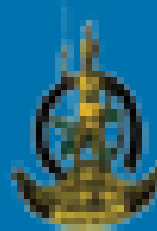


Vanuatu Hardship & Poverty Report

Analysis of the 2010 Household Income and Expenditure Survey



Empowered lives.
Resilient nations.



Vanuatu National Statistics Office
and UNDP Pacific Centre
Suva, Fiji



A photograph of a sunset over the ocean. The sun is a bright, glowing orb in the upper left, casting a shimmering path of light across the dark water. In the middle ground, a small, dark boat is visible on the horizon. The sky is a deep, dark blue, and the overall mood is serene and contemplative.

Acknowledgements

This analysis of the Vanuatu 2010 household income and expenditure survey has been undertaken with the technical and financial support provided by the UNDP Pacific Centre in Fiji. The report builds on the statistical analysis undertaken for the Vanuatu National Statistics Office (VSNO) by David Abbott. The work benefited from support and technical input from the Vanuatu Government Statistician, Simil Johnson, who guided the analysis, and Kim Robertson, Poverty Consultant, Millennium Challenge Account (MCA). Valuable comments provided by colleagues at UNESCAP, Pacific sub-regional office, Fiji, UNDP Policy Development Division, New York, and UNDP Asia Pacific Regional Center, Bangkok, were highly appreciated. The report was edited by Máire Dwyer.

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Foreword

The publication of the 2010 Vanuatu Hardship and Poverty Report comes at a particularly critical time. The Vanuatu economy, which had been growing at a rapid pace for several years, has had much slower growth over the past three years. This growth has made us aware of two realities: it has lifted some of our people out of poverty; but the growth has not been broad based enough to benefit all the poor.

The Vanuatu Hardship and Poverty Report is about simple propositions:

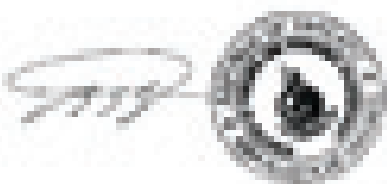
- Economic growth is the only realistic means to lift the poor out of extreme poverty in Vanuatu; but the capacity of the poor to participate in economic growth must be enhanced if they are to share in its benefits.
- The building blocks of a pro-poor growth strategy begin with natural resources. These provide the base upon which the vast majority of the poor now depend for their fragile existence, but over which they exercise little control, and therefore can't exercise full stewardship.
- The role of governance – transparent and accountable governance – is critical to fostering pro-poor growth, and essential to ensuring that the engine of that growth, natural resource wealth, is managed wisely.

For some time now we have known that economic growth, growth that expands the availability of opportunities, is necessary to any permanent effort to alleviate poverty. But the quality of that growth is crucial if its economic benefits are truly to extend to the poor. Change in governance must necessarily include reforms that give the poorest a real stake in their future.

Building the framework for broad based economic growth, especially in rural areas, continues to be a key priority of Government. We have made significant and visible progress since adopting the Priorities and Action Agenda (PAA) in 2005. This success has enabled us to devote increased resources to social services, the primary sector and infrastructure in areas such as health, education and transport networks for remote rural and island communities.

Despite this success, we continue to face the challenge of tackling poverty and social exclusion. That is why this Government is working on a wide-ranging and comprehensive programme of action to assist those who continue to be socially excluded from the greatly improved living standards and opportunities that the majority of us enjoy. This report identifies a wide range of interventions, which together with the high level strategic goals in the PAA, will be necessary in order to achieve the overall objective of reducing poverty.

Working together, in a true spirit of partnership, will ensure that we build on what has been achieved, that no one is left behind and that we achieve the common goal of building an educated, healthy, wealthy and safe society for all.



Honourable Maki Stanley Simelum
Minister of Finance and Economic Management
Republic of Vanuatu
August 2013

Foreword

I am very pleased to introduce the National Report on Poverty and Hardship in Vanuatu. The report is based on the analysis of the 2010 Household Income and Expenditure Survey (HIES) and is a joint collaboration between the Vanuatu National Statistics Office and the UNDP Pacific Centre. For the analysis, poverty is measured by the proportion of households and individuals with expenditure levels below the national food and basic needs poverty lines and as such provides a relative measure of hardship; however its real impact lies within the context in which it is defined.

The incidence of food and basic-needs poverty is thus indicative of the hardship experienced by households and families as they try to meet the minimum standard of living reflected in the poverty lines. The report provides an in-depth comparative analysis of the numbers, location and characteristics of those living below the national poverty line as well as the distribution of expenditure and sources of income by comparing the results of the 2006 and 2010 surveys. Further, the report analyses key dimensions of human poverty, such as the quality of housing and access to energy, education services, water and sanitation. It also identifies vulnerable groups and assesses the gender, geographic and other dimensions of income and human poverty in Vanuatu and provides policy recommendations to accelerate progress towards the achievement of MDG One targets.

The report findings are therefore an important guide to policy-makers and community leaders in planning and formulating appropriate policies that could improve the lives and well-being of the people of Vanuatu, especially those living below the national poverty line. By defining poverty and hardship in terms of gender and geographic location, the report should prove an invaluable tool to politicians, planners and decision makers.



Peter Batchelor
Manager, UNDP Pacific Centre

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Acronyms

ADB	Asian Development Bank
a.e	adult equivalent
AFF	Agriculture, Forestry and Fisheries sectors
BNPL	Basic Needs Poverty Line
CPI	Consumer Price Index
FAO	Food and Agriculture Organization
FPL	Food Poverty Line
FSM	Federated States of Micronesia
GDP	Gross Domestic Product
H3D	Highest three expenditure deciles
HCI	Head Count Index
HH	Households
HHH	Household head
HIES	Household Income and Expenditure Survey
IP	Incidence of Poverty
Kcal	Kilocalories
L3D	Lowest three expenditure deciles
LED	Local Economic Development
MCC	Millennium Challenge Corporation
MDG	Millennium Development Goal
p.c.a.e.	per capita adult equivalent
PGI	poverty gap index
PIC	Pacific Island Country
PNG	Papua New Guinea
RSE	Recognized Seasonal Worker Scheme (New Zealand labor scheme)
SPC	Secretariat of the Pacific Community
SPGI	squared poverty gap index
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNICEF	United Nations International Children Funds
USP	University of South Pacific
VNSO	Vanuatu National Statistics Office
Vt	Vatu (Vanuatu currency)
WESR	Women's Economic Security and Rights Strategy
WHO	World Health Organisation

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Executive Summary

This paper draws on the Vanuatu 2010 Household Income and Expenditure Survey, to construct the Food and Basic Needs Poverty Lines, compute the incidences of Food and Basic Needs Poverty, and provide a detailed analysis of poverty in Vanuatu. The analysis includes the incidence, severity and depth of poverty, the characteristics of the poor, changes in poverty between 2006 and 2010, and the economic factors that contribute to those changes. The paper classifies households and individuals as **poor** if they are below the Basic Needs Poverty Line (BNPL) (defined below), **vulnerable to becoming poor** if their expenditure is no more than double the BNPL and **non-poor** if their expenditure level is more than double the BNPL. The paper analyses inequality in the distribution of expenditure and calculates Gini coefficients from expenditure data. The analysis includes calculations of the value of subsistence production consumed by households.

The analysis identifies three sub-national areas: the two urban areas of significance, Port Vila and Luganville, with all other areas classified as Rural. They respectively contain 20%, 6% and 74% of the population.

Household composition and expenditure

The overall national average household size was 4.9 members (3.9 adult equivalents¹). Poor households were larger on average in both rural and urban areas. Nearly one in eight (12.2%) of households were headed by women; in Port Vila, 13.5% of households were headed by women, compared to 8.3% in Luganville and 12.2% in rural areas. There were 99,350 children under the age of 15 years in 2010, accounting for 40% of the population.

Household weekly expenditure averaged 17,576 Vt with the average total weekly expenditure per capita adult equivalent (p.c.a.e) was 4,455 Vt. For the lowest expenditure quintile, the average weekly household expenditure was 7,259 Vt, compared to 33,577 Vt per week for the highest expenditure quintile. Household average total weekly expenditure is higher in urban areas (23,711 Vt and 17,927 Vt per week in Port Vila and Luganville, respectively) than in rural areas (15,986 Vt per week).

The ratio of non-food to food expenditure increases for each expenditure decile (i.e. as expenditure increases the proportion of total expenditure on food decreases). The average weekly expenditure of households increased on both food and non-food items, and overall per capita adult equivalent (p.c.a.e) expenditure increased by 37.8%, between 2006 and 2010. Proportionately, the expenditure of lower decile households increased more than that of higher decile households.

In 2010, households produced, on average, 58% of their own total food consumption, compared to 52% in 2006. In both years, the proportion of household produced food was significantly higher in rural areas than in urban areas, and rural households consumed the highest proportion of household produced food. In urban areas, higher expenditure households consume a greater proportion of household produced food than households in the lowest quintile.

The Vanuatu National Poverty Lines

In Vanuatu, consumption levels are used to quantify poverty. Vanuatu's poverty measures draw on the "Cost of Basic Needs" methodology. **The Basic Needs Poverty Line** (BNPL) is made up of two components: the cost of a minimum food basket; and an amount of expenditure for "essential" non-food basic needs. Separate estimates were made for Port Vila, Luganville, and Rural (other islands/rural) areas.

The Food Poverty Line (FPL) has an absolute base (2,100 kilocalories/day per adult equivalent) with items that make up those calories derived from the actual consumption patterns of the lowest three deciles in each of the three areas. An adjustment factor of 0.8 (compared to market price) is applied to household production.

The **non-food component** of the BNPL is based on the average total non-food expenditure per week of households in the lowest three deciles per capita adult equivalent.

¹ Adult equivalents refer to the number of adults per household and are derived from "equivalence factors" where children of 14 years and under are counted as half an adult, thus a household with two adults and two children both under 15 years would be equivalent to 3 adult equivalents.



There are significant differences in the BNPLs between the urban and rural areas. Because the cost of food is less in rural areas, the rural FPL is less than 70% of the Port Vila FPL. Expenditure on non-food items is restricted by what is available. In 2010, the rural BNPL is 55%, and Luganville's BNPL is 72%, of the Port Vila BNPL.

Poverty Indicators and 2006 and 2010 comparative analysis

Expenditure poverty is measured in terms of poverty incidence, and the depth and severity of poverty. The **Incidence of Poverty (IP)** is the proportion of households/population below the defined food and basic needs poverty lines. The depth of poverty is measured by the gap between the average level of expenditure of the poor, and the BNPL, and is expressed as **the Poverty Gap Index (PGI)**. The higher the PGI, the greater the depth of poverty. Poverty severity, expressed as the **Squared Poverty Gap Index (SQPI)** (the mathematical squaring of the "poverty gap") or Poverty Severity Index, gives added weight to those households and individuals furthest below the poverty line.

Food Poverty

Between 2006 and 2010, the incidence of food poverty across Vanuatu more than halved, with the proportion of the population affected dropping from 7.4% to 3.2%. This is consistent with the increased consumption of household produced food and strong economic growth over 2006-2010.

However, the incidence of food poverty in Luganville increased from 2.2% of the population in 2006 to 8.2% in 2010. While the consumption of household produced food increased between 2006 and 2010 for all expenditure deciles in Port Vila and rural areas, for the lowest quintile in Luganville, it declined from 32.1% to 22.8% of all food consumed.

Incidence of Food Poverty				
Proportion of HH and Population with Weekly p.c.a.e. Expenditure less than the FPL				
%	Households		Population	
	2006	2010	2006	2010
Vanuatu average	6.0	2.7	7.4	3.2
Port Vila (urban)	4.7	2.2	5.4	2.8
Luganville (urban)	2.2	6.0	2.2	8.2
Rural	5.1	2.0	6.6	2.6

Basic needs poverty and vulnerability to poverty

The incidence of basic needs poverty has barely changed; in 2006, 13.0% of the population were below the BNPL and in 2010, the incidence was 12.7%. Whilst the incidence of basic needs poverty has fallen slightly in both Port Vila and the rural areas, it almost doubled in Luganville, from 10.4% of households (12.2% of population) in 2006 to 19.4% of households (23.6% of population) in 2010.

Incidence of Basic Needs Poverty				
Proportion of HH and Population with Weekly per capita adult equivalent Expenditure less than the BNPL				
%	Households		Population	
	2006	2010	2006	2010
Vanuatu average	10.3	10.7	13.0	12.7
Port Vila (urban)	16.3	14.7	20.1	18.4
Luganville (urban)	10.4	19.4	12.2	23.6
Rural	9.0	8.5	11.5	10.0

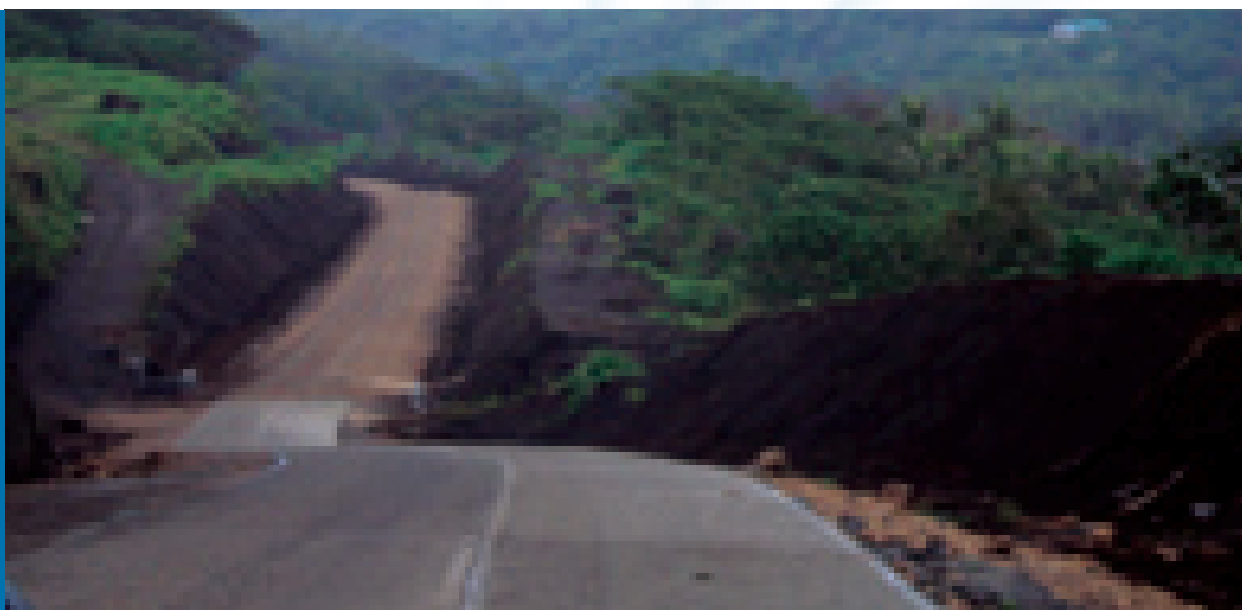
The proportion of the population very vulnerable to becoming poor (per capita expenditure that is 10% or less above the basic needs poverty line) rose, slightly, from 3.0% to 3.4% of the population between 2006 and 2010. There were small increases in Port Vila and rural areas, but a nearly threefold increase in Luganville (6.9% in 2010).



Impact of economic performance

In-depth studies of the performance of economic sectors, as well as the dynamics of labour market, are needed to better understand which sectors performed comparatively well, and who reaped the benefits of such performance. It seems that whilst Port Vila and the rural areas benefitted from the general economic growth, led by tourism, favourable commodity prices, increasing remittances resulting from the New Zealand Recognised Seasonal Employer scheme and infrastructure investment, Luganville has been left behind.

Vanuatu has adapted MDG One Eradicate extreme poverty and hunger targets to a target to reduce poverty levels to 2% by 2015. Achieving this would be an enormous task and would require higher levels of annual growth, and growth that is broader based.



Depth and severity of poverty

At the national level the PGI (depth of poverty) for Vanuatu has declined from 5.6 in 2006 to 2.9 in 2010. This means there needs to be an average 2.9% real increase in income of households below the BNPL for them to reach the BNPL. The PGI was highest in Luganville, at 6.4 (up from 2.9 in 2006), followed by Port Vila (5.4, down from 10.4 in 2006), and lowest in the rural areas (2.3, down from 3.8 in 2006).

Depth (PGI) and Severity (SPGI) of Poverty				
	Poverty Gap Index (PGI)		Squared Poverty Gap Index (SPGI)	
	2006	2010	2006	2010
Vanuatu average	5.6	2.9	3.0	1.0
Port Vila (urban)	10.4	5.4	5.1	2.0
Luganville (urban)	2.9	6.4	1.2	2.6
Rural	3.8	2.3	2.0	0.8

At the national level the SPGI (severity of poverty) was estimated at 1.0 in 2010, down from 3.0 in 2006. In 2010, the SPGI was estimated to be 0.8 in rural areas (down from 2.0 in 2006), 2.0 in Port Vila (down from 5.1 in 2006), and, 2.6 in Luganville (up from 1.2 in 2006). Households below the BNPL in Luganville, therefore, experience significantly more severe poverty and hardship than in the rest of Vanuatu.





Progress towards MDG 1

There has been progress towards the achievement of MDG 1, particularly in the area of eradicating hunger and food poverty. While fewer people are below the FPL and BNPL in 2010, compared to 2006, there has been a small increase in the group vulnerable to falling back into poverty. Luganville has deteriorating indicators for all targets.

Millennium Development Goal (MDG1) Indicators 2006 & 2010

MDG Indicator	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	2006	2010	2006	2010	2006	2010	2006	2010
1.1 Proportion of Population below Basic Needs Poverty Lines %	13.0	12.7	20.1	18.4	12.2	23.6	11.5	10.0
Proportion of Population vulnerable to falling into poverty; per capita adult equivalent expenditure \leq 10% above BNPL %	3.0	3.4	5.0	5.3	2.4	6.9	3.0	3.3
1.2 Proportion of households with per capita adult equivalent expenditure below the minimum level of dietary energy consumption (FPL) %	6.0	2.7	4.7	2.2	2.2	6.0	5.1	2.0
1.3 Poverty Gap Index (PGI) - Depth of Poverty	5.6	2.9	6.7	5.4	2.9	6.4	4.3	2.3
Squared PGI - Severity of Poverty	3.0	1.0	3.2	2.0	1.2	2.6	2.3	0.8
1.4 Share of poorest quintile (20%) in consumption by region %	7.4	8.3	7.5	10.0	8.2	9.3	7.2	8.4
Ratio of Share of poorest quintile (20%) to highest quintile	5.7	4.6	5.4	3.6	4.7	4.1	5.9	4.7
HH Gini Coefficient: (0 = perfect equality 1 = perfect inequality)	0.41	0.31	0.46	0.25	0.41	0.28	0.40	0.31
Population Gini Coefficient	n/a	0.37	n/a	0.34	n/a	0.35	n/a	0.36

Note 1: Some indicators for 2006 have been revised to be consistent with 2010 methodology

Note 2: Proportion of Population below US\$1 (PPP) per day not available.



Consumption distribution and inequality

Between 2006 and 2010 there was a substantial decrease in the Gini coefficient (a measure of inequality where 1 is total inequality and 0 total equality). This occurred at the national level (from 0.41 to 0.31) and in rural areas (0.40 to 0.31) and, to an even greater extent, in the urban centres - Port Vila (0.41 to 0.25) and Luganville (0.46 to 0.28). The decrease in Port Vila is consistent with the pattern of economic growth over the period from 2006 to 2010.

Gini Coefficients of Inequality				
	HH Gini Coefficients		Population Gini Coefficients	
	2006	2010	2006	2010
Vanuatu average	0.41	0.31	n/a	0.37
Port Vila (urban)	0.46	0.25	n/a	0.34
Luganville (urban)	0.41	0.28	n/a	0.35
Rural	0.40	0.31	n/a	0.36

Changes in the level and distribution of expenditure

At the national level, the 2010 BNPL was 60.1% higher in real terms than it was in 2006 and the average weekly expenditure by the lowest three deciles was 51.3% higher than in 2006. The lowest quintile's share of total expenditure increased from 7.4% in 2006 to 8.3% in 2010. The lower middle (decile 4 and 5) quintile's share of expenditure remained the same and upper middle (decile 6 and 7) quintile's share increased to 20.4%, up from 18.7% in 2006. The share of total expenditure by the highest quintile declined from 41.7% in 2006 to 38.2% in 2010. It is the redistribution of expenditure away from the top expenditure decile that has largely led to improvements in the Gini coefficient.

In Port Vila, the lowest quintile's share of total expenditure increased from 7.5% in 2006 to 10.0% in 2010, while the share of the highest quintile in Port Vila declined from 40.8% in 2006 to 35.7% in 2010. This shift is attributed to employment and income growth being greater for the lowest and the lower middle expenditure households, than for higher expenditure households. Expenditure growth for the poorest households also explains the significant reduction in the incidence of severe (food) poverty.

In Luganville, most of the changes in expenditure distribution were confined within the highest three deciles with a shift from the top decile, to the 9th and 8th deciles. The limited improvement in inequality was, mainly, at the expense of the middle expenditure households. This is consistent with the increase in the incidence of basic needs poverty as more lower-middle income households slipped below the BNPL.

The agriculture, fishery and forestry sector stagnated between 2006 and 2010. Most of the reduction in poverty and improvement in income distribution in the rural areas, therefore, may be attributed to increasing government expenditure and internal (urban to rural) remittances. Manufacturing also performed poorly, including agro-processing industries, and this may have contributed to deteriorating conditions in Luganville. In addition, migration from rural areas to the urban area of Luganville contributed to the increasing incidence of poverty.

Economic growth slowed in Vanuatu, and GDP per capita fell, for the first time since 2002, by 0.8% in 2010 and 0.9% in 2011. This means some of the 7.8% of the population whose expenditure was less than 20% above the BNPL, and the 11.2% of the population whose expenditure was between 20% and 50% above the BNPL in 2010, are vulnerable to fall below the BNPL.

Characteristics of the poor

Whilst the incidence of basic needs poverty and hardship is highest in Luganville, the poor in Luganville represent only 11.4% of all households living below the BNPL, with 59.4% of all poor households living in the rural areas, and 29.2% in Port Vila.



Women

Nationally, female-headed households are proportionately represented in the lowest quintile (19.6% of all female headed households) and the lowest three deciles (29%) and slightly over-represented in the highest quintile (22.8%). Luganville varies from this pattern with overrepresentation (30%) of female-headed households in the highest quintile and underrepresentation in the lowest three deciles (22%) and the lowest quintile (12%). The degree of inequality within female-headed households increased between 2006 and 2010, apart from in Luganville.

The proportion of women in the lowest quintile, and the lowest three deciles, declined from 24.6% and 35.7% in 2006 to 23.3% and 33.5% in 2010, respectively. Most of the improvement in the economic status of women occurred in the rural areas. In Port Vila and Luganville the proportion of women in the lowest expenditure quintile and the lowest three deciles increased. In Port Vila and rural areas girls below 14 years of age are more vulnerable to food poverty than women and girls above the age of 14, while in Luganville vulnerability for women of all ages was about the same. Around half of the female population in rural areas are not poor on any measure (as is the case for the whole population), compared to less than third of females living in urban areas.

Economic activity and poverty

At the time of the 2009 Census, labour force participation in Vanuatu was 71% - with men's labour force participation rate 80%, compared to 61.4% for women. The participation rate was higher in rural than urban areas. Women are more likely to be unemployed and looking for work than men, especially in urban areas. Producing goods for sale is the main income source for 46% of households, while wages and salaries are the main support for around 36% of households.

Being in formal employment does not necessarily keep individuals and their households out of poverty. Note that this analysis is based on HIES data from 2010, and prior to the increase in the minimum wage to 30,000 Vt per month in 2012 (from 26,000 Vt). In Port Vila, 16.8% of government employees and 17.1% of private sector employees were below the BNPL; the respective proportions in Luganville were 15.8% and 21.3% and, in rural areas, much lower at 5.1% and 7.1%. On average, female government employees were more likely to be below the BNPL than their male counterparts in all areas, but in the private sector, the reverse was true. In all areas, over half of all employers had expenditure at least 100% higher than the BNPL; that is, they were not poor. Amongst employers, men fared significantly better than women and rural areas had the highest proportions of employers who were not poor. Around half of subsistence farmers were not poor in rural areas, but this was only the case for 20% of this group in Luganville. People who produced goods for sale were generally less likely to be below the BNPL in Port Vila than employees were, but this was not the case in Luganville or rural areas.

In Port Vila, nearly a quarter of disabled people were under the BNPL (23.3%) whereas retired people were less likely to be below the BNPL (18.1%). In Luganville, the reverse was true with 12.5% of people with disabilities, but 29.2% of retired people below the BNPL. In urban areas, women who were engaged full-time in housework were generally less likely to be under the BNPL than other groups not in employment.

Education

The incidence of food and basic needs poverty is significantly higher among people with low levels of education (no schooling or primary education only), particularly in urban areas. However, males with no schooling in urban areas are less likely to be vulnerable to poverty than all other groups with low levels of education. This may be because the employment opportunities that do not require schooling (particularly in the booming construction sector), tend to be male-dominated and concentrated in urban areas.

Elderly

Males and females aged over 60 are more vulnerable in urban areas than in rural areas. Around 22.7% and 21.1% of elderly males and females, respectively, are below the BNPL in Port Vila. In Luganville, 21.9% of elderly males and 25.4% of elderly females are below the BNPL. In rural areas the respective proportions are 10.9% and 9.0%.

Children

At the national level, 13.2% of all children live in households below the BNPL (3.2% in households below the FPL); 37% of all children live in households in the lowest three expenditure deciles – up from 31% in 2006. One third of all children in urban areas, compared to half of all children in rural areas, live in non-poor households. In urban areas, children living in households headed by an elderly person are more likely to be poor. In most areas, children living in female-headed households are no more likely to be poor than other children. A UNICEF study on child poverty and disparities, based on the 2006 HIES, found nearly 20% of children in Port Vila lived in households which suffered from poverty and deprivation, with 17% suffering health deprivation.

Human multidimensional poverty

Access to basic services and energy **depends more on the geographic location, less on the vulnerability status**, of households. Consequently, households below the BNPL in rural areas suffer **significantly more multiple deprivations** than their counterparts in urban areas. Inequalities and geographic disparities are more severe when viewed through a human poverty, rather than just income poverty, lens. Therefore, while income poverty may be relatively lower, multidimensional **human poverty is higher and more severe in rural areas.**

Energy use

Access to energy remains a major challenge. Eight out of ten (82%) of households in Port Vila rely on electricity as the main source of household lighting, compared to 86% in 2006. Electricity is more prevalent in higher decile households. The proportion with electricity is lower in Luganville (73% up from 30% in 2006) and rural areas (30% up from 10% in 2006), but reliance on electricity as a source of energy has increased significantly since 2006. Wood and coconut shells are the main source of energy for cooking, contributing around 46%, 81% and 91% of energy used for cooking in Port Vila, Luganville and rural areas, respectively, followed by gas in urban areas. Nearly all poor households in rural areas and Luganville (90%), and about two thirds of poor households in Port Vila, rely solely on coconut shells and wood for cooking.

Drinking water and sanitation

Access to improved water and sanitation systems depend more on the geographic location, less on vulnerability status, of households. At the national level, the average proportion of all households with access to piped water (private and shared) is 35% compared to an average of 39% for households below the BNPL. Meanwhile, on average, 21% of all households rely on wells, springs, rivers and other sources for drinking water compared to a slightly higher average of 24% of all households below the BNPL. The proportions of households below the BNPL with access to piped water (private and shared) are 76%, 55% and 21% compared to 85%, 78% and 21% of non-poor households in Port Vila, Luganville and rural areas, respectively. Very few households in rural areas have access to private, shared piped and/or standpipe water (14%, slightly higher than 12% in 2006) as there are very few distribution systems in



rural areas. Similar to access to water, access to improved sanitation systems depends more on the geographic location, less on the vulnerability status, of households. Interestingly, however, the link between the vulnerability status and access to improved sanitation systems is stronger than in the case of access to improved water systems, particularly in urban area. Around 56.5% of households in rural areas rely solely on a pit latrine (private/shared), compared to 11.8% and 22.7% in Port Vila and Luganville, respectively. Access to sanitation did not improve between 2006 and 2010.

Housing

In Port Vila, 45% of households live in permanent houses and 18% in traditional houses with permanent material. Housing patterns are similar in Luganville where more than half of households live in permanent houses and one third in traditional houses with permanent materials. In contrast, 42% of families in rural areas live in traditional houses, 24.6% in permanent houses and 28% in traditional houses with permanent materials. Makeshift housing is most prevalent in Port Vila (27%).

Telephones

Mobile phones are now ubiquitous throughout Vanuatu and spread across all deciles; 95% of households in Port Vila and Luganville, and 82% of rural households, have mobile phones. Expenditure on mobile phones accounted for 3.3% of all household non-food expenditure. Less than 2% of urban households have private landlines. Port Vila incurred 33% of the mobile phone expenditure, Luganville 9%, and rural areas, 58%.

Education costs

Nearly seven percent (6.7%) of non-food household expenditure went towards education costs. Households below the BNPL spent around 11.5% of their non-food expenditure on education compared to less than 9% by households above the BNPL. Around 36% of the expenditure on education was incurred in Port Vila, 6.0% in Luganville and 58% in rural areas. The proportion of non-food expenditure devoted to education declines as overall expenditure increases.

Education attainment of household heads

In Port Vila, 6% of household heads have no schooling and 30% only primary education, in Luganville, 7% have no schooling and 37% only primary education, and in rural areas the proportions are 31% no schooling and 44% only primary education.

Health expenditure

Health related expenditure accounted for 0.5% of all non-food household expenditure. For households below the BNPL, health was 0.9% of their non-food expenditure.

Income

Three-quarters of all household income in Port Vila (82% for those below the BNPL), two thirds of household income in Luganville (75% for those below the BNPL), but only 23% of household income in the rural areas (10% for those below the BNPL) came from wages and salaries. While men's income from wages and salaries is significantly higher than women's, wages and salaries account for similar proportions of income for male and female heads of households.

Income from remittances, gifts and other miscellaneous sources accounted for 3.6% of income in Port Vila and 2% in Luganville and rural households. On average, poor households receive only about 1% of their income from this source compared to over 2% for households above the BNPL.

Concluding remarks

Apart from in Luganville, there was a significant reduction in hunger (food poverty) between 2006 and 2010. Overall, food poverty more than halved and now affects 3.2% of the population. This progress was, primarily, driven by economic growth



during the period from 2005 to 2009. Growth, however, was not structured in a way to reduce basic needs poverty, which only declined from 13% to 12.7%, and reduce the large proportion of the population concentrated marginally (20%-50%) above the BNPL and vulnerable to becoming poor. However, the depth and severity of poverty have diminished with particularly impressive progress in rural areas. The inequality of expenditure distribution has also reduced with the expenditure-based Gini coefficient reducing from 0.41 in 2006 to 0.31 in 2010. The reduction in the Gini Coefficient was greatest in Port Vila which is consistent with it being the location of a disproportionate share of economic growth. The rise in poverty and inequality in Luganville demands attention from policy makers.

Gender-based inequality is deeper in urban areas, compared to rural areas, and, to some extent, reflects wage inequality. Women's share of the benefits from economic growth has been less than men's with more of the growth being in male-dominated jobs such as construction. More women are vulnerable to falling below the poverty line than are men. The unemployed poor, elderly and people with disabilities are more vulnerable in urban areas than in rural areas.

There is a strong correlation between vulnerability status and education level in urban areas, but less so in rural areas. A strong three-way relationship between gender, low or no education and poverty prevails in urban areas, as vulnerability and the incidence of basic needs poverty is higher among females than males with limited or no schooling.

Children are highly vulnerable to poverty and hardship, with 37% living in households with expenditure less than the BNPL – up from 31% in 2006. Poor households (lowest three deciles), and households in rural areas, tend to have more children than households in the highest expenditure quintile and households in urban areas.

Inequalities and geographic disparities are more severe when viewed through a human poverty, rather than just income poverty, lens. Lack of access to quality services is a major issue, particularly in rural areas.

Policy Implications

Principles for intervention

If interventions to reduce poverty are to be effective, they must be based on proven and cost effective mechanisms for allocating resources and assistance to poor households. Direct targeting is based on clearly identifying poor households or individuals. If providing assistance directly to the poor is not feasible, it may be possible to intervene on the basis of their characteristics. However, characteristic targeting has two potential drawbacks. First, some non-poor households could possess the same characteristics as the poor and, hence, receive benefits (leakage). Second, not all poor households possess the designated characteristics to benefit from the intervention, and consequently all might not be reached (under-coverage).



