government is the largest employer in Timor-Leste. The public sector employment to population ratio, at 3.6%, is high compared to international norms; it is the second highest in South-East Asia (after Malaysia).⁷ The wage and salary bill for civil servants in Timor-Leste is also high, relative to other countries in the region; as a percentage of GDP, it is between 25 to 50% higher than countries such as Fiji, Tonga, and Vanuatu; and two to four times higher than countries such as Solomon Islands, Laos and Cambodia. Consequently, the government should consider reducing the number of civil servants. This is necessary to reduce

⁷ According to a World Bank report (Timor-Leste Civil Service Review, 2011) the number of civil servants, excluding military and police, should be no more than 2.5% of the population.

government expenditures and excess withdrawals from the Petroleum Fund.⁸ The withdrawal of UNMIT at the end of 2012 is expected to cause a sharp increase in labor supply in the short-run, especially in Dili (“Economic impacts of UNMIT's withdrawal”, United Nations Integrated Mission in Timor-Leste, 2011). The urban labor market will not be able to quickly adapt to the labor supply shock generated by the withdrawal of international agencies.

⁸ According to an ILO assessment, the Timor-Leste government is expected to freeze recruitment of civil servants in 2012, and is not likely to create too many new jobs in 2013 either.

4. KEY GROWTH SECTOR: AGRICULTURE

Agriculture is the major and most certain path to food security, economic diversification, and job growth. Jobs have to increase much faster, both to engage greater numbers of the current working-age population as well as to absorb the rapidly growing population. The manufacturing and service sectors are too small to absorb this burgeoning workforce. Until a viable private sector emerges in the urban areas, only the agricultural sector has the potential to employ such large numbers in the medium term. Thus, no strategy for Timor-Leste's long-term development is feasible without due regard to agricultural development.

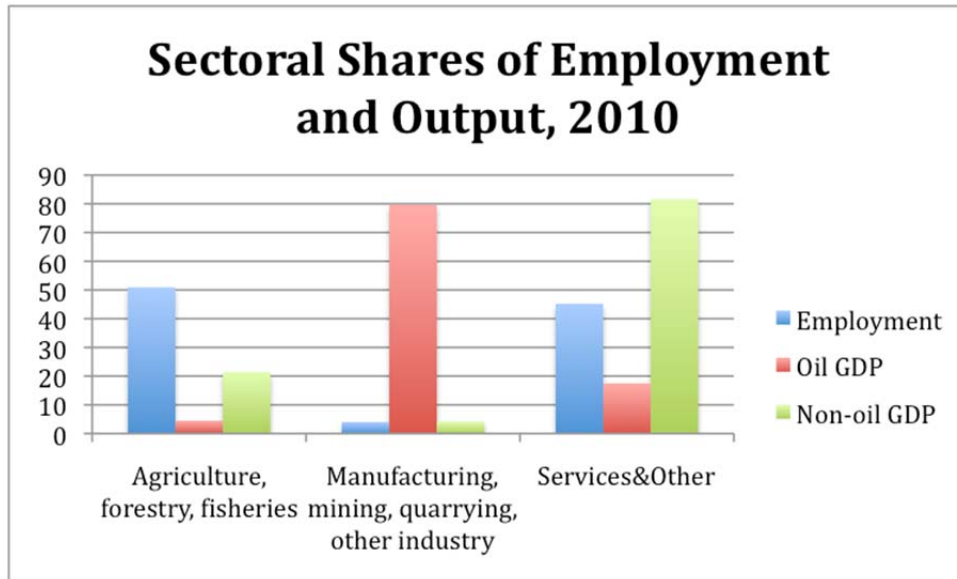
Agricultural productivity – Current situation and prospects

Productivity in agriculture is very low. Households typically farm the main staple crops - maize, cassava, rice – and some garden crops and livestock (chickens, pigs, goats, and cattle). The main cash crop is coffee for export; over one-quarter of Timor-Leste farming households engage in coffee production (USAID, 2008, “Timor-Leste Economic Recovery Assessment”).

One measure of this low productivity is the share of output in this sector, relative to employment. As displayed in Figure 9, agriculture employs approximately 50% of the labor force⁹ but produces a mere 20% of output, and is clearly far less productive than the industry or services sectors. This reflects the small-scale, subsistence nature of most farming in Timor-Leste.

⁹ In the labor force survey, a person is considered as employed if they did any work at all (paid or unpaid) during the reference period, which was taken as being the previous week (Monday to Sunday).

Figure 7. Sectoral shares of employment and output, 2010



Source: TL National Accounts 2004-'10 and LFS 2010.

