Social Justice and Inequality in Asia

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Introduction

Timor-Leste, one of the youngest nations in the world, became a sovereign state on 20 May 2002. Independence marked the end of 450 years of Portuguese colonization, occupation by the Japanese, and 24 years of Indonesian occupation. More than 200,000 Timorese perished during the occupation from 1975 to 1999. The withdrawal of the Indonesian military in September 1999 was accompanied by a massive destruction of property and the decimation of private and public infrastructure. Almost two-thirds of the population was displaced and some 2,000 casualties were recorded.

Following independence, Timor-Leste, with support from the international community, attempted to establish the required institutions that are fundamental to its economic development. The first five years following the country's independence have been turbulent, and progress has been minimal. Timor-Leste continues to face many challenges, including high levels of poverty, especially in rural areas, where there is continued dependence on subsistence agriculture and hence, also vulnerability to food shortages. A significant section of the population does not have access to basic services, including education, safe water, sanitation and health. The economy is unable to provide productive employment opportunities for the rapidly growing labour force. The private sector remains relatively under developed and private investment needed for job creation is negligible. Inadequate infrastructure, services, and weak human resource base and institutional capacities are additional factors undermining the economy.

During the early stage of recovery, national economic development was interrupted by social and political turmoil in April–May 2006. This had wide repercussions on the security and political stability of the country. Public confidence in the state is yet to be restored.

Amongst the many challenges facing the country, income inequality and poverty are probably the most important ones. Poverty afflicts almost half of the population, placing the country a long way off from achieving the Millennium Development Goals (MDGs) by 2015. Based on the new poverty line (which is nationally determined at $0.88 per person per day at average national prices of December 2007), the incidence of poverty rose significantly to approximately 50 percent in 2007 from 36 percent in 2001. The increase in urban poverty, which rose from 25 percent to 45 percent from 2001 to 2007, was more pronounced than the increase in rural poverty which moved up relatively slower from 40 percent to 52 percent in the same time period. This trend was accompanied by an increase in regional poverty as well, with the incidence in poverty increasing from 41 percent to 58 percent in the centre and from 37 percent to 55 percent in the west. The east remained the least poor with an average poverty headcount index of 26.5 percent.

At the same time, the poverty gap ratio, which measures the disparity between the expenditure of the poor against the poverty line, decreased from 21 percent in 2003 to 14.9 percent in 2007. Additionally, the poorest quintile of the population, based on national consumption analyses, consumed 7.9 percent in 2007 compared to 7 percent in 2001. This indicates that a significant increase in the number of poor is not followed by a corresponding improvement in their share in national consumption. The gini index also reflected higher inequality in the country relative to other South-east Asian countries. In the case of Timor-Leste, the index was 0.37 (in 2001), making it higher than Indonesia (0.34 in 2002), Lao PDR (0.34 in 2002), and Viet Nam (0.34 in 2004).

Faced with the challenge of reducing poverty and inequality, the Government of Timor-Leste initiated a comprehensive programme for poverty reduction. The first National Development Plan stated two overriding development goals for the country. First, to reduce poverty in all sectors and regions of the nation; and second, to promote economic growth that is equitable and sustainable, improving health, education, and overall well being of the population.

A poverty reduction strategy, according to the Plan, 'is focused on improving the productivity of the poor by achieving strong economic growth within an enabling environment' (Planning Commission, p. 2). However, no specific redistribution policy was articulated by the government to address economic inequality.

A redistribution policy through income taxes is difficult to implement owing to the dominance of the informal sector. This, in effect, translates into an extremely low level of tax revenues, and therefore less fiscal space for the government to effectively implement redistribution policies. A majority of the labour force works in the informal sector of which only a small percentage are paid-workers. The high percentage of unpaid workers (in the informal sector) has affected overall income levels. More than 80 percent of the population rely on the informal sector and the share of the rural labour force engaged in agricultural activities is about 90 percent.

Income redistribution is largely dependent on transfer mechanisms. As the informal sector dominates the economy, other transfer sources should be utilized to address income inequality. With the establishment of the Petroleum Fund in 2005, Timor-Leste adopted relatively sound management arrangements for petroleum revenues. The creation of the Petroleum Fund was a critical step towards future economic development, including redistribution reform. In 2007, more than $100 million had accumulated monthly to the Petroleum Fund, bringing total assets to approximately $3.8 billion by end-September 2008. The Petroleum Fund is a critical source of income for the government in its bid to establish a long-term sustainable and equitable development programme for the country.

An analysis of horizontal inequality is also important for describing the progress of development. However, access to information on economic and social schemes is limited and comprehensive data is absent. Thus, it is difficult to assess and get a complete picture of horizontal inequality in the country.

This chapter initially provides a description of trends in inequality. A decomposition of residents, demographic characteristics, regions, and groups of income is used to study specific characteristics of income inequality. Secondly, the primary causes behind these trends and their impact on livelihoods (taking into account political, macroeconomic, and social conditions) are also discussed. Sources of household income are also studied to explore the reasons behind income inequality. While analysing income, the role of the labour market, productive assets, and transfers among various income groups is also examined.

Finally, we also provide a set of policy options to address income inequality by considering the important role of the Petroleum Fund and other instruments available in the country, while looking at ways of transforming the informal sector. This set of policy options is expected to stimulate discussion on the importance of addressing income inequality, the main causes of inequality, the impact of inequality on the country's growth, and how these factors might have to be modified to better maintain a more equal income distribution. Where appropriate, we suggest a number of options to tackle inequality based on limited data. The set of policy options will mainly focus on how to stimulate the non-oil economy while reducing inequality and maintaining stability and security in the country. The chapter seeks to promote more inclusive growth that will benefit all segments of society, with the intention of preventing a rise in inequality, and thereby increasing the impact of growth on poverty.

The Profile of Timor-Leste

Administrative Set-up

Timor-Leste is a parliamentary democratic state with a total area of 14,609.37 sq. km. It has a unicameral legislature system, with the President as the head of the state, and the Prime Minister as the head of the government. Administratively, Timor-Leste consists of 13 districts with five regions. Region I comprises the Lautem, Baucau and Viqueque Districts; Region II comprises the Manatuto, Manufahi, and Ainaro Districts; Region III consists of the Dili, Aileu, and Ermera Districts; and

Region IV covers the Liquica, Bobonaro, and Covalima Districts. Oecusse District is classified as a special region and it is surrounded by Indonesia. Almost the entire area of Timor-Leste occupies the North-eastern part of Timor island, except the Oecusse district, which is an enclave within the Indonesian part of the island (that is in the western half). These demarcations predate the colonial period and they are part of the old kingdoms of Timor.

Demography and Labour Force Characteristics

Timor-Leste has a very young population —43 percent of the population is under 15 years of age. In 2005, the male-female ratio stood at 51:49. Population growth in the 1990s was slow at an annual average rate of 0.47 percent, but accelerated to 5.3 percent between 2001 and 2004. This was attributable to a period of relative social and political stability in the post independence period. The rate of growth in population, however moderated to 3.2 percent per annum from 2004 to 2007.

The population in the productive age group (15-64 years) in Timor-Leste was 492,243 people or about 53.3 percent of the total population. About 20 percent of Timor-Leste's population lives in Dili District (where the capital city is located), followed by Ermera District and Baucau District—each with 11 percent of the total population. The adult literacy rate in 2007 was only 51 percent. The low literacy rate stems largely from the lack of primary education. Overall, 57 percent of the population aged 15 and above have never been to school, 23 percent have elementary education, while only about 18 percent have been to high school.