Targeting poverty reduction programmes to a subgroup of the population has an intuitive appeal, but also poses difficulties. Direct targeting identifies individual households as poor or non-poor and directly provides benefits to the former group, and tries to withhold them from the latter. For example, the provision of food or medical care to households that show clear signs of malnutrition, or to individuals who have special needs (such as pregnant and lactating women and persons with disabilities) are all forms of direct targeting of assistance. However, the screening needed to identify the poor can be very expensive to implement.

There are two alternatives to direct targeting of the poor. The first involves targeting types of spending or 'broad targeting'. Under this approach, programmes target types of spending that are relatively more important to the poor. Spending on basic social services, such as primary education and primary health care, is one example.

The second approach targets categories of people. Under this approach, which can be called 'narrow targeting', benefits are directed to certain types of people. Examples are food stamp schemes targeted to mothers in food-insecure communities or micro-credit schemes targeting women vendors. Narrowly targeted schemes are based on one or both of two methods. The first is indicator targeting (also called categorical targeting). This approach identifies a characteristic of poor people (an indicator) that is highly correlated with low income and is used as a proxy for targeting. The second approach is self-targeting. Under this approach, beneficiaries self-select through the creation of incentives that would induce the poor, and only the poor, to participate in a programme. Examples are public employment schemes that use work requirements and conditions to help self-screen out the non-poor. One drawback of indicator targeting is that not all of the poor can be identified by the same indicators. For example, even though most countries have poor regions, not all the poor live there, nor do all the rich live elsewhere. Geographical targeting at the level of the village or the urban community could reduce the leakage of benefits to the non-poor.

Vanuatu

Vanuatu's poverty-reduction programme needs to focus its efforts on building up the human capital of the working-age population. This would enable the working members of poor households to secure more rewarding employment and generate income. Programmes to improve educational institutions have very high returns over the long-run. Supply-side challenges facing public services, including education and health, are significant. However, there will not be any major progress in terms of human poverty unless such challenges are addressed effectively.

Fiscal space needs to be found to increase expenditure on public services, social protection and investment in other social services. In addition, policymakers need to identify economic policies that can stimulate a broad-based, balanced and more inclusive and equitable pattern of economic growth, which can raise the standard of living of poor households across the country.

Policy recommendations

Maintaining the downward trend in income poverty and accelerating progress towards the achievement of MDGs, particularly goal one, requires further reforms that will allow Vanuatu to sustain and broaden economic growth and enhance its inclusiveness. This requires continued investments in transport and communication infrastructure and services, allowing the rural majority to access domestic and export markets, as well as quality and affordable health and education and financial services, which will directly contribute to the reduction of human poverty.

A stronger sense of accountability is needed within the public service to achieve service delivery targets and improve the management of services, especially health and education, through the strengthened use of data and information systems, human resource development, performance management, and more effective use of resources. Improving the efficiency and effectiveness of the public service also requires a more concerted effort to implement decentralization policies. This



includes the strengthening of provincial governments and municipalities and clarifying their roles and responsibilities for service delivery.

A major concern across the health sector is the lack of personnel, both numbers and skill mix, to drive the health sector plan and deliver basic health services, especially in the rural areas. There is significant potential to work with civil society and faith-based organizations to provide health services.

The next generation of policy reforms in Vanuatu should address human poverty, rather than narrowly concentrate on income poverty. Social protection in the form of non-contributory social pensions is a proven strategy for reducing poverty, vulnerability and inequality. A growing body of evidence demonstrates that social pensions both reduce the poverty and vulnerability of older people, and result in net contributions to multigenerational household economies and the wider community.

Other recommendations for Vanuatu are for Local Economic Development (LED), addressing the needs of youth, and the development of a Women's Economic Security and Rights (WESR) strategy.

There is scope for more detailed analysis of the 2010 HIES on specific issues relating, inter alia, to human poverty, food expenditure patterns, specific areas of expenditure including health and education, gender, children in poverty and geographic disparities identified in the report. Further and more detailed analysis will add policy substance to the key poverty indicators. Most importantly, it will guide the formulation of policies and initiatives aiming at addressing the various dimensions of human poverty and better targeting of vulnerable groups.



A. Introduction

1. The purpose of this paper is to provide an in-depth analysis of poverty in Vanuatu, using the Food and Basic Needs Poverty Lines, including the incidence, severity and depth of poverty, and identification of the characteristics of the poor, using data from the Vanuatu National Statistic Office's (VNSO) 2010 Household Income and Expenditure Survey (HIES).
2. The paper estimates and analyses inequality in the distribution of expenditure and calculates Gini coefficients from expenditure data. In estimating expenditure, and the degree of poverty, the analysis takes account of the high levels of subsistence production and consumption by calculating the value of subsistence production consumed by households, thus providing a better picture of overall well-being. Subsistence production is also incorporated as part of income measurement.
3. The paper also compares findings on poverty and inequality from the 2006 and 2010 HIES surveys. In order to ensure comparability, some of the data for 2006 has been re-worked, in particular, the calculation of the Basic Needs Poverty Line (BNPL) for 2006. The paper links poverty and inequality trends in Vanuatu with growth and economic performance over the period 2006 to 2010, and highlights the key policy issues arising.
4. Poverty and hardship are being increasingly accepted as concerns in the Pacific which need greater attention. Some countries in the Pacific region, including Fiji, Papua New Guinea (PNG), and Samoa, have already fully embraced the need to deal with increasing levels of hardship and poverty and the consequent societal implications. Other countries, are now accepting that there are growing numbers of disadvantaged people who are being left behind as economic and social structures change in response to both external and internal developments.
5. Household survey data on subsistence production also provides a sounder basis for estimating the non-monetary sector in national accounts. In many countries, the value of such subsistence production in the national income (gross domestic product) has not been fully calculated; it may have been inadequately assessed in GDP estimates or occasionally it is missing entirely.
6. The paper is structured as follows:

Section B provides background on Vanuatu, economic growth trends, and price changes;

Section C provides the HIES results on household composition and expenditure, and the method for estimating poverty lines;

Section D sets out the findings on poverty and compares the results for 2010 and 2006;

Section E discusses distribution and inequality;

Section F discusses linkages between growth, income distribution and poverty;

Section G discusses the key characteristics of the poor;

Section H identifies vulnerable groups;

Section I discusses access to services;

Section J provides an analysis of income sources;

Section K provides concluding remarks;

Section L discusses policy implications, and

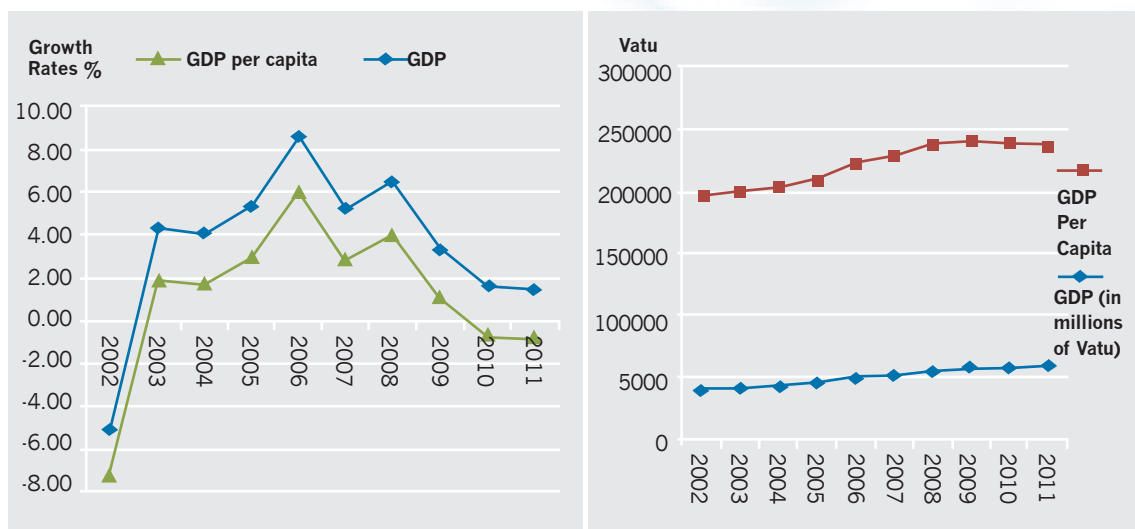
Section M makes policy recommendations.



B. Background

7. Vanuatu is a small Pacific Island Country (PIC) with a land mass of 12,281.25 square kilometres, a population of 249,853 at the time of the 2010 HIES, and population density of approximately 19 persons/km² (2009 Census) living in six provinces (Torba, Sanma, Penama, Malampa, Shefa and Tafea). According to the 2009 Census, annual population growth averaged around 2.3% between 1999 and 2009. More than three quarters (75.6%) of the population live in rural areas. Urbanization is increasing, and the urban population is growing at an annual average rate of 3.5%, compared to the 1.9% annual growth rate for the rural population (1999 – 2009 Census data). The largest urban area, Port Vila, and associated peripheral settlements, are in Shefa province, and have the highest population growth (3.7% annually) and density (52 persons/km²). The second largest urban area is Luganville in Sanma province.
8. In terms of economic growth, Vanuatu performed relatively well during the period 2003-2010, with an average real GDP growth rate of over 5% for four consecutive years (2005-2008). Unlike most of the Pacific region, Vanuatu managed to maintain positive GDP growth during the peak of the global economic crises in 2008 and 2009. This has translated into significant increases in real per capita incomes. Tourism and construction have driven this growth, but it has been concentrated in the major urban areas of the country. Gross domestic capital formation has averaged over 20% of GDP during the period from 2001 to 2011, which is the highest among all PICs. Macroeconomic policies are relatively sound, and both fiscal and monetary management have improved markedly. Inflation has been contained to a large extent.
9. However, a possible lagged effect of the global economic crises is now occurring in Vanuatu (Figures 1a and 1b). Most economic indicators deteriorated in 2009, 2010 and 2011. This should be a signal for the Vanuatu government to scale up efforts to maintain, broaden and enhance the inclusiveness and stability of economic growth.

Figures 1.a and 1.b: Growth rates (2006 constant prices) of GDP and per capita GDP (2006 constant prices in Vatu) 2002-2011



Source: Vanuatu National Statistics Office.



10. The agriculture, forestry and fishery (AFF) and manufacturing sectors did not perform well from 2002 to 2011. Economic growth slowed down in 2010 and 2011 as tourism and construction also slowed down, and, in both years, GDP per capita declined for the first time since 2002.
11. The strong economic growth from 2006 to 2010 was associated with significant growth in government expenditure (8,973 million Vt in 2010, up from 6,733, 6,728 and 6,843 million Vt in 2004, 2005 and 2006, respectively). Together, these contributed to the decline in poverty in Vanuatu. Household consumption grew by 11% in real terms over the same period.

Figures 2.a and 2.b: Consumer price and food price indexes (2000-2010) and the annual percentage change in consumer price and food price indexes (2000-2010)



Source: Vanuatu National Statistics Office

12. Between 2000 and 2003, the consumer price index (CPI) and the food price index moved in very close alignment with an annual increases averaging around 1% to 2%. The food price index, however, increased by 4% in 2004 and 2006, while the CPI maintained the same average annual change. Figures 2.a and 2.b show that the CPI and the food price index rose sharply in 2007 and 2008 in response to the global food and energy crises. The food price index rose faster, recording an 11% increase in 2008. Inflationary pressure relaxed in 2009 and 2010.

C. Overview of the 2010 and 2006 HIES results and methodology

13. The 2010 HIES, like that of 2006, was based on a national sample of 10% of private households. The survey coverage included only persons living in private households during the survey period, September to November. Persons living in institutions, such as school dormitories, hospital wards, hostels and prisons were excluded, as were expatriate temporary residents and permanent residents who had not resided, and were not intending to reside, in Vanuatu for at least 12 months. More discussion on the method for the HIES 2010 survey is included in the Vanuatu National Statistics Office (2013) publication on the 2010 HIES.

C.1. Households size and characteristics

14. As with the 2006 HIES, the reference period for the 2010 Households Income and Expenditure survey was the second and third quarters of the reference year (2010). Table 1 summarizes the characteristics of the households (HH) included in HIES 2010 and the derived estimates for the total number of households and population in Vanuatu. For the purposes of analysis, three sub-national areas have been identified: the two urban areas, Port Vila (20% of the population) and Luganville (6% of the population), with all other areas classified as Rural (74% of the population). The table also shows the estimated number of “adult equivalent” (a.e) population (discussed below) which is used as the basis for the poverty/hardship estimates.

Table 1: 2010 HIES Survey size and population, and comparison with 2006

SurveySize & Population Estimates for 2010 Household Income and Expenditure Survey								
	Sample size: Number of HH	% change from 2006 HIES	Estimated Total Number of HH	% change from 2006 HIES	Estimated Total Population	% change from 2006 HIES	Estimated Adult Equivalent Population	% change from 2006 HIES
Vanuatu	4377	12.7	50735	17.1	249853	22.9	200182	21.3
Port Vila (urban)	578	42.7	9765	35.1	49447	49.1	41229	45.4
Luganville (urban)	485	17.1	2701	14.5	15114	38.7	12409	36.6
Other isalands/rural	3314	8.1	38269	13.5	185292	16.4	146544	14.8

Expenditure deciles and quintiles and adult equivalent calculations

15. To make comparisons, the analysis divides households into deciles – that is ten equal sized groups of households that are ranked by, for example, the level of household expenditure per adult equivalent. The first decile will be the ten percent of households with the lowest expenditure per adult equivalent, the second decile the ten percent of households with the next lowest equivalent expenditure and so on. Quintiles are two deciles combined together – so the lowest quintile is decile one and two (the lowest two deciles). Dividing households this way enables a closer analysis of the characteristics of households of different expenditure levels.
16. Adult equivalents (a.e) are derived from “equivalence factors” where children of 14 years and under are counted as half an adult; thus a household with two adults and two children both under 15 years would be equivalent to 3 adult equivalents. This methodology has been adopted to: a) take account of the downward bias in per capita expenditure that would otherwise occur in households with more children, often those with lower expenditure levels anyway, and which might therefore have an upward bias in the likelihood of a particular household falling below the poverty lines; and, b) to make an allowance for the “economies of scale” in a household of larger size.
17. The overall national average household size was 4.9 members (3.9 adult equivalents). Poor households were larger on average in both rural and urban areas. Table 2 shows that, for the lowest quintile, the average household size was 5.7 (4.4 a.e). Households in urban areas were, on average, larger than those in rural areas. The largest average household size was in Luganville where the average for all households was 5.6 (4.6 a.e), while lowest quintile households had an average of 6.8 members (5.6 a.e). As is the case in other parts of the Pacific region, as well as most developing countries, households that spend more p.c.a.e tend to be smaller. The average household size in the highest quintile was 4.0 (3.3 a.e). Even in Luganville the size of households in the highest quintile was only 4.8 (3.9 a.e) compared to the average of 5.6.



Table 2: Household size and adult equivalents by expenditure level

Household Size 2010								
Ranked by per capita adult equivalent HH expenditure deciles	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	All Persons	Adult Equivalent	All Persons	Adult Equivalent	All Persons	Adult Equivalent	All Persons	Adult Equivalent
Average all Households	4.9	3.9	5.1	4.2	5.6	4.6	4.8	3.8
Lowest Quintile	5.7	4.4	6.3	5.2	6.8	5.6	5.5	4.3
Lowest Three Deciles	5.5	4.3	5.9	4.9	6.5	5.3	5.4	4.2
Highest Quintile	4.0	3.3	3.8	3.2	4.8	3.9	4.0	3.3
Total Population; survey est	249,855	200,182	49,447	41,229	15,114	12,409	185,293	146,544

Female-headed households

18. Overall, 12.2% of households were reported as being headed by women (6,660 households), a high of 13.5% of all households in Port Vila, and a low of 8.3% in Luganville (Table 3). The highest proportion of female-headed households was recorded within the highest expenditure quintile in Port Vila, while the lowest proportion was recorded within the poorest quintile in Luganville.

Table 3: Proportion of households headed by females by expenditure level

Ranked by per capita adult equivalent HH expenditure deciles	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural
Average all Households	12.2	13.5	8.3	12.2
Lowest Quintile	11.8	13.0	5.0	12.1
Lowest Three Deciles	11.7	11.6	6.1	12.1
Highest Quintile	14.1	15.5	12.3	13.0

19. Female-headed households were smaller in size than households headed by males, with an average of 3.9 people compared with 5.1 people in male-headed households. Female-headed households had a higher per capita expenditure level at 16,400 Vt per month than compared to male-headed households (15,700 Vt). However, female-headed households had lower average household expenditure at 64,600 Vt compared to male-headed households (79,600 Vt), because they were smaller in size.

Children

20. There were 99,350 children under the age of 15 years in 2010, accounting for 40% of the population. Nationally, the average number of children per household was 2, and this was also the case in Luganville and the Rural Areas. The average number of children per household is slightly lower in Port Vila (1.7). The number of children is higher in the poorest quintile; 2.5 children compared to 1.4 children in the highest quintile. Poor rural households have the highest number of children per household (2.6).

Table 4: Number of children per household and proportion by expenditure level

Ranked by per capita adult equivalent HH expenditure deciles	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	%	No. per households	%	No. per households	%	No. per households	%	No. per households
Average		2.0		1.7		2.0		2.0
Lowest Quintile	25.6	2.5	25.5	2.2	24.5	2.5	25.5	2.6
Lowest Three Deciles	36.6	2.4	35.8	2.0	36.2	2.4	35.9	2.4
Highest Quintile	14.3	1.4	14.1	1.2	16.8	1.7	14.3	1.4
Children by Region		99,346		16,437		5,411		77,497

C.2 Household expenditure

21. Household total weekly expenditure averaged 17,576 Vt and the average total weekly expenditure per capita adult equivalent (p.c.a.e) was 4,455 Vt. For the lowest expenditure quintile, the average weekly household expenditure was 7,259 Vt, compared to 33,577 Vt per week for the highest expenditure quintile. Household average total weekly expenditure is higher in urban areas (23,711 Vt per week in Port Vila and 17,927 Vt per week in Luganville) than in rural areas (15,986 Vt per week). This also holds for the lowest quintile. In Luganville, however, the average weekly adult equivalent total expenditure in the lowest three expenditure deciles is slightly lower than in rural areas (Table 5).

Table 5: Weekly household and adult equivalent average total expenditure by decile

Weekly Household Expenditure	Weekly per capita adult equivalent Total Expenditure								
	VT per week				PCAE Expenditure deciles/VT week PCAE	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural
Ranked by per capita adult equivalent HH expenditure deciles	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural	Decile 1	1329	1810	1227	1268
Average all Households	17576	23711	17927	15986	Decile 2	1981	2784	1839	1888
Lowest Quintile	7259	11891	8424	6689	Decile 3	2490	3480	2251	2360
Lowest Three Deciles	8239	12847	9216	7565	Decile 4	2958	4016	2704	2766
Highest Quintile	33577	42152	33874	31012	Decile 5	3447	4688	3097	3201
VT per capita adult equivalent per week					Decile 6	4039	5280	3601	3734
Average all Households	4455	4682	3903	4175	Decile 7	4797	6063	4295	4436
Lowest Quintile	1655	2297	1533	1578	Decile 8	5729	7423	5338	5377
Lowest Three Deciles	1933	2691	1772	1839	Decile 9	7363	9677	6552	6724
Highest Quintile	10571	13690	8850	9709	Decile 10	13778	17702	11147	12695
Ratio H20/L20	6.4	6.0	5.8	6.2	Average	4455	4682	3903	4175



22. The overall average weekly expenditure on food per household in Vanuatu was 9,834 Vt (Table 6). Average expenditure on food is typically lower in rural areas due to subsistence food production. Luganville is the exception, where the average weekly expenditure on food per household was 8,924 Vt compared to 9,930 Vt in rural areas. The average weekly expenditure on non-food items per household was 7,742 Vt for all households, lower than average weekly expenditure on food. Households in the highest expenditure quintile in urban areas spend more on non-food than on food.

Table 6: Average food and non-food household expenditure by expenditure level

Ranked by per capita adult equivalent HH expenditure deciles	Food Expenditure (VT per week)				Non-Food Expenditure (VT per week)			
	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural
Average all Households	9834	9708	8924	9930	7742	14003	9004	6056
Lowest Quintile	5004	5955	5189	4852	2255	5936	3234	1836
Lowest Three Deciles	5594	6315	5630	5395	2645	6532	3586	2170
Highest Quintile	15839	14579	13910	16933	17738	27573	19964	14079
VT per capita adult equivalent per week				VT per capita adult equivalent per week				
Average all Households	2492	1917	1943	2593	1962	2765	1960	1581
Lowest Quintile	1141	1150	945	1145	514	1147	588	433
Lowest Three Deciles	1312	1319	1083	1310	622	1372	690	528
Highest Quintile	4949	4660	3612	5265	5622	9030	5238	4445

23. Table 7 illustrates the ratio of non-food to food weekly expenditure per household and per capita adult equivalent (p.c.a.e). The 0.79 ratio (for all households) means that, on average, households spend 79 Vt per adult equivalent per week on non-food for every 100 Vt spent on food. The ratio is lower in rural areas than in urban areas because rural households have less access to, and a more limited supply of, non-food goods and services than is the case for urban households. The ratio of non-food to food expenditure increases for each expenditure decile (i.e. as expenditure increases, the proportion of total expenditure on food decreases).

Table 7: Ratio of non-food to food expenditure by expenditure level

Ranked by per capita adult equivalent HH expenditure	Per household per week			
	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural
Average all Households	12.2	13.5	8.3	12.2
Lowest Quintile	11.8	13.0	5.0	12.1
Lowest Three Deciles	11.7	11.6	6.1	12.1
Highest Quintile	14.1	15.5	12.3	13.0
Per capita adult equivalent per week				
Average all Households	0.79	1.44	1.01	0.61
Lowest Quintile	0.45	1.00	0.62	0.38
Lowest Three Deciles	0.47	1.04	0.64	0.40
Highest Quintile	1.14	1.94	1.45	0.84

24. In real terms, the average weekly expenditure on both food and non-food items per household increased by 42.7%, and p.c.a.e by 37.8%, between 2006 and 2010 (Table 8). The expenditure of the low decile households, however, increased more than that of the high decile households. Table 8 illustrates the percentage change of total, food, and non-food household weekly expenditure in 2010, compared to 2006. Lower expenditure in 2010, compared with 2006, only occurs in the total, and non-food, expenditure per capita adult equivalent (p.c.a.e), in urban areas (Luganville and Port Vila) as well as the non-food expenditure of households in urban areas.

Table 8: Total, food, and non-food household expenditure (percentage change from 2006)

Total Expenditure								
% change in average per HH and per capita adult equivalent expenditure	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent
Average all Households	42.7	37.8	17.4	-9.0	20.6	1.1	52.9	51.1
Lowest Quintile	59.0	70.5	54.6	48.7	37.1	11.8	76.2	93.8
Lowest Three Deciles	51.3	62.3	44.0	44.3	32.1	10.8	64.7	81.7
Highest Quintile	31.0	23.8	3.5	-8.0	17.4	-8.3	40.1	34.2
Food Expenditure								
% change in average per HH and per capita adult equivalent expenditure	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent
Average all Households	48.6	43.6	39.3	7.9	40.2	17.6	51.4	49.6
Lowest Quintile	62.3	74.1	53.9	47.9	34.1	9.5	69.5	86.5
Lowest Three Deciles	54.3	65.4	46.4	46.2	30.8	9.7	57.3	73.4
Highest Quintile	40.0	31.3	27.3	11.4	65.7	28.6	47.4	40.2
Non-food Expenditure								
% change in average per HH and per capita adult equivalent expenditure	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent	Per HH	Per capita adult equivalent
Average all Households	35.8	31.1	5.9	-17.9	5.9	-11.2	55.4	53.5
Lowest Quintile	52.0	63.1	55.3	49.5	42.3	15.8	96.7	116.3
Lowest Three Deciles	45.4	56.2	41.9	42.5	34.2	12.6	86.6	106.2
Highest Quintile	23.9	17.8	-5.8	-15.6	-2.4	-23.5	32.3	27.7

25. Table 9 and Figure 3 show that, between 2006 and 2010, there was an increase in the proportion of all food consumed that had been produced by households for their own use (household production). In 2010, all households produced, on average, 58% of their own total food consumption compared to 52% in 2006. In both years, the proportion of household produced food was significantly higher in rural areas than in urban areas due to the dominance of agriculture as the main economic activity. In both years, rural households consumed the highest proportion of household produced food, followed by Luganville and then Port Vila.

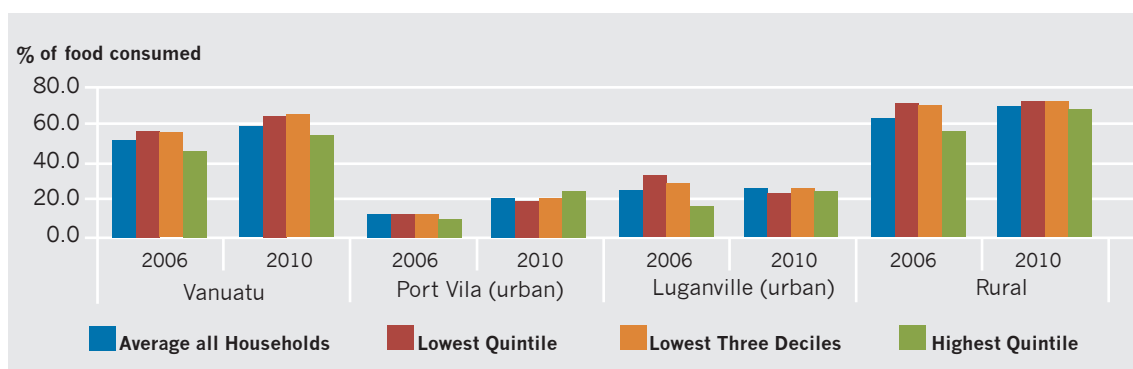
26. One might expect that households in the lower expenditure deciles in both urban and rural areas would consume more household produced food than households in the highest expenditure deciles. This is because they have less monetary income, and possibly more time available due to unemployment or underemployment. However, this is true only in rural



Vanuatu where 72% of the food consumed by the lowest quintile is household produced food compared with 68% for the highest quintile households. In Luganville, households in the highest expenditure quintile consume a slightly higher proportion of household produced food than households in the lowest quintile. Meanwhile, households in the highest expenditure quintile in Port Vila consume six percentage points more household produced food (24% of total consumed food) than households in the lowest quintile (18% of total food consumed). This suggests that, even in urban areas, households in the higher expenditure deciles in Vanuatu enjoy better access to land for gardens and farming. Gardening and households production of food are typical activities within Pacific culture and, therefore, the main determinant of the proportion of household produced food in Pacific households is likely to be access to land.

Table 9 and Figure 3: Share of household produced food as a percentage of total household food consumption 2006 and 2010 - by expenditure level

% of HH Food Expenditure	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	2006	2010	2006	2010	2006	2010	2006	2010
Ranked by per capita adult equivalent HH expenditure deciles								
Average all Households	51.8	57.8	11.9	20.6	24.1	25.7	62.8	69.0
Lowest Quintile	55.7	63.8	11.4	18.2	32.1	22.8	70.6	71.8
Lowest Three Deciles	55.3	64.1	12.2	19.3	28.5	25.5	69.3	72.0
Highest Quintile	45.6	53.6	9.0	23.6	16.5	23.8	55.0	67.6



C.3. The Vanuatu Poverty Lines

27. Poverty lines provide a measure of the level of hardship experienced by households and individuals. They assess the basic costs of an acceptable minimum standard of living in a particular society and measure the number of households and/or the proportion of the population that cannot satisfy these basic needs. As the costs and basic needs for individual households differ between the urban and rural areas of Vanuatu, the analysis separates Vanuatu into three areas: Port Vila urban area; Luganville urban area, and Rural (other islands and rural parts of Efate and Espiritu Santo).
28. In Vanuatu, expenditure levels are used to quantify poverty. This is the standard used in the Pacific region for the analysis of poverty by the Secretariat of the Pacific Community (SPC), United Nations Development Program (UNDP) and the Asian Development Bank (ADB). Discrepancies are often observed between declared income and expenditure, with declared income being significantly lower than declared consumption. A consumption approach better allows for the incorporation of food production for own consumption, and gifts of food and non-food items, in the assessment of a household's position relative to the poverty line.

29. Vanuatu's poverty measures draw on the "Cost of Basic Needs" methodology. Using the "Cost of Basic Needs" methodology, the estimation of food and basic needs poverty lines and hence the extent or Incidence of Poverty (IP) in Vanuatu follows a four stage process:
- i. calculating the Food Poverty Line (FPL);
 - ii. estimating a non-food basic needs component;
 - iii. combining the FPL with the non-food basic needs component to give an estimate of the Basic Needs Poverty Line (BNPL); and finally,
 - iv. estimating the incidence of poverty against the BNPL benchmark using the Head Count Index (HCI) (the proportion of the population with a standard of living below the poverty line); also measured are vulnerability-to poverty status, and the prevalence of poverty by gender, age and other disaggregated characteristics and indicators of hardship and poverty.
30. **The Basic Needs Poverty Line** is made up of two components: the cost of a minimum food basket, and an amount of expenditure for "essential" non-food basic needs. The BNPL is therefore intended to represent the minimum expenditure that is required by an individual, household or family to:
- provide a basic, low-cost, minimally nutritious diet - measured in terms of the minimum daily calorie intake required for basic human survival. This food energy requirement is internationally benchmarked at an average of 2,100 kilocalories/day per adult per capita ² and termed the "Food Poverty Line" (FPL). The FPL includes food that is purchased from markets or shops, as well as food grown for own consumption (subsistence) and any gifts of food received;
 - an additional amount which is required to meet the costs of purchasing (or otherwise acquiring) essential non-food basic needs (e.g. costs relating to housing/shelter, clothing, utilities, school fees and/or other education related expenses, health, transport and communications) and to meet family/community/church obligations. Most of these non-food costs require cash payments and are often the underlying cause of the greatest financial hardship.
31. The Incidence of Poverty is then measured against the BNPL by estimating the proportion of households or population which have a Per Capita Adult Equivalent (p.c.a.e.) expenditure (including the value of subsistence production consumed) less than the BNPL value. This is referred to as the Head Count Index (HCI).
32. Households with p.c.a.e expenditure below the FPL are deemed to be in absolute or "extreme" poverty since their expenditure is below that required to meet basic food needs. Those with expenditure below the BNPL are in "basic needs" poverty.
33. Table 10 classifies households/persons on a spectrum from very poor to non-poor in relation to the level of their expenditure.

² This is the FAO/WHO recommended daily minimum adult calorie intake for a moderately active adult and the standard calorie benchmark for estimating food poverty lines.



Table 10: Poverty and vulnerability status classifications

Category of vulnerability Status	Expenditure relative to poverty line
Very Poor (extreme poverty)	Households/persons whose per capita adult equivalent weekly expenditure is below the FPL
Poor (basic needs poverty)	Households/persons whose p.c.a.e weekly expenditure is below the BNPL, i.e. the very poor and the poor
Very vulnerable	Households/persons whose p.c.a.e which is above the BNPL but less than 20% above the BNPL
Vulnerable	Households/persons whose p.c.a.e between 20% and 50% above the BNPL
Potentially vulnerable	Households/persons whose p.c.a.e. expenditure between 50% and 100% above the BNPL
Non-poor	Households/persons whose p.c.a.e expenditure was equal to or more than 100% above the BNPL

34. In the Pacific region, the extent of extreme or food poverty is generally very low. Most households, particularly those in the rural areas, have access to land for subsistence cropping, and many have access to the sea for fish and seafood. They are therefore able to meet a high proportion of their daily food needs from their own production. Even in many urban areas, households provide at least a proportion of their own food needs. This access to land and subsistence crops sets the Pacific apart from most of the developing world where access to land and subsistence crops is often much less widespread.