Agriculture and employment

The agriculture sector is the mainstay of the economy, contributing 28% to the GDP, 90% of exports (mainly coffee) and over 50% of total employment. Subsistence farming is the main source of livelihood for 75% of the population. Over 51% of households report that their source of income is from agriculture and fishing (Timor-Leste LFS, 2010). Although agriculture and allied activities (forestry, livestock, and fishing) serve as the major activity for the majority of TL citizens, agricultural activity is seen largely as a personal survival strategy rather as the engine for sustained growth and development.

The rural sector has a complex set of labor transactions e.g. wage labor, labor exchanges, sharecropping and social obligations. There is a range of subsistence activities (farming, hunting and fishing) supplemented by limited cash earning activities such as selling farm produce, trading and wage employment. Of the 70,000 workers who are in wage employment in Timor-Leste, only 1,000 work in the agriculture sector (Timor-Leste LFS, 2010, Table 4.21). As a consequence, 98% of employment in agriculture is classified as 'vulnerable' employment (Timor-Leste LFS, 2010, Table 4.8).

Table 6. Status in employment: Rural sector*

Employee	Employer	Own-account Worker	Contributing family member	Total
1.8	36.2	58.0	89.2	50.9

*Includes agriculture, forestry, fisheries

One reason for the low productivity in agriculture is that the population under the age of 40 is predominantly in urban areas, leaving the older and presumably less productive workers in rural areas (Timor-Leste LFS, 2010, Table 2.1). This is reflected in the fact that a large share of the working-age population in rural areas is inactive.¹⁰

¹⁰ This group includes those who are studying or doing housework, as well as others such as the elderly and disabled who are not available for work. It also includes selected marginal groups such as: those who thought they had a job or business but have not been paid during their absence; self-employed seasonal workers; self-employed wage employees who cannot be sure of returning to work within 6 months, and those not working for technical or economic reasons who cannot be sure of returning to work within 3 months (Timor Leste LFS, 2010).

Table 7. Main activity of working-age population in rural areas

(July '08- June '09)

Employed	Unemployed	Inactive
44.9	2.0	53.1

Source: LFS, 2010

According to demographic projections based on a moderate growth scenario, the population of Timor-Leste would grow by 80% in 2025, relative to its 2005 level. The population will not age considerably by then, with 40% still younger than age 15 (“Policy note on population growth and its implications”, World Bank, 2008). Without a viable private sector to employ the growing workforce, emigration to urban areas needs to be curtailed to break the cycle of large-scale urban unemployment/under-employment. To keep people in rural areas, productivity in agriculture needs to increase, and this requires big investments in this sector.

The rural labor and agricultural production model (“Notes on Rural Labour and Agriculture Production Model”, Phillip Young, 2012) projects that incremental Gross Value of Production (an approximate indicator of incremental Agriculture GDP) from additional investments in this sector, would be about USD 100 million per year over the 20-year time period (2011-2030). This increment would cost about USD 55.5 million per year to generate. This implies an un-discounted benefit-cost ratio of 1.8, gainful employment for about 200,000 farmers, and a reasonable standard of living for 300,000 farmer dependents.

5. BUSINESS ENVIRONMENT

Timor-Leste requires large-scale foreign investment, given its limited capacity to generate domestic capital; “for a country such as Timor-Leste with very limited domestic capital, a negligible indigenous industrial base and dependence on technology-intensive industry such as oil, the degree to which policy stimulates investment and trade is unusually important” (Enterprises, workers and skills in urban Timor-Leste, World Bank, 2005). Thus, policies to induce an investment-friendly climate in order to stimulate large inflows of foreign capital and broaden the industrial base would help foster a viable urban private sector that will create employment opportunities for the urban population. But Timor-Leste provides weak protection to foreign investors; it scores very low on investor protection index, relative to some other developing countries. Both time and money costs required to start a business and to enforce contracts are also significantly higher in Timor-Leste, relative to other countries in the region. Relative to most East Asian and Pacific countries, Timor-Leste's labor regulations are also rigid.

The informal urban sector in Timor-Leste is sizable, and has emerged largely as a result of accelerated rural-urban migration and the labor surplus that this migration has generated in the cities, particularly in Dili. Dili's population has increased by 33.3% since the 2004 national census. According to the 2010 census, 44.5% of the population in Dili was born elsewhere (Housen, Hopkins and Earnest, 2010). This is true of other urban centers as well. Thus, a situation where a large number of workers in urban areas are chasing the few desirable formal sector jobs that are rationed by high wages, is leading inevitably to high urban unemployment, and also high underemployment in the informal sector.

Lack of sources for raising capital and shortage of credit are considered important constraints on urban firms. However, there may be an under-exploited market for small-scale credit (Enterprises, workers and skills in urban Timor-Leste, World Bank, 2005). Firms also identified a lack of demand as a major constraint for the rapid expansion of a private sector (Enterprises, workers and skills in urban Timor-Leste, World Bank, 2005).