The labour force participation rate is 64.2 percent, with an unemployment rate of 7 percent. However, only 10 percent of workers are categorized as paid-workers. This means that most of the population is involved in subsistence economic activities, and therefore have no income earnings. The agricultural sector, characterized by simple, traditional farming practices, remains the main source of income, and constitutes more than 80 percent of the population. The industrial sector employs and provides sustenance to just 4 percent of the total population.

The Economy

With a non-oil per capita GDP of just $364 in 2007 (Figure 1), Timor-Leste is the poorest country in the ASEAN region. The average growth rate of real GDP per annum between 2002 and 2007 was only about 2.5 percent. The 2006 crisis severely hampered public and private sector activities, resulting in growth contracting by an estimated 6 percent. Despite a sustained increase in oil revenue, in per capita terms, real non-oil GDP is estimated to have declined by 12 percent from 2001 to 2007. The decline in real per capita private consumption was even larger. For instance, IMF estimates suggest that between 2002 and 2007 per capita real private consumption declined by 24 percent. Overall, these findings reflect the fact that the country's sluggish growth performance between 2001 and 2007 was the primary factor behind the increase in nationwide poverty.

Today, the economy is undergoing a rapid and broad-based expansion. Following an 8 percent increase in 2007, real non-oil GDP is projected to grow by at least 10 percent in 2008. Agriculture has benefited

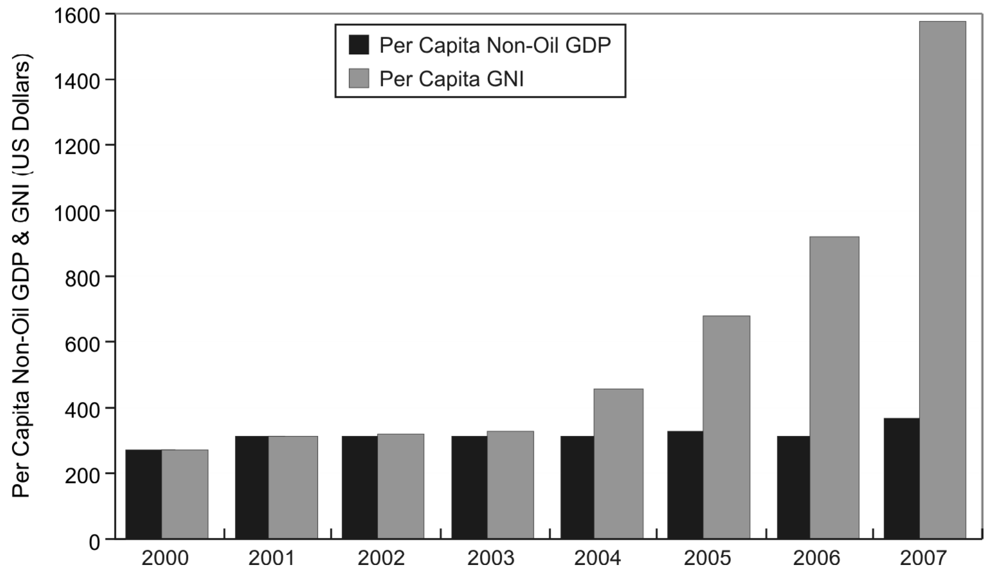

FIGURE 1: Timor-Leste per Capita Non-Oil GDP and GNI, 2000–2007 (US Dollars)

Source: IMF, 2008, p. 6.

from favorable weather conditions, and production levels for key crops are up significantly. Coffee exports (as the main non-oil export commodity) in the first nine months of 2008 reached 13.7 thousand tons, double the amount in previous years. The main source of growth, however, has been the sharp increase in government spending.

Timor-Leste is fundamentally an agrarian economy. The agriculture sector accounts for over 31 percent of GDP and provides employment to about 80 percent of the labour force—an indication of the very low level of productivity in the sector. The income generated from the agricultural sector is grossly insufficient. A combination of factors such as the lack of access to local markets, and the difficulty in selling, as well as the low price of the agricultural produce, eventually results in people consuming the produce themselves. At the *suco* (village) level, it was found that 94 percent of the *sucos* still depend on the agricultural sector as the main source of income.

Private investment is minimal in an uncertain security climate, further exacerbating one of the most unattractive business climates in the world. As a result, job creation has stalled. An estimated 15,000 young people enter the labour market each year, while only 400 formal jobs are created. According to the 2004 census, unemployment in Dili was 23 percent, with youth unemployment at 40 percent, rising to 58 percent for the 15–19 year-old age bracket.

Inflation has remained high. Consumer prices rose by 9.1 percent from end- 2007 to September 2008, more than double the rate between 2004 and 2006. The rise in inflation over the past two years was largely attributable to the global increase in food and fuel prices.

Data Sources and Concepts Used

This study relies heavily on both the Timor-Leste Survey of Living Standards 2007 (TLSLS 2007) and the Living Standards Measurement Survey 2001 (LSMS 2001), published by the Directorate of National Statistics, Government of Timor-Leste. Both surveys are similar and were financially supported by several donors. The 2001 LSMS reached 1,800 households over a period of three months. The same survey in 2007 (TLSLS 2007) covered 5,400 households over twelve months. The TLSLS sample has two components: (1) a cross-sectional component of 4,500 households selected with the intention of representing the current population of Timor-Leste, and (2) a panel component of 900 households, where half the participants of the 2001 LSMS sample of 1,800 households were randomly selected and re-interviewed. The scarcity of the data limits the choice of data source. As we only have two data points, this will prevent us from utilizing an econometric model. Also, as the indicators are dependent on two household surveys, the analysis provides a static understanding of the income inequality. Short-term income inequality dynamics are based on speculation.

We mainly employ the expenditure approach to measure income inequality. Using the consumption expenditure in place of income can provide lower estimates of inequality. In the two household surveys carried out, the respondents were asked about their expenditures during the week prior to the survey. With such a short period, the respondents could remember their expenditures, resulting in relatively reliable data. Another advantage of this approach is that the individual expenditure in a short period of time is relatively stable and does not significantly fluctuate.

We utilize income decomposition in order to support further analysis on income inequality. Income is parsed into gross income, factor income and labour income (including wage, salary income, and farm or non-farm self-employment income). Unlike expenditure data, the most serious problem with income data is in the validity of the data itself. Both LSMS 2001 and TLSLS 2007 databases display a weakness in terms of recording income data. Almost 20 percent of observed cases did not answer the questions on income. Since the surveys use a stratified random sampling technique which requires weighting the responses, such observations could not be simply neglected. Therefore, for most of the population, consumption expenditure is regarded as a good proxy of incomes (Sundrum 1990). However, as more affluent segments generally save a large proportion of their income, the inequality in incomes across society will be greater than that of consumption expenditure.

In general, we apply two approaches to measure income inequality, namely the gini index and the Lorenz curve. The gini index is a measure of inequality which varies between 0 and 1 (0 indicates perfect equality and 1 indicates perfect inequality). The Lorenz curve plots the cumulative percentages of total income received against the cumulative percentages of recipients, starting with the poorest individual or household. The deeper a country's (or region's) Lorenz curve the less equal its income distribution. The gini index is a summary of statistics of inequality derived from the Lorenz curve.

In order to measure inequality between groups, the Theil index is employed. It can split inequality into two components: between and within regions. This enables us to capture the contribution to growth of each source. With it, some necessary conditions of welfare inequality are also fulfilled, including mean dependence, the principle of population replication and Pigou-Dalton's transfer principal.

