# Economic Governance and Development

# in Vietnam and Mozambique

# *FFU: 85-08-KU*

**Poverty Identification and Definition in Mozambique and Vietnam**

**By**

Lars Østerdal (UoC)

Pham Minh Thu (ILSSA)

Saide Dade (INE)

**1. Introduction - Motivation**

Most people in developing countries in general and in Mozambique in particular are very poor. According to Gerster and Zimmerman(2005), evidence from household surveys shows that more than 30 percent of the people in the developing world spend less than the international poverty line of $1.08 per day per person.Evidence from Mozambique shows that “the consumption of about 55 percent of Mozambicans falls below the national poverty line (i.e., they live in a state of absolute poverty” (MPF, 2010).

Over the past decade the elimination of poverty all over the world has become a much-discussed international issue, and the reduction of the incidence of absolute poverty in developing countries has been a major issue in the policy agenda. In line with these discussions, absolute poverty that characterizes the developing world in general and Mozambique in particular is over the last two decades the most important economic problem in the country, which has been of interest not only of many researchers and policymakers in the area of public policy, but also of the multilateral and bilateral aid agencies.

Work conducted in 2009 under the FFU project described the different measures of poverty used in Vietnam and Mozambique, and the some of the impact that the use of different measures has on national poverty statistics. In order to move from a descriptive to more of an analytical approach, to evaluate the relevance and applicability of the different poverty measure used in the two countries in order to answer the following questions: what is the most appropriate way to define poverty in Vietnam and Mozambique? What are the level and trends of poverty in these countries? What are the characteristics of the poor? What methodologies are used in the measurement of poverty in the two countries?

This paper is organized as follows. Section two gives the general methodologies of addressing the poverty problem in developing countries in general and in Mozambique in particular. In section three, we provide the relevant description of the national/country poverty situation in Mozambique (which will be used for comparison of poverty between Mozambique and Vietnam). Through section four, we explore the impacts on policy and present the policy debate. Section five concludes the paper and gives some lessons learnt.

**2. General Methodologies**

This section is divided in five subsections. The first subsection defines the concept of poverty. The second subsection identifies the poor. The third subsection describes poverty measurement. The forth subsection presentspoverty profiles and identifies the causes of poverty. The last section describes poverty reduction and presents its evidence.

**2.1. Defining the Concept of Poverty**

Many poverty studies over the past two centuries have attempted to develop concepts and definitions of poverty. An important initial definition is that developed by Rowntree (1901) study of poverty in York, England, which defined poverty as “income below that needed to obtain the minimum necessities for the maintenance of physical efficiency”. Since the Rewntree´s definition of poverty, the concept has been redefined in different ways to reflect the reality of the developing countries, where it is now widely understood to be a multi-dimensional phenomenon. As such, most of the current definitions are based on the four perspectives that the concept of poverty draws, namely the income perspective, consumption perspective, capabilities perspective, and human development perspective.

The income perspective originates from the above definition by Rowntree’s study. Poverty in this perspective was defined for many years as lack of income necessary to ensure access to a specified set of basic needs, in other words, a person is poor if, and only if, her income level is below the cut-off poverty line defined in terms of “having enough income for a specified amount of food” UNDP (1997). Many countries have adopted income poverty lines to monitor progress in reducing poverty incidence.

In the consumption perspective, poverty has been defined in terms of deprivation of material requirements for minimally acceptable fulfillment of human needs, including food. According to Fields (1998), poverty in the consumption perspective is “the inability of an individual or a family to command sufficient resources to satisfy basic needs such as food, clothing, shelter, health care and the other necessities of life”. Note that this concept of deprivation goes well beyond the lack of private income: it includes the need of basic health and education and essential services that have to be provided by the community to prevent people from falling into poverty (UNDP, 1997). The definition also suggests the possibility that someone may be food-poor or non-food poor. In the first case, the individual or household is said to face food-poverty defined generally “as a condition of lacking the resources to acquire a nutritionally adequate diet” (Greer and Thorbecke, 1986). Someone who is both food-poor and non-food poor is said to face consumption poverty.

The capabilities perspective is a result of significant changes that the concept of poverty has suffered in recent years. Poverty in this perspective represents the absence of some basic capabilities to function. According to Sen (1985), the relevant capabilities are of many different kinds, such as being free from starvation, from hunger, from *under*nourishment; participating in communal life; being adequately sheltered; being free to travel to see friends; and so on. In this context, poverty is no longer viewed only as being restricted to lack of income or material deprivation, but also refers to “disadvantages in access to land, credit, and services (e.g., health and education), vulnerability (towards violence, external economic shocks, natural disasters), powerlessness and social exclusion from decision making process” (Gerster and Zimmerman, 2005).