Conclusions

This report summarizes current state, prospects and challenges with respect to numerous supply and demand factors as follows:

Demand-side factors: (a) high rate of unemployment among the youth, a problem exacerbated by the high rate of population growth; (b) primitive nature of the agricultural sector that nevertheless provides some form of employment and sustenance for the predominant share of the population; (c) dominance of the public sector in urban areas, offering high wages and benefits; (d) limited role of the private non-oil sector in generating employment opportunities.

Supply-side factors: (a) low levels of educational attainment and job-related skills among the population; (b) poor nutrition and health outcomes, affecting labor productivity; (c) status of foreign labor, which constitutes a significant share of the urban workforce, due to lack of skills among the local population; and (d) low female participation rate.

In formulating policies for inclusive growth, the government has to reconcile two potentially conflicting goals. On the one hand, there are social consideration of workers' needs, standards of living, and earnings inequality, which need to be addressed with appropriate labor policies and social protection policies. On the other hand, there are economic considerations of productivity, competitiveness, and job creation that require the creation of a friendly business environment to foster the private sector and attract international capital.

In Timor-Leste, both these goals require urgent attention. Timor-Leste has to balance equity considerations for its citizens with a need to encourage its fledgling private sector to grow and become more productive. Currently, the government is the largest employer, with a wage and salary bill for civil servants that is unsustainably high, and calls for a reduction in the size of the civil service sector. Consequently, the government cannot continue to absorb a large and growing workforce, and requires the private sector to begin employing larger shares of the workforce.

REFERENCES

- Asian Development Bank, 2011, Global Food Inflation and Developing Asia
- Bhalla, G.S., Food Security in South and South East Asian Countries, JNU working paper
- Croucher, Richard and Geoff White (2011), The impact of minimum wages on the youth labour market: An international literature review for the low pay commission
- De Tray, Dennis, 2009, Bridging state capacity gaps in situations of fragility, OECD.
- DNE Timor-Leste, 2010, Timor-Leste Labour Force Survey
- DNE Timor-Leste, 2010, Business Activity Survey Of Timor-Leste
- Food and Agricultural Organization, FAOSTAT, 2010
- Heckman, James, 2011, *The Economics of Inequality: The Value of Early Childhood Education*, American Educator, Spring, pp.31-47
- Housen, Tambri, Sandra Hopkins, Jaya Earnest (2012), *Migration patterns and the impact of internal remittances on poverty and human capital in Timor-Leste*
- International Labor Organization, 2011, *Global Economic Trends*
- International Monetary Fund, 2012, *Timor-Leste Country Report No.12/24*
- International Monetary Fund, *World Economic Outlook Database*, October 2010
- Schulten (2010), *Minimum wages under the conditions of the global economic crisis*, in J. Heyes and L. Rychly (ed.), *Labour Administration and the Economic Crisis. Challenges, Responses and Opportunities*, Geneva, ILO
- Sugden, Craig and Kiyoshi Taniguchi, 2008, *The Growth Penalty of High Government Pay Rates*, ERD Working Paper No. 118, Asian Development Bank
- Timor-Leste Census, 2010
- Timor-Leste *Demographic and Health Survey (DHS)*, 2009-10
- Timor-Leste Government, *General State Budgets*, various years

Timor-Leste Government, National Accounts 2004-'10

Timor-Leste Ministry of Education and World Bank, 2012, *2011 Early Grade Mathematics Assessment Result Analysis and Recommendation Report*

Timor-Leste Ministry of Education and World Bank, 2012, *An Analysis of Early Grade Reading Acquisition*

United Nations, 2011, *Economic impacts of UNMIT's withdrawal*

United Nations, United Nations Development Assistance Framework (UNDAF) Timor-Leste, 2009-2013

United Nations, *Human Development Reports*, various years

USAID, 2008, *Timor-Leste Economic Recovery Assessment*

World Bank, 2004 *Timor-Leste: Education Since Independence – From Reconstruction to Sustainable Improvement*

World Bank, 2005, *Enterprises, workers and skills in urban Timor-Leste*

World Bank, 2007, Timor-Leste Poverty Assessment

World Bank, 2008, *Policy Note On Population Growth And Its Implications In Timor-Leste*

World Bank, 2008, *Timor-Leste: Poverty in a young nation*

World Bank, 2010, *Indonesia Jobs Report: Towards Better Jobs and Security for All*

World Bank, 2011, Timor-Leste Civil Service Review

World Bank, 2012, *Timor-Leste Education Sector Issues Paper*

Young, Phillip, 2012, *Notes on Rural Labour and Agriculture Production Model*, World Bank