National Income Inequality

From 2001to 2007, income inequality trends in terms of the gini index, have shown a decline. In 2001, the gini index which stood at 0.37 decreased to 0.26 in 2007. The Lorenz curves in Figures 2 and 3 also depict a similar decrease in the income inequality, despite the 2006 political crisis and unstable social and economic conditions during this time-period. There are two factors that are likely to have contributed to declining income inequality. First, higher expenditure in the bottom and middle quartile households would tend to reduce the income disparity between household groups. Second, expenditure among the highest 10 percent showed a tendency to decline. As presented in Table 1, the expenditure of the bottom 10 percent of the expenditure distribution rose from \$7.7 in 2001 to \$16.2 in 2007 (up by 111.7 percent), while the expenditure of the highest 10 percent expenditure group fell from \$112.4 in 2001 to \$101.5 in 2007.

Given the absence of private investment during the reconstruction and recovery phase, it is not surprising that the government assumed a significant role in tackling inequality. Thus, decline in income inequality was primarily attributable to households in the bottom quartile receiving a significant amount of money in the form of government transfers. As depicted in

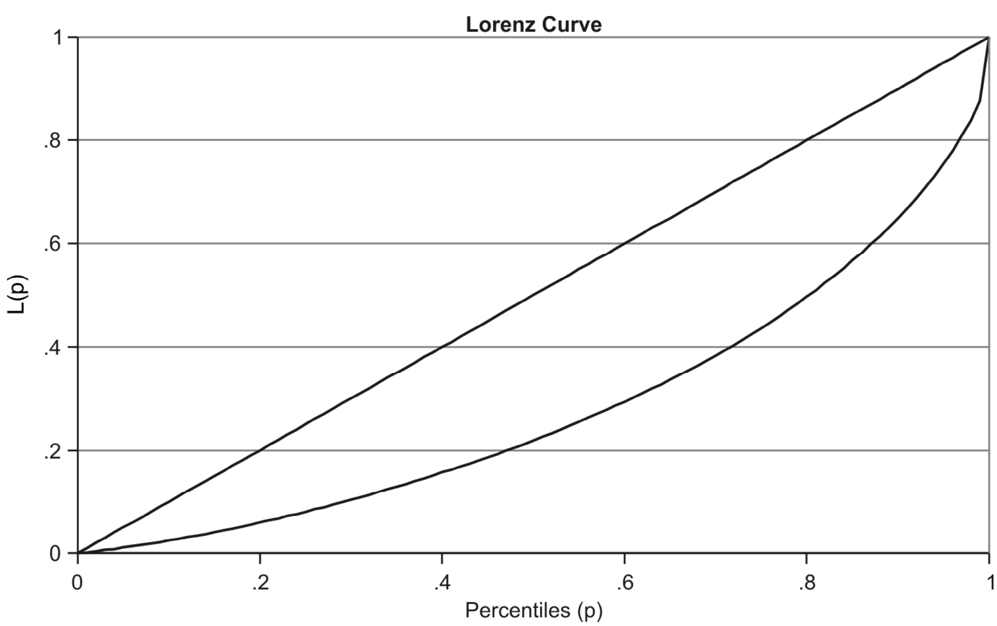

FIGURE 2: Lorenz Curve of Timor-Leste, 2001

Source: Calculated from LSMS 2001 and TLSLS 2007.

TABLE 1: East Timorese Households Ranked by Expenditure, 2001 and 2007

	Household in Expenditure Quartile (US dollar)					
	Lowest 10%	**1st**	**2nd**	**3rd**	**4th**	**Highest 10%**
2001	7.65	10.35	14.23	19.09	32.58	112.41
2007	11.21	19.96	25.07	30.83	42.35	101.46

Source: Calculated from LSMS 2001 and TLSLS 2007.

Table 2, households in the bottom 25 percent of the income distribution scale received a substantial amount of state transfers, which resulted in increasing their gross income from 24.76 percent in 2001 to 60.72 percent in 2007. In 2001, the data shows that there was no transfer from the government, as the country was still under the supervision of the United Nations. By 2007 the contribution of the government transfers to the gross income of the bottom 25 percent of the income distribution table had risen to almost 34 percent. Thus, changes in the composition of gross income sources contributed significantly towards changes in income inequality.

In addition, Table 2 also displays an unequal labour income distribution among household groups. The share of labour income increased as expenditure rose. This is a reflection of unequal job opportunities among household groups. In 2001, about 63.36 percent of household gross income

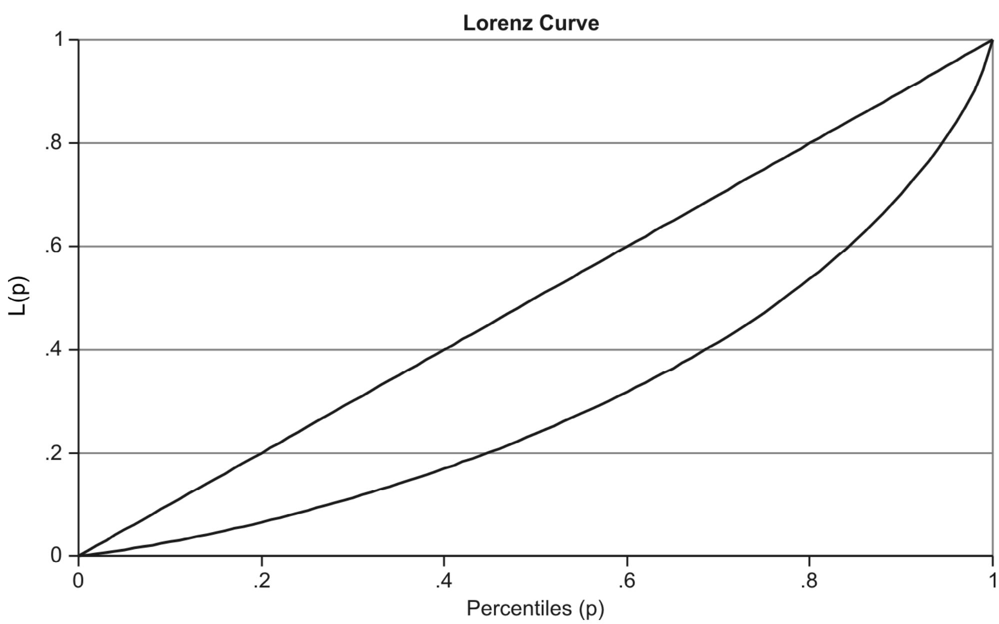

FIGURE 3: Lorenz Curve of Timor-Leste, 2007

Source: Calculated from LSMS 2001 and TLSLS 2007.