The above definition based on the capabilities perspective includes some aspects of the human development perspective, in which the United Nation Development Program (UNDP) has developed the concept of human poverty or poverty of lives and opportunities. In this perspective, poverty means that “opportunities and choices most basic to human development are denied to lead a long, healthy, creative life, and to enjoy a decent standard of living, freedom, dignity, self-respect, and the respect of others” (UNDP, 1997).

In Mozambique, since the publication of the data from the 2008/2009 household budget survey by the National Statistical Institute (INE) and associated poverty assessment report by the Ministry of Planning and Development (MPD), a number of debates has emerged on what is the most appropriate way to define and measure poverty in Mozambique. Officially, poverty defined as “the impossibility, owing to inability and/or lack of opportunity for individuals, families, and communities to have access to the minimum basic conditions, according to the society’s basic standards (GOM, 2006). Likewise, in the three consecutive National Poverty Assessments based on the data from the three large-scale household budget surveys conducted in 1996/97, in 2002/03 and in 2008/09, poverty was defined on the base of the Cos-of-Basic-Needs approach and on the assumptions about the group of households over which a certain empirically estimated cost applies. Ibraimo (2009) argues that “the Cost-of-Basic- Need approach has several advantages:

* It allows presenting a summary estimate of deprivation by comparing household consumption to a poverty line that covers not only the cost of acquiring an explicit basic bundle of food, but also the access to household assets and public goods and services;
* It measures poverty through consumption rather income, as many household from developing countries tend to have significant part of their consumption fed by own production and transfers;

As discussed in the Ibraimo´s study, one of difficulties when estimating the cost of both food and non-food bundles, is the guarantee of consistency welfare comparison among different groups of population. She argues that because applying a single national bundle to poverty estimations would imply that relative prices did not apply to household choices, Simler et al (2002) in their poverty assessment for 1996/7 applied 13 food baskets capturing 13 possible differences in household consumption patterns according to urbanization, and province. This same method was applied during the 2002/3 poverty assessment.

The study by Tarp et al (2002) based on the 1996/97 household survey data support Simler´s view. They found that poverty patterns based on the Cost-of-Basic-Needs were sensitive to the food basket that is chosen. Indeed, with a few exceptions, as an alternative to a single national basket, the poverty line based on 13 local regional food baskets are associated with a significant shift to cheaper sources of calories in response to regional variation of prices (Bart van den Boom, 2010). He argues that, because this could capture locally relevant demand behavior, regional food baskets could be preferable. However, he suggests that in order to make a poverty line operational, it has to take into account data limitation, the unobservable components and the volatility of price unit values. To take into account such trade-off with consistency and robustness, Bart van den Boom, (2010) follows Asra and Santos-Francisco (2001) procedure of checking for robustness by empirically testing the outcomes from specific poverty lines against more aggregated lines, a procedure that is common in many countries.

**2.2 Identification**

When identifying the poor, the unit of analysis has usually been the households. As such, researchers and policymakers in the area of public policy have chosen either consumption or income to measure current households’ living standards, on the base of which individuals or households have been classified as poor if their consumption or income (depending which one is chosen as a measure of living standards) is below a cut-off amount and non-poor if it is above that amount. This cut-off amount is the poverty line, which is a measure of absolute poverty in developing countries.

There is an extensive debate in the literature on whether the poverty lines should be based on consumption or income. Some unanimity seems to exist in favor of the consumer-based poverty lines. DFID (2000), for example, argues that consumption is the preferred measure rather than income because it is less variable and this because people tend to save in good times and draw down their savings in times of stress. Justifying their choice of a consumption-based concept of poverty line, Laabas and Liman (2004) argue that a consumption-based concept of poverty is more appropriate when trying to analyze the standards of living in a society since current income may fluctuate over time and hence tend not to reflect consumption smoothing that is a good indicator of life-time material wealth or resources. Because consumption is thought to be a better indicator of living standards than income, it has been suggested that consumption should always be used whenever information on it is available.

Consumption-based poverty lines are commonly set in developing countries where “the main focus has been on how to specify a set of basic needs, and measure the extent to which these needs are satisfied” (Callan and Nolan, 1991). There are several approaches that have been adopted in these countries to setting those types of poverty lines. We narrow our review to the dollar-a-day criterion, the Food Energy Intake (FEI) method, and the Cost of Basic Needs (CBN) method, which are the methods that have been largely used by many researchers in their attempts to set more robust poverty lines in developing countries.