C.4. Poverty line estimation

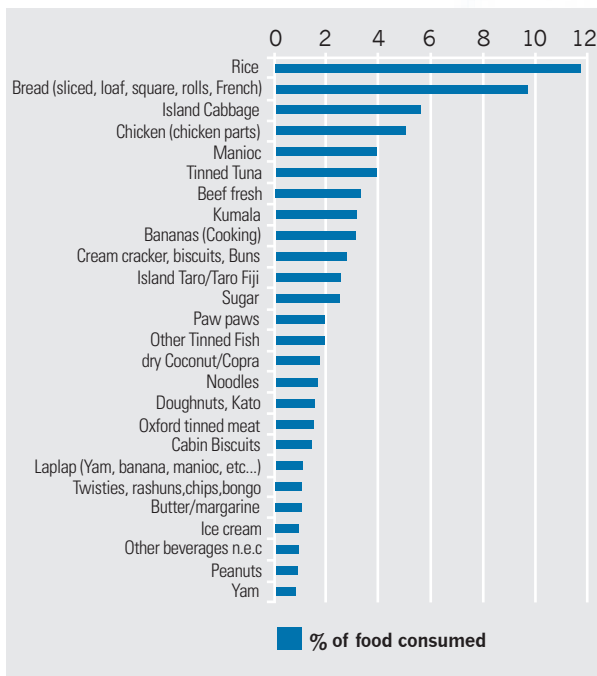
I) Derivation of the food basket for the FPL

35. For the HIES 2006 and HIES 2010, an expenditure-based method has been used to calculate the basic food baskets and the corresponding food poverty lines. As discussed above, separate estimates were made for Port Vila, Luganville and Rural (other islands/rural). The expenditure-based food baskets were derived from the type of food and expenditure patterns of the poor (households with p.c.a.e. in the lowest 3 deciles), as reported by households. The food items (from purchases, household production, and transfers to and from households as gifts) were then weighted by expenditure shares and quantities. The first 30 or so items, with the highest weighted expenditure and covering approximately 80-85% of all food expenditure, formed the food basket used in the estimation of the FPL. The FPL has an absolute base (2,100 kilocalories/day) but the items that make up those calories are derived from actual consumption patterns in each of the three areas; Figures 4.a, 4.b and 4.c illustrate.

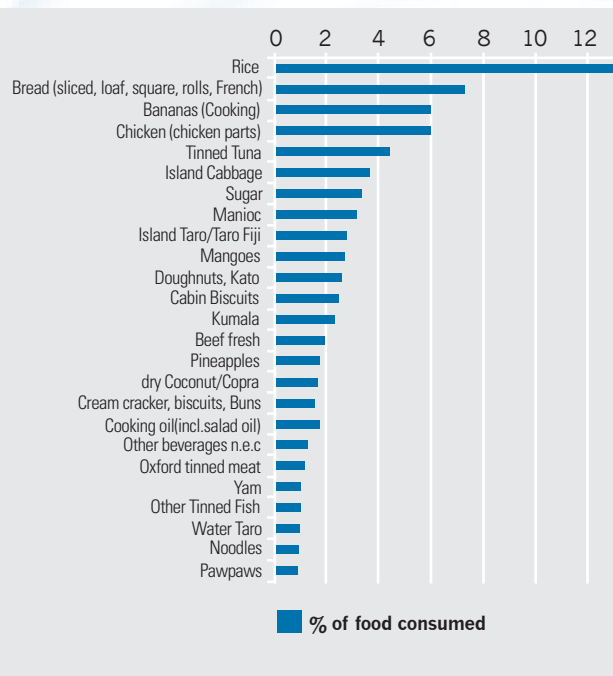


Figures 4.a, 4.b and 4.c: Food baskets of the bottom three expenditure deciles

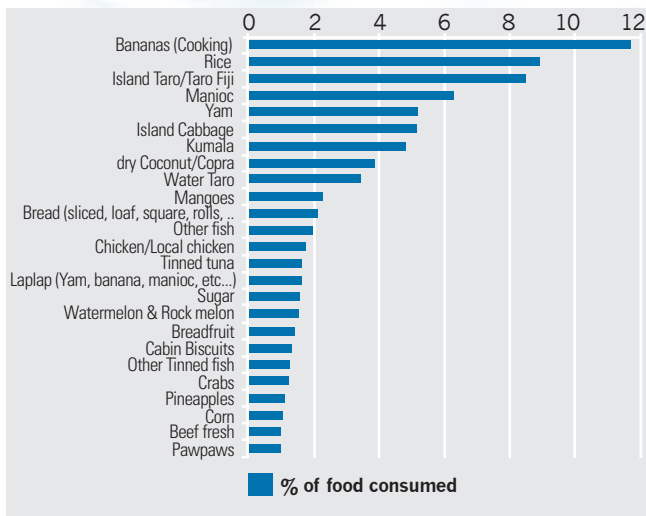
Top 25 Food Items for Port Vila L3D HH



Top 25 Food Items for Luganville L3D HH



Top 25 Food Items for Rural L3D HH



What makes a good poverty line?

We define a poverty line as the monetary cost of achieving a standard of living above which one is not deemed to be poor. A poverty comparison assesses which of two distributions (of an agreed indicator of living standards) has more poverty on average. The groups can be regions or sectors of a country, the same population at different dates, or the same population observed with and without a policy change. A special case of a poverty comparison is a poverty profile, where groups of households defined by some common characteristic (such as where they live) are compared at one date.

The guiding principle in making a poverty comparison to inform policy is that it should be consistent with the policy objective. When that objective is to reduce poverty by increasing people's command over basic consumption needs, any two individuals (at one date or at different dates) with the same command over those needs should be treated identically. This requires the poverty line to have a fixed purchasing power over relevant commodities.

The cost-of-basic-needs method

The cost-of-basic-needs method bases poverty lines on purchasing power over basic consumption needs. This achieves the desired consistency for the purposes of the World Bank Poverty Assessments. But putting this method into practice with imperfect data can be difficult. Once "basic needs" are defined, we need to be able to measure their cost over time and location. Setting basic needs requires an inherent value judgment, which often leads to disagreements. Also price data are often inadequate.

World Bank, 1994

II) Derivation of the Food Poverty Line (FPL)

36. The average weekly food expenditure p.c.a.e. and corresponding amount of food p.c.a.e. per week consumed were calculated from the diary-based weighted food basket. This calculation used commodity prices, primarily from the CPI, adjusted for the balance of purchases, household production, public and private transfers ³.
37. In some cases a weighted mean price of a commodity was estimated from the diary data in the calculation of poverty lines. In the particular cases of dry coconuts and cooking bananas where the actual consumable part of the commodity represents only a small part of the actual weight purchased in the market, adjustments to CPI prices were made to reflect the actual food value purchased ⁴.
38. To take account of the "farm-gate" value of households produced food (compared to market price) an adjustment factor of 0.8 has been applied to all home produced and gifted food consumed in Port Vila, Luganville and the rural areas. (This can be regarded as a form of "shadow price" for subsistence production).
39. The "consumed weights" in grams were converted to calorific values p.c.a.e per day using The Pacific Islands Food Composition Tables ⁵. The food calorie values used in the analysis are either for raw food or cooked items as specified in the tables; no additional adjustments have been made for different cooking processes, and there is generally no loss of food-energy value due to cooking.
40. To get the cost of the nutritionally required 2,100 kilocalories ⁶, per person per day; 2,100 was divided by the total kilocalories consumed, as derived from the expenditure diary data, and multiplied by the mean weekly expenditure to get the three food poverty lines for Port Vila, Luganville and other islands/rural areas respectively. Table 11 and Figure 5 summarise the Food Poverty Lines (FPL) derived for Port Vila, Luganville and the rural areas. The national FPL is a weighted average of the three regional FPL.

³ The weighted price is a mean of prices from the different sources, i.e. purchases, own production and private transfers, each at its particular price.

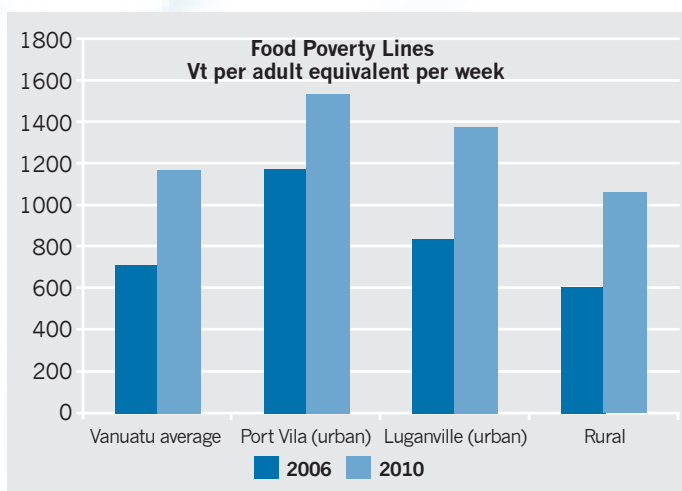
⁴ In the case of dry coconuts the consumable part is estimated at 150g per nut; for cooking bananas it is estimated that for each kg of product purchased in the market only 400g is consumable, the rest being skin and stalk.

⁵ The Pacific Islands Food Composition Tables, Second Edition, USP/FAO, 2004

⁶ The Food and Agricultural Organization (FAO) and the World Health Organization (WHO) recommend a minimum food energy intake of 2100 kilocalories per person per day for an average active person.

Table 11 and Figure 5: Estimated food poverty lines for 2006 and 2010 HIES

Estimated Food Poverty Lines Weekly cost based on 2100 kcal per adult per day			
Vt per adult equivalent per week	Food Poverty Line Vt per adult equivalent per week		Change between 2006 & 2010 %
	2006	2010	
Vanuatu average	715	1178	64.7
Port Vila (urban)	1175	1538	31.0
Luganville (urban)	839	1375	63.9
Rural	604	1060	75.5



III) The Estimation of Non-Food Components

41. The FPL is not sufficient on its own to determine a benchmark of basic needs and poverty classifications. A household that can afford to meet food requirements of all members, but lacks the resources to purchase clothing, shelter, education, transport, communications, lighting and health care, experiences hardship in a very basic sense. A widely accepted scaling-up approach is used for non-food items to determine a Basic Needs Poverty Line (BNPL). This approach uses the FPL as the reference point for estimating non-food basic needs expenditure.
42. The rationale for this approach is that if a household is meeting all its food requirements, it is likely it would also be meeting basic non-food requirements. Conversely if a household is not able to meet its food requirements, it is probably not able to meet its basic needs for non-food items either. This is not necessarily always the case since as income increases, the share of food in total households' expenditure tends to decrease due to the low income elasticity of demand for food items.
43. Further, for Vanuatu and other Pacific Island Countries, taking the level of the FPL as a reference point for estimating non-food basic needs would give a very low figure for non-food basic needs expenditure. This is because subsistence production makes up a significant part of the FPL and, therefore, the proportion of households falling below the FPL is very small and the non-food basic needs calculation would be based on a very small number of the very poorest households. This would not give a true reflection of the actual costs of essential non-food items.
44. Therefore, the basis for the estimation of non-food basic needs expenditure for Vanuatu and all other PICs is the average actual non-food expenditure of households in the bottom three deciles. The BNPL for both HIES surveys (2006 and 2010) was calculated by estimating the average total non-food expenditure p.c.a.e. per week for households in the lowest three deciles and multiplying it by the average size of households at the lowest three expenditure deciles (Table 12). This is the estimated cost of "non-food" basic needs. This is a relative measure that will increase with growth in real incomes.



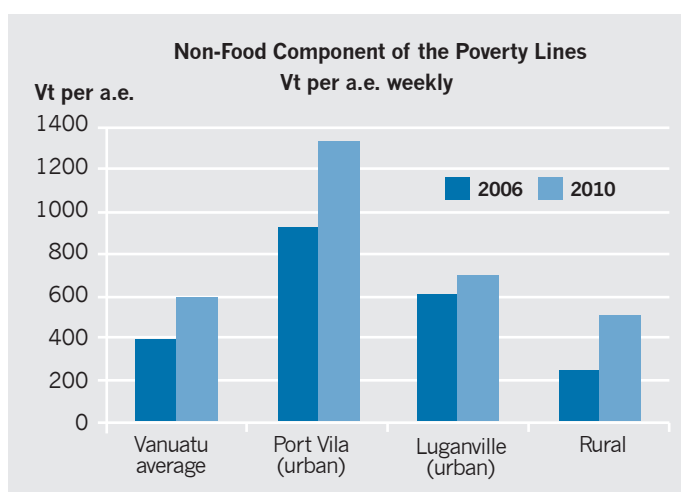
Table 12: The calculation of the Basic Needs Poverty Lines

Weekly per capita adult equivalent Basic Needs Poverty Lines					
Vt per capita adult equivalent per week	Food Poverty Lines p.c.a.e.	Estimated Non-Food Expenditure p.c.a.e.	Basic Needs Poverty Lines	Average size of L3D HH	Weekly cost per HH in L3D
	A	B	C = A+B	D	E=C(D)
Vanuatu average	1178	583	1761	5.5	9679
Port Vila (urban)	1538	1328	2866	5.9	16864
Luganville (urban)	1375	690	2065	6.5	13477
Rural	1060	504	1564	5.4	8393

45. It is sometimes argued that this method leads to an over-inclusion of non-basic items and therefore raises the BNPL. However it is deemed preferable from a planning and policy perspective to slightly over-estimate than to under-estimate basic-needs requirements.

Table 13 and Figure 6: Estimated non-food component of the poverty lines

Estimated Non-Food Component of the Poverty Lines Based on Actual Expenditure of HH in the Lowest Three Deciles			
Vt per adult equivalent per week	Non-Food Costs Vt per adult equivalent per week		Change between 2006 & 2010 %
	2006	2010	
Vanuatu average	385	583	51.3
Port Vila (urban)	915	1328	45.1
Luganville (urban)	594	690	16.1
Rural	244	504	106.2



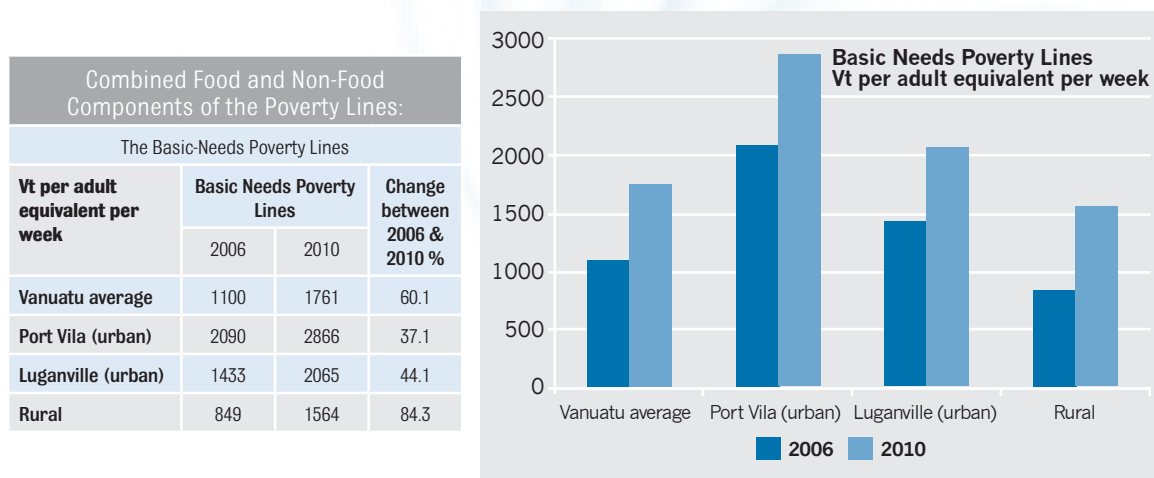
IV) The Basic Needs Poverty Lines

46. Combining the food and non-food components provides the Basic Needs Poverty Lines (BNPL) for the three sub national areas (Table 12). These represent the estimated expenditure (including household subsistence production) required per adult equivalent per week to meet the costs of a minimum standard of living in each of the regions.
47. There are significant differences in what is deemed to be basic needs and, hence, in the BNPLs in the urban and rural areas. The benchmark for food consumption is largely the same (set at 2,100 kcal per adult equivalent per day) except that rural households consume a much greater proportion of household produced food. The notional cost (farm gate or shadow price) of this subsistence production is less than the urban market price (as it excludes transport, marketing and mark-ups). Thus the FPL is lower for rural households; less than 70% of the Port Vila FPL in 2010 (Table 11).
48. There are also major differences in non-food basic needs between rural and urban households. Rural households frequently do not have access to power. Therefore, they are less likely to have utility costs as a non-food essential. Rural households often do not have easy access to, or need for, transport while, for urban households, bus fares are often an

essential cost. Rural housing is more likely to be made of traditional materials and will be less costly to maintain than urban housing, but has fewer amenities. Expenditure on essential clothing and other non-food items is limited in rural locations where there are few shops. As shown in Table 12, in 2010 the average rural non-food basic needs costs were less than 40% in rural Vanuatu than in Port Vila. In 2010, the rural BNPL is 55%, and Luganville's BNPL is 72%, of the Port Vila BNPL (Table 14).

49. The BNPLs measure each household against the basic needs standard of the particular sub-national area. Since what is deemed to be a basic need is more restricted in rural areas, the poverty threshold is materially lower in rural areas and the average material standard of living is also lower. This means a rural household that had per capita expenditure equivalent to the rural BNPL would be below the urban BNPL and in poverty compared to the urban standard. Conversely, an urban household with per capita expenditure equivalent to the urban BNPL has a material living standard above the rural BNPL.

Table 14 and Figure 7: The Basic-Need Poverty Line



50. In general, it is easier for poor households to survive at a basic needs level in a rural environment where food can be obtained from subsistence production and where non-food basic needs are limited (either by availability or “need”). A poor urban household would find it much more difficult to survive since there is less opportunity for subsistence production and a much greater need for cash to purchase food and other non-food basic needs.
51. The incidence of basic-needs poverty/hardship is measured by the proportion of households and population that fall below these levels of per capita adult equivalent weekly expenditure for the respective regions. This is discussed in the next section.

Comments on BNPL measurement methodology

52. All poverty measures have limitations, in that there is no single measure that addresses all of the aspects of poverty. The approach adopted in poverty analysis of the Vanuatu 2006 HIES has been criticised for having such different BNPL for urban and rural populations, as this is seen by some as understating rural poverty compared to urban poverty⁷.
53. The approach adopted for calculation of the food basket recognises the constrained preferences of poor households and therefore may actually deliver a nutritionally inferior diet to that used in the “model-diets” often developed by nutritionists. However, households do not eat model diets and this approach is reality-based.

⁷ e.g. Narsey, Wadan Lal (2012) *Poverty Analysis in Vanuatu: A Critical Review and Alternative Formulation South Pacific Studies Vol 33 No 1*



National Poverty Lines; Income or Consumption

There are two basic ingredients in measuring poverty. The first is a poverty line that refers to a benchmark level of consumption (or income) that enables a person to attain a threshold standard of living. A person whose consumption is below this benchmark level does not attain the threshold standard of living and is thereby defined as poor. The poverty line is said to be absolute, as opposed to relative, when the threshold standard of living is held fixed both over time and space. Given that absolute poverty lines, and the poverty measures derived from these, are widely believed to be the appropriate bases on which to inform antipoverty policies in developing countries, the discussion focuses on these.

The second ingredient in measuring poverty is a survey that collects data on income and/or consumption levels from a sample of household's representative of a given population. The choice of income or consumption as an indicator of household welfare is often determined by the availability of data. Where choice is available, researchers have normally preferred consumption to income on the basis that the former is a better indicator of permanent income and standard of living of people due to consumption smoothing through savings and insurance opportunities. It has also been argued that it is easier to collect information from respondents on consumption than on income. Once a poverty line has been set and survey data are available, it is a simple matter to determine how many households or people are poor.⁸

Unfortunately, the setting of poverty lines always involves some element of subjective methodological choice. The poverty line refers to a minimum level of living necessary for physical and social development of a person. A minimum level of living defined in monetary terms comprises both food and non-food components of consumption. An objective approach could, in principle, be adopted for computing minimum food expenditure, the dominant component in the total consumption bundle of the poor. However, non-food expenditure is clearly affected by social needs and the minimum on this count obviously differs from one society (or region) to another. it is difficult to consider even the physical component of minimum needs entirely on an objective basis. Despite such problems, recent literature has grown substantially to define the absolute poverty line on a reasonably, although not completely, objective basis.

Once the poverty line is defined, data are required on size distribution of income or consumption to compute the number and proportion of the population below the poverty line. Household income or consumption expenditure surveys are the principle source of such data..... ADB 2004, pages 7-8

Poverty lines are defined either in terms of income or consumption. In practice, this choice is restricted by the availability of household survey data since most countries collect data on either household income or consumption. A few countries ... collect data on both income and consumption. Income is a better measure of opportunity for consumption than actual consumption in the case of households that save. But consumption might be a better measure of opportunity for poor households that save little or in fact dis-save. Most practitioners also prefer to define poverty in terms of total consumption expenditure because income data collection faces a wider range of measurement problems. Consumption is less affected by short-term fluctuations due to the consumption smoothing opportunities available to a household. Hence, total consumption expenditure is thought to be a better indicator of the permanent income of a household, particularly in an agrarian economy..... (ADB 2004, p 41)

54. Being largely a relative measure, the BNPL will always register a proportion of the population as being poor and the very small reduction in the proportion living below the BNPL does not illustrate the overall upward shift in living standards that occurred between 2006 and 2010. For example, Robertson's analysis of the impacts of the Millennium Challenge Account roading projects found the proportion of the population living on less than \$3US per day reduced by 27% on the Santo East Coast and halved in rural Efate between the 2006 and 2010 HIES surveys ⁸.

⁸ Robertson, Kim (2011) *HIES 2010 Poverty Analysis prepared for the Millennium Challenge Corporation Vanuatu*



D. Poverty indicators and 2006 / 2010 comparative analysis

D.1 Poverty Indicators

55. Expenditure poverty is measured in terms of poverty incidence, the depth of poverty, and the severity of poverty. Poverty incidence is the proportion of households/population below the defined food and basic need poverty lines for the particular sub-national area of Port Vila, Luganville or the rural areas.
56. The depth of poverty measures the gap between the average level of expenditures of the poor and the BNPL ⁹. It is expressed as the Poverty Gap Index (PGI). The PGI gives an indication of how much extra household expenditure would be required to bring people and households in poverty up to the BNPL. A higher PGI indicates a greater depth in the extent of poverty.
57. Poverty severity, expressed as the Squared Poverty Gap (the mathematical squaring of the poverty gap) or Poverty Severity Index, gives added weight to those households and individuals furthest below the poverty line. In the Poverty Severity Index, the higher the index, the greater the degree of poverty being experienced by those below the BNPL. This index helps policy-makers to see how “severe” the depth of poverty is by giving extra weight to the very poorest. It also helps to identify how resources might be redistributed among the poor to reduce inequality.

D.2 Incidence of Food Poverty

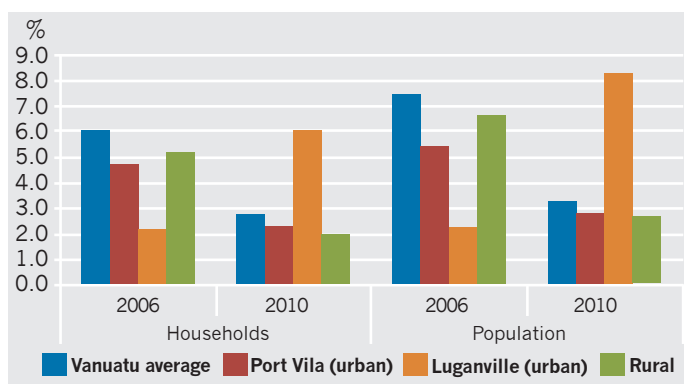
58. The incidence of food poverty has more than halved, from 7.4% of the population affected in 2006 to 3.2% of the population in 2010. This remarkable progress meant cutting the incidence of food poverty by half throughout the country. This is consistent with the increased consumption of household produced food and the strong economic growth during the period 2006-2010, which resulted in an increase in total household consumption expenditure; particularly on food items (refer Table 8).
59. The incidence of food poverty declined from 5.4%, to 2.8% in Port Vila, and from 6.6% to 2.6% in rural areas, between 2006 and 2010. However, in Luganville the incidence of food poverty increased from 2.2% of the population in 2006 to 8.2% of the population in 2010; higher than the average incidence of food poverty anywhere in the country in both 2006 and 2010. This is also a high incidence of food poverty by Pacific standards. Most recent HIES (2008-2010) in Fiji, Samoa, Tonga and Tuvalu recorded incidences of food poverty of 7.5%, 4.9%, 2% and 3.4%, respectively. It is not, however, unusual to have within country variations. In Samoa (2008), for instance, the incidence of food poverty in the rest of Upolu was 8.1%, more than four times the average incidence. While the share of household produced food consumed increased between 2006 and 2010 for all expenditure deciles in Port Vila and rural areas, it declined for the lowest quintile in Luganville from 32.1% in 2006 to 22.8%. This is the same segment of the population experiencing a higher incidence of food poverty.

⁹ If the BNPL were \$50 per capita adult equivalent per week and the average level of expenditure of those households below this level was \$40 per week the poverty gap would be 0.2 or 20%. Thus if there were 1000 persons in the households below the BNPL it would cost \$10000 per week in direct transfers (1000x\$10) to “buy” these poor out of poverty.



Table 15 and Figure 8: Incidence of food poverty in 2006 and 2010

Proportion of HH and Population with Weekly p.c.a.e. Expenditure less than the FPL				
%	Households		Population	
	2006	2010	2006	2010
Vanuatu average	6.0	2.7	7.4	3.2
Port Vila (urban)	4.7	2.2	5.4	2.8
Luganville (urban)	2.2	6.0	2.2	8.2
Rural	5.1	2.0	6.6	2.6



D.3 Incidence of Basic Needs Poverty and Hardship

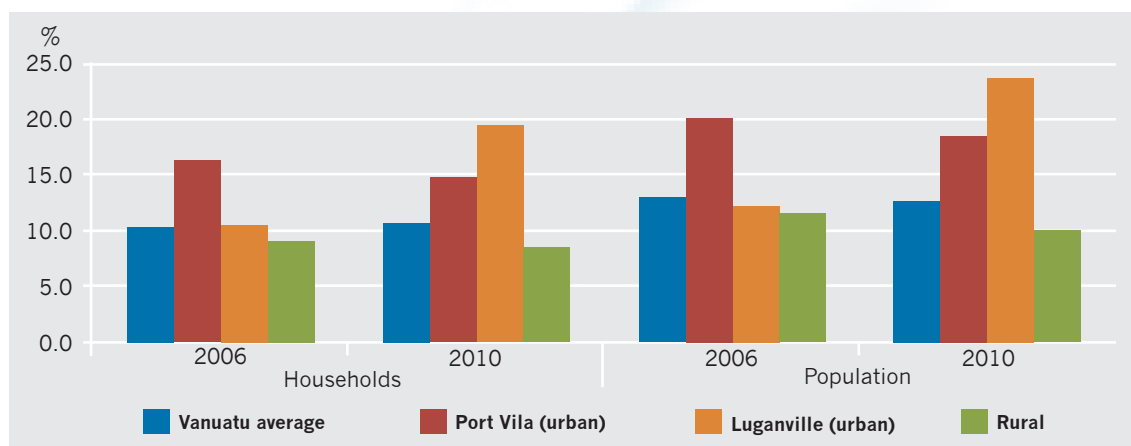
60. Unlike the reduction in the incidence of food poverty, the incidence of basic needs poverty has barely changed; it was 13.0% of the population in 2006, down to 12.7% in 2010. Maintaining economic growth during the global economic crisis enabled Vanuatu to sustain some progress in reducing basic needs poverty. Overall, however, the relatively strong growth in Vanuatu did not trickle down to the poorest segments of the population and had very little impact on poverty reduction. The incidence of poverty indicators are shown in Table 16 and Figure 9. The results are consistent with what might be expected from the general performance of the Vanuatu economy over the period between 2006 and 2010.

Table 16: Incidence of basic needs poverty in 2006 and 2010

Incidence of Basic Needs Poverty				
Proportion of HH and Population with Weekly per capita adult equivalent Expenditure less than the BNPL				
%	Households		Population	
	2006	2010	2006	2010
Vanuatu average	10.3	10.7	13.0	12.7
Port Vila (urban)	16.3	14.7	20.1	18.4
Luganville (urban)	10.4	19.4	12.2	23.6
Rural	9.0	8.5	11.5	10.0

61. Whilst the incidence of basic needs poverty has fallen slightly in both Port Vila and the rural areas, it has almost doubled in Luganville, from 10.4% of households (12.2% of population) in 2006 to 19.4% of households (23.6% of population) in 2010. The HIES survey found that the population of Luganville increased by almost 39% between 2006 and 2010 and that the average household size is estimated to have increased from 4.6 to 5.6 over the same period. For households in the poorest three deciles the household size is estimated to have increased from 5.2 to 6.5. These are the largest increases in household size in any of the three areas and may have contributed to increased numbers falling below the BNPL.

Figure 9: Incidence of basic needs poverty in 2006 and 2010



62. Over the period 2007-2010, particularly 2008 and 2009, whilst most PICs experienced periods of zero or negative economic growth, largely as a consequence of the impacts of global economic and financial crisis of this period, Vanuatu achieved a steady positive annual increase in its GDP. The ADB ¹⁰ estimates that Vanuatu's GDP increased at an annual average rate of about 5.8% between 2006 and 2010. With an estimated annual population increase of around 2.3%, this implies that real GDP per capita increased at approximately 3.5% per annum.
63. The proportion of the population vulnerable to falling into poverty (defined as per capita expenditure that is 10% or less above the basic needs poverty line, rose, slightly, from 3.0% to 3.4% of the population between 2006 and 2010. The small increases in Port Vila (from 5.0% to 5.3%) and rural areas (from 3.0% to 3.3%), were surpassed by a nearly threefold increase in Luganville (6.9% in 2010 up from 2.4% in 2006).
64. Macro-economic performance suggests that there should have been a fall in the general level of hardship and poverty. The small reduction in the incidence of basic needs poverty, and the increases in the population vulnerable to falling into poverty, compared to the significant reduction in the incidence of food poverty, suggests that the distribution effects of economic growth were just enough to lift a significant proportion of the population out of food poverty, but not enough to reduce the incidence of basic needs poverty.
65. In-depth studies of the performance of various economic sectors in the country (e.g. agriculture, fishery, services, tourism and manufacturing), as well as the dynamics of labour market, are needed to better understand which sectors have performed comparatively well and who reaped the benefits of such performance. Further, economic policies should be analysed thoroughly to unravel biasness and lack of inclusiveness.
66. In an effort to localize MDGs targets, Vanuatu has adapted the targets of MDG One "Eradicate extreme poverty and hunger" to a reduction in basic needs poverty level to 2% by 2015. Achieving that target would be an enormous task and would require higher levels of annual growth rate that is more broad based and inclusive.
67. Luganville, however, appears to be something of an anomaly with the rate of poverty incidence increasing between the two reference years. It seems that whilst Port Vila and the rural areas benefitted from the general economic growth, led by tourism, favourable commodity prices, increasing remittances from the New Zealand Recognized Seasonal Employer scheme and infrastructure investment, Luganville has been somewhat left behind.



68. According to the survey data, the average household size of the lowest three expenditure deciles (L3D) in Luganville increased by a quarter between 2006 and 2010. Over the same period the expenditure of these households rose by about 37% in current prices. Thus expenditure per capita increased by only about 12% with the food component of the CPI increasing by about 26%. This resulted in the increase in households falling below the BNPL.

D.4 The depth and the severity of poverty

69. As discussed earlier (in section D1), the depth and severity of poverty are measured by the Poverty Gap Index¹¹ (PGI) and the Squared Poverty Gap Index (SPGI)¹² respectively (Table 17). The PGI is Indicator 2 of Target 1, Goal 1 of the MDGs.

Table 17: Poverty Gap Index (PGI) and the Squared Poverty Gap Index (SPGI) in 2006 and 2010

Depth (PGI) and Severity (SPGI) of Poverty				
	Poverty Gap Index (PGI)		Squared Poverty Gap Index (SPGI)	
	2006	2010	2006	2010
Vanuatu average	5.6	2.9	3.0	1.0
Port Vila (urban)	10.4	5.4	5.1	2.0
Luganville (urban)	2.9	6.4	1.2	2.6
Rural	3.8	2.3	2.0	0.8

70. At the national level the PGI (depth of poverty) for Vanuatu has declined from 5.6 in 2006 to 2.9 in 2010. This means there needs to be an average 2.9% real increase in income of households below the BNPL for them to move just above the BNPL. This PGI is significantly lower than, for example, Samoa (8.2 in 2008), Fiji (9.9 in 2008/09), Tonga (6.3 in 2009) and the Federated States of Micronesia (FSM) (9.3 in 2005). Since the average inflation rate for 2011 was 0.6%, and rose to around 1.9% in 2012, assuming perfect equality in the distribution of income, a minimum of a 5% real increase in income is needed to achieve 100% poverty reduction by 2013 at the national level. The PGI was highest in Luganville, at 6.4 (up from 2.9 in 2006), followed by Port Vila (5.4, down from 10.4 in 2006), and lowest in the rural areas (2.3, down from 3.8 in 2006). This means that households with expenditure that falls below the BNPL have, on average, a total expenditure that is 5.4% (Port Vila) and 6.4% (Luganville) below the BNPL. In contrast, households below the BNPL in rural areas have average expenditure that is only 2.3% below the BNPL (Table 17).