TABLE 2: East Timorese Households Ranked by Expenditure and Decomposed by Sources of Gross Income, 2001 and 2007

			2001			
Sources of Gross Income	**Lowest 10%**	**1st**	**2nd**	**3rd**	**4'"**	**Highest 10%**
Labor Income	na	63.36	85.88	92.17	94.80	96.28
Formal Sector	na	4.29	20.17	27.16	21.55	2.38
Informal Sector	na	59.07	65.71	65.01	73.26	93.90
Factor Income	na	11.88	3.43	3.86	3.80	3.43
Transfer	na	24.76	10.69	3.97	1.39	0.29
Government	na	0.00	0.00	0.00	0.00	0.00
Private	na	24.76	10.69	3.97	1.39	0.29
			2007			
Sources of Gross Income	**Lowest 10%**	**Ist**	**2nd**	**3rd**	**4th**	**Highest 10%**
Labor Income	na	38.30	80.56	82.97	96.54	97.55
Formal Sector	na	0.00	0.08	0.04	0.92	6.56
Informal Sector	na	38.30	80.48	82.93	95.62	90.99
Factor Income	na	0.98	8.82	12.53	3.14	2.30
Transfer	na	60.72	10.62	4.51	0.32	0.16
Government	na	33.97	5.19	2.12	0.15	0.05
Private	na	26.75	5.43	2.38	0.17	0.11

Source: Calculated from LSMS 2001 and TLSLS 2007.

of the bottom quartile was generated by labour income (earnings). However, the share of labour income in gross income fell for households in the 1st, 2nd, and 3rd quartiles in 2007. This trend indicates that between 2001 and 2007, employment creation was severely limited. This situation reflects an inadequate labour market, a result an enabling environment for investment.

Given that state transfers play a significant role in reducing income inequality, policy makers ought to examine several options available for redistribution, particularly since taxes are not an effective redistribution instrument, given that the informal sector accounts for 80 percent of the economic activity. As presented in Table 2, the share of labour income from the informal sector was very high in 2001, exceeding 95 percent for the richest 10 percent. Although, there was a slight expansion in the formal sector between 2002 and 2007. Today, the formal sector contributes a relatively higher proportion to the labour income. In 2007, the formal sector labour income of the richest 10 percent accounted for about 6.62 percent of income compared to only 3.50 percent in 2001. At the same time, the share of labour income from the informal sector also increased rapidly as incomes increased. However, a rise in informal activity tends to depress tax revenues.

The distribution of income tends to be closely linked to human capital which in turn is linked to education. Table 3 shows that there is a strong positive corelation between the years of schooling of the heads of the households and increased expenditure. In reality, the lower the education level of the heads of the households the poorer they are likely to be. It should be noted that

TABLE 3: East Timorese Households Characteristics Ranked by Expenditure, 2001 and 2007

	Household Characteristics in Expenditure Quartile					
	Lowest 10%	1st	2nd	3rd	4th	Highest 10%
	Average Years of Schooling of the Household Head					
2001	1.57	1.83	2.43	2.76	3.57	6.83
2007	1.35	1.48	2.07	2.82	3.64	6.98
	Literacy Rate					
2001	34.49	34.49	37.26	37.22	36.63	34.08
2007	48.91	49.66	49.90	48.70	34.62	45.04
	Average Household Size					
2001	6.52	6.06	5.72	5.34	5.06	3.78
2007	7.01	6.78	6.38	6.03	5.57	3.61

Source: Calculated from LSMS 2001 and TLSLS 2007.

although household groups with better expenditure and income status have higher education, this does not necessarily mean that people in this group have finished high school. In the long run, Timor-Leste, with a young population, needs to ensure that adequate primary and secondary education facilities are in place to accommodate the growing needs of its people. This strategy would help ensure a sustainable decline in income disparity among different household income groups.

Table 3 also shows that households with lower expenditure levels tend to have larger families. The reason behind this trend is a combination of poor health quality, limited access to health facilities which would increase child mortality rates, so that having

TABLE 4: Age of Household Head Ranked by Expenditure, 2001 and 2007

	Household in Expenditure Quartile					
	Lowest 10%	1st	2nd	3rd	4th	Highest 10%
	2001					
< 25	2.78	2.22	4.11	4.89	5.72	8.89
25–34	16.11	19.78	23.22	23.56	24.72	28.89
35–44	35.00	30.89	29.56	27.48	26.50	27.78
45–54	30.00	28.22	22.78	21.11	20.06	15.56
> 55	16.11	18.89	20.33	22.96	23.00	18.89
	2007					
< 25	2.90	1.80	2.95	3.31	3.55	5.36
25–34	17.19	17.12	17.95	17.60	18.23	20.54
35–44	35.94	33.06	31.84	31.18	29.19	23.66
45–54	25.89	26.76	24.70	23.88	23.65	21.88
> 55	18.08	21.26	22.55	24.03	25.37	28.57

Source: Calculated from LSMS 2001 and TLSLS 2007.

more children would secure the continuation of families (Harmadi and Iswandono, 2007). Children are important not only in demographic terms, but also from a cultural standpoint. Poorer households with a large number of children carry a heavier burden than the more affluent ones. The size of Timorese families has in fact increased in 2007 compared to 2001. In spite of the declining trend in income inequality, poverty headcount ratio has increased significantly from 36 percent in 2001 to around 50 percent in 2007.

Finally, the data also shows that income inequality in Timor-Leste is not necessarily linked with the age of the head of the household, as depicted in Table 4. Income follows an inverse U-shape pattern, increasing initially with age and then declining as the head of the household gets older. From the table, one could assume that heads of households in the age groups of 35–54 years have on average higher incomes, but as they get older, they will earn lower incomes. This is especially true of a country without institutionalized welfare.

Regional Inequality

Decomposition by Dwelling (Rural-Urban)

Inequalities also exist within and across urban and rural areas. Household data reveals that in 2001 mean household expenditure was only slightly larger for urban households than for rural households, except for the top quartile of the income distribution. In that year, the 4th quartile mean urban household expenditure was almost double the 4th quartile mean rural household expenditure. While average household expenditure in 2007 for all income groups increased significantly, both for urban and rural income groups, the lowest 10 percent household income group in rural area experienced, to some extent, higher mean household expenditure than their urban counterparts. Also, there was no significant income disparity between urban and rural areas during 2001 to 2007, except for 4th quartile mean household expenditure. In fact, the expenditure gap between urban and rural segments with this quartile has decreased significantly since 2001.

As Table 5 depicts, income inequality decreased in both urban and rural areas from 2001 to 2007. Further urban inequality was greater than rural inequality in 2001, and the difference was quite significant. In 2007, however, rural inequality became a more prominent as did its contribution to national income inequality. Income inequality at the national level is within-region disparities. In both urban and rural areas, more than 90 percent of inequality was due to differences within, rather than between, regional groupings (see Figure 4 and Table 6). Furthermore, between 2001 and 2007 there were significant shifts in rural and urban gini levels, while within group and between group inequality stayed stable. This strongly indicates that inequality persists areas but within those areas.

Lower inequality between urban and rural areas was primarily due to rural-urban migration. As shown in Table 7, the share of households in urban areas increased during 2001 to 2007. One possible explanation for this is the massive urbanization that took place over this time-period. People migrated from outlying districts to urban areas, in particular the capital city Dili, owing to the perception of greater opportunities for economic

TABLE 5: Monthly Mean Household Expenditure Ranked by Expenditure, 2001 and 2007

	Mean Household Expenditure (in US$)					
	Lowest 10%	1st	2nd	3rd	4th	Highest 10%
			2001			
Urban	7.75	10.63	14.87	20.44	44.35	120.08
Rural	7.63	10.26	13.97	18.56	25.06	91.31
National	7.65	10.35	14.23	19.09	32.58	112.41
			2007			
Urban	16.19	20.17	25.23	31.70	45.86	104.36
Rural	16.22	19.83	24.97	30.21	39.59	97.77
National	16.21	19.96	25.07	30.83	42.35	101.46

Source: Calculated from LSMS 2001 and TLSLS 2007.