The dollar-a-day criterion is usually used for international comparisons by the World Bank and other international institutions. It involves setting a poverty line of $1 a day per person defined in terms of per capita consumption, and calculated primarily from household surveys[[1]](#footnote-1). As such, it is an internationally agreed measure of absolute poverty. However, it has been argued that although the poverty line of $1 a day per person is useful as a global indicator, the country level national poverty lines are a more important benchmark.

Existing data show that most people in the developing world are absolutely poor, as presented in table below.

Table 2.1 Aggregate poverty measures by region, 1990

|  |  |  |  |
| --- | --- | --- | --- |
| Region | Headcount index  (%) | Poverty gap index  (%) | Number of poor  (millions) |
| East-Asia and Pacific (EAP) | 29.84 | 7.65 | 476.22 |
| Of which China | 32.98 | 8.87 | 374.33 |
| Eastern-Europe + Central Asia (ECA) | 0.46 | 0.11 | 2.16 |
| Latin America and Caribbean (LAC) | 10.19 | 3.57 | 44.60 |
| Middle East and North Africa (MNA) | 2.33 | 0.49 | 5.26 |
| South Asia | 43.04 | 11.00 | 479.10 |
| Of which India | 44.31 | 11.09 | 376.44 |
| Sub-Saharan Africa (SSA) | 46.73 | 19.07 | 240.34 |
| Total  Total (excluding China) | 28.66  27.14 | 8.23  9.10 | 1247.68  873.35 |

Source: Chen and Ravallion (2004, 2007).

The above table presents the incidence and depth of extreme poverty, as well as the number of poor by region in 1990.Its figures show that in 1990, a baseline year for global poverty reduction analysis, about 1.25 billion people were living in extreme poverty. Note that “this was about a quarter of the world’s population, or almost 30 percent of the people living in developing countries” (DFID, 2000).

Figures in the table also show that poor people lived primarily in SSA, South Asia and EAP, where the incidence of absolute poverty was 47 percent, 43 percent, and 30 percent, respectively. Note that the largest numbers of poor were found in South Asia (479.1 million living mainly in India) and in EAP (476.2 million living mainly in China). Note further that SSA is the region that had not only the highest incidence of absolute poverty, but also the greatest depth of poverty (19 percent).

The general observation has been that poverty in the six regions is more pronounced in rural areas, where both real income and real consumption are noted to be lower. This is confirmed by Chen and Ravallion (2007), who recently found that three-quarters of the developing world’s poor live in rural areas.

In Mozambique a national household survey on living conditions in Mozambique was first conducted by the National Institute of Statistics (NIE) in 1996/97. This survey, which was an essential first step to determine the true extent of poverty and where it was most severe, produced poverty estimates presented in table below.

Table 2.2 Aggregate poverty measures by zone/region, 1996/97

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Zone/Region | Portion of the  population  (%) | Mean consumption  (MT/month) | Headcount  index  (%) | Poverty gap index  (%) | Squared poverty gap Index  (%) | Distribution of the poor  (%) |
| Rural | 79.7 | 150,740.00 | 71.3 | 29.9 | 15.9 | 81.8 |
| Urban | 20.3 | 202,685.00 | 62.0 | 26.7 | 14.6 | 18.2 |
| North | 32.5 | 168,834.00 | 66.3 | 26.6 | 13.8 | 31.0 |
| Centre | 42.6 | 141,990.00 | 73.8 | 32.7 | 18.0 | 45.3 |
| South | 24.9 | 183,718.00 | 65.8 | 26.8 | 13.9 | 26.6 |
| National | 100.0 | 160,780.00 | 69.4 | 29.3 | 15.6 | 100.0 |

Source: GOM(2000)

The above table presents the incidence, depth and severity of absolute poverty in Mozambique by zone/region in 1996/97. Figures in the table show that the average monthly per capita consumption expenditure (which was the indicator used to measure the households’ living standards) was only MT 160,780.00 (about $170.00 per person per month).

Note that the national level of the headcount index was 69.4%, indicating that over two-thirds of the Mozambicans (about 10.9 million people) lived below the poverty line. This was fixed at MT 5,433.00 per person per day (roughly $0.47 per person per day) following the Cost of Basic Needs (CBN) method[[2]](#footnote-2), so it is a consumption-based poverty line.