71. At the national level the SPGI (severity of poverty) was estimated at 1.0 in 2010, down from 3.0 in 2006. This is lower than Samoa (2.9 in 2008), Fiji (2.6 in 2008/09), Tonga (4.0 in 2009) and FSM (4.0 in 2005). The significant decline in the SPGI in 2010, from 2006 levels, is in line with overall trends in poverty indicators, as is the sub-national picture. In 2010, the SPGI was estimated to be 0.8 in rural areas (down from 2.0 in 2006), 2.0 on Port Vila (down from 5.1 in 2006), and, 2.6 in Luganville (up from 1.2 in 2006). Households below the BNPL in Luganville, therefore, experience significantly more severe poverty and hardship than in the rest of Vanuatu, while households in rural areas experienced the least severe poverty and hardship.

¹¹ The Poverty Gap Index gives an indication of how poor the poor are and reflects the depth of poverty. The formula calculates the mean distance below the basic needs poverty line as a proportion of the poverty line where the mean is taken over the whole population, counting the non-poor as having zero poverty gap. The PGI is an important indicator as recognized by its inclusion as a specific indicator in MDG1.

m

Poverty Gap Index: $1/N \cdot \sum_{i=1}^m (BNPL - y_i) / BNPL$

$i=1$

where: N = total number of households, m = number of households below basic needs poverty line; and y_i equals expenditure of each household.

¹² Through the process of squaring the index the SPGI gives greater weight to those at the lowest consumption/income levels and thus better reflects the severity of the poverty gap. In both the PGI and SPGI, the higher the index the greater the depth and severity of poverty, respectively.



D.5 Millennium Development Goals: poverty target status

72. Table 18 summarizes the MDG 1 poverty target indicators in 2006 and 2010. There has been progress towards the achievement of MDG 1, particularly in the area of eradicating hunger and food poverty. While fewer people are below the FPL and BNPL in 2010, compared to 2006, there has been a small increase in the group vulnerable to falling back into poverty. As discussed, Luganville lags behind with deteriorating indicators for all targets.

Table 18: MDG 1 poverty indicators in 2006 and 2010

Millennium Development Goal (MDG1) Indicators 2006 & 2010								
	Vanuatu		Port Vila(urban)		Luganville(urban)		Rural	
	2006	2010	2006	2010	2006	2010	2006	2010
1.1 Proportion of Population below Basic Needs Poverty Lines %	13.0	12.7	20.1	18.4	12.2	23.6	11.5	10.0
Proportion of Population vulnerable to falling into poverty; per capita adult equivalent expenditure <=10% above BNPL %	3.0	3.4	5.0	5.3	2.4	6.9	3.0	3.3
1.2 Proportion of households with per capita adult equivalent expenditure below the minimum level of dietary energy consumption (FPL) %	6.0	2.7	4.7	2.2	2.2	6.0	5.1	2.0
1.3 Poverty Gap Index (PGI) - Depth of Poverty	5.6	2.9	6.7	5.4	2.9	6.4	4.3	2.3
Squared PGI - Severity of Poverty	3.0	1.0	3.2	2.0	1.2	2.6	2.3	0.8
1.4 Share of poorest quintile (20%) in consumption by region %	7.4	8.3	7.5	10.0	8.2	9.3	7.2	8.4
Ratio of Share of poorest quintile (20%) to highest quintile	5.7	4.6	5.4	3.6	4.7	4.1	5.9	4.7
HH Gini Coefficient: (0 = perfect equality 1 = perfect inequality)	0.41	0.31	0.46	0.25	0.41	0.28	0.40	0.31
Population Gini Coefficient	n/a	0.37	n/a	0.34	n/a	0.35	n/a	0.36
Note 1: Some indicators for 2006 have been revised to be consistent with 2010 methodology								
Note 2: Proportion of Population below US\$1 (PPP) per day not available.								

E. Expenditure distribution and inequality

73. The Gini coefficient is a measure of the level of inequality in the distribution of income or expenditure of households and individuals. In a situation of perfect equality (everyone has the same level of expenditure) the Gini coefficient would be equal to zero. At the other extreme, a Gini coefficient of 1.0 would indicate total inequality, where one household or individual received all the income while other households received none at all. Thus, an increase in the coefficient over time suggests an increase in the level of inequality. A “normal” index level would be between 0.3 and 0.4; anything above this indicates a high degree of inequality.

74. The Gini coefficient has its limitations and must be interpreted cautiously as measure of inequality due to its inherent statistical bias towards the median income strata. It should be complemented by careful analysis of the actual distribution across expenditure and/or income deciles and the use of indicators such as the share of the poorest quintile in total expenditure and the ratio of the share of the poorest quintile to the share of the highest quintile, which are indicators 1.4 of MDG 1. For instance, in Vanuatu, the total share of the middle expenditure households (5th, 6th and 7th deciles combined) in 2010 was 29.3%, compared to 23.8% of total expenditure for the lowest four deciles combined; and 46.8% of total expenditure for the top three deciles (8th, 9th and 10th). Note that the 8th decile has only a slightly larger share of total expenditure (11.1%) compared to the 7th and 6th deciles, 10.5% and 10.0%, respectively (Table 20).



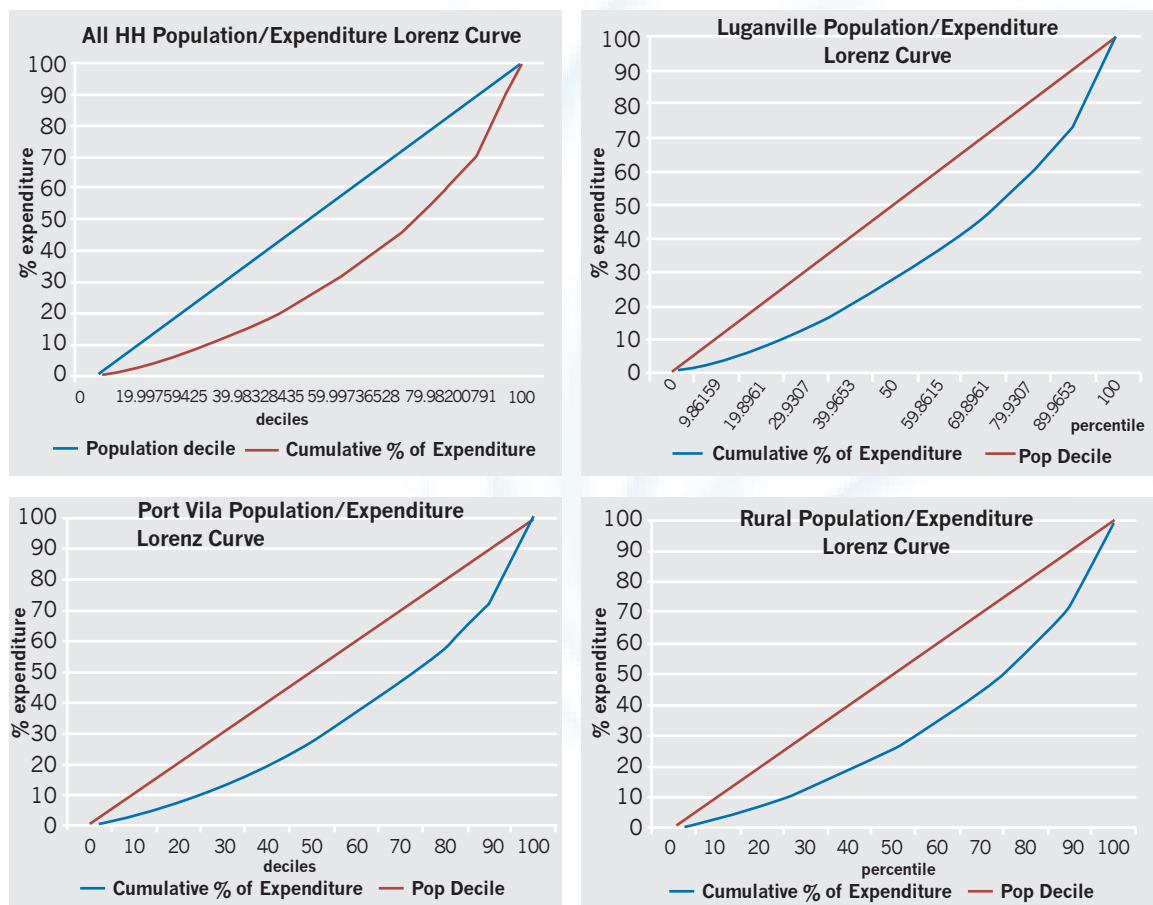
Table 19: National and sub-national Gini coefficients of expenditure in 2006 and 2010

Gini Coefficients of Inequality				
	HH Gini Coefficients		Population Gini Coefficients	
	2006	2010	2006	2010
Vanuatu average	0.41	0.31	n/a	0.37
Port Vila (urban)	0.46	0.25	n/a	0.34
Luganville (urban)	0.41	0.28	n/a	0.35
Rural	0.40	0.31	n/a	0.36

75. In 2010, the Gini coefficient has been estimated for both households and for the population. The Gini coefficient tends to be higher for the population, as poorer households tend to be larger and this accentuates inequality. Table 19 shows a substantial decrease in the Gini coefficient at the national level (from 0.41 in 2006 to 0.31 in 2010) and for rural areas (from 0.40 in 2006 to 0.31 in 2010), but an even greater decrease in the urban centres (Port Vila, from 0.46 in 2006 to 0.25 in 2010, and Luganville, from 0.41 in 2006 to 0.28 in 2010). The largest decrease in the Gini coefficient was in Port Vila. This is consistent with the pattern of economic growth over the period from 2006 to 2010. Growth sectors were construction, government and public sector, tourism and other related services (e.g. wholesale and retail trade and transport) and most growth was concentrated in Port Vila and the surrounding areas in the island of Efate.
76. The Gini coefficients can be depicted graphically in Lorenz Curves where the further the expenditure line is from the line of equality, the greater the degree of inequality. Figures 10.a, 10.b, and 10.c illustrate the Lorenz curves for national level, Luganville, Port Vila and the rural areas. The greater the convexity of the line the greater degree of inequality.



Figures 10.a, 10.b, 10.c and 10.d: 2010 population expenditure Lorenz curves at the national level and for the three sub-national areas



Changes in the level and distribution of expenditure

77. At the national level, the BNPL went up by 60.1%, and the lowest three deciles were facing 91.2% higher weekly costs, in 2010 compared to 2006. The average weekly expenditure of the lowest three deciles increased by 51.3% (Table 20). The lowest quintile's share of total expenditure increased by 12.2%, from 7.4% in 2006 to 8.3% in 2010. The share of the lower middle expenditure quintile remained the same and the share of the upper middle expenditure quintile increased by 9.1% to 20.4% of total expenditure in 2010, up from 18.7% in 2006. Meanwhile, the share of the highest expenditure quintile declined from 41.7% in 2006 to 38.2% of total expenditure in 2010. Interestingly, there was a redistribution of expenditure away from the top expenditure decile to the 1st, 6th, 7th, and 8th deciles, leading to improvement in Gini coefficient, PGI and SPGI (Table 20).



Table 20: The distribution of expenditure among deciles in 2006 and 2010

Distribution of HH Expenditure %												
Ranked by per capita adult equivalent HH expenditure deciles	Vanuatu			Port Vila (urban)			Luganville (urban)			Rural		
	2006	2010	% change	2006	2010	% change	2006	2010	% change	2006	2010	% change
1st Decile	2.6	3.4	29%	2.7	4.0	49%	3.3	4.1	24%	2.5	3.4	36%
2nd Decile	4.8	4.9	2%	4.8	6.0	24%	5.0	5.2	5%	4.7	4.9	5%
3rd Decile	5.9	5.8	-1%	5.7	6.2	10%	5.8	6.1	5%	6.0	5.8	-2%
4th Decile	6.9	6.8	0%	7.2	7.6	7%	6.9	6.9	-1%	6.7	6.5	-3%
5th Decile	7.7	7.7	-1%	7.9	8.8	11%	7.9	8.6	9%	7.6	7.9	3%
6th Decile	8.5	9.4	11%	8.1	10.0	24%	8.8	8.3	-5%	8.6	9.0	5%
7th Decile	10.2	10.9	7%	10.9	10.5	-4%	10.8	9.9	-9%	9.8	11.3	15%
8th Decile	11.8	12.8	9%	11.8	11.1	-7%	12.5	12.7	2%	11.6	12.2	5%
9th Decile	14.8	14.9	1%	14.3	15.5	8%	14.2	16.1	13%	15.0	15.1	1%
Top Decile	27.0	23.3	-14%	26.5	20.2	-24%	24.7	22.1	-11%	27.4	23.8	-13%
Total	100.0	100.0	0%	100.0	100.0	0%	100.0	100.0	0%	100.0	100.0	0%
Ratio of Q1:Q5	4.8	4.6	-3%	5.4	3.6	-34%	4.7	4.1	-13%	5.9	4.7	-21%
Share of the lowest quintile	7.4	8.3	12%	7.5	10.0	33%	8.2	9.3	13%	7.2	8.4	16%
Share of L3D	13.3	14.1	6%	13.2	16.2	23%	14.1	15.4	9%	13.2	14.2	8%
Share of lower middle income (D4+D5)	14.6	14.5	-1%	15.1	16.4	9%	14.9	15.5	4%	14.4	14.4	0%
Share of upper middle income (D6+D7)	18.7	20.4	9%	19.1	20.6	8%	19.6	18.2	-7%	18.4	20.3	10%
Share of the highest quintile	41.7	38.2	-8%	40.8	35.7	-13%	38.9	38.2	-2%	42.4	38.9	-8%
Share of H3D	53.5	51.1	-5%	52.7	46.8	-11%	51.5	50.9	-1%	54.0	51.1	-5%

Economic factors impacting on changes in expenditure across deciles and in sub-national areas

78. In Port Vila and surrounding areas in the island of Efate, the following sectors - construction, government, public sector, tourism and other related services (e.g. wholesale and retail trade and transport) - generated more employment and income for the lowest and the lower middle expenditure households than the upper middle and the highest expenditure households between 2006 and 2010. This explains the decrease in Gini coefficient, and reduced incidence of basic needs poverty, as well as the significant decrease in PGI. It is also consistent with the decline in the ratio of the share of the highest quintile to the share of the lowest quintile in total expenditure, from 5.4 in 2006 to 3.6 in 2010. The lowest quintile's share of total expenditure increased from 7.5% in 2006 to 10.0% in 2010, while the share of the highest quintile in Port Vila declined from 40.8% in 2006 to 35.7% in 2010.
79. The share of the lower middle (decile 4 and 5) and upper middle (decile 6 and 7) expenditure quintiles increased slightly, from 15.1% and 19.1% in 2006 to 16.4% and 20.6% in 2010, respectively, at the expense of the highest expenditure strata. This improved equality and reduced poverty. The lowest quintile in Port Vila, however, reaped most of the benefits of economic growth, with a 33% increase in its share of total expenditure. The lowest decile had the largest increase (49%) in total expenditure, compared to 9% and 8% increases in total expenditure for the lower and upper middle expenditure quintiles, respectively. This also explains the significant reduction in the incidence of severe poverty (food poverty).

Table 21: Weekly per capita adult equivalent Food and Basic Needs Poverty Lines and average costs for the lowest three deciles: 2006 and 2010

Comparison of Weekly per capita adult equivalent Food and Basic-Needs Poverty Lines 2006 & 2010								
VT per capita adult equivalent per week	Food Poverty Lines p.c.a.e.		Estimated Non-Food Expenditure p.c.a.e.		Basic Needs Poverty Lines		Weekly cost per HH in L3D	
	2006	2010	2006	2010	2006	2010	2006	2010
Vanuatu average	715	1178	385	583	1100	1761	5061	9679
Port Vila (urban)	1175	1538	915	1328	2090	2866	9992	16864
Luganville (urban)	839	1375	594	690	1433	2065	6305	13477
Rural	604	1060	244	504	849	1564	3734	8393
% change in components of Basic Needs Poverty Line between 2006 to 2010								
Vanuatu average		64.7		51.3		60.1		91.2
Port Vila (urban)		31.0		45.1		37.1		68.8
Luganville (urban)		63.9		16.1		44.1		113.8
Rural		75.5		106.2		84.3		124.8

80. In Luganville and the rural areas, average weekly costs faced by the lowest three deciles, increased by 113.8% and 124.8%, while their total weekly expenditure increased by 32.1% and 64.7%, respectively. As previously noted, the lowest three decile group in Luganville experienced the lowest increase in the total weekly household expenditure, and an even lower increase in p.c.a.e weekly expenditure (10.8%). As a result, the decline in the ratio of the share of the highest quintile to the share of the lowest quintile in total expenditure in Luganville declined from 4.7% in 2006 to 4.1% in 2010; in rural areas the same ratio declined from 5.9% in 2006 to 4.7% in 2010. The higher ratio in the rural areas is consistent with the higher Gini coefficient of 0.31, compared to 0.25 and 0.28 for Port Vila and Luganville, respectively.
81. The lowest (1st) decile in rural areas experienced a significant increase in its share of total expenditure (a 36% increase taking it from 2.5% of all expenditure to 3.4%) (Table 20). This contributed to the significant reduction in the incidence of



food poverty, yet led to much less significant improvement in inequality, particularly as measured by the Gini coefficient, as the middle expenditure strata gained very little. All deciles from 2nd to 6th experienced small increases or decline in share of total expenditure, which explains the high Gini coefficient.

82. In Luganville, most of the redistribution was confined within the highest three deciles, away from the top decile to the 9th and 8th deciles. The shares of the lowest and the lower middle expenditure quintiles increased by only 13% and 4%, respectively, while the shares of the upper middle expenditure and the highest expenditure quintiles decreased by 7% and 2%, respectively, this meant that the limited improvement in inequality was, mainly, at the expense of the middle strata. This is consistent with the increase in the incidence of basic needs poverty as more lower-middle income households slipped below the BNPL.

Table 22: Average total weekly expenditure (per household and p.c.a.e.) 2006 and 2010

Vt Per Household Per Week								
Vt per week	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	2006	2010	2006	2010	2006	2010	2006	2010
Average all Households	12319	17576	20191	23711	14866	17927	10454	15986
Lowest Quintile	4567	7259	7693	11891	6143	8424	3796	6689
Lowest Three Deciles	5444	8239	8919	12847	6978	9216	4593	7565
Highest Quintile	25626	33577	40733	42152	28850	33874	22130	31012
Vt per capita adult equivalent per week								
Average all Households	3233	4455	5145	4682	3859	3903	2763	4175
Lowest Quintile	971	1655	1544	2297	1371	1533	814	1578
Lowest Three Deciles	1191	1933	1866	2691	1599	1772	1012	1839
Highest Quintile	8541	10571	14878	13690	9655	8850	7237	9709
Ratio 5Q:1Q	8.8	6.4	9.6	6.0	7.0	5.8	8.9	6.2
% change in average per HH and per capita adult equivalent expenditure	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	Per HH	per capita adult equivalent	Per HH	per capita adult equivalent	Per HH	per capita adult equivalent	Per HH	per capita adult equivalent
Average all Households	42.7	37.8	17.4	-9.0	20.6	1.1	52.9	51.1
Lowest Quintile	59.0	70.5	54.6	48.7	37.1	11.8	76.2	93.8
Lowest Three Deciles	51.3	62.3	44.0	44.3	32.1	10.8	64.7	81.7
Highest Quintile	31.0	23.8	3.5	-8.0	17.4	-8.3	40.1	34.2

F. Growth, income distribution and poverty reduction linkages

83. Figures 11 and 12 illustrate the changes in shares of productive sectors in GDP and their real growth rates over the period from 1998 to 2009. There has been an increase in the share of the non-agricultural sectors. Agriculture, fishery and forestry, however, still employ 61% of total employed population (59% and 62% of employed males and females, respectively, according to the 2009 Census). Construction, which is relatively labour intensive, recorded the highest growth rates and contributed 5% of total employment in 2009 (9% of employed males and less than 1% of the employed females), and was mainly concentrated in Port Vila. The wholesale and retail trade sector, contributing 8.2% of total employment (6.7% and 10.2% of total males and females employed, respectively) has also experienced solid growth during the same period.

Figure 11: Sector shares of GDP 1998-2009



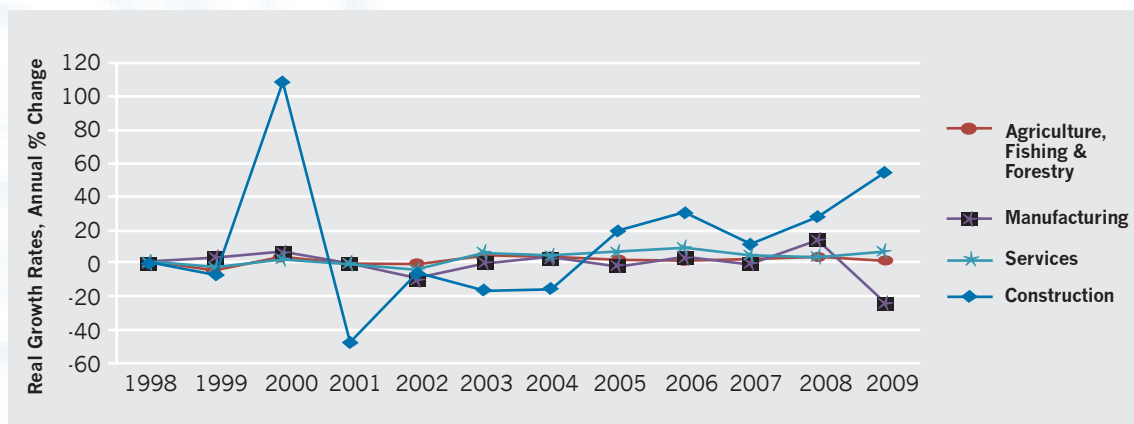
Source: Vanuatu National Statistics Office.

84. These growth sectors provided enough real increase in income (equal or more than the 2006 PGI of 2.9% in Port Vila) to lift a small proportion of the population, mostly those closest to the BNPL, above the BNPL. This resulted in a reduction in the incidence of basic needs poverty. The poorer households remained below, but closer to, the BNPL, and experienced less severe poverty (as indicated by the decline in PGI and SPGI) due to their share in economic growth and the increase in household production of food consumed. The lowest three deciles in Port Vila faced a 68.8% increase in weekly costs between 2006 and 2010, while, their average total weekly expenditure per households increased by only 44%, and those below the BNPL need a 5.4% (2010 PGI, compared to 10.4 in 2006) real increase in income to move above the 2010 BNPL, which is 37.1% higher than 2006 BNPL (Tables 20, 21 and 22).

85. The agriculture, fishery and forestry sector stagnated between 2006 and 2010. Most of the reduction in poverty and improvement in income distribution in the rural areas can be attributed to increasing government expenditure and internal (urban to rural), as well as external remittances. The stagnation of the agriculture, fishery and forestry sector led to the erratic and poor performance of the manufacturing sector, which relies, mostly, on agro-processing, as illustrated by Figure 12. This may have also contributed to the deteriorating conditions in Luganville, which relies on the agriculture, fishery and forestry sector for agro-processing industries (mainly beef, timber and copra processing and coconut oil production). In addition, the migration from rural areas to the urban area of Luganville contributed to the increasing incidence of poverty.



Figure 12: Real growth rates (2006 constant prices) of key economic sectors (1998-2009)



Source: Vanuatu National Statistics Office

86. Vanuatu has achieved some progress in reducing poverty, driven by economic growth over the period from 2006 to 2010. There is, nonetheless, a risk of digression. In 2010, 7.8% of the population, nationwide, and 10.8%, 11.6% and 6.5% in Port Vila, Luganville and rural areas, respectively, had expenditure that is less than 20% above the BNPL, meaning they are very vulnerable to falling below the BNPL. Moreover, 11.2% of the population nationwide is relatively vulnerable to falling below the BNPL as their expenditure level is more than 20%, but less than 50%, above the BNPL (Table 23). The sectors that drove the 2006-2010 growth, particularly construction, have slowed down, while the traditional productive sector continues to stagnate. GDP real growth rates fell to 1.6% (2010) and 1.4% (2011), compared to an average of over 5% annually over the 2006-2010 period. GDP per capita fell for the first time since 2002, by 0.8% (2010) and 0.9% (2011).

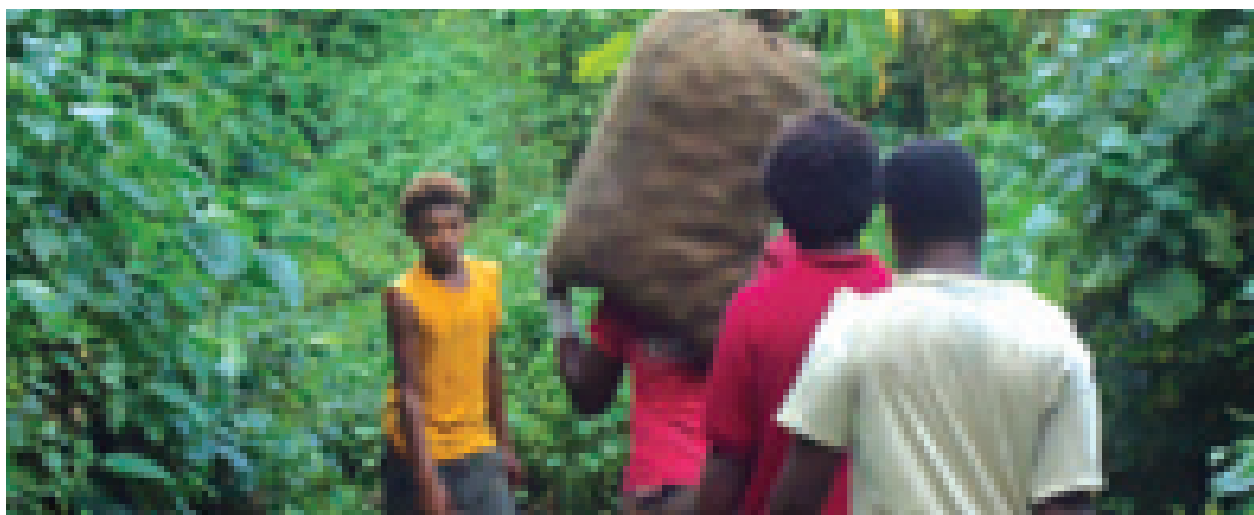


Table 23: Poverty and vulnerability status (by population and households)

Population Poverty & Vulnerability Status				
% of population relative to poverty lines	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural
Population pcae exp < FPL	3.2	2.8	8.2	2.6
Population pcae exp above FPL but < BNPL	9.4	15.6	15.4	7.4
Total Population below BNPL	12.7	18.4	23.6	10.0
Pop pcae exp> BNPL but < 20% above BNPL	7.8	10.8	11.6	6.5
Pop pcae exp> 20% but < 50% above BNPL	11.2	15.1	15.3	10.9
Pop pcae exp > 50% but < 100% above BNPL	18.5	24.2	15.6	19.2
Pop Not Poor pcae exp> 100% above BNPL	49.8	31.4	33.8	53.3
Total	100.0	100.0	100.0	100.0
Total Number of Persons	249855	49447	15114	185293
Household Poverty & Vulnerability Status				
% of Households relative to poverty lines	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural
Households pcae exp < FPL	2.7	2.2	6.0	2.0
HH pcae exp above FPL but < BNPL	8.0	12.5	13.4	6.5
Total HH below BNPL	10.7	14.7	19.4	8.5
HH pcae exp > BNPL but < 20% above BNPL	6.9	9.7	10.9	6.0
HH pcae exp > 20% but < 50% above BNPL	10.6	14.4	14.6	10.1
HH pcae exp > 50% but < 100% above BNPL	18.2	22.8	16.7	18.6
HH Not Poor: pcae exp > 100% above BNPL	53.6	38.4	38.4	56.8
Total	100.0	100.0	100.0	100.0
Total Number of Households	50735	9764	2701	38269

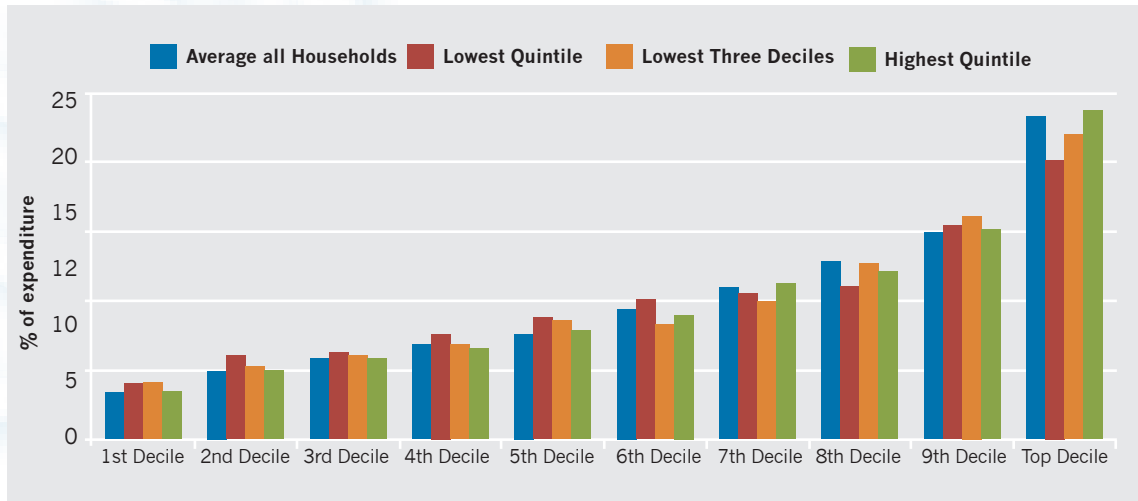
G. Key characteristics of the poor and vulnerable

87. Understanding which groups are poor, their characteristics, and where they are located, is critical for the design of effective poverty reduction policies and provides the basis for better targeting of support.



G.1. Location of the poor

Figure 13: Distribution of household expenditure by decile

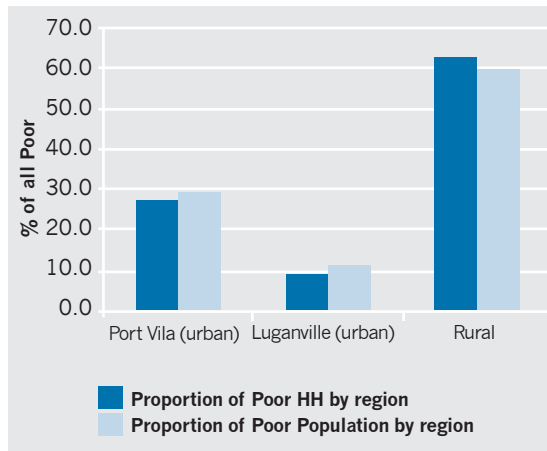


88. Whilst the incidence of basic needs poverty and hardship is highest in Luganville, the poor in Luganville represent only a small proportion (about 11.4%) of the total population living below the BNPL. Despite the decline in the incidence of basic needs and food poverty in rural areas, 59.4% of all poor people live in the rural areas, while 29.2% of the poor live in Port Vila, as illustrated by Table 24 and Figure 14.