TABLE 6: Trends in Gini and Theil Indices by Household Expenditure, 2001 and 2007

	Gini Index	
	2001	2007
Urban	0.39	0.26
Rural	0.34	0.27
	Theil Index	
	2001	2007
Within group	0.98	0.99
Urban	0.92	0.76
Rural	0.06	0.23
Between group	0.02	0.01

Source: Calculated from LSMS 2001 and TLSLS 2007.

advancement. This is further underscored by statistics that indicate that more than 4 percent of the population in Dili was born outside. Massive migration to Dili occurred primarily due to the absence of public investment in rural infrastructure and lack of resources devoted to developing and spreading new agricultural technologies in the face of fast depleting natural resources. This fact also provides an explanation for the stagnation in agriculture. The process of urbanization largely reflects the decisions of individuals and employers to centralize their activities in urban areas. Rapid population growth and urbanization in Dili have however given rise to social, economic and political problems as is evident from the political crisis of April 2006. Given the fact that rural households benefit more than their urban counterparts from their decision to migrate, and that they were poorer than their urban counterparts, it is not surprising that the inequality between the urban and rural sectors falls.

The contribution of rural inequality to within-group inequality increased significantly from 0.06 in 2001 to 0.23 in 2007. This implies that despite the rural Gini index showing a significant decrease, recent income inequality in rural areas is worse than in urban areas. As highlighted in the earlier part of this section, the high incidence of rural-urban migration clearly reflects the inability of the rural economy to absorb the surplus labour. Recent data reveals that in recent years poverty has tended to concentrate in rural areas. Given the absence of product and factor markets in rural hinterland, labour productivity in the rural sector tends to be lower than that

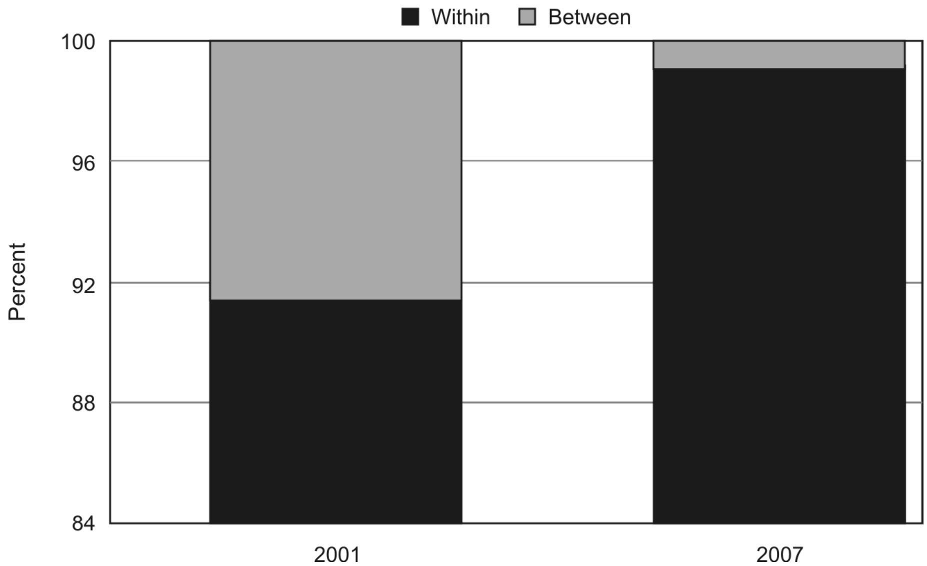

FIGURE 4: Inequality Decomposition by Urban-Rural

Source: Calculated from LSMS 2001 and TLSLS 2007.

TABLE 7: Number of Households Ranked by Household Expenditure, 2001 and 2007

	Number of Household (% Share)					
	Lowest 10%	1st	2nd	3rd	4th	Highest 10%
			2001			
Urban	21.84	23.36	27.34	30.08	35.66	65.73
Rural	78.16	76.64	72.66	69.92	64.34	34.27
National	100.00	100.00	100.00	100.00	100.00	100.00
			2007			
Urban	35.28	37.14	37.46	39.41	41.68	56.34
Rural	64.72	62.86	62.54	60.59	58.32	43.66
National	100.00	100.00	100.00	100.00	100.00	100.00

Source: Calculated from LSMS 2001 and TLSLS 2007.

in the urban sector. It therefore follows that labour income in rural areas is also lower than their counterparts in urban areas. If economic activities continue to be concentrated in urban areas, contributing to an enclave economy with uneven growth across sub-national locations, then urban wages will continue to rise relative to rural wages, and migration will be inevitable. In the long run, this will exacerbate income inequality and possibly trigger social and political unrest in the urban areas.

Decomposition by Region

Timor-Leste consists of thirteen districts (including the Special Region of Oecusse) which are usually classified into six regions: Rural-East, Urban-East, Rural-Center, Urban-Center, Rural-West, and Urban-West. One of the most interesting features is that Dili constitutes merely 3.26 percent of total land area, but accommodates around 20 percent of the total population. The vast majority of districts are still under-developed.

In 2001, the urban areas were more unequal than rural areas, particularly in the east and center regions. The Gini index in urban areas stood at between 0.40 and 0.47 compared to 0.3 to 0.36 in rural areas. The worst off regions were Dili and Baucau, the two main urban centers, located in the center and eastern regions. This narrowed six years later in 2007, with the Gini index for urban areas declining to between 0.27 and 0.28 and to 0.25 and 0.29.for rural areas.

High inequality within, rather than across regions contributed approximately 94 percent toward total inequality. As depicted by Figure 5 and Table 8, in 2007, Dili contributed the highest portion, 24.9 percent based on the Theil measurement of within-group inequality, followed by Oecusse (12.1 percent) and Baucau (11.2 percent). These three regions have different sets of problems that drive them to collectively contribute up to 48.3 percent of within-group inequality. Similar to highly urbanized regions in the world, both Dili and Baucau are categorized as the most urbanized regions, and thus have a high

TABLE 8: Gini Index by Region, 2001 and 2007

Regions	2001	2007	GI Ratio (2007/2001)
Rural East	0.33	0.25	0.76
Urban East	0.47	0.28	0.60
Rural Center	0.37	0.25	0.68
Urban Center	0.47	0.27	0.58
Rural West	0.30	0.29	0.97
Urban West	0.40	0.28	0.70

Source: Calculated from LSMS 2001 and TLSLS 2007.

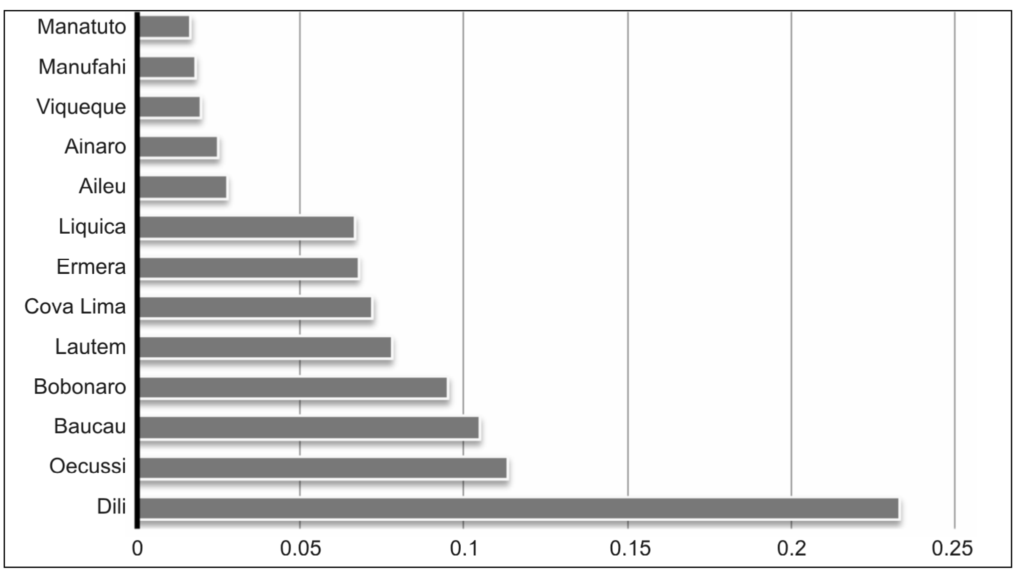

FIGURE 5: Contribution to Within Region Inequality for Each Region, 2007

Source: Calculated from LSMS 2001 and TLSLS 2007.