Figures in the table also show that there was a greater incidence of poverty in rural areas, where the majority of Mozambicans reside and work. The depth and severity of poverty was also higher in rural areas than in urban areas. It has been argued by many analysts that the fact that the poor are mostly rural suggests that poverty is primarily a rural phenomenon, because Mozambique is a rural society and economy. Regional differences were large, since all poverty indexes indicate that the central region was poorer than the other two regions. However, poverty rates in north and south of the country were close to each other. Note that all the national-level poverty figures are much higher than the 1990 figures presented in Table 1

**2.3 Measurement**

Based on the poverty lines estimated as indicated in previous subsection, many researchers over the years have attempted to set aggregate measures of poverty using the absolute poverty approach. These measures are usually used by researchers and policy makers in the area of public policy not only to judge the extent of the incidence of poverty in a country, but also to monitor its progress.

There are two standard measures, namely the headcount ratio and the poverty gap index. The headcount ratio (*H)*,which measures the incidence of poverty, is the percentage of people below the specified poverty line . Algebraically, it is given by:

, (2.5)

where is the number of people identified as poor, and  is the total number of people in the community. Thus, if poverty is measured by consumption (income), then the headcount ratio is the percentage of the population who live in households with income or consumption per capita less than the poverty line. However, “the headcount ratio is the commonest of over-all poverty, and has been extensively utilized recently both for intertemporal comparison as well as for international contrasts” (Sen, 1979).

The poverty gap index indicates how far poor people are below the poverty line (or more precisely, how far household income or consumption falls below the poverty line), so it measures the depth of poverty. Algebraically, it is given by:

*,* (2.6)

where is the poverty line,  is the average income or average consumption expenditure of the poor, and  is the income-gap or expenditure-gap (with  for the poor and  for the rich). Thus, the poverty gap index is simply the income-gap ratio or expenditure-gap ratio. Yet, used alone, the poverty-gap index could mislead conclusions as it willincrease if the mean of the poor falls (in the case that a poor becomes less poor while theothers remain the same). To avoid this problem, Sen(1976) normalized it into a per-person percentage gap *I* as follows.

 (2.7)

where*S(z)* stands for the set of people with income *yi* no higher than the poverty line *z*. This normalization has led him to redefine the poverty-gap index as the average shortfall of the income of the poor with respect to the poverty line, multiplied by the headcount ratio, i.e.,

** (2.8)

Notice that both the headcount ratio and the poverty-gap index ignore thewelfare of households above the poverty line.

Many researchers over the years have criticized the above standard measures because of shortcomings associated with them. Sen’s (1976) critique, for example, is that *H* is completely insensitive to the extent of *I*, this, in turn, is completely insensitive to *H*, and both measures together are not sufficiently informative since neither gives adequate information on the exact income distribution among the poor”.[[3]](#footnote-3) This critique has led that researcher to formulate the following two basic axioms for a poverty measure to satisfy: “monotonicity axiom: given other things, a reduction in the income of a poor household must increase the poverty measure” and “transfer axiom: given other things, a pure transfer of income from a poor household to any other household that is richer must increase the poverty measure”. In order to avoid the mentioned above shortcomings and arrive at a suitable measure of poverty, Sen proposed the poverty measure *P*. There are two variants of this index depending on the number of the poor. For small numbers, the poverty measure *P* is a weighted sum of shortfalls of all people who are judged to be poor, i.e., the set *.*

*P = A (z, q, n) * (2.9)

where*A* is a constant term for a normalization, *gi*, are nonnegative weights on the income short-fall of person *i*, and the other variables have the meanings indicated above. On the other hand, if the number of the poor is large,*P* is given by:

*P = H[I+ (1–I)] G* (2.10)

where*G* is the Gini coefficient of the income distribution among the poor, and the other variables have the meaning indicated above. The Gini coefficient is measured on a scale from 0 to 1[[4]](#footnote-4). Thus, *G* = 0 implies that all the poor have the same income, and in the absence of inequality among the poor, equation (2.10) becomes *P = H.I*.

It has been argued thatSen’s measure fails to satisfy the transfer-sensitive axiom which states that “if a transfer  of income takes place from the  poor with income  to a poor with income , then for a given , the magnitude of the increase in poverty measure decreases as  increases” (Kikwani, 1980) . Many researchers over the years have tried to propose various poverty measures that satisfy the above three axioms (monotonicity, transfer, and transfer-sensitive). Some important measures devised along the lines of these axioms are the so-called  class of decomposable poverty measures proposed by Foster *et al*. (1984), and defined by:

 (2.11)

where the parameter** is the measure of poverty aversion, and the other variables have the meanings indicated above. Note that if *,*  (which is equal to the headcount ratio), by setting *,* (which is a normalization of the poverty-gap measure), and for *,*(which is the squared poverty gap). As pointed out by Foster *et al* these results suggest that “a larger  gives greater emphasis to the poorest poor, so  is a measure of severity of poverty”. In the literature on poverty, the three measures together are known as members of the Foster-Greer-Thorbecke class of poverty measures. The computer program POVCAL developed by Chen *et al*. (1998) has been commonly used to estimate the three measures.