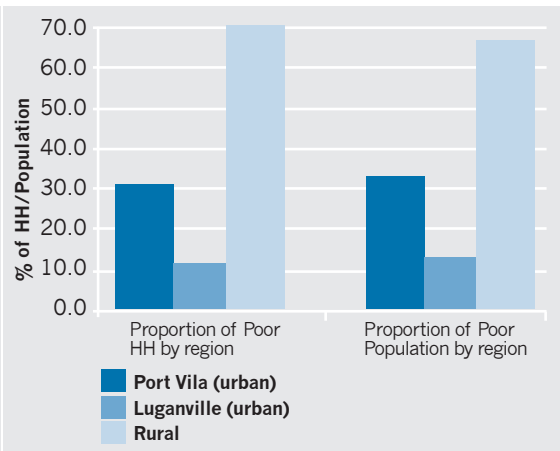
Table 24 and Figures 14a and 14b: Distribution of the poor and vulnerable

Location of HH and Population below the BNPL				
% of all Poor	HH	Proportion of Poor HH by region	Population	Proportion of Poor Population by region
Total Number below BNPL	5213		31263	
Port Vila (urban)	1436	27.5	9123	29.2
Luganville (urban)	524	10.0	3570	11.4
Rural	3254	62.4	18570	59.4

Location of HH and Population below the BNPL



Location of HH and Population in Lowest Three Deciles



G.2 Gender

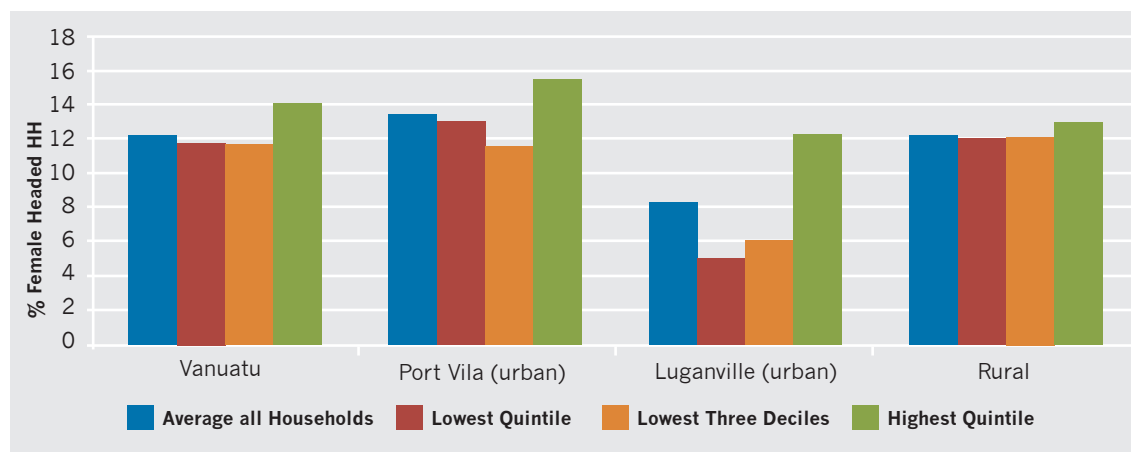
89. In the 2010 HIES, there were 6,570 households headed by females, accounting for 12.2% of all households. In Port Vila, 13.5% of households were headed by females, compared to 8.3% in Luganville and 12.2% in rural areas.
90. The proportions of female-headed households in the highest and lowest quintiles were: nationally, 14.1% (highest) and 11.8% (lowest); Port Vila, 15.5% and 13%; Luganville, 12.3% and 5.0%; and rural areas 13.0% and 12.1% (Table 25). Nearly one in five (19.6%) of all female-headed households in Vanuatu were in the lowest quintile and 29% of all female-headed households in the lowest three deciles, compared to 22.8% in the highest quintile. This pattern holds for both Port Vila and the rural areas. In Luganville, however, 30% of female-headed households are in the highest expenditure quintile compared to 22% in the lowest three deciles and 12% in the lowest quintile. Around 48.2% of female-headed households fall in the middle-expenditure deciles (4th, 5th, 6th and 7th).

Table 25: Female-headed households by expenditure level and sub-national area 2010

Proportion of Households Headed by Females By Decile								
Ranked by per capita adult equivalent HH expenditure deciles	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	% of all HH	% of Female-headed HH	% of all HH	% of Female-headed HH	% of all HH	% of Female-headed HH	% of all HH	% of Female-headed HH
Average all Households	12.2		13.5		8.3		12.2	
Lowest Quintile	11.8	19.6	13.0	19.2	5.0	12.0	12.1	19.9
Lowest Three Deciles	11.7	29.0	11.6	25.6	6.1	22.0	12.1	29.9
Highest Quintile	14.1	22.8	15.5	23.1	12.3	30.0	13.0	21.3

91. Nationally, the proportion of female-headed households has increased from 8.5% of all households in 2006 to 12.2% in 2010 (44% increase). Most of this increase occurred in rural areas (12.2% in 2010 up from 7.7% in 2006) and, to a much lesser extent, in Port Vila which already had a significant proportion of female-headed households (13.5% in 2010 up from 12.1% in 2006). The proportion of female-headed households remained around the same level in Luganville (8.3% in 2010 down from 8.5% in 2006).

Figure 15: Female-headed-households by expenditure level



92. Nationally, the ratio of female-headed households in the lowest quintile to female-headed households in highest quintile rose by 18% (from 0.7 in 2006 to 0.8 in 2010), due to a larger increase in the proportion of female-headed households in the lowest quintile than in the highest quintile. The largest increase in inequality across female-headed households (as represented by the ratio of the lowest quintile to the highest quintile) occurred in Port Vila (64%), compared to a 19% increase in the rural areas, while the ratio declined by 43% in Luganville. Female-headed households in the lowest quintile in rural areas increased by 81% (a 77% increase for the three lowest expenditure deciles). The proportion of female-headed households in the lowest three deciles and quintile in Luganville declined by 37% and 42%, respectively.

Table 26: Female-headed households in 2006 and 2010

Proportion of Households Headed by Females By Percentile												
Ranked by per capita adult equivalent HH expenditure deciles	National			Rural			Port Vila			Luganville		
	2006	2010	% change	2006	2010	% change	2006	2010	% change	2006	2010	% change
Average all Households	8.5	12.2	44%	7.7	12.2	59%	12.1	13.5	12%	8.5	8.3	-2%
Lowest Quintile	6.9	11.8	70%	6.7	12.1	81%	7.5	13.0	74%	8.6	5.0	-42%
Lowest Three Deciles	7.6	11.7	53%	6.8	12.1	77%	10.7	11.6	8%	9.7	6.1	-37%
Highest Quintile	9.7	14.1	45%	8.5	13.0	53%	14.6	15.5	6%	12.0	12.3	2%
Ratio of female-headed households in the lowest to the highest quintiles	0.7	0.8	18%	0.8	0.9	19%	0.5	0.8	64%	0.7	0.4	-43%

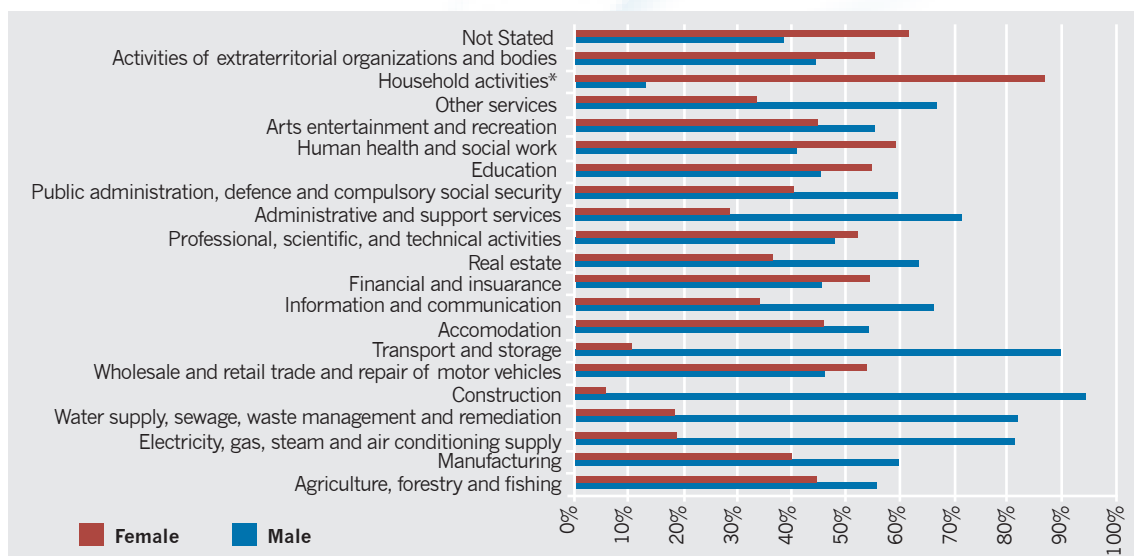
The impact of employment trends on women

93. The increased inequality across female-headed households can be related to the pattern of economic growth between 2006 and 2010, during which the booming sectors (e.g. construction) were male dominant and concentrated in urban areas. According to the 2009 census, 94% of construction workers were males and the sector contributed 5% of overall employment in Vanuatu. As illustrated in Figure 16, men dominated most formal employment, particularly in urban-based sectors such as construction, manufacturing, government and public administration, utilities, and administrative services. The few exceptions are wholesale and retail, financial and insurance, professional and scientific, education, and international organisations. Note agriculture numbers relate to formal (paid) employment and exclude subsistence agriculture.



94. In 2010, women were 49.3% of the total population (up from 48.8% in 2006). The proportion of women in Port Vila and Luganville declined from 49.9% and 49.7% in 2006 to 49% and 47.7% in 2010, respectively, but increased in the rural population from 48.6% to 49.6%. Women were slightly underrepresented in the top two deciles where they were 48.5% (9th) and 48.3% (10th), of individuals and slightly underrepresented in the bottom two deciles where they were 50.3% (1st) and 50% (2nd) of individuals; this was a slight deterioration from 2006.

Figure 16: Employment composition by sex and economic sector (2009 Census)



Source: Vanuatu National Statistics office, 2009 National Population and Housing Census

*Activities of households as employers, undifferentiated goods and service-producing activities of household for own use

Distribution of women across expenditure deciles

95. The proportion of women in the lowest quintile and the lowest three deciles declined from 24.6% and 35.7% in 2006 to 23.3% and 33.5% in 2010, respectively. The proportion of women in the highest expenditure quintile was the same in 2006 and 2010. This may be indicative of the relative improvement of the position of women, nationally, from the lowest to the middle deciles. The proportion of women in the middle expenditure strata (5th, 6th and 7th deciles) increased by 4.5%, at the national level, which can be totally attributed to change in rural areas, where there was a 7.2% increase. In Luganville, however, the proportion of women in these middle deciles declined by 12.5% and the proportion remained around the same in Port Vila

Table 27: The distribution of women across expenditure levels in 2006 and 2010

Ranked by per capita adult equivalent HH expenditure deciles	Proportion of Females By Decile (% of all females)											
	Vanuatu			Port Vila (urban)			Luganville (urban)			Rural		
	2006	2010	% change	2006	2010	% change	2006	2010	% Change	2006	2010	% change
All Households	48.8	49.3	1.0%	49.9	49.0	-1.8%	49.7	47.7	-4.0%	48.6	49.6	2.1%
Lowest Quintile	24.6	23.3	-5.2%	24.4	25.0	2.7%	23.6	24.5	3.9%	24.8	23.4	-5.7%
Lowest Three Deciles	35.7	33.5	-6.2%	35.6	35.9	0.9%	33.7	34.9	3.6%	35.9	33.4	-6.9%
Highest Quintile	15.8	15.8	-0.4%	14.4	14.9	3.3%	15.7	17.9	14.4%	16.1	16.4	1.9%
Middle three deciles (5th+6th+7th)	29.1	30.4	4.5%	30.2	30.2	-0.1%	30.8	27.0	-12.5%	28.7	30.8	7.2%



96. Most of the improvement in women's expenditure status occurred in the rural areas, where the proportion of women in the lowest quintiles and three deciles (as percentage of the rural female population) went down by 5.7% and 6.9%, respectively, and the proportion of women in the highest quintile increased by 1.9%. In Port Vila, the proportion of women in the lowest expenditure quintile and three deciles increased by 2.7% and 0.9% respectively, while the proportion of women in the highest quintile increased by 3.3%. In Luganville, the proportion of women in the lowest expenditure quintile increased by 3.9% and in the lowest three deciles by 3.6%, while the proportion in the highest quintile increased by 14.4% (Table 27).

Women's vulnerability to poverty

97. Women's vulnerability to poverty varies considerably, as illustrated in Table 28. In Port Vila and rural areas girls (below 14 years of age) are more vulnerable to food poverty than women and girls above the age of 14, while in Luganville vulnerability for women of all ages was about the same. Women in rural areas are better off than their counterparts in urban areas, particularly girls below 14 years of age. In urban areas, the proportion of girls under 14 below the BNPL ranges between fifth to a quarter of girls in this age group, compared to 11% in rural areas.

98. A sizable proportion of women live in households where expenditure is just 20% above the BNPL, and a larger proportion in household where expenditure is between 20% but less than 50% above the BNPL. This means they are vulnerable to dropping below the BNPL. Around half of the female population in rural areas are not poor, compared to less than third of females living in urban areas. Comparing Table 28 to Table 22, which illustrates the overall population vulnerability; women are more vulnerable than the population as a whole in all age categories in urban areas. The gap, however, is smaller in rural areas.

Table 28: Vulnerability status of females by age group

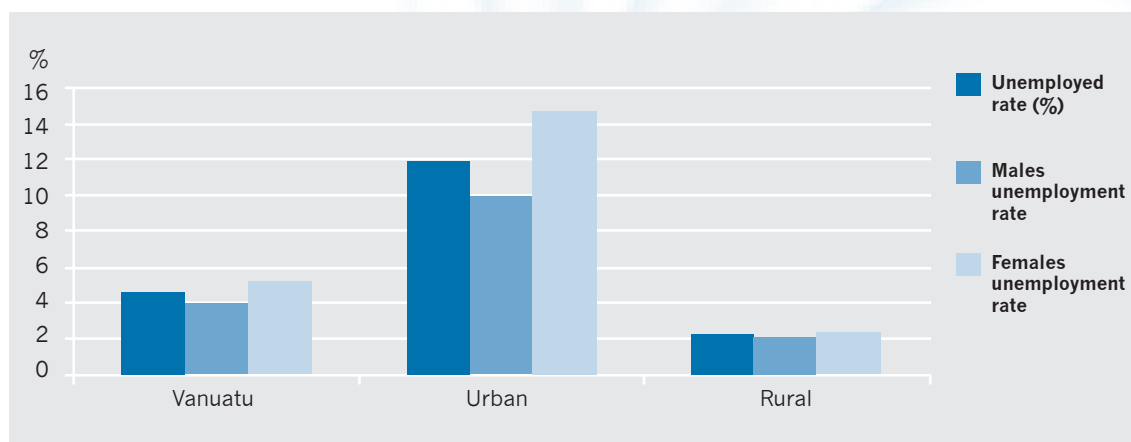
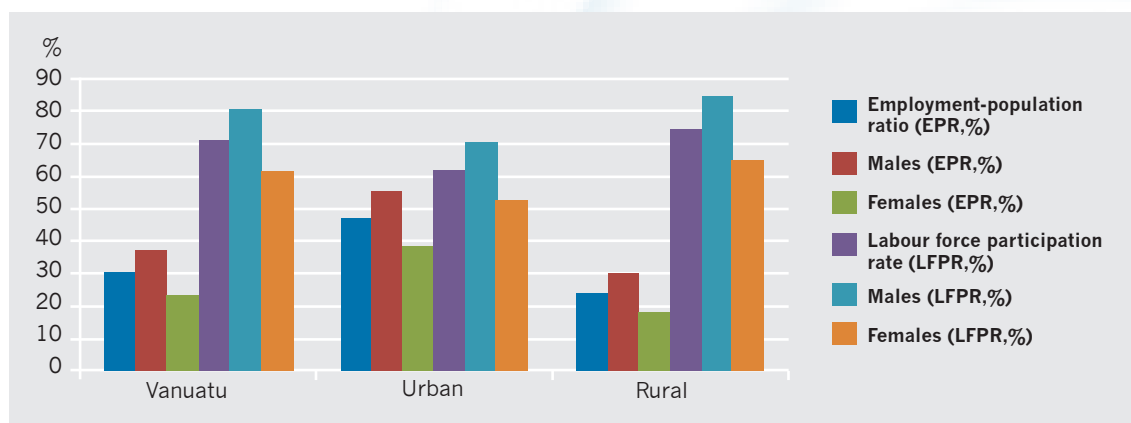
Female Vulnerability Status						
Female Vulnerability Status	Port Vila (urban)		Luganville (urban)		Rural	
	0 - 14 years	15 yrs plus	0 - 14 years	15 yrs plus	0 - 14 years	15 yrs plus
Females below FPL	3.9	2.5	9.1	9.1	3.1	2.4
Females > FPL but < BNPL	16.5	15.0	15.7	14.7	7.9	7.0
Total Females below BNPL	20.4	17.5	24.9	23.8	11.1	9.4
Females < 20% above BNPL	10.6	12.2	11.6	11.1	7.4	6.5
Females < 50% above BNPL	18.7	14.6	14.1	14.9	12.0	10.3
Females < 100% above BNPL	21.9	25.4	14.1	15.3	19.9	18.4
Females Not Poor	28.4	30.2	35.4	34.9	49.6	55.4
Total	100	100	100	100	100	100
Number of Females	7788	16421	2514	4675	37366	54428

99. The non-poor constitute, on average, half of the population, yet only 31.4% and 33.8% in Port Vila and Luganville, respectively. The proportion of non-poor females living in urban areas is a little higher than these averages (Table 28). In rural areas there is no female disadvantage as the proportion of non-poor females in both age groups is nearly the same as the overall proportion of non-poor.



G.3 Economic activity and poverty

Figures 17.a and 17.b: Labour force participation and employment (2009) persons aged 15+



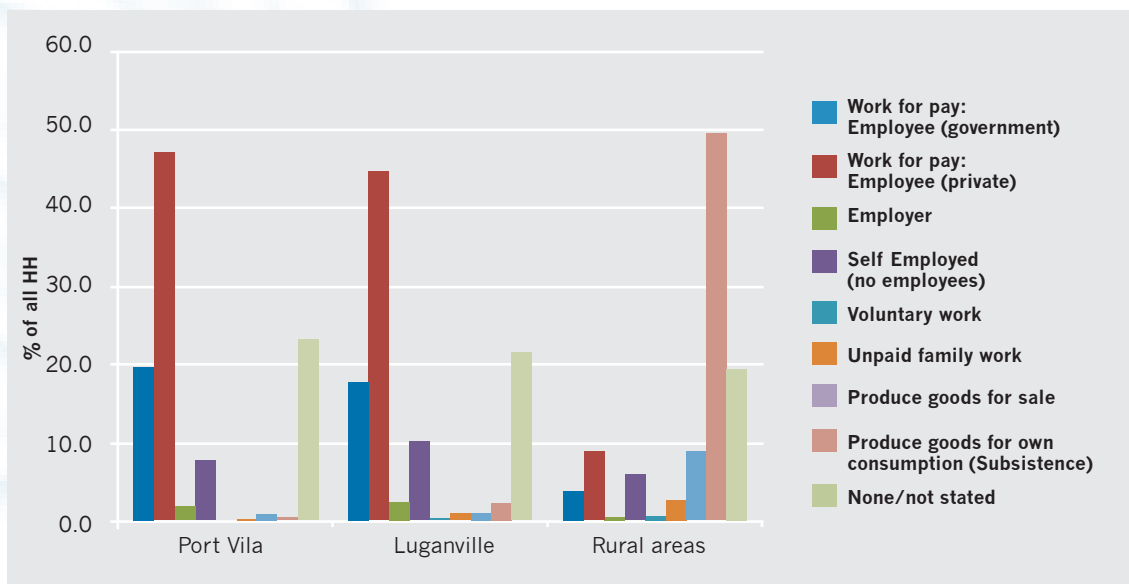
Source: Vanuatu National Population and Housing Census, 2009

100. At the time of the 2009 Census, labour force participation in Vanuatu was 71% of people aged 15 and over. Men's labour force participation rate was 80%, compared to 61.4% for women. The participation rate was higher in rural areas (84% and 64.8% for males and females, respectively) compared to urban areas (70.4% and 52.3% for males and females respectively). The unemployment rate was 5% but varied considerably between urban (12%) and rural (2.3%). Unemployment is higher for women (5.2%) compared to men (4.2%). The difference between male and female unemployment is larger in urban areas, with an unemployment rate of 14.7% for women compared to 9.9% for men. In rural areas the rates are 2.4% for women compared to 2.2% for men.

101. According to the 2010 HIES, the main sources of employment in urban centres (Port Vila and Luganville) are formal employment in the private sector (45%) followed by the government (19%), while in rural areas subsistence production and producing goods for sale are the main sources of employment and income. With 75% of the population of Vanuatu living in rural areas, the HIES results are consistent with the 2009 Census finding that subsistence production and producing goods for sale are the main income for 46% of households, while wages and salaries derived from formal employment (in both government and private sector) support only around 36% of households.



Figure 18: Main economic activities in households



I) Port Vila

102. There is a strong correlation between income generating activities and vulnerability status, particularly in urban centres.

In Port Vila, 14.9% of government employees are below the BNPL but above the FPL (compared to 15.6% of all people in Port Vila (Table 23) and 1.9% below the FPL (compared to 2.8% of all people in Port Vila). Just above this expenditure level, 7.1% of government employees are up to 20% above the BNPL (very vulnerable), and 13% are in the expenditure range between 20% and 50% of the BNPL (vulnerable). For female government employees, 3.4% are below the FPL – this is a higher proportion than the average for all people in Port Vila - and 15.1% above the FPL but below the BNPL. This compares to 0.7% of male government employees being below the FPL, and 14.7% above the FPL but below the BNPL. This is consistent with wage, occupation and promotion policies and practices in government that effectively discriminate against women, resulting in the concentration of women in low paid occupations (e.g. cleaning and clerical positions). The government increased the minimum wage in 2012 from 26,000 Vt to 30,000 Vt per month and these women would have benefitted disproportionately since they are concentrated in minimum wage type work.

103. In the private sector, however, proportionately more male employees are below the FPL - 3.7% compared to 1.9% of female employees. Men constitute 56% and 58% of total employees in government and the private sector, respectively (Table 29).

104. Government employees are slightly better off than their counterparts in the private sector. Self-employed (no employees) and market vendors, particularly women, are among the most vulnerable. Self-employed males are significantly better off than their female counterparts. The majority of market vendors are female (91%) and are more vulnerable to falling below the BNPL than any other group, yet only a small portion of them (5.3%) are already below the BNPL. Business owners, employers, are less vulnerable, particularly females compared to their male counterparts (Table 29).

105. Women predominate in the group working full time in the household (83%). However, the 22.8% of males working full time in the household are below the BNPL, compared to 18.8% of females working in the households. Overall, nearly a fifth (19.5%) of those working in the households is below the BNPL and, at least 18.2% are vulnerable to falling below the BNPL.

Table 29: Type of work and vulnerability status in Port Vila persons aged 15+

Poverty/Vulnerability Status		Persons 15 years and above	Persons below FPL	Persons > FPL but < BNPL	Total Persons below BNPL	Persons < 20% above BNPL	Persons < 50% above BNPL	Persons < 100% above BNPL	Persons Not Poor	Total	Number of Persons
Work for pay: Employee (government)	males	0.7	14.7	15.3	6.0	12.0	23.3	43.3	100.0	2534	
	females	3.4	15.1	18.5	8.4	14.3	23.5	35.3	100.0	2010	
	Total	1.9	14.9	16.7	7.1	13.0	23.4	39.8	100.0	4544	
Work for pay: Employee (private)	males	3.7	15.0	18.7	10.8	13.2	24.5	32.7	100.0	6403	
	females	1.9	13.0	14.9	12.3	13.0	21.6	38.3	100.0	4544	
	Total	2.9	14.2	17.1	11.4	13.1	23.3	35.0	100.0	10947	
Employer	males	0.0	16.7	16.7	16.7	0.0	8.3	58.3	100.0	203	
	females	0.0	0.0	0.0	25.0	12.5	25.0	37.5	100.0	135	
	Total	0.0	10.0	10.0	20.0	5.0	15.0	50.0	100.0	338	
Self-Employed (no employees)	males	0.0	6.9	6.9	6.9	10.3	17.2	58.6	100.0	980	
	females	2.7	10.8	13.5	10.8	8.1	18.9	48.6	100.0	625	
	Total	1.1	8.4	9.5	8.4	9.5	17.9	54.7	100.0	1605	
Unpaid family work	males	0.0	0.0	0.0	0.0	0.0	16.7	83.3	100.0	101	
	females	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	34	
	Total	0.0	0.0	0.0	0.0	0.0	37.5	62.5	100.0	135	
Produce goods for sale	males	0.0	0.0	0.0	0.0	50.0	50.0	0.0	100.0	34	
	females	0.0	5.3	5.3	26.3	26.3	21.1	21.1	100.0	321	
	Total	0.0	4.8	4.8	23.8	28.6	23.8	19.0	100.0	355	

106. Table 30 shows that retirees and people with disabilities in Port Vila are particularly vulnerable to being below the BNPL with 18.1% of retirees and 23.3% of people with disabilities below the BNPL. There is no significant difference by gender in the vulnerability of these two groups. Students are also a vulnerable group, with 17.4% below the BNPL and at least 14.6% are highly vulnerable to falling below the BNPL. There are more female students below the FPL (2.5%) than male students (1.7%).

107. One in five unemployed people looking for work (20.8%) in Port Vila are below the BNPL, 1.9% below the FPL, and 20.8% are vulnerable to falling below the BNPL. Males constituted nearly 70% of this group. The depth of poverty among unemployed females is higher than for unemployed males. A larger percentage of unemployed females are below the FPL, 2.9%, compared to 1.4% of unemployed males (Table 30).



Table 30: Vulnerability status and reasons for not working in Port Vila persons aged 15+

Poverty/ Vulnerability Status	Persons 15 years and above	Persons below FPL	Persons > FPL but < BNPL	Total Persons below BNPL	Persons < 20% above BNPL	Persons < 50% above BNPL	Persons < 100% above BNPL	Persons Not Poor	Total	Number of Persons
Student	males	1.7	15.8	17.5	8.3	11.7	28.8	33.8	100.0	4054
	females	2.5	14.6	17.2	13.1	18.2	26.8	24.7	100.0	3345
	Total	2.1	15.3	17.4	10.5	14.6	27.9	29.7	100.0	7399
Retired	males	0.0	20.0	20.0	8.6	25.7	25.7	20.0	100.0	591
	females	0.0	16.2	16.2	8.1	8.1	32.4	35.1	100.0	625
	Total	0.0	18.1	18.1	8.3	16.7	29.2	27.8	100.0	1216
Disability	males	6.7	20.0	26.7	26.7	20.0	13.3	13.3	100.0	253
	females	0.0	20.0	20.0	6.7	6.7	33.3	33.3	100.0	253
	Total	3.3	20.0	23.3	16.7	13.3	23.3	23.3	100.0	507
Do not want to work	males	4.5	28.8	33.3	12.1	10.6	22.7	21.2	100.0	1115
	females	2.9	21.4	24.3	15.7	18.6	18.6	22.9	100.0	1183
	Total	3.7	25.0	28.7	14.0	14.7	20.6	22.1	100.0	2298
Household work full time	males	0.0	22.8	22.8	8.8	17.5	26.3	24.6	100.0	963
	females	3.3	15.4	18.8	11.4	18.4	26.5	25.0	100.0	4595
	Total	2.7	16.7	19.5	10.9	18.2	26.4	24.9	100.0	5558
Others	males	8.3	8.3	16.7	11.1	16.7	33.3	22.2	100.0	608
	females	13.0	8.7	21.7	8.7	21.7	30.4	17.4	100.0	389
	Total	10.2	8.5	18.6	10.2	18.6	32.2	20.3	100.0	997
Looking for work	males	1.4	19.4	20.8	9.7	26.4	23.6	19.4	100.0	1216
	females	2.9	17.6	20.6	11.8	8.8	38.2	20.6	100.0	574
	Total	1.9	18.9	20.8	10.4	20.8	28.3	19.8	100.0	1791

II) Luganville

108. The higher incidence of poverty and hardship in Luganville is reflected throughout all categories of economic activities.

Around 15.8% of government employees are below the BNPL, 3.8% are below the FPL, while 12.5% are vulnerable to falling below the BNPL. Gender differences are evident with the proportion of female government employees below the FPL and BNPL (4.0% and 13.3% respectively) higher than the proportion of their male counterparts (3.7% and 11.0% respectively). As in Port Vila, Table 31 shows that government employees, in general, are better off than their counterparts employed by the private sector. This is particularly the case for men. In the private sector, women are better off than their male counterparts, yet worse off than women working in the government sector.

109. Female employers are all above BNPL, but more vulnerable than male employers. A larger proportion of male employers are not poor (62.5%) compared to female employers (37.5%). However women who are self-employed with no employees are better off than men in the same category; 15.7% of self-employed men are below the BNPL (5.9% below the FPL), 9.8% are very vulnerable to falling below the BNPL and 15.7% are vulnerable to falling below the BNPL, while 35.3% are not poor. In contrast, 7.1% of self-employed women are below the BNPL, half of them are below the FPL (3.6%), 3.6% are very vulnerable to falling below the BNPL and 14.6% are vulnerable to falling below the BNPL, while 53.6% are not poor.

Table 31: Type of work and vulnerability status in Luganville persons aged 15+

Poverty/ Vulnerability Status	Persons 15 years and above	Persons below FPL	Persons > FPL but < BNPL	Total Persons below BNPL	Persons < 20% above BNPL	Persons < 50% above BNPL	Persons < 100% above BNPL	Persons Not Poor	Total	Number of Persons
Work for pay: Employee (government)	males	3.7	11.0	14.7	12.8	13.8	18.3	40.4	100.0	757
	females	4.0	13.3	17.3	8.0	10.7	12.0	52.0	100.0	521
	Total	3.8	12.0	15.8	10.9	12.5	15.8	45.1	100.0	1278
Work for pay: Employee (private)	males	5.9	16.1	22.0	9.2	17.2	19.4	32.2	100.0	1896
	females	8.1	11.8	19.9	11.8	14.0	16.2	38.2	100.0	945
	Total	6.6	14.7	21.3	10.0	16.1	18.3	34.2	100.0	2841
Employer	males	6.3	0.0	6.3	6.3	0.0	25.0	62.5	100.0	111
	females	0.0	0.0	0.0	12.5	12.5	37.5	37.5	100.0	56
	Total	4.2	0.0	4.2	8.3	4.2	29.2	54.2	100.0	167
Self-Employed (no employ- ees)	males	5.9	9.8	15.7	9.8	15.7	23.5	35.3	100.0	354
	females	3.6	3.6	7.1	3.6	14.3	21.4	53.6	100.0	194
	Total	5.1	7.6	12.7	7.6	15.2	22.8	41.8	100.0	549
Unpaid family work	males	0.0	16.7	16.7	16.7	0.0	0.0	66.7	100.0	42
	females	0.0	16.7	16.7	16.7	16.7	16.7	33.3	100.0	83
	Total	0.0	16.7	16.7	16.7	11.1	11.1	44.4	100.0	125
Produce goods for sale	males	20.0	0.0	20.0	60.0	0.0	0.0	20.0	100.0	35
	females	5.9	17.6	23.5	17.6	11.8	17.6	29.4	100.0	118
	Total	9.1	13.6	22.7	27.3	9.1	13.6	27.3	100.0	153
Produce goods for own consumption (Subsistence)	males	30.8	23.1	53.8	0.0	7.7	23.1	15.4	100.0	90
	females	23.1	15.4	38.5	0.0	23.1	15.4	23.1	100.0	90
	Total	26.9	19.2	46.2	0.0	15.4	19.2	19.2	100.0	181

110. Market vendors (classified here as producing goods for sale) are one of the most vulnerable groups with 22.7% below the BNPL (9.1% below the FPL) and 27.3% are very vulnerable to falling below the BNPL. Only 27.3% of this group are not poor. The majority of market vendors are women (87%) and are somewhat better off than men. The majority of unemployed (looking for work) in Luganville are poor and/or highly vulnerable to fall into poverty (9.5% below FPL, 40.5% below the BNPL, 10.7% very vulnerable and 16.7% vulnerable). Unemployed females are more vulnerable than their male counterparts. While more men than women self classify as unemployed, women overwhelmingly dominate the category of full time household work (89%). Further, 25% of females working full time in the household are below the BNPL (6.6% are below the FPL). Males working in the households are more vulnerable to poverty; 16% are below the FPL and 36% below the BNPL.

111. Retirees and people with disability, particularly women, are among the most vulnerable, yet less vulnerable than their counterparts in Port Vila. Notably, 20% of women with disabilities are below the BNPL, half of them (10%) are below the FPL, while no men with disabilities are below the BNPL. Similarly, 36.4% of retired women are below the BNPL, 13% are below the FPL, compared to 23.1% of retired men below the BNPL and none below the FPL. Students in Luganville are more vulnerable than their counterparts in Port Vila. Female students are more vulnerable than their male counterparts.