percentage of low income households. On the other hand, Oecusse has a remote location and poor access to the mainland. In 2001, the relatively high inequality regions (above national level) were Urban-Center, Urban-East, and Urban-West. While the relatively low inequality regions were Rural-West, Rural-East, and Rural-Center. The situation changed sligthly in 2007. Although urban regions still retained their prime position of having highest inequality, the worst degree of inequality was found in the Rural-West, as indicated by the region's Gini indices. By contrast, the three urban regions made the most significant progress in reducing inequality.

Based on the TLSLS 2007, it is clear that the most populous Central Region also had the lowest levels of welfare compared to other regions. This is highlighted by the fact that almost 15 percent of the households in the region fell under the lowest 10 percent income group, compared to 8.70 percent in the Eastern and 11.35 percent in the Western region. Additionally in the Central region, a mere 4.35 percent of the population was in the highest 10 percent category, as opposed to a healthy 6.56 percent in the Eastern Region and 10.27 percent in the Western Region. The data clearly indicates

TABLE 9: Percentage of Household by Region and Ranked by Household Expenditure, 2001 and 2007

	Percentage of Household					
	Lowest 10%	**1st**	**2nd**	**3rd**	**4th**	**Highest 10%**
Region			**2007**			
East	13.62	17.50	19.06	19.49	19.98	
Centre	60.53	59.40	55.75	54.33	51.57	34.57
West	25.84	23.10	25.19	26.18	28.69	45.45

Source: Calculated from LSMS 2001 and TLSLS 2007.

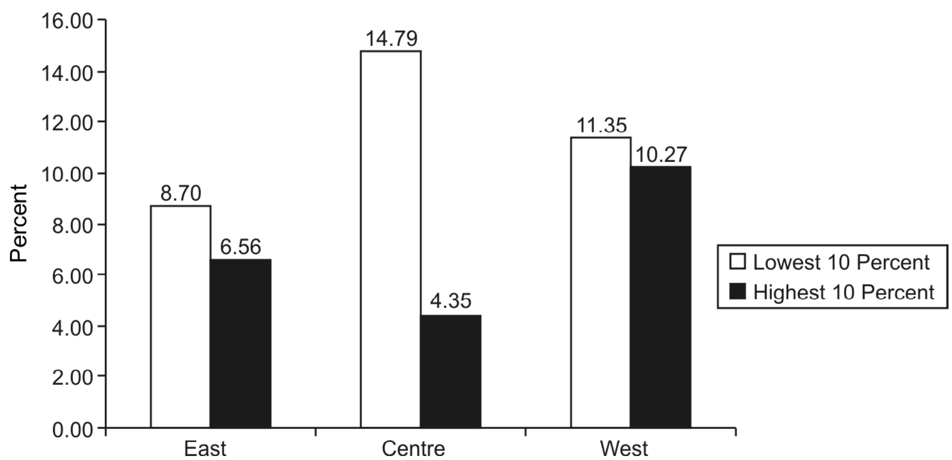

FIGURE 6: Percentage of Highest and Lowest 10 Percent Household Expenditure by Region, 2001 and 2007

Source: Calculated from LSMS 2001 and TLSLS 2007.

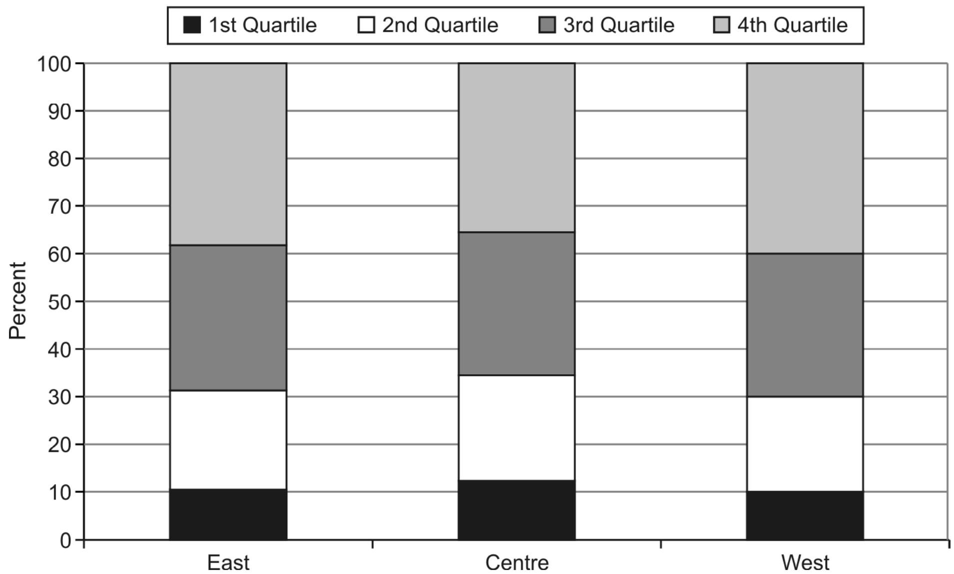

FIGURE 7: Percentage of Household Expenditure Quartile by Region, 2001 and 2007

Source: Calculated from LSMS 2001 and TLSLS 2007.

that the Central Region is far poorer than the Eastern and Western Regions.

Is There Any Horizontal Inequality in Timor-Leste?

It is difficult to correctly assess horizontal inequality in Timor-Leste given the lack of comprehensive information and data on economic and social schemes. Additionally while an analysis of employment in the informal sector may provide some indication of horizontal inequalities, once again, existing household surveys do not provide detailed information on labour status. Nevertheless an attempt is made to assess the degree of horizontal inequality using indicators such as language profiency, sex, and access to financial markets.

Language Usage

Four languages are officially used in Timor-Leste, for both oral and written communication purposes. They are Tetum and Portuguese, which in the Constitution are regarded as the official languages, and Indonesian and English, which are considered as the two main working languages. A comparison of the usage of these languages by the lowest 10 percent and the highest 10 percent income groups reveal significant differences. For example, in 2001 about 40 percent of the households within the lowest 10 percent income group could communicate in Tetum and Indonesian, as opposed to 75.5 percent of those in the highest 10 percent. Only 2.1 percent of the population in the lowest 10 percent group could communicate in both Tetum and Portuguese. The date shows that in the highest 10 percent, 23.2 percent had a good command of both Tetum and Portuguese.