In Mozambique, poverty has been measuredby the headcount index, the poverty gab index and the squared poverty gab index, as presented in Table 2.2. Note that those three poverty indexes are members of the Foster-Greer-Thorbecke class of poverty measures described in the previous paragraph. There are no perfect measures of poverty. However, the members of the Foster-Greer-Thorbecke class of poverty measures seem to be more appropriate to measure poverty in Mozambique since they satisfy the monotonicity, transferand transfer-sensitive axioms.

**2.4The Causes of Poverty**

The causes of poverty in developed countries differ from those in developing countries since poverty issues also differ across the two groups of countries. A review of poverty profiles by Rowntree (1901) reveals that in 1899, poverty in the region of York (England) was caused by factors such as death of chief wage earner, illness or old age of chief wage earner, chief wage earner out of work/unemployed, largeness of family, irregularity of work, and in regular work but at low wage.

Glennerster*et al*. (2004) examined how far Rowntree’s causes continue to explain poverty. To do so, they reanalyzed data from the Family Resources Survey for 2001/02 using as far as possible the same categories as Rowntree, and obtained results showing that the biggest group in poverty remains households with someone in work, but these account for only one third of those now in poverty. The In their study, Glennerster*et al*. indicate that largeness of families (five or more children) has greatly declined in significance from 22 to 2 percent. They also point out that illness or old age of the chief wage earner has grown in importance but widowhood is less significant, unemployment is now more important than a century ago in explaining poverty, there is now a large group whose poverty is not explained by any of Rowntree’s causes, and that these include lone parent families, students and others. Finally, they argue that the above results apply not only to the region of York, but also to the developed economies in general.

However, the picture in developing countries in general and in SSA in particular is quite different. A review of poverty profiles by Lipton and Ravallion (1997) reveals that the poor of the developing world are more likely to be characterized by larger household size, women, elderly, reliance on labor incomes, low calorie intakes, income variability, and rural. In the case of SSA, Hope (2004) points out that poverty in Africa is multifaceted in the sense that it is characterized by, among other things, a lack of purchasing power, rural predominance, exposure to risk, insufficient access to social and economic services, and few opportunities for formal income generation.

Many researchers over the years have tried to introduce the causes of poverty into the modeling exercise in order to empirically identify the key determinants of poverty in developing countries. Several approaches have been developed so far, and most of them rely heavily on household surveys of consumption or incomes. These surveys are usually conducted by the countries’ statistics bureaus/offices, and their formats have followed the World Bank’s Living Standards Measurement Study (LSMS) survey program[[5]](#footnote-5).

One of the common modeling approaches involves using the well-known Engel method of estimating equivalence scales, “a common practice to estimate a homogeneous food demand equation that can be ex-post justified by some utility function”[[6]](#footnote-6) (Deaton and Muellbauer, 1986). According to these authors, one equation that frequently fits the data well is the Working-Leser model, in which the food share is a linear function of the logarithm of total outlay. The two authors proposed a simple extension of the above model which incorporates demographic effects, and takes the following basic specification form:

 (2.12)

where  denotes the budget share devoted to food by household *i*,  is the household *i*’s total expenditure*,* is the household size***, ***is the per capita expenditure,  is a set of demographic variables (i.e., the proportion of persons in household *i* who belong to category *J(j = 1, …, J*), *α*, *β, and δ* are parameters, and *εi* is a random error.

General observations have indicated that in most developing countries, there are significant differences in costs of basic baskets of necessities between different regions as well as between urban and rural areas. In the latter case, for example, these costs tend to be relatively higher in urban areas than in rural areas. Thus, when predicting changes in consumption levels (and hence poverty), some applications of the indirect modeling approach have used separate regressions for regions and urban/rural areas, while others have simply included regional/urban/rural dummies to capture the effects of differences in relative prices.

Using both the direct approach and the indirect method of modeling the causes of poverty, many empirical poverty studies over the years have attempted to identify the key determinants of absolute poverty that characterize the economies of developing countries. Some of the studies have been bivariate while others have been multivariate, mainly comparing either poverty measures or poverty proxies and household/community characteristics. A significant number of the studies have adopted a cross-section approach, while others have used panel data analysis to study the above relationship. Most of the empirical results reported so far “have found evidence of a strong negative correlation between household size and consumption (or income) per person in developing countries, implying that larger families and younger households tend to be poorer” (Lanjouw and Ravallion, 1995).