Table 32: Vulnerability status and reasons for not working in Luganville persons aged 15+

Poverty/Vulnerability Status	Persons 15 years and above	Persons below FPL	Persons > FPL but < BNPL	Total Persons below BNPL	Persons < 20% above BNPL	Persons < 50% above BNPL	Persons < 100% above BNPL	Persons Not Poor	Total	Number of Persons
Student	males	6.4	11.7	18.1	13.3	17.6	16.0	35.1	100.0	1306
	females	9.6	18.5	28.1	8.1	14.8	15.6	33.3	100.0	938
	Total	7.7	14.6	22.3	11.1	16.4	15.8	34.4	100.0	2244
Retired	males	0.0	23.1	23.1	3.8	7.7	0.0	65.4	100.0	181
	females	13.6	22.7	36.4	0.0	4.5	13.6	45.5	100.0	153
	Total	6.3	22.9	29.2	2.1	6.3	6.3	56.3	100.0	333
Disability	males	0.0	0.0	0.0	33.3	16.7	0.0	50.0	100.0	42
	females	10.0	10.0	20.0	20.0	20.0	20.0	20.0	100.0	69
	Total	6.3	6.3	12.5	25.0	18.8	12.5	31.3	100.0	111
Do not want to work	males	17.0	13.2	30.2	18.9	17.0	11.3	22.6	100.0	368
	females	28.9	2.6	31.6	5.3	15.8	13.2	34.2	100.0	264
	Total	22.0	8.8	30.8	13.2	16.5	12.1	27.5	100.0	632
Household work full time	males	16.0	20.0	36.0	20.0	12.0	8.0	24.0	100.0	174
	females	6.6	18.4	25.0	11.8	16.2	14.5	32.5	100.0	1584
	Total	7.5	18.6	26.1	12.6	15.8	13.8	31.6	100.0	1757
Others	males	17.8	15.6	33.3	13.3	20.0	13.3	20.0	100.0	313
	females	14.3	10.7	25.0	28.6	7.1	10.7	28.6	100.0	194
	Total	16.4	13.7	30.1	19.2	15.1	12.3	23.3	100.0	507
Looking for work	males	8.9	30.4	39.3	7.1	17.9	10.7	25.0	100.0	389
	females	10.7	32.1	42.9	17.9	14.3	3.6	21.4	100.0	194
	Total	9.5	31.0	40.5	10.7	16.7	8.3	23.8	100.0	583

III) Rural areas

112. The majority of people (65%) who are employees of government and the private sector in the rural areas are not poor. Government employees in rural areas are less vulnerable than their counterparts in urban areas and those in the private sector. Women employed by the government are slightly more vulnerable than men. Unlike in urban areas, women working for the private sector are better off than their counterparts who are working for the government, while men working for the government are better off than their counterparts working for the private sector.

113. Private sector employers and the self-employed are predominantly male and are less vulnerable than their counterparts in urban areas. The most vulnerable groups in rural areas are unpaid family workers and people producing goods for sale and/or own consumption. Around 14.1% of unpaid family workers are below the BNPL (3.6% are below the FPL). The percentage of poor women within this group (15.6% below the BNPL) is significantly higher than that of men (11% below BNPL), as illustrated in Table 33.

Table 33: Type of work and vulnerability status in Rural Areas persons aged 15+

Poverty/ Vulnerability Status		Persons 15 years and above	Persons below FPL	Persons > FPL but < BNPL	Total Persons below BNPL	Persons <20% above BNPL	Persons <50% above BNPL	Persons <100% above BNPL	Persons Not Poor	Total	Number of Persons
Work for pay: Employee (government)	males		2.4	2.2	4.6	3.4	10.1	14.0	67.9	100.0	907
	females		1.3	4.4	5.7	9.9	4.2	18.6	61.6	100.0	758
	Total		1.9	3.2	5.1	6.4	7.4	16.1	65.0	100.0	1665
Work for pay: Employee (private)	males		1.4	6.1	7.5	4.2	6.2	17.4	64.7	100.0	2956
	females		2.2	4.4	6.6	0.5	7.3	18.5	67.1	100.0	1837
	Total		1.7	5.4	7.1	2.8	6.6	17.8	65.6	100.0	4793
Employer	males		0.0	0.0	0.0	0.0	19.5	0.0	80.5	100.0	74
	females		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	Total		0.0	0.0	0.0	0.0	19.5	0.0	80.5	100.0	74
Self-Employed (no employ- ees)	males		0.0	1.4	1.4	3.0	3.3	17.2	75.1	100.0	1448
	females		0.0	2.1	2.1	2.4	1.2	14.9	79.3	100.0	956
	Total		0.0	1.7	1.7	2.8	2.5	16.3	76.8	100.0	2404
Unpaid family work	males		2.6	8.8	11.3	11.0	13.5	23.6	40.5	100.0	529
	females		4.2	11.4	15.6	7.0	16.5	25.1	35.8	100.0	966
	Total		3.6	10.4	14.1	8.4	15.4	24.6	37.5	100.0	1496
Produce goods for sale	males		0.0	6.2	6.2	2.3	10.5	13.5	67.5	100.0	1028
	females		0.0	8.8	8.8	11.4	1.8	14.6	63.4	100.0	803
	Total		0.0	7.3	7.3	6.3	6.7	14.0	65.7	100.0	1831
Produce goods for own consumption (Subsistence)	males		3.2	3.2	6.4	7.3	12.8	23.2	50.3	100.0	6060
	females		2.3	3.0	5.4	6.5	13.0	19.4	55.7	100.0	5715
	Total		2.8	3.1	5.9	6.9	12.9	21.3	52.9	100.0	11774

114. People producing goods for sale are among the most vulnerable in rural areas (7.3% below the BNPL), particularly women (8.8% below the BNPL compared to 6.2% of men), yet they are better off than their counterparts in urban areas. Unpaid family workers and subsistence workers are the two groups with the highest food poverty in rural areas (3.6% and 2.8% below the FPL, respectively). Women working in subsistence production are slightly better off than their male counterparts in the same group. This can be attributed to the fact that many women working in subsistence production live in male-headed households with a primary source of income from government or private sector employment.

115. People with disabilities in rural areas are highly vulnerable. While there are more men than women with disabilities below the BNPL and the FPL, women with disabilities are vulnerable to falling into poverty due to nearly half the group being clustered within 50% of the BNPL. Meanwhile, 63.8% of men with disabilities in the rural areas are not poor compared to 48.6% of women with disabilities. Retired people in rural areas are less vulnerable than in urban areas.

116. Men who are unemployed and looking for work are more vulnerable than their female counterparts within the same group and are amongst the most vulnerable groups in rural areas. Table 34 shows that 6.9% of unemployed (looking for work) men are below the FPL and 9.2% are below the BNPL. In comparison, 3% of women looking for work are below



the BNPL (and none are below the FPL). Access to land and kin support as well as the slower pace of monetization in rural areas compared to urban areas, is likely to contribute to unemployed people in rural areas being, generally, less vulnerable than their counterparts in urban areas (68% of men and 72% of women who are unemployed and looking for work in rural areas are not poor).

Table 34: Vulnerability status and reasons of not working in Rural Areas persons aged 15+

Poverty/ Vulnerability Status	Persons 15 years and above	Persons below FPL	Persons > FPL but < BNPL	Total Persons below BNPL	Persons <20% above BNPL	Persons <50% above BNPL	Persons <100% above BNPL	Persons Not Poor	Total	Number of Persons
Student	males	1.0	4.7	5.7	4.4	14.4	22.0	53.6	100.0	4465
	females	1.3	5.7	6.9	4.4	11.5	18.8	58.3	100.0	4303
	Total	1.1	5.2	6.3	4.4	13.0	20.4	55.9	100.0	8768
Retired	males	4.0	0.0	4.0	0.0	0.0	23.0	73.0	100.0	335
	females	0.0	6.3	6.3	4.1	4.5	16.5	68.6	100.0	320
	Total	2.1	3.1	5.1	2.0	2.2	19.8	70.8	100.0	656
Disability	males	9.8	9.8	19.7	0.0	6.7	9.8	63.8	100.0	204
	females	5.8	0.0	5.8	19.3	26.3	0.0	48.6	100.0	174
	Total	8.0	5.3	13.3	8.9	15.7	5.3	56.8	100.0	377
Do not want to work	males	10.4	16.9	27.3	5.0	11.2	22.4	34.1	100.0	1417
	females	3.1	17.9	21.0	6.1	14.7	15.7	42.6	100.0	758
	Total	7.8	17.2	25.1	5.4	12.4	20.1	37.1	100.0	2176
Household work full time	males	13.5	10.0	23.5	12.5	13.8	11.4	38.9	100.0	1935
	females	6.8	9.6	16.4	8.4	8.8	16.9	49.6	100.0	4604
	Total	8.8	9.7	18.5	9.6	10.2	15.3	46.4	100.0	6539
Others	males	0.0	10.7	10.7	4.8	13.6	17.4	53.5	100.0	840
	females	0.0	11.3	11.3	5.4	12.7	21.9	48.8	100.0	795
	Total	0.0	11.0	11.0	5.1	13.1	19.5	51.2	100.0	1635
Looking for work	males	6.9	9.2	16.0	3.4	3.4	9.1	68.0	100.0	585
	females	0.0	3.0	3.0	8.9	3.0	8.9	76.2	100.0	674
	Total	3.2	5.9	9.0	6.4	3.2	9.0	72.4	100.0	1258

G.4. Education level

117. The incidence of food and basic need poverty is significantly higher among people with low levels of education (no schooling or primary education only) in urban areas. However, this is less of a predictor of poverty in rural areas where agriculture and subsistence farming are the main economic activities. In urban areas one fifth of people with no schooling or only primary education are below the BNPL, 3.5% are below the FPL. The incidence of basic needs poverty is higher among women with no schooling or only primary education (21.7% and 20.5%, respectively) than for men with no schooling and



men with only primary education (18.1% and 18.9%, respectively). In rural areas the incidence of basic needs poverty for both men and women with no schooling and primary education is 13% and 9%, respectively.

118. The incidence of basic needs poverty is higher in Luganville for women with no schooling and primary education only, as well as for men with primary education only, compared to Port Vila. Basic needs poverty is, however, lower for men with no schooling (Table 35). In urban areas, men with no schooling are less likely to be vulnerable to poverty than all other groups with low levels of education. This may be because the employment opportunities that do not require schooling (particularly in the booming construction sector), tend to be male-dominated and concentrated in urban areas.

Table 35: Vulnerability status by education level in urban and rural areas persons aged 15+

Persons 15 years and above			Persons below FPL	Persons > FPL but < BNPL	Total Persons below BNPL	Persons < 20% above BNPL	Persons < 50% above BNPL	Persons < 100% above BNPL	Persons Not Poor	Total	Number of Persons
Port Vila (urban)	Females	No Schooling	4.3	17.4	21.7	20.7	10.9	21.7	25.0	100.0	1554
		Primary level only	3.6	16.9	20.5	12.3	12.0	27.3	27.9	100.0	5203.2
	Males	No Schooling	1.4	16.7	18.1	16.7	15.3	6.9	43.1	100.0	1216
		Primary level only	3.5	15.4	18.9	10.2	11.9	29.5	29.5	100.0	4814.7
	All Persons	No Schooling	3.0	17.1	20.1	18.9	12.8	15.2	32.9	100.0	2771
		Primary level only	3.5	16.2	19.7	11.3	12.0	28.3	28.7	100.0	10017.9
Luganville (urban)	Females	No Schooling	8.5	14.9	23.4	12.8	23.4	6.4	34.0	100.0	326
		Primary level only	8.7	15.6	24.4	11.6	16.0	15.3	32.7	100.0	1910.1
	Males	No Schooling	8.7	2.2	10.9	15.2	17.4	19.6	37.0	100.0	320
		Primary level only	10.5	12.7	23.2	13.1	18.7	14.6	30.3	100.0	1854.5
	All Persons	No Schooling	8.6	8.6	17.2	14.0	20.4	12.9	35.5	100.0	646
		Primary level only	9.6	14.2	23.8	12.4	17.3	14.9	31.5	100.0	3764.7
Rural	Females	No Schooling	3.4	9.5	12.9	8.2	11.8	17.9	49.2	100.0	16155
		Primary level only	2.3	6.1	8.4	6.1	10.3	19.7	55.5	100.0	24029.9
	Males	No Schooling	3.4	9.1	12.5	7.4	11.0	18.0	51.0	100.0	14037
		Primary level only	2.7	6.3	9.0	6.2	10.8	19.5	54.5	100.0	23740.7
	All Persons	No Schooling	3.4	9.3	12.7	7.8	11.4	18.0	50.0	100.0	30192
		Primary level only	2.5	6.2	8.7	6.2	10.6	19.6	55.0	100.0	47770.6

119. Heads of households with higher levels of education are mostly concentrated in the highest expenditure quintile. This is particularly the case for female heads of households, particularly in urban areas. Heads of households with lower levels of education (School Year 9 or lower) are concentrated in the lowest three deciles. The distribution across deciles is more uniform in rural areas. There is no clear correlation, however, between vulnerability status and the education level of heads of households. This may be because of the small size of the group with higher levels of education, as most of the population, across all deciles, has only completed primary education.



H. Vulnerable groups

H.1. Vulnerable age groups

120. Elderly (aged 60 plus) men and women are more vulnerable in urban areas than in rural areas. Around 22.7% and 21.1% of elderly men and women, respectively, are below the BNPL in Port Vila (Table 36). In Luganville, 21.9% and 25.4% of elderly men and women, respectively, are below the BNPL. In contrast, only 10.9% and 9.0% of elderly men and women, respectively, are below the BNPL in rural areas. Half of the elderly men and women in rural areas are not poor, compared to around a third of elderly men and women in urban areas. In general and throughout the country, elderly women are more vulnerable than elderly men, with the exception of Port Vila, where the degree of vulnerability is nearly the same for both.



Table 36: Vulnerability status of elderly (aged 60+) males and females

Persons 60 years and above	Port Vila (urban)		Luganville (urban)		Rural	
	Elderly Females	Elderly Males	Elderly Females	Elderly Males	Elderly Females	Elderly Males
Elderly persons Vulnerability Status						
Elderly Persons below FPL	0.0	4.5	12.5	8.5	1.9	3.2
Elderly Persons > FPL but < BNPL	21.1	18.2	9.4	16.9	9.0	5.7
Total Elderly Persons below BNPL	21.1	22.7	21.9	25.4	10.9	9.0
Elderly Persons < 20% above BNPL	10.5	15.9	15.6	11.9	7.6	5.4
Elderly Persons < 50% above BNPL	2.6	9.1	15.6	13.6	13.4	10.6
Elderly Persons < 100% above BNPL	34.2	20.5	9.4	11.9	18.2	19.1
Elderly Persons Not Poor	31.6	31.8	37.5	37.3	49.9	55.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of Elderly Persons	642	743	222	410	5019	6041

121. At the national level, one third of households headed by elderly (age 60+) are in the lowest three expenditure deciles, while only 15.3% are in the highest expenditure quintile (Table 37). Elderly-headed households comprise 13.4% of all households in Vanuatu, 15% of all households in the lowest deciles and 10.4% of households in the highest expenditure deciles. Households headed by elderly are, therefore, among the highly vulnerable groups.

Table 37: Elderly-headed households by expenditure level and sub-national area

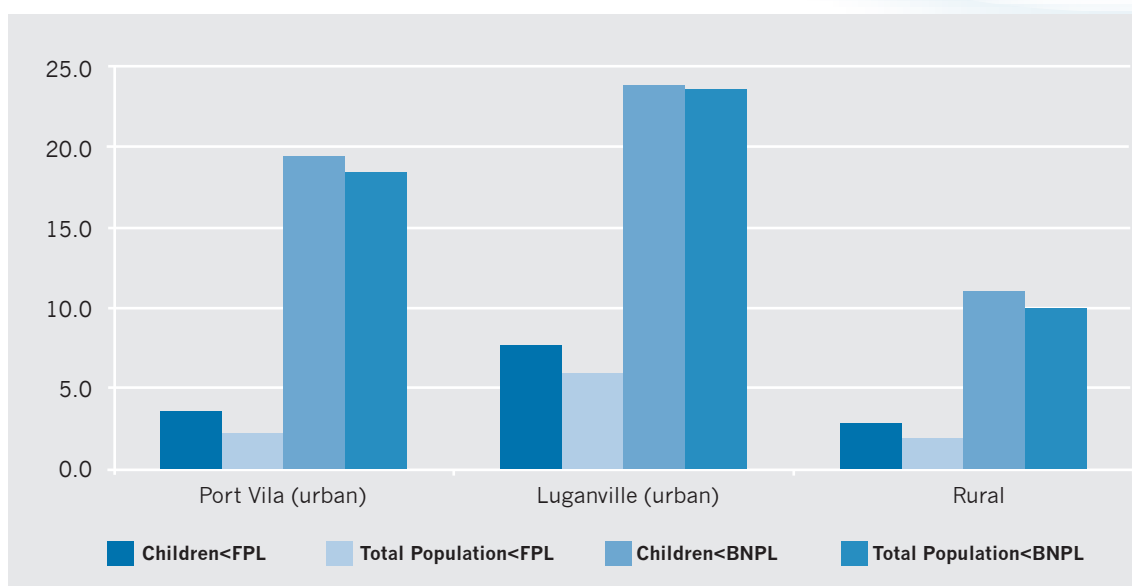
Ranked by per capita	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	% of all HH	% of elderly headed-HH	% of all HH	% of elderly headed-HH	% of all HH	% of elderly headed-HH	% of all HH	% of elderly headed-HH
Average all Households	13.4		6.1		9.4		15.5	
Lowest Quintile	15.0	22.6	8.7	28.6	11.7	24.6	14.8	19.2
Lowest Three Deciles	14.7	33.2	6.4	31.4	11.6	36.8	15.4	29.8
Highest Quintile	10.4	15.3	6.0	20.0	7.4	15.8	13.2	17.1

122. The concentration of households headed by elderly in the lowest three expenditure deciles is slightly higher in urban areas (Port Vila and Luganville) than in rural areas (Table 37). On the one hand, the proportion of households in the lowest three deciles that are headed by elderly is higher in rural areas (15.4% of all households in the lowest three deciles) compared to urban areas (11.6% and 6.4% of households in the lowest three deciles in Luganville and Port Vila, respectively). On the other hand, the proportion of households headed by elderly in the highest quintile is also higher in rural areas (13.2%) compared to urban areas (6% and 7.4% in Port Vila and Luganville, respectively).

123. As discussed in previous sections, youth are among the vulnerable groups. Students and young females are highly vulnerable, particularly in Luganville and, to a lesser extent, in Port Vila. According to the 2009 population and housing census, children and youth under the age of 19 years comprised 47% of the population, while youth age 19-24 comprised 11% in 2009.

124. Figure 19 illustrates the proportion of children (aged 14 and under) falling below the FPL and BNPL compared to the proportion of the total population falling below the FPL and BNPL. In all cases the proportion of children below the poverty lines is higher than the average for the population as a whole. The proportion of children under the poverty lines is significantly lower in rural areas as is the case for the rural population as a whole.

Figure 19: Children (aged 14 years and under) below the FPL and BNPL by sub-national area



¹³ Study on Child Poverty and Disparities Vanuatu, UNICEF Pacific, 2010



125. Nationally, 13.2% of all children live in households below the BNPL (3.2% of all children live in households below the FPL).

The proportion of children living households below the poverty line is significantly higher in Port Vila (19.4% below the BNPL and 3.6% below the FPL) and Luganville (23.9% and 7.7% respectively) compared to rural areas (11.1% and 2.8% respectively). Around one third of all children in urban areas, compared to half of all children in rural areas, live in non-poor households. Further, a significant percentage of children live in households with an expenditure that is only 50% higher than the BNPL (13% nationally, 17.2% and 15% in Port Vila and Luganville, respectively, and 11.9% in rural areas).

126. At the national level and particularly in urban areas, children living in elderly-headed households are more vulnerable than all children on average but children living in female-headed households are no more vulnerable than all children on average. Children living in households where the head is widowed in Luganville are significantly more vulnerable than all children on average. In rural areas, the vulnerability of children living in households headed by women, elderly and widows hovers around the average for all children. Throughout the country, 14% of children live in households in the highest expenditure quintile, while 36% of all children live in households in the lowest three expenditure deciles.

Table 38: Children's vulnerability status by sub-national area and status of household head (HHH)

Children Vulnerability Status: % of Children in Each Region by Age/Gender/Status of HH Head											
		Children below FPL	Children > FPL but < BNPL	Total Children below BNPL	Children < 20% above BNPL	Children < 50% above BNPL	Children < 100% above BNPL	Children Not Poor	Total	% of all Children	Number of Children
Vanuatu	Children in Elderly HHH	5.4	11.1	16.6	7.5	10.7	19.8	45.4	100.0	7.7%	7628
	Children in Female HHH	3.2	9.7	12.9	8.5	10.7	22.3	45.6	100.0	9.5%	9487
	Children in Widow/er HHH	6.8	9.1	15.8	8.5	7.7	23.6	44.3	100.0	2.8%	2795
	All Children	3.2	10.0	13.2	7.8	13.0	20.0	46.0	100.0		99346
Port Vila (urban)	Children in Elderly HHH	10.7	19.6	30.4	5.4	17.9	21.4	25.0	100.0	5.8%	946
	Children in Female HHH	1.9	16.3	18.3	10.6	10.6	23.1	37.5	100.0	10.7%	1757
	Children in Widow/er HHH	0.0	18.2	18.2	9.1	27.3	18.2	27.3	100.0	2.3%	372
	All Children	3.6	15.8	19.4	10.2	17.2	21.9	31.3	100.0		16437
Luganville (urban)	Children in Elderly HHH	9.7	21.0	30.6	9.7	8.1	11.3	40.3	100.0	8.0%	431
	Children in Female HHH	4.3	10.1	14.5	8.7	10.1	5.8	60.9	100.0	8.9%	479
	Children in Widow/er HHH	0.0	27.3	27.3	36.4	9.1	18.2	9.1	100.0	1.4%	76
	All Children	7.7	16.2	23.9	12.5	15.0	15.4	33.2	100.0		5411
Rural	Children in Elderly HHH	4.4	9.2	13.5	7.7	9.8	20.1	48.9	100.0	8.1%	6252
	Children in Female HHH	3.5	8.1	11.5	7.9	10.8	23.3	46.5	100.0	9.4%	7251
	Children in Widow/er HHH	8.1	7.0	15.1	7.5	4.6	24.6	48.1	100.0	3.0%	2347
	All Children	2.8	8.3	11.1	7.0	11.9	20.0	50.0	100.0		77497

127. Typically, poor households (the lowest three deciles) and households in rural areas tend to have more children than households in the highest expenditure quintile and households in urban areas. Vanuatu is not an exception in this regard. Within urban areas, however, households in Port Vila tend to have more children than their counterparts in Luganville for all deciles.



128. A UNICEF study on child poverty and disparities found that nearly 20% of children in Port Vila lived in households which suffered from poverty and deprivation, based on the 2006 HIES. The study reported that around 17% of children in Vanuatu suffer from health deprivation. The next most common deprivation was shelter (affecting 14% of all children) followed by water, education and sanitation deprivations which affected 7.5%, 5% and 3.2% of children in the country, respectively ¹³.

129. Comparing the 2006 to 2010 HIES, Table 39 shows that, at the national level, the concentration of children in the lowest three expenditure deciles has increased slightly, from 36.1% to 36.6% of all children. Most of the increase in children's poverty took place in Luganville, where the proportion of children in the lowest three deciles increased from 32.4% to 36.2% of all children in Luganville. Meanwhile, the proportion of children in the lowest three deciles has decreased marginally in Port Vila and rural areas from 37.4% and 36.1% in 2006 to 35.8% and 35.9% in 2010, respectively. The proportion of children in the highest expenditure quintile remained around the same at the national level, driven by an increase in Port Vila from 12.5% in 2006 to 14.1% in 2010 that was offset by a decline from 17.6% and 15.1% in 2006 to 16.8% and 14.3% in Luganville and rural areas, respectively.

Table 39: Distribution of children by expenditure level and sub-national area 2006 and 2010

Ranked by per capita adult equivalent HH expenditure deciles	Vanuatu		Port Vila (urban)		Luganville (urban)		Rural	
	2006	2010	2006	2010	2006	2010	2006	2010
Lowest Quintile	24.9	25.6	27.0	25.5	23.6	24.5	24.7	25.5
Lowest Three Deciles	36.1	36.6	37.4	35.8	32.4	36.2	36.1	35.9
Highest Quintile	14.9	14.3	12.5	14.1	17.6	16.8	15.1	14.3
Children by Region		99346		16437		5411		77497



I. Human Poverty and public services

I.1. Energy

130. On average, 81.8% of households in Port Vila rely on electricity as the main source of household lighting, compared to 86% in 2006, while 10% use candles and around 4.3% use kerosene lamps. Households in high expenditure deciles rely more on electricity (86.2%, 84.5% and 91.4 % of households in 8th, 9th and 10th deciles, respectively, around the same as in 2006) compared to households in lower expenditure deciles (71.9%, 75.9% and 79.3%, compared to 70%, 77.5% and 87.8% in 2006, of households in the 1st, 2nd and 3rd deciles, respectively). Reliance on electricity as a source of energy for lighting in rural areas has increased significantly since 2006 as electricity distribution systems have been established in a number of communities, notably provincial headquarters. Households in Luganville and rural areas rely less on electricity as the main source of energy for lighting (around 73% and only 39.9% of households in Luganville and rural areas in 2010, compared to 30% and 10% in 2006, respectively).
131. Kerosene lamps and candles are widely used in Luganville and rural areas. Households in high expenditure deciles rely more on electricity. Around 12.8% and 6.6% of all households in Luganville, but 42.5% and 2.9% of all households in rural areas, rely on kerosene lamps and candles, respectively. Most poor houses in rural areas, particularly within the first expenditure decile, lack access to electricity (only 19.2%, 27.8% and 26.7% of households in the 1st, 2nd, 3rd deciles in rural areas, respectively, have electricity).
132. Wood and coconut shells are the main source of energy for cooking, contributing around 46.2%, 81.4% and 90.5% of energy utilized for cooking in Port Vila, Luganville and rural areas, respectively, followed by gas in urban areas (37% and 14.4% of households in Port Vila and Luganville, respectively) and very few households in rural areas (around 3%), mainly due to the difficulty in getting gas to rural areas. Electricity is also a main source of energy for cooking for households in top three deciles in Port Vila and, to a lesser extent, in the top deciles in Luganville and rural areas. Nearly all poor households in rural areas and Luganville (around 90%) and about two thirds of poor households in Port Vila rely solely on coconut shells and wood for cooking. Meanwhile, more than half of households in the highest expenditure deciles in Port Vila use gas as a source of energy for cooking compared to a quarter and no more than 10.3% of the high expenditure households in Luganville and rural areas.

I.2. Drinking water and sanitation

133. Private and community shared piped drinking water respectively supply 46.2% and 33% of all households in Port Vila. While private piped water is more common for households in the higher expenditure deciles (between half to two thirds of households in the highest three expenditure deciles), poor households rely more on community shared piped and standpipe drinking water. Household tanks are more common in Luganville, particularly among poor households, where two thirds (mostly middle and high expenditure) of all households use private piped water (Appendix Tables A.10, A.11 and A.12; Figure 20).

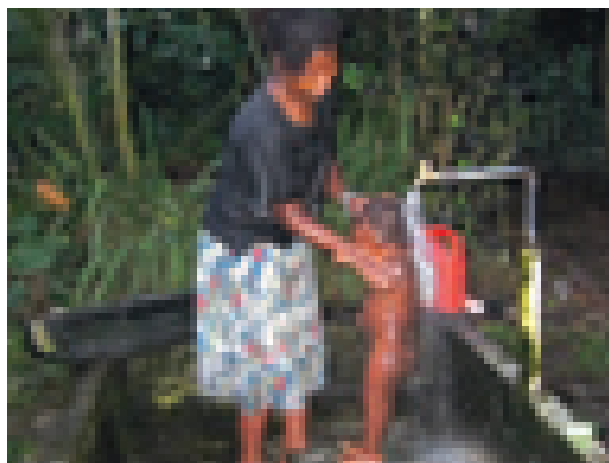
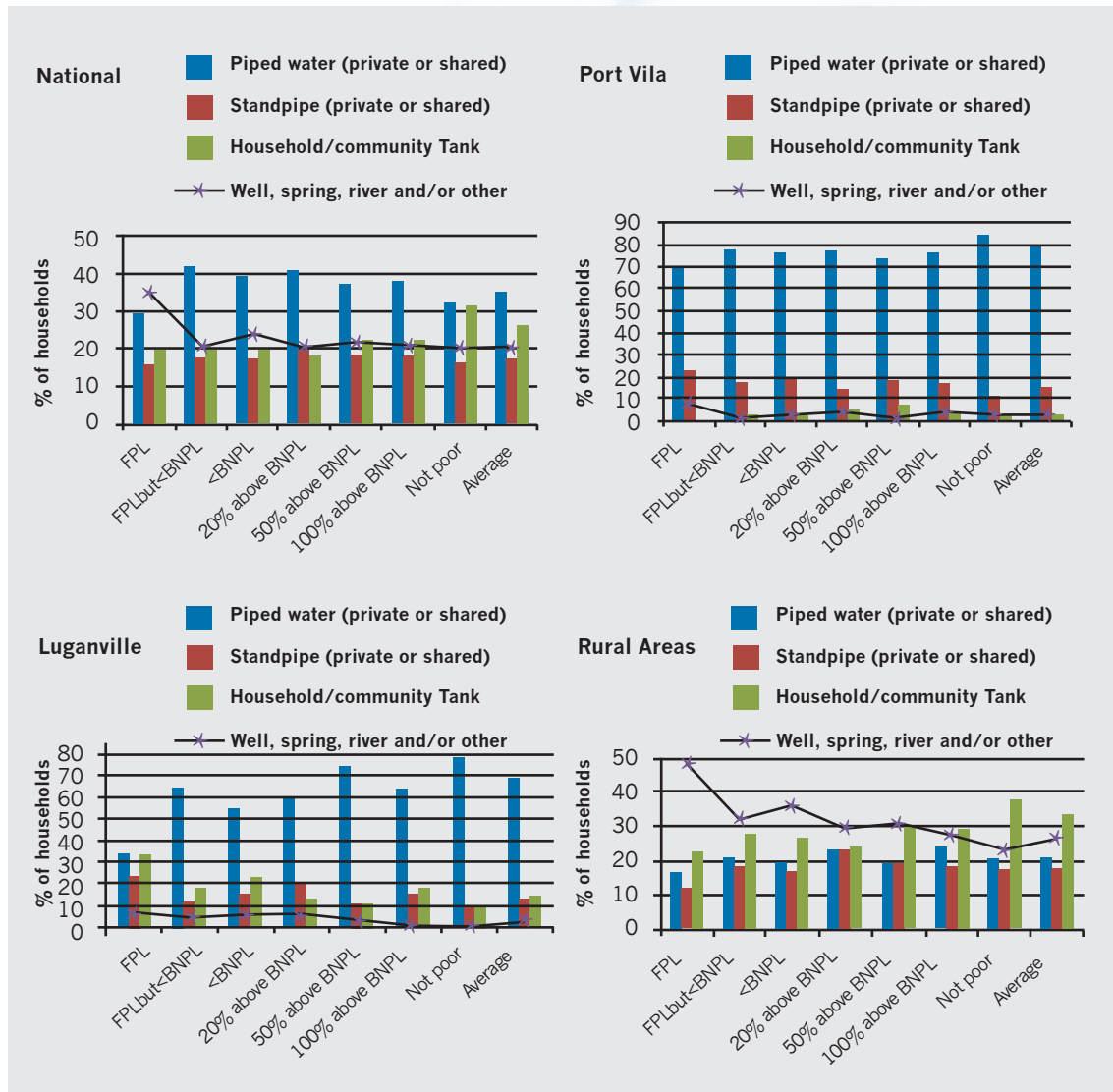


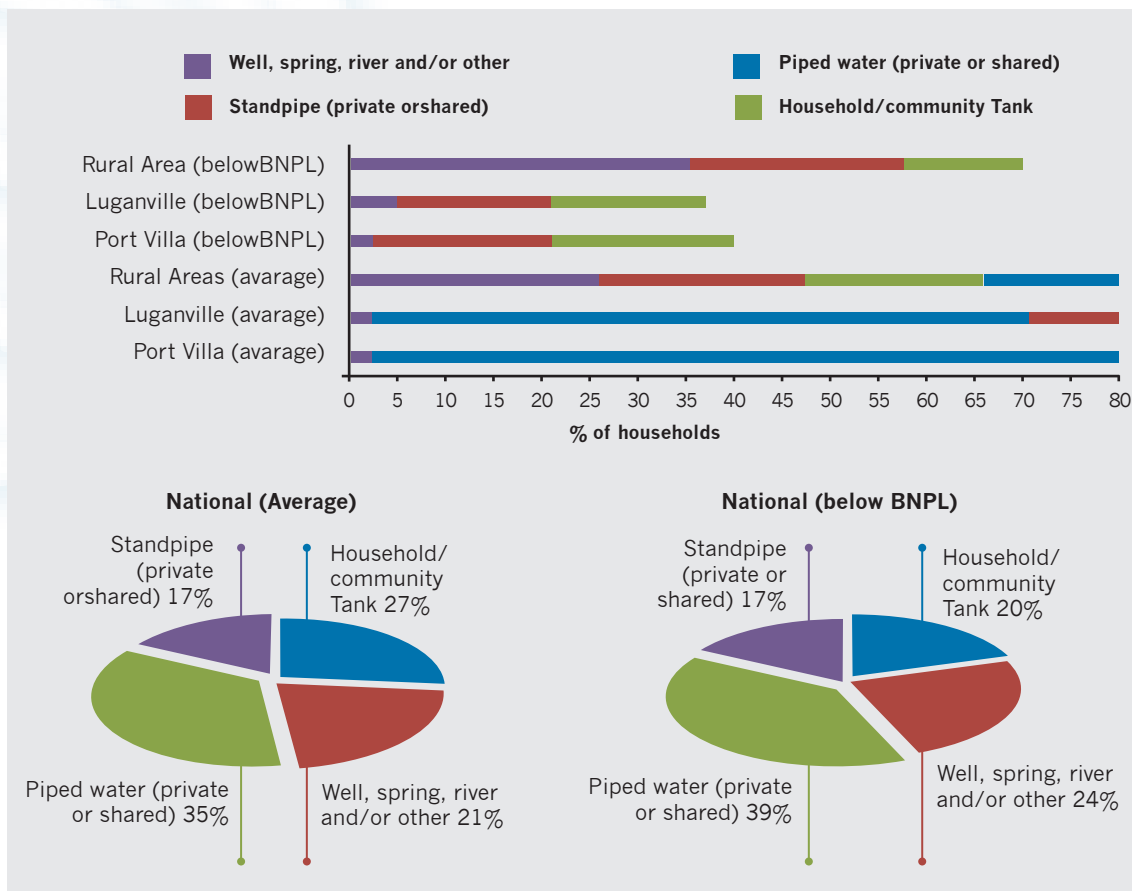
Figure 20: Access to drinking water by vulnerability status



134. Access to improved water systems depends more on the geographic location, less on vulnerability status, of households. At the national level the average proportion of all households with access to piped water (private and shared) is 35% compared to an average of 39% for households below the BNPL. Meanwhile, on average, 21% of all households rely on wells, springs, rivers and other sources for drinking water compared to a slightly higher average of 24% of all households below the BNPL. The proportions of households below the BNPL with access to piped water (private and shared) are 76%, 55% and 21% compared to 85%, 78% and 21% of non-poor households in Port Vila, Luganville and rural areas, respectively. The gap between non-poor households and those below the BNPL in terms of access to water is, however, wider in Luganville. (Figures 20 and 21).