In 2007, however, the usage of Tetum, Portuguese and English increased in percentage terms while the use of Indonesian became less common. In particular, Portuguese became the preferred

TABLE 10: Percentage of Household by Language Use and Ranked by Household Expenditure, 2001 and 2007

	Lowest 10%	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	Highest 10%
Language Use			**2001**			
Teturn and Indonesian	36.97	36.18	38.78	41.90	46.09	75.48
Teturn and Portuguese	2.13	2.75	3.77	4.92	7.41	23.20
Teturn and English	0.17	0.70	1.30	1.83	3.26	12.92
Can speak 3 languages	1.87	2.68	3.98	5.26	8.38	27.90
Can speak 4 languages	0.09	0.44	0.68	1.04	1.77	7.64
Teturn	78.88	78.83	80.82	82.71	83.98	96.18
Language Use			**2007**			
Teturn and Indonesian	24.82	28.84	32.80	36.18	39.12	57.58
Teturn and Portuguese	9.55	11.98	12.90	14.22	15.63	24.68
Teturn and English	1.85	2.33	2.85	3.57	4.60	10.76
Can speak 3 languages	7.29	8.48	9.59	10.87	12.35	23.01
Can speak 4 languages	1.65	2.04	2.44	3.08	3.87	8.47
Teturn	81.32	83.72	84.77	86.04	86.66	88.62

Source: Calculated from LSMS 2001 and TLSLS 2007.

language amongst all income groups between the period of 2001 and 2007. Persons in the highest 10 percent bracket preferred to use foreign languages, (English and Portuguese) as compared to the lowest 10 percent. One of the conclusions from data on language use is that the more affluent people tend to have better communication skills (both oral and written) compared to the less disadvantaged ones.

Having a good command of both Portuguese and English is an important attribute as not only does it facilitate access to high paying jobs, but also encourages entrepreneurship amongst individuals. It follows that persons with a good command of both Portuguese and English would tend to benefit more from the fruits of development compared to those who have difficulty in communicating in either language. Given that most investment into

TABLE 11: Percentage of Household by Sex and Ranked by Household Expenditure, 2001 and 2007

	Lowest 10%	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	Highest 10%
Gender			**2001**			
Male	50.51	51.23	51.40	51.14	50.61	52.13
Female	49.49	48.77	48.60	48.86	49.39	47.87
Gender			**2007**			
Male	51.59	50.49	51.01	50.87	50.92	51.08
Female	48.41	49.51	48.99	49.13	49.08	48.92

Source: Calculated from LSMS 2001 and TLSLS 2007.

the country comes from Indonesia, Portugal, Australia and other European countries, investors prefer to employ individuals who have good command of the languages used in those countries. Having a good command of English, Portuguese and Indonesian also facilitates access to universities and other training courses overseas.Younger persons who have a good command of both Indonesian and English are in an advantageous position not only because they face greater opportunities and access to higher education overseas, but these attributes raise their social capital level which eventually translates into earning higher salaries.

Sex

An examination of the rather limited data reveals that there is no discrimination based on sex across income groups.This reinforces the argument that indeed there is no gender discrimination, especially in terms of access to income generating jobs and/or the capacity to spend. With regard the to proportion of women in each income group, women do not face inequalities and discrimination. Each income group shows that the share of women is almost equal with the share of their male counterpart. They have no discrimination in consumption expenditure with men.This argument can align with the fact that in 2007, the number of people in the labor force was estimated to be around 325,400, of whom approximately 48.5 percent were women.

Access to Finance

Access to financial services is extremely limited for all income groups. In 2001, only about 5 percent of the households had access to financial institutions, in terms of savings and/or credit and a mere 2.5 percent of the highest 10 percent income group had access to a financial institution. This is primarily attributable to the fact that there are very few financial institutions and that most of these are located in the capital city of Dili. The situation changed only slightly in 2007 with more people having access to financial institutions due to improved access.Access to finance for those in the higher income bracket improved in 2007. It should be noted though that lower access to financial institutions was not due to any form of discrimination but rather due to the paucity of adequate financial services.

Inadequate access to financial services disempowers the population in the sense that it prevents people from undertaking investment activities and eventually

TABLE 12. Percentage of Household Who Has Access to Financial Market and Ranked by Household Expenditure, 2001 and 2007

	Lowest 10%	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	Highest 10%
2001						
Have access	4.24	5.18	5.05	4.73	4.51	2.46
No access	95.76	94.82	94.95	95.27	95.49	97.54
2007						
Have access	7.37	9.29	11.03	12.95	13.78	15.63
No access	92.63	90.71	88.97	87.05	86.22	84.38

Source: Calculated from LSMS 2001 and TLSLS 2007.

weakens people's capacity to generate productive activities. This situation, unless reversed, could entrap more people in poverty. The end result is likely to be low output, unless it is complemented by high accumulation of capital.

Fundamental Policies in Income Inequality

Even though the government is still focusing on addressing poverty, there is no clear agenda to prevent income inequality. The first Living Standards Measurement Survey conducted in 2001 shows that 36 percent of the population lived below the national poverty line estimated at $0.55 per capita per day. The incidence of poverty was higher in rural areas (39.7 percent) than in urban areas (25.2 percent). Attempts to achieve the Millennium Development Goals, particularly Goal 1, have been largely unsuccessful. Estimates from the second Living Standard Measurement Survey conducted in 2007 indicate a sharp increase in poverty to 50 percent, from 36 percent in 2001. Poverty remained higher in rural areas (51.5 percent) than in urban areas (45.2 percent).

Since its installation on 8 August 2007, the Fourth Constitutional Government has devised a number of policies which were approved by Parliament on 15 September 2007. In less than one year, and in light of the difficulties facing the country, the government managed to usher in political stability and create a more stable macro-economic environment, which is crucial for sustaining economic growth.

Cash Transfers

One fundamental policy in reducing hardships and income inequality has been cash transfers. These transfers (through 'Bolsa Mãe', pensions, and rice subsidies) have had a significant impact, in particular for the poor in rural areas, by boosting their expenditure capacities of the targeted groups.

Economic Stabilization Fund

Given high inflation, especially in food prices, the government proposed the establishment of a $ 240 million Economic Stabilization Fund (ESF) in the 2008 budget. The principal aim of such a fund was to provide social safety nets to insulate people from higher prices. The introduction of the ESF in the 2008 Budget dampened the impact of imported inflation on key imported consumables, such as rice. Given the global increase in commodity prices, especially of food items and fuel, many countries have opted recently to provide some protection to the poor through setting up social safety nets.

The principal flaw in the ESF is of a technical nature relating to the design of the support mechanism. When prices rise, two options exist. The first is a price subsidy and the second is an income supplement (either in the form of a cash transfer, food stamps or coupons). Although the price subsidy is relatively easy to administer, its benefits are dispersed and not specifically targeted at the poor. In contrast, the transfer scheme involves more administrative work such as identifying the poor and making special payment arrangements.

Taxation Breaks

Given the inflow of significant and rapidly increasing oil revenues, the government has opted for substantial tax breaks. This includes an across-the-board reduction in the standard rate of import duty from 6 percent to 2.5 percent. Some critics believe that while this may stimulate imports and reduce the component of imported inflation, it raises the fundamental issue of whether Timor-Leste has liberalized too much, too soon. The cut in import tariffs at the initial stages of development tends to result in a process of deindustrialization' as the fall in import tariffs jeopardizes the postion of domestic industry as it becomes increasingly unable to face foreign competition.

The Return of IDPs

Policies in the area of social welfare have basically been implemented through the 'Hamutuk Hari'i Futuru' (Together Build the Future), which is a national strategy for recovery. This package aims to alleviate the effects of the 2006 crisis, particularly in assisting the return of the Internally Displaced People (IDPs) to their homes. To that end, the government has distributed $6.6 million to 3,206 out of 5,500 families, to help them return to their homes. By October 2008, some 32 IDP camps (out of approximately 50 camps) were closed down reflecting the success of the programme. Additionally the government has established 'Dialogue Teams' to help smooth reassimilation of the IDPs into their former communities.