Among the important studies are those undertaken by Lanjouw and Ravallion (1995) and Kyereme and Thorbecke (1991). In this context, Lanjouw and Ravallion (1995) examined the view that larger families tend to be poorer in developing countries. To do so, they specified a poverty model based on the extension of the Leser-Working form, and regressed budget share devoted to food on the log of expenditure per person, log of household size, demographic variables (adults 15-60 years, children 5-15 years, and infants below 5 years), log of the food poverty line and its squared value, and urban/rural/regional dummy variables (included to pick up differences in relative prices). To estimate their model, they used data from the Pakistan Integrated Household Survey covering 4,794 households residing in 300 urban and rural communities between January 01, 1991 and December 31, 1991. They found that the correlation between poverty (measured by food share) and household size vanishes in Pakistan when the size elasticity of the cost of living is about 0.6.

Kyereme and Thorbecke (1991) attempted to identify the main determinants of food poverty (defined as inadequate calorie consumption) in Ghana. Utilizing Ghana’s household budget survey data covering hundreds of households in between 1975 and 1985, they estimated four separate poverty models for the whole/rural/urban/city coast, in which poverty (proxied by the household’s total calorie gap) was regressed on household characteristics (age of household head, natural log of income of household head, natural log of assets, natural log of the fertility index, natural log of the maturity index, education of the head, and sex of the head). The two researchers obtained regression results suggesting that income, fertility and maturity indexes, age, sex and education significantly explain poverty.

On the basis of the 1996/97 survey data, the government of Mozambique (GOM) has identified the following determinants of absolute poverty that characterizes the country’s economy: “slow economic growth until the beginning of the 1990s, poor levels of education of economically active members of households (especially women), high dependency rates in households, low productivity in the family agricultural sector, lack of employment opportunities in the agricultural sector and elsewhere, and poor development of basic infrastructure in rural areas” (GOM, 2001). Note poverty picture in Mozambique is somehow consistent with that described in the previous paragraph fordeveloping countries in general and SSA in particular.

Since the first assessment of poverty and well-being in Mozambique carried out in 1996/97, an empirical poverty literature has rapidly developed which attempts to identify the determinants of absolute poverty that characterizes the country’s economy. Among the important studies are those undertaken by Datt*et al*. (2000), Simler*et al*. (2004), Fox *et al*. (2005), and Klasen and Woltermann (2005). In this context, Datt*et al*. (2000) analyzed the determinants of poverty in Mozambique by specifying a simple model in which the logarithm of household per capita consumption was regressed on a set of explanatory variables that reflect household and community characteristics, namely demographic characteristics (age, gender, household size and composition), educational attainment in the household, employment (occupational distribution within the household), agriculture (landholding size, irrigation and use of agricultural inputs, land tenure, type of crops cultivated, and household’s possession of livestock), and community characteristics and access to services. Using the 1996-97 survey data, the authors estimated separate models for five regions. Three of these models were specified for rural areas to identify the determinants of poverty in north, center and south of the country, while the other two were specified for urban areas to identify the determinants of poverty in large cities and small urban areas. Datt*et al*.’s findings indicate that the areas that stand out in particular are low levels of human capital (including low educational levels and the poor health of most of the population), low productivity in the agricultural sector (where most Mozambicans are employed), a weak physical infrastructure and poor access to basic services (including potable water, health facilities, transportation, communications, and markets), and high rates of fertility and corresponding high dependency ratios.

Simler*et al*. (2004) also attempted to identify the determinants of poverty in Mozambique. In their attempt, they also used the 1996-97 survey data to estimate empirical rural and urban models of poverty determinants in which the dependent variable, poverty, was proxied by real per capita consumption. The RHS of both models included the same regressors as those used by Datt*et al*. (2000), plus seasonal variations in welfare. They obtained OLS results showing that household size, education, employment, and livestock ownership are the key determinant of living standards and (and hence poverty) in rural areas. The results also show that the urban determinants of consumption are household size, education (except adult male literacy), and employment.