Figure 21: A comparison of access to drinking water by vulnerability status and area

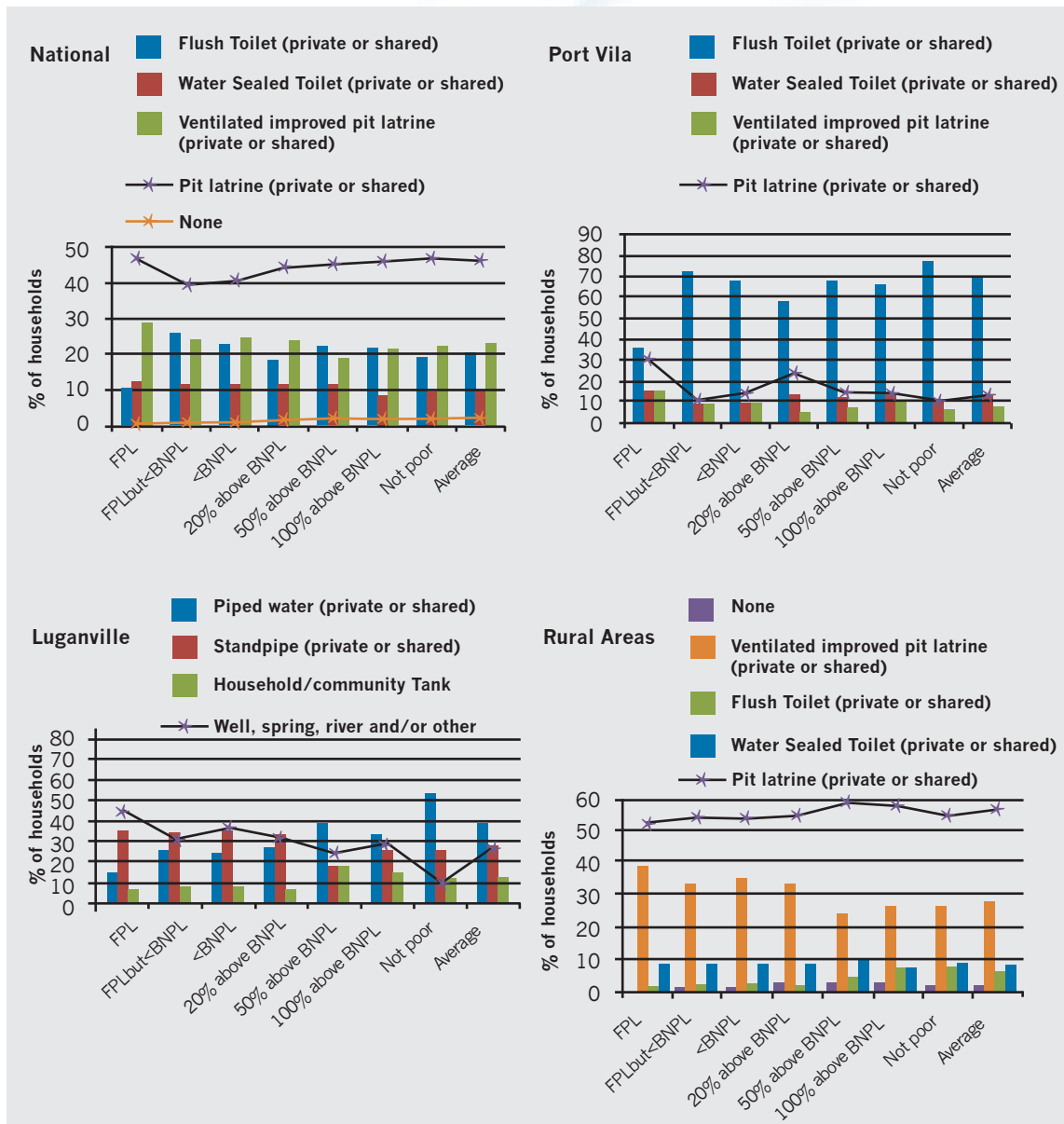


135. Very few households in rural areas have access to private, shared piped and/or standpipe water (14%, slightly higher than 12% in 2006) as there are very few distribution systems in rural areas. A significant proportion of households in rural areas (26.4% of all households, 36% of households below the BNPL and 23.5% of non-poor households) rely on wells, springs, rivers and other unsafe sources of drinking water, compared to the national average of 20.5% and only 2.6% and 2.5% of all households in Port Vila and Luganville, respectively. (Figures 20 and 21).

136. Consequently, households below the BNPL in rural areas suffer multiple deprivations compared to their counterparts in urban areas. Figure 21 shows that only 20.2% and 17% of households below the BNPL in rural areas have access to piped and stand pipe water. In contrast, the proportions of households below the BNPL with access to piped water in Port Vila and Luganville are 76.5% and 55.3%, respectively. Around 18.8% and 16% of households below BNPL in Port Vila and Luganville, respectively, have access to stand pipe water.

137. Similar to access to water, access to improved sanitation systems depends more on the geographic location, less on the vulnerability status, of households. Interestingly, however, the link between the vulnerability status and access to improved sanitation systems is stronger than in the case of access to improved water systems, particularly in urban area. While modern sanitation systems (flush toilet) are available in urban areas, particularly in Port Vila, rural areas lack access to sanitation and rely, mostly, on pit toilets because there is no piped water system to provide the water required for a flush toilet system.

Figure 22: Access to sanitation by vulnerability status



138. Tables A.1 and A.2 and A.3 in the appendix, illustrate household access to sanitation systems in urban and rural areas. A significant proportion of the population in Port Vila has access to sanitation, but access is lower for households below the BNPL as well as in the lowest three expenditure deciles. Access to sanitation in Port Vila is around 20% lower for middle and high deciles. Access to sanitation is 40% less in Luganville than is the case in Port Vila. The lack of access to sanitation is more widespread in rural areas with 1.6% of all households with no access to sanitation in 2010, compared to 1.8% of all households in 2006. This is the case even for households in the highest three deciles; in rural areas, 1.3% and 1.4% of households in the lowest and highest quintiles, respectively, have no access to sanitation,



139. Around 56.5% of households in rural areas rely solely on a pit latrine (private/shared), compared to 11.8% and 22.7% in Port Vila and Luganville, respectively. Around 53.9% of households below the BNPL in rural areas (compared to 12.9% and 35.1% in Port Vila and Luganville, respectively) rely on pit latrine (Figure 22). Meanwhile, only around 2.3% of households below the BNPL in rural areas have access to flush toilet (shared and/or private) compared 68.2% and 22.3% in Port Vila and Luganville, respectively. Access to sanitation, therefore, has not improved overall, or in rural areas, between 2006 and 2010.

1.3. Housing

140. In Port Vila, 45% of households live in permanent houses, 27% live in makeshift housing and 18% in traditional houses with permanent material. On average, 1.7% of households in Port Vila live in traditional houses. Housing patterns across expenditure deciles are similar in Luganville with more than half of households living in permanent houses and one third in traditional houses with permanent materials. In contrast, 42% of families in rural areas live in traditional houses and only 24.6% and 28% live in permanent and traditional houses with permanent materials, respectively (Table 41).



Table 40: Housing type by expenditure level and sub-national area

Ranked by per capita adult equivalent HH expenditure deciles	Port Vila				Luganville				Rural Areas			
	Average all HH	1Q	L3D	5Q	Average all HH	1Q	L3D	5Q	Average all HH	1Q	L3D	5Q
Traditional house	1.7	1.7	1.7	2.6	3.9	4.2	4.1	2.0	41.8	49.1	47.6	36.5
Makeshift house	27.3	32.2	31.8	11.2	3.5	7.3	5.5	2.0	3.6	3.8	3.1	5.8
Traditional house with some permanent house materials	18.3	23.5	22.0	18.1	34.4	41.7	42.1	20.4	28.2	26.2	27.1	28.4
Permanent house	45.3	39.1	39.3	63.8	55.5	44.8	46.2	71.4	24.6	19.4	20.5	28.2
Flat	4.3	2.6	4.1	2.6	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.4
Other	2.4	0.9	1.1	0.9	1.6	2.1	1.4	3.1	0.8	0.4	0.6	0.2
Not stated	0.5	0.0	0.0	0.9	1.0	0.0	0.7	1.0	0.9	0.7	0.9	0.5

141. Mobile phones are the most common means of communication in Port Vila, on average phones are in 95% of households across all expenditure deciles. Only 1.7% of households have private landlines and 60% of these landlines are in top decile households. Households in Luganville mostly rely on mobile phones (95% of all households) and only 1% of households have private landlines, but these are distributed across all expenditure deciles. In rural areas, 82% of households have mobile phones, and less than 1% has private landlines. Around 14% of all households (15% of households in the lowest three deciles and 10% of households in the highest three deciles) have no access to phones.
142. Expenditure on mobile phones accounted for 3.3% of all household non-food expenditure. Only 4.3% of total mobile expenditure was incurred by households below the BNPL, but this represented 4.1% of their total non-food expenditure. This compares to an average of 3.4% of non-food expenditure for households above the BNPL. Port Vila, where 20% of the population live, incurred 33% of mobile phone expenditure, Luganville incurred 9% of mobile phone expenditure, and the rural areas, where 75% of the population live, incurred about 58% of total mobile phone expenditure.

I.4. Education



143. Expenditure on health and education is very low, especially for those with total expenditure below the BNPL. This is not surprising since Vanuatu has a fairly comprehensive system of publicly provided health and education services. Since 2009, the government of Vanuatu and development partners have implemented a comprehensive policy package geared towards achieving universal primary education. This included a school grants programme that replaced school fees for years 1 to 6 of primary education.
144. The HIES data indicates that 6.7% of total non-food household expenditure went toward education-related costs. Households below the BNPL spent around 11.5% of their non-food expenditure on education compared to less than 9% by households above the BNPL. Overall approximately 36% of the expenditure on education was incurred by households in Port Vila, 6.0% by households in Luganville, and 58% by households in rural areas.
145. Levels of educational attainment vary considerably between urban and rural areas. A larger proportion of the population across all deciles in rural areas has no schooling or primary schooling only compared to urban areas. The weaker correlation, therefore, between education attainment levels and poverty in rural areas compared to urban areas,



discussed earlier, is mainly due to the lack of access in rural areas. While, on average, 6% and 30% of the heads of households in Port Vila have no schooling and only primary education, respectively, and, similarly, 7% and 37% of the heads of households in Luganville have no schooling and only primary schooling, respectively; 31% and 44% of the heads of households in rural areas have no schooling and only primary education, respectively.

146. Comparing the lowest expenditure quintiles in urban and rural areas, we find that only 3% and 6% of the heads of households in Luganville and Port Vila, respectively, have no schooling, compared to 40% of the heads of households in rural areas. Meanwhile, 27% of the heads of households in the highest expenditure quintile in rural areas have no schooling, compared to 5% and 7% of household heads in this expenditure group in Port Vila and Luganville, respectively.

147. The gender-gap is wider, however, in urban areas where more females, particularly among low decile households, lack access to school in comparison to rural areas, where lack of access to education affects both males and females equally. Expenditure on education in rural areas constitutes 58% of total expenditure on education in Vanuatu, compared to 36%, and 6% of total education expenditure for Port Vila and Luganville respectively. This is, chiefly, due to the exceptionally high transaction costs in rural areas.

Table 41: Expenditure on education as a percentage of non-food expenditure by vulnerability status

Expenditure on Education				
% of Non-Food Expenditure by Poverty Status				
Poverty/Vulnerability Status	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural
Households below FPL	10.9	11.3	11.3	10.3
Households > FPL but < BNPL	11.5	12.9	8.4	10.2
Average Households below BNPL	11.5	12.8	9.2	10.2
Households < 20% above BNPL	9.4	10.2	7.8	8.4
Households < 50% above BNPL	8.3	8.2	8.1	8.4
Households < 100% above BNPL	8.3	9.1	7.1	7.5

148. Expenditure on education constitutes, on average, 11.5% of non-food expenditure for households below the BNPL. The proportion of non-food expenditure devoted to education is slightly higher in Port Vila, compared to Luganville and rural areas. The percentage of non-food expenditure, spent on education is lower for households above the BNPL and it declines as the overall households' expenditure rises, particularly in rural areas (Table 41). The proportion of non-food expenditure devoted to education declines as overall expenditure increases.

1.5. Health

149. The challenges facing the Vanuatu government in providing health services are similar to those for other public services, particularly in rural areas where the vast majority of the population lack access to quality health services. The costs of providing health services are considerably higher in rural areas and, to a lesser extent, in Luganville compared to Port Vila.



150. Health related expenditure accounted for only 0.5% of all non-food household expenditure. For households below the BNPL, health expenditure represented 0.9% of their non-food expenditure, double the proportion for households above the BNPL. Overall approximately 34% of expenditure on health services and medications was incurred by households in Port Vila, 4% by households in Luganville and 62% by households in the rural parts of the country.

Table 42: Expenditure on health as a percentage of non-food expenditure by vulnerability status

Expenditure on Health % by Poverty Status				
Poverty/Vulnerability Status	Vanuatu	Port Vila (urban)	Luganville (urban)	Rural
Households below FPL	1.6	2.7	5.9	0.8
Households > FPL but < BNPL	4.5	8.2	9.0	2.2
Total Households below BNPL	6.1	10.9	14.9	3.0
Households < 20% above BNPL	3.8	6.0	9.7	2.2
Households < 50% above BNPL	6.4	9.1	12.6	4.6
Households < 100% above BNPL	14.2	15.0	25.4	13.0

J. Income analysis

151. At the national level, income from wages and salaries accounted for 37% of total household income and about three-quarters and two thirds of all household income in Port Vila and Luganville, respectively, but only about 23% of household income in the rural areas. In urban areas, however, wages and salaries accounted for 82% and 75% of total income for households below the BNPL in Port Vila and Luganville, respectively. This suggests that there are a significant number of “working poor” households in urban areas. In the rural areas, wages and salaries accounted for only about 10% of the incomes of those below the BNPL.

152. Wages and salaries accounted for 73%, 58% and 27% of the total income of households that are not poor in Port Vila, Luganville and rural areas, respectively. This suggests that non-poor households in rural areas rely on other sources of income such as producing goods for sale and subsistence production. This also suggests a significant degree of inequality in the wage structure, particularly in urban centres where wages are typically the main source of income. The proportion of men receiving wages and salaries is significantly higher than the proportion of women throughout the country and across all income deciles. However, for male and female heads of households, on average wages and salaries account for the same proportion of total income.



Table 43: Income from salaries and wages by expenditure level

Income from Wages & Salaries												
Poverty/ Vulnerability Status	Vanuatu			Port Vila (urban)			Luganville (urban)			Rural		
	% of total wages & sala- ries by decile	wages & sala- ries % of total income by decile	wages & sala- ries % of total income across deciles	% of total wages & sala- ries by decile	wages & sala- ries % of total income by decile	wages & sala- ries % of total income across deciles	% of total wages & sala- ries by decile	wages & sala- ries % of total income by decile	wages & sala- ries % of total income across deciles	% of total wages & sala- ries by decile	wages & sala- ries % of total income by decile	wages & sala- ries % of total income across deciles
Households below FPL	0.9	34.1	0.3	1.2	79.7	0.9	4.0	78.7	2.6	0.1	2.9	0.0
Households > FPL but < BNPL	5.7	48.6	2.1	9.6	82.8	7.3	7.6	73.3	5.0	1.5	12.4	0.4
Total Households below BNPL	6.6	45.9	2.5	10.8	82.4	8.2	11.5	75.1	7.6	1.6	10.3	0.4
Households < 20% above BNPL	5.0	34.6	1.9	8.3	73.3	6.3	8.0	61.0	5.2	1.3	7.1	0.3
Households < 50% above BNPL	7.5	38.7	2.8	11.7	78.7	8.8	12.4	73.5	8.2	2.5	10.3	0.6
Households < 100% above BNPL	16.2	38.6	6.0	21.9	76.8	16.6	21.1	78.8	13.8	9.7	16.6	2.3
Households Not Poor	64.6	35.9	23.9	47.3	73.2	35.7	47.0	58.6	30.9	84.9	27.2	19.8
Total/ Average	100.0	37.0	37.0	100.0	75.5	75.5	100.0	65.7	65.7	100.0	23.3	23.3

153. Income from remittances, gifts and other miscellaneous sources accounted for about 3.6% of income in Port Vila and about 2% for Luganville and rural households. This amount is likely to have increased since the HIES as the number of temporary workers on the NZ Recognised Seasonal Employer (RSE) scheme has risen significantly over the last two years. On average, poor households receive 1% of their income from this source compared to over 2% for households above the BNPL. This suggests that as participation in the RSE scheme will contribute to households moving out of poverty. Households in the highest three income deciles receive larger proportion of their income from gifts and remittances compared to households in the lowest three income deciles. Female-headed households receive more than male-headed households, particularly in urban areas.

Table 44: Income from remittances, cash gifts and other sources by expenditure level

Income from Remittances, Cash Gifts & Other Misc Sources												
	Vanuatu			Port Vila (urban)			Luganville (urban)			Rural		
Poverty/ Vulnerability Status	% of Total remit- tances, gifts & other misc income	Remit- tances/ gifts % of HH expend- iture by decile	Remit- tances/ gifts % of HH expend- iture across decile	% of remit- tances, gifts & other misc income	Remit- tances/ gifts % of HH expend- iture by decile	Remit- tances/ gifts % of HH expend- iture across decile	% of remit- tances, gifts & other misc income	Remit- tances/ gifts % of HH expend- iture by decile	Remit- tances/ gifts % of HH expend- iture across decile	% of remit- tances, gifts & other misc income	Remit- tances/ gifts % of HH expend- iture by decile	Remit- tances/ gifts % of HH expend- iture across decile
Households below FPL	0.4	0.9	0.01	0.2	0.7	0.01	2.7	1.7	0.06	0.3	0.7	0.01
Households > FPL but < BNPL	1.9	1.0	0.04	1.0	0.4	0.04	4.5	1.4	0.09	2.2	1.5	0.04
Total Households below BNPL	2.2	1.0	0.05	1.2	0.4	0.04	7.1	1.5	0.15	2.5	1.4	0.05
Households < 20% above BNPL	4.9	2.2	0.12	12.7	5.4	0.46	10.7	2.6	0.22	0.2	0.1	0.00
Households < 50% above BNPL	7.0	2.3	0.17	13.0	4.2	0.47	9.7	1.8	0.20	3.5	1.2	0.07
Households < 100% above BNPL	13.0	2.0	0.31	17.3	2.9	0.63	12.9	1.5	0.27	10.6	1.6	0.21
Households Not Poor	72.9	2.6	1.73	55.8	4.1	2.02	59.5	2.4	1.24	83.2	2.3	1.67
Total/ Average	100.0	2.37	2.37	100.0	3.62	3.62	100.0	2.08	2.08	100.0	2.01	2.01

K. Concluding Remarks

154. It is hoped that the analysis contained in this report will stimulate national policy makers in Vanuatu, and users in the international community, to seek more detailed analysis on specific issues identified in this report such as human poverty, food consumption patterns, specific areas of expenditure including health and education, gender, children in poverty and geographic disparities. Further and more detailed analysis of broader socio-economic issues in Vanuatu, which can be done using the survey data, will add substance to the key poverty indicators. Most importantly, it would inform the formulation of policies and initiatives aiming at addressing the various dimensions of human poverty, and the better targeting of vulnerable groups. It would also assist in the further development of the conclusions and hypotheses relating to poverty in Vanuatu which are identified in this report.
155. The results from the analysis of the 2010 HIES demonstrate significant progress towards eradicating hunger (food poverty) in Vanuatu, apart from in Luganville. The incidence of food poverty (at the national level) declined from 7.4% in 2006 to 3.2% of the population in 2010. The incidence of basic needs poverty has declined, slightly, from 13% in 2006 to 12.7% of the population in 2010. Poverty reduction progress was, primarily, driven by economic growth during the period from 2005 to 2009. Vanuatu was able to withstand the global economic shocks which have negatively impacted most



Pacific countries. The structure and composition of growth influenced, to a great extent, the distribution of the benefits of growth and manifested into disparities based on geographic location, households' sources of income, gender, education levels and economic activity, as the distribution of the benefits of growth followed the same sectoral imbalances that inhibited the growth structure.

156. The macroeconomic performance suggests that there should have been a fall in the general level of hardship and poverty. The small reduction in the incidence of basic needs poverty, compared to the significant reduction in the incidence of food poverty, suggests that the trickle down effects of economic growth were just enough to lift a large proportion of the population out of food poverty, but not enough to reduce basic needs poverty. Further, a large proportion of the population is concentrated marginally (20%-50%) above the BNPL and highly vulnerable slipping back into poverty.
157. The depth and severity of poverty has reduced. Progress was particularly impressive in rural areas. Despite persistent disparity, the distribution of expenditure is less unequal and the expenditure-based Gini coefficient dropped from 0.41 in 2006 to 0.31 in 2010, at the national level. The decline in the Gini coefficient was greatest in Port Vila, which is consistent with the structure of economic growth over the period from 2006 to 2010, during which growth in construction, government and public sector, tourism and other related services (e.g. wholesale and retail and transport) were the main drivers, and were mostly concentrated in Port Vila. The ratio of the lowest to the highest expenditure quintiles dropped by around 3%, at the national level, confirming the overall narrowing of income distribution.
158. Households affected by a combination of adverse factors and/or multiple deprivations face the highest risk of poverty. For example, a person's location can interact with gender and labor market profile to produce different welfare outcomes across individuals and households. Similarly, inequality is deeper and wider when more than one vulnerability factor is present.
159. The standout geographic disparity was the rise in poverty and inequality in Luganville which should be addressed by policy makers. There is some degree of gender dimension to poverty in Vanuatu, particularly in urban areas. The gender dimension intertwines with other household characteristics and factors that are mutually reinforcing, such as geographic location, marital status, number of children, age, education level, economic activity and main source of income. Employment and wage gender-based discrimination is evident in both public and private sectors, particularly in urban areas where formal employment is main economic activity and, hence wages are the main source of income for individuals and households.
160. Gender-based inequality is deeper in urban areas, compared to rural areas. Women's share of the benefits from economic growth has been less than that of their male counterparts. Women have better access to resources and social/family support networks in rural areas, particularly single mothers, and female heads of households, widows and elderly women. The lower level of monetization in rural areas, compared to urban areas, also plays an important role in reducing women's vulnerability in rural areas.
161. Between 2006 and 2010, economic growth was mainly concentrated in urban areas and, disproportionately, in male-dominated jobs. This meant deterioration in gender-based inequality and increased vulnerability of women to poverty. A sizable proportion of females have an expenditure that is just 20% above the BNPL and a larger proportion has expenditure between 20% and 50% above the BNPL. This renders them very vulnerable to falling below the BNPL. Girls below 14 years of age are more vulnerable to food and basic needs poverty than women and girls above the age of 14.

¹⁴ Datt, G., and M. Ravallion (1993) 'Regional Disparities, Targeting, and Poverty in India' in Michael Lipton and Jacques Van Der Gaag, eds. *Including the Poor*. Washington D.C.: The World Bank. See also Ravallion, M. (1995). 'Growth and Poverty: Evidence for Developing Countries in the 1980s'. *Economic Letters*, 48

162. Government continues to be the main source of secure, and relatively well-paid, employment, while the private sector is slowly making progress in terms of job creation and income generation. Subsistence and small scale commercial production and trade continue to be a major source of livelihoods and income, particularly in rural areas. People who are unemployed, elderly and/or have disabilities in urban areas are highly vulnerable to poverty, while in rural areas this is not necessarily true. Thanks to access to land and the slower pace of monetization in rural areas, compared to urban areas, unemployed people in rural areas are, generally, less vulnerable than their counterparts in urban areas.
163. There is a strong correlation between vulnerability status and education level in urban areas, but the correlation is much weaker in rural areas. A strong three-way relationship between gender, low or no education and poverty prevails in urban areas, where vulnerability and the incidence of basic needs poverty is higher among women with no schooling and only primary education, than in the case for men.
164. Children are highly vulnerable to poverty and hardship, with 37% living in households with expenditure less than the BNPL. Poor households (the lowest three deciles) and households in rural areas tend to have more children than households in the highest expenditure quintile and households in urban areas. Children are, therefore, concentrated in the three lowest expenditure deciles. Children in Vanuatu continue to suffer from multidimensional poverty and deprivation.
165. The gap between income poverty and human poverty is widening in Vanuatu, as there has been no significant improvement between 2006 and 2010 in most dimensions of human poverty. This is mainly due to the government's lack of capacity to provide public services, such as health, education, water and sanitation, particularly in rural areas and remote islands. Access to energy remains a major challenge. Access to basic services and energy depends more on the geographic location, and on the vulnerability status, of households. Consequently, households below the BNPL in rural areas suffer significantly more multiple deprivations than their counterparts in urban areas. Inequalities and geographic disparities are more severe when viewed through a human poverty, rather than just income poverty, lens. Therefore, while income poverty may be relatively lower in rural areas, multidimensional human poverty is higher and more severe. While government expenditure on education and health is increasing, its impact on the ground remains minimal. Salaries and high transactions costs in rural areas account for most of the government expenditure on health and education.

L. Policy Implications

Principles for intervention

166. The characteristics of the poor revealed by the HIES provide a wealth of information for policy makers to use to efficiently and effectively target poverty reduction strategies in Vanuatu. If interventions to reduce poverty are to be effective as well as financially feasible, they must be based on proven and cost effective mechanisms to allocate resources and assistance directly, efficiently and effectively to poor households, rather than relying on indirect effects, such as spillover, externalities and market forces in allocating benefits from economic growth. Although the explicit goal of many types of interventions is to reduce poverty, they are also likely to benefit some non-poor as well. Given the limited funding for programmes, it is preferable to direct available resources, and therefore benefits, as effectively as possible toward those who need them most.
167. Direct targeting is based on identifying poor households or individuals (e.g. identifying those who are below the poverty lines). If providing assistance directly to the poor is not feasible, intervening on the basis of their characteristics (characteristic targeting) might be the best option. For instance, where the poor are concentrated in certain regions, islands or districts (as is the case in Luganville), more public services could be provided to those areas. Other characteristics, such as education level, are useful to guide additional support.



168. However, characteristic targeting has two potential drawbacks. First, some non-poor households possess the same characteristics as the poor and, hence, receive benefits (leakage). Second, not all poor households possess the designated characteristics to benefit from the intervention, and consequently might not be reached (under-coverage). The success of characteristic targeting depends on the ability of programme designers to minimize these problems.
169. Targeting poverty reduction programmes to a subgroup of the population has an intuitive appeal for policymakers, but it also poses considerable difficulties. Direct targeting explicitly identifies individual households as poor or non-poor and directly provides benefits to the former group and tries to withhold them from the latter. The specific form of such targeting depends on the ability of governments to identify the poor.
170. If beneficiaries can be identified on a household or individual level, transfers and/or some other forms of direct assistance could be mobilized to reduce their vulnerability. For example, the provision of food or medical care to elderly and disabled individuals, or to households that displays clear signs of malnutrition, or to individuals who have special needs, such as pregnant and lactating women, are all forms of direct targeting of assistance. However, the 'screening', needed to identify the poor, such as their level of income, can be very expensive to implement.
171. In practice, there are two alternatives to direct targeting of the poor based on income measures. The first involves targeting types of spending and can be called 'broad targeting'. Under this approach, no attempt is made to reach the poor directly as individuals. Instead, programmes hope to achieve gains by targeting types of spending that are relatively more important to the poor. Spending on basic social services, such as primary education and primary health care, is one example. Directing resources to rural development, because poverty is often concentrated in rural areas, is another. It is important to note that around 60% of poor households in Vanuatu are in rural areas, despite the significant reduction in poverty.
172. The second approach entails targeting categories of people. Under this approach, which can be called 'narrow targeting', benefits are directed to certain types of people. Examples are food stamp schemes targeted to mothers in food-insecure communities or micro-credit schemes targeted to women vendors. In Port Vila, for instance, households with a female head who has no schooling or only primary education are highly vulnerable. So targeting through combining gender, education level and head of household criteria could be effective. Also, while targeting female-headed households in general might not make sense, given that they are represented in highest as well as the lowest deciles, directing resources to households headed by female sole parent with three or more children – who are generally in poverty - may be efficient.
173. Narrowly targeted schemes are based on one of two principles - or a combination of both. The first is indicator targeting (also called categorical targeting). This approach identifies a characteristic of poor people (an indicator) that is highly correlated with low income but can be observed more easily than income. The indicator is then used as a proxy for income to identify and target the poor. An example is a region identified as particularly poor (e.g. Luganville). Alternatively, such indicators as gender, nutritional status, disability or household size could be used to identify beneficiaries.
174. The second approach to narrow targeting is self-targeting. Instead of relying on an administrator or a policy maker to choose participants in and /or beneficiaries of the poverty reduction programme, this approach relies on beneficiaries opting in through incentives that would induce the poor, and only the poor, to participate in a programme. Examples are public employment schemes that use work requirements and conditions to help screen out the non-poor, and subsidy programmes that target items that the poor consume but the rich do not.

¹⁵ UN System Task Team's report "Realizing the future we want for all" June 2012.