Pension Schemes, Child Protection and Various Subsidies

As part of the national effort to reduce poverty and provide social protection to the most vulnerable sections of the population, the government has (since August 2008) disbursed $20 to each member of 29,000 registered families. The beneficiaries are primarily the elderly and medically challenged individuals. The total number of registered families to be served under this scheme is 70,000.

The government has also established a pension fund for ex-combatants and war victims. More than 200 beneficiaries have received pensions and 12,338 more are to be paid towards the end of this year. A cash transfer mechanism covering widows and single mothers has been set up for 7,000 families under the so-called 'Bolsa Mãe' (Mother's Purse) programme. The principal aim of this scheme is to ease their financial burden, so that they can provide better education and nutrition for their children. The protection of children from sexual abuse and violence has also been a major issue in the country. For that reason, the Government has set up 12 reference networks throughout the country to attend to complaints in each of the districts.

Due to lack of medical services in the country, the government has also set up various assistance schemes for citizens who are in need of foreign medical treatment. So far, 58 people have benefited.

Timor-Leste is prone to natural disasters with serious consequences. In response to this, the Government assisted approximately 500 families who suffered the consequences of heavy rains and droughts in six districts by rebuilding their homes and providing families with basic needs and temporary shelters.

Concluding Remarks and the Way Forward

Socially, economically, and politically, Timor-Leste is undergoing a difficult transition to becoming a truly sovereign nation state. Despite the challenges facing the country at this transitional stage, the present study reveals a strange paradox within the country. While on the one hand income (as consumption expenditure) distribution in the period 2001 to 2007 has become less dispersed, suggesting declining inequalities; on the other hand, the incidence of poverty in the country has dramatically increased from 36 percent to 50 percent. The study also shows that Timor-Leste saw declining income inequalities even during the 2006 crisis. Income distribution has grown markedly more equal over the past seven years. The income expenditure trends were almost the same for all social groups, and the increase of poverty incidence has been experienced by all groups.

The principal recommendation is that policy makers should direct their focus to absolute poverty dynamics. This implies that rather than income inequality, policies should ideally be directed at tackling absolute poverty.

A significant question is whether income inequality can lead to political and social instability in Timor-Leste. The answer is no. Empirical evidence shows that declining income inequalities, primarily due to government transfers, was not the trigger of political and social instability. The decomposition of the sources of income has clearly shown that low income households have an extremely low share of labour income due to their unequal access to job opportunities. This could trigger horizontal conflicts between people who do not have access to the employment opportunities, and others who have access.

Although transfers have played an important role in reducing inequalities, they have failed to reduce the incidence of poverty in the country. Additionally, transfers tend to be effective only in the short-run. Economic theory suggests that there is a trade-off between transfers and the decision to work. Transferring more income to the poor tends to reduce their work effort during their working years and may induce them to retire early. Theory further suggests that if gross income increases while labour income is held constant, the number of working hours demanded will go down. In addition, it can also distort the economic decisions of those who are taxed to provide the revenues that are being redistributed.

A more effective transfer scheme recommended is one that enhances human capital accumulation which is linked through education and health transfers. Not only would such a scheme lay the foundation for sustainable development, but it would also transform young people into a quality workforce. Such a targeted transfer scheme by a process of 'equalizing downward' will help maintain a sustainable development through higher labour competitiveness.

Another recommendation for policy makers is to aim at expanding employment opportunities. This would entail designing policies that expand employment for both the poor and non-poor. For example, having an industrial policy that promotes structural change is crucial for the economic development of the country. Trade and industrial policy in the next National Development Plan should focus on identifying emerging industries in which Timor-Leste is likely to have a comparative advantage. Such industries, in the Timorese context, are likely to be small or medium-scale, focusing primarily on light consumer goods, and be either agro-based or engaged in processing local raw materials. In a bid to sustain a high growth rate and increase labour absorption over the next decade, a fundamental role will have to be accorded to private-sector led industrialization.

The Petroleum Fund, an important source of government revenue, should be managed appropriately to tackle both income inequality and poverty reduction programmes. The fund could tackle both problems simultaneously, without having any contradiction in the distribution of money. The accumulation of wealth in the Petroleum Fund could be utilized to stimulate the growth of the non-oil economy, which would benefit all segments of society, particularly the low income group.

The empirical evidence shows that the lower the household expenditure the larger the size of the household. This is a clear indication that access to health facilities for the lower income households remains extremely limited. Second, there is a positive correlation between household expenditure and the education level of the head of the household. This highlights the importance of education as an important instrument in addressing income inequality problems.

Thus, policies should focus on initiating a family planning programme, especially for low income households. Additionally better access to health facilities would help to improve the quality of life of the low expenditure households. The family planning programme should be aligned with an improvement in the access to health facilities for the poor. This would reduce the burden of the poor in their struggle to increase human capital accumulation by providing education to their children. At the same time, with a young-age population structure, the government should consider improving the education level of the people through a nationwide programme of education for all.

Given the strong correlation between income and health quality, it is recommended that the government should re-assess its policy on health and family planning. The introduction of free user fees and medicines at government health care facilities, as part of health sector reforms should be associated with a requirement that the facilities and services are also available to specified groups, including very poor would-be patients in remote areas. The existing health sector reforms demonstrate that the poorest rarely benefit, while higher income urban areas frequently avail free treatment.

Income inequality in Timor-Leste is predominantly within-region inequality rather than between-region inequality. This clearly indicates that there is no significant difference in the welfare of the people between-regions. Nationwide pro-poor programmes are perhaps more appropriate than geographically targeted programmes. Programmes that concentrate exclusively in specific areas will not overcome the problem of income inequality at the aggregate level. Thus it is imperative to have a broad national strategy targeting all regions.

An additional recommendation is the creation of a fully functioning labour and goods market which will have a significant impact on within region inequality. This reform permits agricultural households to focus solely on their on-farm activities. By having a functioning labour and goods market, not only will the tendency for people to migrate out of rural areas be minimal, but such a strategy could also significantly boost the incomes of those remaining in agriculture.

Most rural people rely on the agricultural sector, which has not yet developed into commercial agriculture. With such a pattern of living, rural people do not have much need for money-based transactions and a monetized economy. All of their needs are fulfilled by their own crops or by conducting transactions using a barter system.

The transfer policy for farmers should be amended to make it more effective and transform the agricultural sector into a broadly commercialized activity. Two types of transfers are therefore recommended. First, a mechanical subsidy would benefit commercial farmers to boost their productivity and increase the value of their products, while the development in irrigation infrastructure will cut commercial farm costs. Second, no incentives exist for subsistence farmers to increase their productivity in the absence of a well functioning market. Hence, the transfer policy for this group of farmers should primarily aim at improving their access to markets. Being able to market their produce would provide an incentive to farmers to improve yields and productivity. The long-term impact of these policies would be an increase in farmers' labour incomes thereby progressively reducing their dependency on government income transfers.

Moreover, the literacy in foreign languages has a direct relation with access to gainful employment. It should be emphasized that higher education will increase the probability of the workers accessing better quality jobs and thus earning higher incomes. Workers who complete secondary or university education are less likely to work in the informal sector than less educated workers. Therefore, a cash transfer policy through the education channel will help poorer people to have better job market access. The existing government policy on provision of free education is more politically desirable, but will be meaningless without policies to improve the business or investment climate in Timor-Leste where labour can be gainfully absorbed.

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