Likewise, Fox *et al*. (2005) attempted to identify the determinants of poverty in Mozambique by regressing the log of household per capita consumption on household characteristics (household composition, gender of the head, presence of any disabled adults or children, marital status of the head, head education, and head employment). Similar to Simler*et al*. (2004), Fox *et al*. also estimated separate rural and urban regressions, but using two cross-sectional data extracted from the 1996/97 and 2002/03 national household surveys. Fox *et al*.’s findings indicate that the most important determinant of household per capita consumption in both urban and rural areas is education of head, and that controlling for education, working in transport, trade, or heath increases household consumption on the margin by about 30 percent. Their findings also indicate that in urban areas, working in education decreases consumption relative to nearly all other sectors, suggesting that there may be a problem with teacher salaries in urban areas.

Finally, Klasen and Woltermann (2005) assessed the impact of household size on poverty (proxied by the consumption of the poor) at the household level. Similar to Fox *et al*. (2005), Klasen and Woltermann also regressed the log of per capita consumption on the same household variables for both survey years 1996/97 and 2002/03. But contrary to the previous works, Klasen and Woltermann ran only one model that included urban/rural/regional dummies on the RHS aimed at capturing the effects of being located in a rural/urban area, and also being from each of the 11 Mozambican provinces. Their findings indicate that demographic variables such as household size and dependency rate had a significant negative impact on consumption. By contrary, education of the household heads was found to be significantly and positively correlated to the consumption levels. The two researchers also obtained results showing that “in 1996, being located in a rural area had a large and significant positive effect on consumption, but in 2002 the coefficient dropped and lost its significance, and that unlike in many other African countries, female headed households in 1996 were not significantly poorer than male headed households on a national level”. The remaining variables were found to be insignificant in both 1996 and 2002.

**2.5 Poverty Reduction/Targeting**

In the late 1990s, the United Nations and associated multilateral aid agencies committed themselves to a specific agenda for reducing global poverty, as a response to the global deterioration of poverty. Poverty reduction is essentially about improving human well-being of poor people living in the developing world. The agenda was agreed at the Millennium Summit in September 2000, which set targets for the world community to achieve in 15 years. In the literature, these targets have come to be known as the Millennium Development Goals (MDGs)[[7]](#footnote-7). With regard to poverty, the target is “to reduce the proportion of people in developing countries living in extreme poverty from 30 percent in 1990 to 15 percent in 2015, according to a poverty line of $1.08 a day per person[[8]](#footnote-8)” (Bhalla, 2004).

The MDGs are now the center of attention in developing countries, where governments are mobilizing to achieve them and reduce poverty by 50 percent by the year 2015. However, it has been argued that the MDGs are not real poverty eradication strategy, since they only aim at halving absolute poverty. Giving this situation, some have argued that a second target will be needed after 2015 to move further towards poverty elimination.

As described above, the United Nations and associated multilateral aid agencies have committed themselves to a specific agenda for halving global poverty by 2015, as a response to the global deterioration of poverty. The commitment of the donors, which is to support poverty reduction strategies with resources and debt relief, has led to significant changes in the objectives of the International Monetary Fund (IMF) and the World Bank. For example, in September 1999, “the objectives of the IMF’s concessional lending were broadened to include an explicit focus on poverty reduction in a context of a growth oriented strategy” (IMF, 2007). Under this new objective, the IMF has supported, along with the World Bank, strategies elaborated by the borrowing countries in Poverty Reduction Strategy Papers (PRSPs).

According to the IMF(2007), the PRSPs describe the country's macroeconomic, structural and social policies and programs over a three-year or longer horizon to promote broad-based growth and reduce poverty, as well as associated external financing needs and major sources of financing. The new emphasis of the two multilateral institutions on poverty is reflected in the inclusion of poverty strategies in loan agreements. It was in this context that the IMF established the Poverty Reduction and Growth Facility (PRGF), which is based on a regular PRSP, replacing the Enhanced Structural Adjustment Facility (ESAF)[[9]](#footnote-9).

The PRSPs, which also aim to provide the crucial link between national public actions, donor support, and the development outcomes needed to meet the MDGs, are currently the center of development assistance and planning in many developing countries since they provide a framework for domestic policies and programs to reduce poverty as well as for development assistance to these countries. The strategies are prepared by the countries themselves, by first elaborating Interim PRSPs (I-PRSPs). The I-PRSPs, which were introduced to avoid delays in receiving assistance, “summarize the current knowledge and analysis of a country's poverty situation, describe the existing poverty reduction strategy, and lay out the process for producing a fully developed PRSP in a participatory fashion” (IMF, 2007). In this context, the participating countries are required to define their own priorities taking into account a comprehensive view of development. By implementing a PRSP, poverty reduction becomes the ultimate goal and all policies in the country should contribute to it, as part of acoherent strategy.