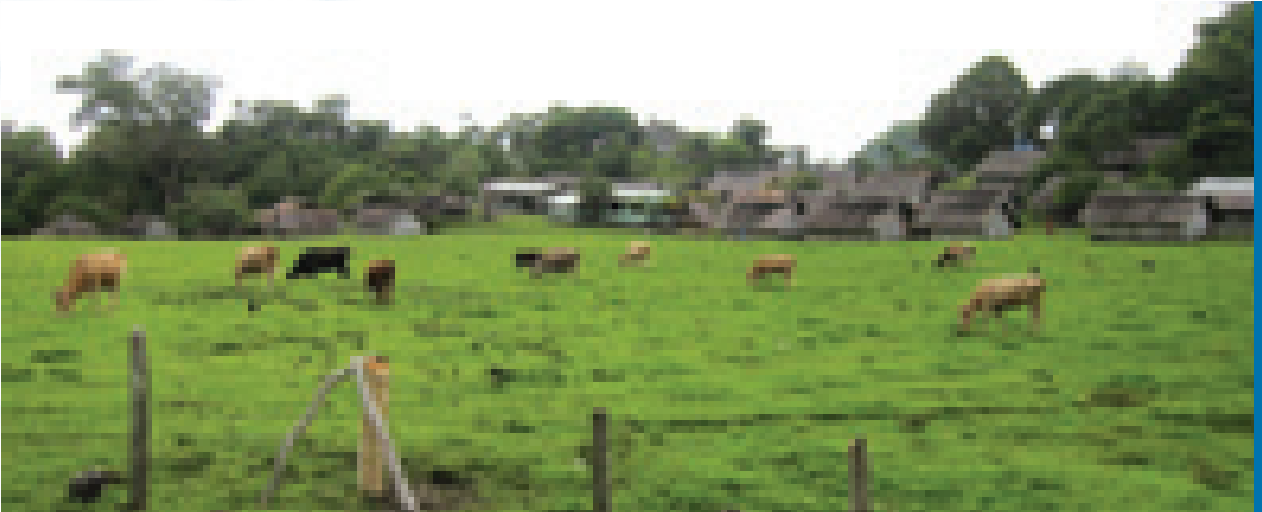
175. Both narrow targeting approaches offer the hope of avoiding two commonly identified errors of targeting: 1) leakage of benefits to the non-poor, which are measured by the ratio of non-poor beneficiaries to total beneficiaries; and 2) under-coverage of the poor, which is measured by the ratio of poor beneficiaries to the total poor population.
176. One drawback of indicator targeting is that not all of the poor can be identified by the same indicators. For example, even though most countries have regions which are poorer than others, not all poor people live there, nor do all rich people live elsewhere. Hence, geographic targeting can often benefit some of the rich and can bypass—and perhaps even tax—some of the poor who live in the better-off areas ¹⁴.
177. Narrow geographical targeting at the level of the village or the urban community could reduce the leakage of benefits to the non-poor in countries or regions where, because of common agro-climatic or socioeconomic conditions, the standard of living in the majority of the households in most villages and urban communities is similar. The households in these villages would often have similar sources of income, and could be affected by the same factors, such as road conditions, the distance to the nearest town, and the availability of public facilities such as health, education and water supply.
178. Common methods of assessment can obscure some of the potential benefits of narrow targeting. Assessments of the benefits from geographical targeting provide an example. Several studies have examined the potential impact on poverty of allocating a predetermined budget optimally across regions. But the static gains of such an allocation are often found to be modest, reflecting, in essence, that the poor are heterogeneous.
179. Recent work, which allows for gauging the potential dynamic effects of programmes, suggests, however, that static assessments can greatly underestimate the long-term benefits. Gains could percolate through and strengthen over time as a result of the positive external effects of development in poor regions on the productivity of the private investments by poor households.

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180. In order to enable poor households to take advantage of economic opportunities and access the benefits of economic growth, Vanuatu's poverty-reduction programme would have to focus efforts on building up the human capital of the working-age population. This would enable working members of poor households to secure more rewarding employment and generate better income.
181. An important implication is that programmes to improve educational institutions -particularly those providing technical training and helping to retain children in school -represent social investment with potentially very high long-run returns. A crucial prerequisite to the success of any demand-side interventions, however, is to tackle the supply-side challenges first.
182. Supply-side challenges facing public services, including education and health, constitute the government of Vanuatu's biggest barrier in its efforts to make progress on poverty reduction and other MDG goals. There will not be any major progress in terms of human poverty unless these challenges are addressed effectively. There is a need, therefore, to allocate and manage education and health expenditure more efficiently and effectively, focusing on reducing transaction costs and maximizing benefits to the targeted beneficiaries. Other public services (such as access to sanitation, water and energy) face similar challenges. Rural areas should be the highest priority of a well-designed strategy and action plan to improve the access, quality and coverage of public services.

¹⁶ Sampson, M. (2012) *Micro-simulation analysis of social protection interventions in Pacific Island countries: AusAID Pacific social protection series: poverty, vulnerability and social protection in the Pacific*





183. Fiscal space needs to be found to increase expenditure on public services, social safety nets and public investment in other social services. In addition to implementing such social policies, policymakers will have to identify economic policies that can stimulate a broad-based, balanced and more inclusive and equitable pattern of economic growth, which can raise the standard of living of poor households in the regions and economic sectors in which they are located.

M. Policy Recommendations

184. A social and economic policy package to accelerate poverty reduction will need to simultaneously address challenges at the macro and micro levels through micro-level and local people-centered development initiatives that complement overall macroeconomic policies and are geared towards balanced, sustainable and inclusive growth and widening the economic base.

185. At the macro level, maintaining the downward trend in income poverty and accelerating the progress towards the achievement of MDGs, particularly goal one, will require concerted and coordinated efforts to push ahead with reforms that will allow Vanuatu to sustain and broaden economic growth and enhance its inclusiveness in the country. This requires continued investments in transport and communication infrastructure and services, allowing the rural majority to access domestic and export markets, as well as quality and affordable health, education and financial services, which will directly contribute to the reduction of human poverty.

186. While some progress has been made in improving public services, there is a need to create a stronger sense of accountability in order to achieve service delivery targets. This requires a focus on improving the overall management of basic services, especially health and education services, through the strengthened use of data and information systems, human resource development, performance management, and more effective use of resources. Improving the efficiency and effectiveness of the public service also requires a more concerted effort to implement decentralization policies. This includes strengthening provincial governments and municipalities, and clarifying their roles and responsibilities for service delivery.

187. Vanuatu faces a “double disease burden” where both communicable diseases and emerging non-communicable diseases coexist, putting severe stress on the health budget and overall health system. The Ministry of Health is facing difficult choices on how to prioritise health spending between primary health care and the increasing demand for tertiary care

particularly for non-communicable diseases (NCDs). At present around 23% of the health budget is spent on community health while 42% of health workers are absorbed by the two referral hospitals.

188. A major concern across the health sector is the lack of personnel both in number and skills mix, to drive the health sector plan and deliver basic health services especially in the rural areas. There is a significant potential for working with civil society and faith-based organizations in the provision of health services. There are opportunities to strengthen partnerships with these organizations to deliver community-based services that can complement and supplement government-run health services.
189. There is a need to finalize the development of a National Human Resources Development Plan to identify labor market skill needs and how these can be met based on likely population and labor market participation, in order to achieve better alignment between the supply and demand sides of the labor market. This has been identified as a high priority action by the review of the Vanuatu Priority Action Plan (PAA) conducted in 2011.
190. There is a need for a paradigm shift that is innovative, inclusive and progressive. In fact, 'Business as usual cannot be an option and transformative change is needed. As the challenges are highly interdependent, a new, more holistic approach is needed to address them'¹⁵. Discussed below are options to address some of the issues raised in this report.
191. The next generation of policy reforms in Vanuatu should address various dimension of human poverty, rather than narrowly concentrate on income poverty, and focus on inclusive growth and innovation policy and sound economic governance in order to meet the needs of the low income population. In other words, these policies should focus on delivering high performance products and services at low cost to the people whose needs are generally not addressed.
192. Innovative policies can improve quality of life by using new technologies to improve, for example: access to health services particularly to outer islands and rural areas –ultra-low cost diagnostics and technology, easy-to-understand information about disease, mobile health clinics, access to medical expertise; education through online training or distance learning, virtual libraries, remote access to classroom and laboratory facilities,; access to financial services through online and mobile banking, financial inclusion/ literacy training, delivery of micro-finance services; farmer services through real-time information on: crop patterns and prices, weather forecasts, crop and livestock insurance; food security through improving crop yield, reducing post-harvest losses, integrating supply chains, expanding access to market demand and pricing information.
193. Social protection is a promising strategy to address poverty and vulnerability. Social protection policies should be implemented to support the vulnerable segments of the population, such as the elderly. For example, social protection in the form of non-contributory social pensions is a proven strategy for reducing poverty, vulnerability and inequality for people of all ages. A growing body of evidence demonstrates that social pensions both reduce the poverty and vulnerability of older people, and result in net contributions to multigenerational household economies and the wider community. It is, also, possible to design social protection programmes that provide aging and vulnerable population with access to medical care, income opportunities and basic rights.
194. A recent study projected impact of various social protection interventions on poverty in Vanuatu, shows that a universal cash grant with a value equal to 30% of the national poverty line and an estimated cost of around 0.7% of GDP, targeting all children under 5 years of age may result in up to 10% reduction in the incidence of basic needs poverty and 10% to 18% in the depth of poverty. The study also included Kiribati, Samoa and Solomon Islands¹⁶. Social protection schemes can be more effective when combined with abolishing school fees (which has already been implemented in Vanuatu) and/or providing school meals.



195. One option to address geographical disparity is through local economic development (LED). LED is a participatory process in which local people from all sectors work together to stimulate local commercial activities.. It encourages public, private and civil society sectors to establish partnerships and find local solutions to shared economic challenges. A LED strategy is a process-oriented and non-prescriptive endeavor incorporating local values (such as poverty reduction, basic needs, local jobs, integrating social and environmental values); economic drivers (value-added resource use, local skills training, local income retention, regional co-operation); and development (the role of structural change, quality of development).
196. Addressing the youth bulge in Vanuatu should be one of the key priorities, given their demographic dominance, energy and growing presence in society. Not only young people, but society as a whole, will benefit from empowerment initiatives. Studies have shown that return on investments in youth range from 200 to 1000 percent in terms of improved educational outcomes, crime prevention, healthier lifestyles, and more. Empowering young people through building capacity and creating access to opportunities can be an effective development strategy for Vanuatu.
197. The youth strategy should therefore aim to empower young people as agents of positive change, catalysts for peace and development, and as leaders and contributing members of society by building on their strengths, harnessing their dynamism, and championing their voices. Partnerships with regional and international agencies can help in tapping much needed technical and financial support to design programmes which can empower youth socio-economic empowerment.
198. Vanuatu needs to develop a Women's Economic Security and Rights (WESR) strategy which can apply new mechanisms and processes to promote women's economic security and rights. The WESR strategy should address legal, governance and decent work deficits in the market place operated within the local governments and city/provincial councils. The WESR can also help in raising awareness to policy makers about gender norms and biases that limit women's economic opportunities and work with stakeholders to legislate and to amend laws to end discrimination against women traders and home-based workers particularly in the informal economy, to build/strengthen organizations, movements and networks and leadership among women in the informal economy and encourage transformative dialogues and partnerships with influential national and local leaders and institutions.





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Table A.1: Access to sanitation in Port Vila

Port Vila: Access to Sanitation System: % of HH by Type								
Ranked by per capita adult equivalent HH expenditure deciles	Flush toilet – Private	Flush toilet – Shared	Water sealed toilet – Private	Water sealed - Shared	Ventilated improved pit latrine (VIP) – Private	Ventilated improved pit latrine (VIP) – Shared	Pit latrine – Private	Pit Latrine – Shared
Decile 1	7.7	11.1	7.1	8.8	26.7	11.5	10.3	15.4
Decile 2	9.9	6.7	7.1	17.6	6.7	7.7	20.7	12.8
Decile 3	7.4	15.6	10.7	5.9	6.7	3.8	13.8	15.4
Decile 4	7.0	14.8	21.4	11.8	20.0	7.7	6.9	5.1
Decile 5	9.6	9.6	10.7	11.8	6.7	15.4	6.9	12.8
Decile 6	9.2	7.4	10.7	17.6	13.3	11.5	10.3	12.8
Decile 7	11.4	6.7	10.7	11.8	20.0	19.2	3.4	5.1
Decile 8	11.0	8.9	7.1	5.9	0.0	19.2	17.2	5.1
Decile 9	12.5	10.4	10.7	5.9	0.0	3.8	3.4	7.7
Decile 10	14.3	8.9	3.6	2.9	0.0	0.0	6.9	7.7
Total	100	100	100	100	100	100	100	100
Number of HH	4595	2281	473	574	253	439	490	659
Summary by Decile Group								
1Q	17.6	17.8	14.3	26.5	33.3	19.2	31.0	28.2
L3D	25.0	33.3	25.0	32.4	40.0	23.1	44.8	43.6
5Q	26.8	19.3	14.3	8.8	0.0	3.8	10.3	15.4
% of all HH	47.1	23.4	4.8	5.9	2.6	4.5	5.0	6.7

Table A.2: Access to sanitation in Luganville

Luganville (urban): Access to Sanitation System: % of HH by Type								
Ranked by per capita adult equivalent HH expenditure deciles	Flush toilet – Private	Flush toilet – Shared	Water sealed toilet – Private	Water sealed - Shared	Ventilated improved pit latrine (VIP) – Private	Ventilated improved pit latrine (VIP) – Shared	Pit latrine – Private	Pit Latrine – Shared
Decile 1	5.1	6.7	11.7	11.8	6.1	0.0	17.2	21.7
Decile 2	5.1	13.3	11.7	17.6	8.2	9.1	14.9	4.3
Decile 3	7.6	3.3	11.7	17.6	8.2	0.0	11.5	21.7
Decile 4	8.9	6.7	10.6	2.9	16.3	0.0	11.5	13.0
Decile 5	10.8	13.3	7.4	8.8	14.3	0.0	10.3	8.7
Decile 6	7.0	6.7	9.6	8.8	14.3	18.2	11.5	17.4
Decile 7	11.5	13.3	8.5	11.8	6.1	45.5	6.9	4.3
Decile 8	14.0	16.7	5.3	5.9	10.2	27.3	5.7	4.3
Decile 9	15.9	6.7	8.5	5.9	8.2	0.0	8.0	4.3
Decile 10	14.0	13.3	14.9	8.8	8.2	0.0	2.3	0.0
Total	100	100	100	100	100	100	100	100
Number of HH	874	167	524	189	273	61	485	128
Summary by Decile Group								
1Q	10.2	20.0	23.4	29.4	14.3	9.1	32.2	26.1
L3D	17.8	23.3	35.1	47.1	22.4	9.1	43.7	47.8
5Q	29.9	20.0	23.4	14.7	16.3	0.0	10.3	4.3
% of all HH	32.4	6.2	19.4	7.0	10.1	2.3	17.9	4.7



Table A.3: Access to sanitation in rural areas

Rural: Access to Sanitation System: % of HH by Type									
Ranked by per capita adult equivalent HH expenditure deciles	Flush toilet – Private	Flush toilet – Shared	Water sealed toilet – Private	Water sealed - Shared	Ventilated improved pit latrine (VIP) – Private	Ventilated improved pit latrine (VIP) – Shared	Pit latrine – Private	Pit Latrine – Shared	None
Decile 1	3.8	2.6	9.1	9.8	12.4	12.3	10.2	8.4	3.2
Decile 2	3.3	7.9	10.5	21.2	10.9	11.2	10.0	9.3	12.5
Decile 3	7.9	10.8	7.1	4.7	10.3	7.2	11.4	7.5	11.9
Decile 4	10.4	14.8	9.6	7.5	9.1	10.1	10.0	11.7	10.6
Decile 5	8.0	19.4	9.4	3.0	9.4	7.6	10.7	9.9	14.0
Decile 6	9.9	10.9	12.1	5.7	8.5	11.1	10.7	8.4	8.8
Decile 7	13.0	7.4	10.0	10.8	10.6	12.3	9.5	8.5	7.7
Decile 8	11.5	12.0	11.3	11.3	10.6	7.9	8.9	11.8	13.6
Decile 9	11.4	6.9	10.1	16.0	8.8	9.2	10.4	11.2	9.5
Decile 10	20.8	7.3	11.0	10.1	9.5	11.3	8.2	13.4	8.2
Total	100	100	100	100	100	100	100	100	100
Number of HH	1979	418	2894	443	8494	1826	17945	3662	609
Summary by Decile Group									
1Q	7.1	10.5	19.5	30.9	23.2	23.5	20.2	17.7	15.7
L3D	15.0	21.3	26.7	35.6	33.6	30.7	31.6	25.2	27.6
5Q	32.1	14.2	21.1	26.1	18.3	20.4	18.6	24.6	17.7
% of all HH	5.2	1.1	7.6	1.2	22.2	4.8	46.9	9.6	1.6

Table A.4: Housing type by decile in Port Vila

Port Vila: Type of House % of HH by Decile								
Ranked by per capita adult equivalent HH expenditure deciles	Traditional house	Makeshift house	Traditional house with some permanent house materials	Permanent house	Flat	Other	#N/A	Total
Decile 1	1.8	38.6	22.8	31.6	5.3	0.0	0.0	100.0
Decile 2	1.7	25.9	24.1	46.6	0.0	1.7	0.0	100.0
Decile 3	1.7	31.0	19.0	39.7	6.9	1.7	0.0	100.0
Decile 4	3.4	31.0	13.8	43.1	3.4	3.4	1.7	100.0
Decile 5	0.0	32.8	15.5	32.8	13.8	3.4	1.7	100.0
Decile 6	1.8	35.1	15.8	40.4	1.8	5.3	0.0	100.0
Decile 7	1.7	29.3	17.2	46.6	3.4	1.7	0.0	100.0
Decile 8	0.0	27.6	19.0	44.8	3.4	5.2	0.0	100.0
Decile 9	1.7	10.3	24.1	60.3	3.4	0.0	0.0	100.0
Decile 10	3.4	12.1	12.1	67.2	1.7	1.7	1.7	100.0
Average	1.7	27.3	18.3	45.3	4.3	2.4	0.5	100.0
Average by Decile Group								
1Q	1.7	32.2	23.5	39.1	2.6	0.9	0.0	
L3D	1.7	31.8	22.0	39.3	4.1	1.1	0.0	
5Q	2.6	11.2	18.1	63.8	2.6	0.9	0.9	

#N/A: Not stated

Table A.5: Housing type by decile in Luganville

Luganville (urban): Type of House % of HH by Decile								
Ranked by per capita adult equivalentHH expenditure deciles	Traditional house	Makeshift house	Traditional house with some permanent house materials	Permanent house	Flat	Other	#N/A	Total
Decile 1	2.1	14.6	43.8	39.6	0.0	0.0	0.0	100.0
Decile 2	6.3	0.0	39.6	50.0	0.0	4.2	0.0	100.0
Decile 3	4.1	2.0	42.9	49.0	0.0	0.0	2.0	100.0
Decile 4	2.1	2.1	35.4	58.3	0.0	0.0	2.1	100.0
Decile 5	6.1	2.0	38.8	51.0	0.0	2.0	0.0	100.0
Decile 6	8.3	0.0	47.9	43.8	0.0	0.0	0.0	100.0
Decile 7	4.1	8.2	30.6	55.1	0.0	2.0	0.0	100.0
Decile 8	2.1	2.1	25.0	64.6	0.0	2.1	4.2	100.0
Decile 9	4.1	2.0	18.4	69.4	0.0	4.1	2.0	100.0
Decile 10	0.0	2.0	22.4	73.5	0.0	2.0	0.0	100.0
Average	3.9	3.5	34.4	55.5	0.0	1.6	1.0	100.0
Average by Decile Group								
1Q	4.2	7.3	41.7	44.8	0.0	2.1	0.0	
L3D	4.1	5.5	42.1	46.2	0.0	1.4	0.7	
5Q	2.0	2.0	20.4	71.4	0.0	3.1	1.0	
#N/A: Not stated								

Table A.6: Housing type by decile in rural areas

Rural: Type of House % of HH by Decile								
Ranked by per capita adult equivalentHH expenditure deciles	Traditional house	Makeshift house	Traditional house with some permanent house materials	Permanent house	Flat	Other	#N/A	Total
Decile 1	52.3	3.5	24.5	18.3	0.0	0.9	0.5	100.0
Decile 2	45.8	4.2	27.9	20.5	0.7	0.0	0.8	100.0
Decile 3	44.7	1.5	28.7	22.8	0.0	0.9	1.5	100.0
Decile 4	44.2	2.1	26.0	24.2	0.0	1.6	2.1	100.0
Decile 5	42.0	3.3	29.5	23.2	0.0	0.8	1.2	100.0
Decile 6	39.8	2.3	29.7	27.0	0.0	0.4	0.9	100.0
Decile 7	39.9	3.6	25.9	28.1	0.0	2.0	0.4	100.0
Decile 8	36.1	3.6	33.3	25.2	0.7	0.9	0.2	100.0
Decile 9	37.9	3.6	27.0	29.7	0.4	0.4	1.0	100.0
Decile 10	35.0	7.9	29.9	26.7	0.4	0.0	0.0	100.0
Average	41.8	3.6	28.2	24.6	0.2	0.8	0.9	100.0
Average by Decile Group								
1Q	49.1	3.8	26.2	19.4	0.3	0.4	0.7	
L3D	47.6	3.1	27.1	20.5	0.2	0.6	0.9	
5Q	36.5	5.8	28.4	28.2	0.4	0.2	0.5	
#N/A: Not stated								



Table A.7: Household communications in Port Vila

Port Vila: Household Communications										
% of users by decile										
Ranked by per capita adult equivalent HH expenditure deciles	Telephone – Private (Landline)	Telephone – Public (Landline)	Mobile Phone	Tele-radio	Postage	E-mail	Other/None	#N/A	Total	No of HH
Decile 1	1.8	0.0	98.2	0.0	0.0	0.0	0.0	0.0	100.0	963
Decile 2	1.7	0.0	96.6	1.7	0.0	0.0	0.0	0.0	100.0	980
Decile 3	0.0	1.7	96.6	0.0	1.7	0.0	0.0	0.0	100.0	980
Decile 4	1.7	3.4	91.4	0.0	0.0	0.0	3.4	0.0	100.0	980
Decile 5	0.0	1.7	98.3	0.0	0.0	0.0	0.0	0.0	100.0	980
Decile 6	0.0	0.0	96.5	0.0	0.0	0.0	3.5	0.0	100.0	963
Decile 7	0.0	3.4	94.8	1.7	0.0	0.0	0.0	0.0	100.0	980
Decile 8	0.0	0.0	96.6	1.7	0.0	0.0	1.7	0.0	100.0	980
Decile 9	1.7	5.2	91.4	0.0	1.7	0.0	0.0	0.0	100.0	980
Decile 10	10.3	3.4	84.5	0.0	0.0	0.0	1.7	0.0	100.0	980
Average	1.7	1.9	94.5	0.5	0.3	0.0	1.0	0.0	100.0	9764
#N/A: Not stated										

Table A.8: Household communications in Luganville

Luganville (urban): Household Communications										
% of users by decile										
Ranked by per capita adult equivalent HH expenditure deciles	Telephone – Private (Landline)	Telephone – Public (Landline)	Mobile Phone	Tele-radio	Postage	E-mail	Other/None	#N/A	Total	No of HH
Decile 1	0.0	2.1	95.8	0.0	0.0	0.0	2.1	0.0	100.0	267
Decile 2	2.1	4.2	91.7	0.0	0.0	0.0	2.1	0.0	100.0	267
Decile 3	0.0	2.0	98.0	0.0	0.0	0.0	0.0	0.0	100.0	273
Decile 4	0.0	2.1	97.9	0.0	0.0	0.0	0.0	0.0	100.0	267
Decile 5	2.0	0.0	93.9	0.0	0.0	0.0	4.1	0.0	100.0	273
Decile 6	6.3	2.1	89.6	0.0	0.0	0.0	2.1	0.0	100.0	267
Decile 7	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	273
Decile 8	0.0	2.1	91.7	2.1	0.0	0.0	4.2	0.0	100.0	267
Decile 9	2.0	2.0	91.8	0.0	0.0	0.0	4.1	0.0	100.0	273
Decile 10	0.0	4.1	93.9	0.0	0.0	0.0	2.0	0.0	100.0	273
Average	1.2	2.1	94.4	0.2	0.0	0.0	2.1	0.0	100.0	2701
#N/A: Not stated										

Rural: Household Communications										
% of users by decile										
Ranked by per capita adult equivalent HH expenditure deciles	Telephone – Private (Landline)	Telephone – Public (Landline)	Mobile Phone	Tele-radio	Postage	E-mail	Other/None	#N/A	Total	No of HH
Decile 1	1.9	1.4	76.9	0.5	0.8	0.0	16.7	1.8	100.0	3816
Decile 2	0.4	1.5	81.4	1.0	0.3	0.0	14.7	0.7	100.0	3834
Decile 3	0.3	1.1	80.0	0.6	0.3	0.0	15.7	1.9	100.0	3826
Decile 4	0.3	2.6	77.4	0.3	0.0	0.0	18.4	1.0	100.0	3821
Decile 5	1.3	3.2	78.0	0.1	0.0	0.1	15.5	1.8	100.0	3831
Decile 6	0.8	1.1	83.3	0.6	0.3	0.1	13.3	0.4	100.0	3824
Decile 7	0.1	1.4	85.0	0.4	0.3	0.0	12.5	0.3	100.0	3822
Decile 8	0.6	1.6	87.4	0.6	0.0	0.0	9.8	0.0	100.0	3809
Decile 9	1.1	1.7	85.4	0.6	0.3	0.0	10.9	0.0	100.0	3855
Decile 10	1.1	1.0	85.2	0.5	0.0	0.0	11.4	0.7	100.0	3831
Average	0.8	1.7	82.0	0.5	0.2	0.0	13.9	0.9	100.0	38269

#N/A: Not stated.

Port Vila: Source of Drinking Water Supply											
Households (% by source)											
Ranked by per capita adult equivalent HH expenditure deciles	Piped water (private)	Piped water outside (shared with household/community)	Stand-pipe (private)	Stand-pipe (shared with household community)	Household Tank	Community Tank	Well	Spring	River	Other	Not stated
Decile 1	9.7	9.9	5.0	13.2	6.7	0.0	7.1	0.0	0.0	0.0	0.0
Decile 2	9.0	8.4	10.0	16.2	13.3	50.0	7.1	0.0	100.0	0.0	0.0
Decile 3	6.7	14.1	5.0	7.4	33.3	0.0	14.3	0.0	0.0	0.0	0.0
Decile 4	6.7	14.1	10.0	11.8	13.3	0.0	7.1	0.0	0.0	0.0	0.0
Decile 5	10.1	10.5	10.0	10.3	6.7	0.0	7.1	0.0	0.0	0.0	0.0
Decile 6	9.0	8.4	20.0	11.8	13.3	0.0	21.4	0.0	0.0	0.0	0.0
Decile 7	12.0	8.4	15.0	8.8	0.0	0.0	7.1	0.0	0.0	0.0	0.0
Decile 8	10.9	8.9	10.0	11.8	13.3	0.0	0.0	0.0	0.0	0.0	0.0
Decile 9	11.2	11.0	0.0	4.4	0.0	50.0	21.4	0.0	0.0	0.0	0.0
Decile 10	14.6	6.3	15.0	4.4	0.0	0.0	7.1	0.0	0.0	0.0	0.0
Total	100	100	100	100	100	100	100	0	100	0	0
Number of HH	4510.6	3226.7	337.9	1148.8	253.4	33.8	236.5	0.0	16.9	0.0	0.0
% of HH	46.2	33.0	3.5	11.8	2.6	0.3	2.4	0.0	0.2	0.0	0.0
1Q	18.7	18.3	15.0	29.4	20.0	50.0	14.3	0.0	100.0	0.0	0.0
L3D	25.5	32.5	20.0	36.8	53.3	50.0	28.6	0.0	100.0	0.0	0.0
5Q	25.8	17.3	15.0	8.8	0.0	50.0	28.6	0.0	0.0	0.0	0.0

Table A.9: Household communication in rural areas

Table A.10: Access to drinking water in Port Vila



Table A.11: Access to drinking water in Luganville

Luganville (urban): Source of Drinking Water Supply											
Households (% by source)											
Ranked by per capita adult equivalent HH expenditure deciles	Piped water (private)	Piped water outside (shared with household/ community)	Standpipe (private)	Standpipe (shared with household community)	Household Tank	Community Tank	Well	Spring	River	Other	Not stated
Decile 1	4.9	12.2	11.4	13.3	26.6	14.3	0.0	0.0	0.0	25.0	0.0
Decile 2	11.2	2.0	8.6	13.3	7.8	0.0	25.0	0.0	0.0	25.0	0.0
Decile 3	8.0	14.3	8.6	26.7	7.8	14.3	25.0	0.0	0.0	12.5	0.0
Decile 4	10.8	8.2	5.7	3.3	10.9	0.0	25.0	0.0	0.0	25.0	0.0
Decile 5	10.1	8.2	5.7	16.7	12.5	0.0	25.0	0.0	0.0	0.0	0.0
Decile 6	9.8	10.2	20.0	6.7	9.4	0.0	0.0	0.0	0.0	0.0	0.0
Decile 7	9.4	12.2	8.6	13.3	12.5	14.3	0.0	0.0	0.0	0.0	0.0
Decile 8	11.9	10.2	11.4	3.3	4.7	14.3	0.0	0.0	0.0	0.0	0.0
Decile 9	11.9	8.2	8.6	3.3	4.7	14.3	0.0	0.0	0.0	12.5	100.0
Decile 10	11.9	14.3	11.4	0.0	3.1	28.6	0.0	0.0	0.0	0.0	0.0
Total	100	100	100	100	100	100	100	0	0	100	100
Number of HH	1592.9	272.9	194.9	167.1	356.5	39.0	22.3	0.0	0.0	44.6	11.1
% of HH	59.0	10.1	7.2	6.2	13.2	1.4	0.8	0.0	0.0	1.6	0.4
1Q	16.1	14.3	20.0	26.7	34.4	14.3	25.0	0.0	0.0	50.0	0.0
L3D	24.1	28.6	28.6	53.3	42.2	28.6	50.0	0.0	0.0	62.5	0.0
5Q	23.8	22.4	20.0	3.3	7.8	42.9	0.0	0.0	0.0	12.5	100.0

Table A.12: Access to drinking water in rural areas

Rural: Source of Drinking Water Supply											
Households (% by source)											
Ranked by per capita adult equivalent HH expenditure deciles	Piped water (private)	Piped water outside (shared with household/ community)	Standpipe (private)	Standpipe (shared with household community)	Household Tank	Community Tank	Well	Spring	River	Other	Not stated
Decile 1	9.0	9.8	10.1	10.4	7.9	7.4	12.3	23.3	7.3	8.4	0.0
Decile 2	8.4	10.5	8.6	11.6	6.9	8.6	15.7	13.2	9.2	12.1	6.7
Decile 3	11.7	10.6	11.4	10.9	8.3	7.5	10.6	8.9	12.8	7.3	43.0
Decile 4	12.8	10.7	8.3	10.8	10.6	6.7	6.4	10.7	13.1	13.6	2.9
Decile 5	13.0	9.9	13.2	11.4	7.9	11.8	7.0	6.8	10.8	11.3	16.6
Decile 6	8.2	11.3	8.3	12.3	9.6	11.6	8.6	6.2	9.9	11.4	0.0
Decile 7	11.6	7.5	11.9	8.8	10.7	9.9	12.9	9.7	8.6	9.7	7.6
Decile 8	7.4	8.5	11.6	8.1	10.7	13.9	10.2	8.0	10.5	8.9	0.0
Decile 9	10.1	10.3	10.6	10.3	10.2	11.5	8.4	7.3	9.9	10.9	23.2
Decile 10	7.8	10.9	6.0	5.5	17.2	11.0	7.9	6.1	8.2	6.4	0.0
Total	100	100	100	100	100	100	100	100	100	100	100
Number of HH	3090.6	5145.6	1784.8	5193.8	7683.7	5133.9	3889.4	2378.4	3011.2	821.2	136.9
% of HH	8.1	13.4	4.7	13.6	20.1	13.4	10.2	6.2	7.9	2.1	0.4
1Q	17.4	20.3	18.7	22.0	14.8	16.1	28.0	36.5	16.4	20.5	6.7
L3D	29.1	31.0	30.1	32.8	23.1	23.6	38.6	45.3	29.2	27.8	49.7
5Q	17.8	21.1	16.6	15.8	27.4	22.5	16.3	13.4	18.0	17.4	23.2