Poverty reduction is mainly financed by the PRGF and the Poverty Reduction Support Credits (PRSC), a new programmatic instrument to support implementation of the PRSPs. However, it has been argued that “the state budget is a critical lever of poverty reduction in both low-income and advanced market economies alike” (Klugman*et al*., 2002). These authors’ paper, which considers the role of public transfers and the taxes that fund them, illustrates the potential for state spending and tax design in combating poverty in the transition countries.

It has also been argued that the PRSP framework was originally conceived as a condition of the Heavily Indebted Poor Country (HIPC) initiative (which is an agreement among official creditors to help the most heavily indebted countries to obtain debt relief). This was because countries seeking debt relief through the HIPC program were required to prepare a PRSP to show how money freed up from debt servicing would be used to alleviate poverty[[10]](#footnote-10). Since then, the PRSPs have enlarged in scope and have become the centerpiece for policy dialogue and negotiations in all countries that receive financing from the World Bank’s International Development Association (IDA). Thus, countries that urgently require Bank-Fund credits or debt relief can submit an I-PRSP for consideration by the Bank-Fund Boards on the condition the countries will prepare a full PRSP within a timeline agreeable to the Boards. Existing records indicate that “(i) over 70 countries were initially identified by the World Bank and the IMF as required to develop PRSPs; (ii) as of end-August 2005, 49 full PRSPs have been developed and submitted to the Bank-Fund Boards; and that (iii) an additional 11 countries have completed I-PRSPs” (IMF, 2007).

Some researchers over the past ten years have attempted to assess the trends in poverty reduction in the context of both the PRSPs and the MDGs. Chen and Ravallion (2007), for example, have reported new estimates of measures of absolute poverty for the developing world over 1981-2004. Table 2.3 presents a summary of these estimates.

Table 2.3 Poverty reduction in the developing world, 1990-2004

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Region | 1990  HI (%) NP (ml) | | 2004  HI (%) NP (ml) | | Difference  HI NP | | Poverty (HI) target |
| EAP | 29.84 | 476.22 | 9.05 | 169.13 | -20.79 | -307.09 | 14.92 |
| China | 32.98 | 374.33 | 9.90 | 128.36 | -23.08 | -245.97 | 16.49 |
| ECA | 0.46 | 2.16 | 0.94 | 4.42 | 0.48 | 2.26 | 0.23 |
| LAC | 10.19 | 44.60 | 8.64 | 47.02 | -1.55 | 2.42 | 5.10 |
| MNA | 2.33 | 5.26 | 1.47 | 4.40 | -0.86 | -0.86 | 1.17 |
| South Asia | 43.04 | 479.10 | 30.84 | 446.20 | -12.2 | -32.9 | 21.52 |
| India | 44.31 | 376.44 | 34.33 | 370.67 | -9.98 | -5.77 | 22.16 |
| SSA | 46.73 | 240.34 | 41.10 | 298.30 | -5.63 | 57.96 | 23.37 |
| Total  Total (ex. China) | 28.66  27.14 | 1247.68  873.35 | 18.09  20.70 | 969.48  841.12 | -10.57  -6.44 | -278.2  -32.23 | 14.33  13.57 |

Source: Chen and Ravallion (2007). The differences were calculated by the author of this paper.

Notes: HI = headcount index; NP = number of poor.

Following Chen and Ravallion, figures in the above table show evidence of a clear trend decline in the percentage of absolutely poor people (although with uneven progress across regions), and a more mixed success in reducing the total number of poor. The two researchers also show that the developing world outside China has seen little or no sustained progress in reducing the number of poor, with rising poverty counts in some regions, notably SSA.

Faced with the widespread poverty described in subsection (2.2), in 2001, the GOM launched the country’s first fully developed PRSP named Action Plan for the Reduction of Absolute Poverty I (PARPA I)[[11]](#footnote-11). With this poverty reduction strategy, “the central objective of the government was a substantial reduction in the levels of absolute poverty in Mozambique, and the specific objective was to reduce the incidence of absolute poverty from 70% in 1997 to less than 60% by 2005 and less than 50% by the end of this decade” (GOM, 2001). Note that this national poverty target was set along the lines of the MDGs and the HIPC initiative. Over the past decade poverty reduction in Mozambique has been the primary goal not only of the government, but also of the bilateral and multilateral development agencies, and the PARPA has replaced the ERP as a development strategy.

According to the GOM, the PARPA is an instrument defining policies and actions that have been periodically reviewed and perfected. As such four reviews and perfections were undertaken so far namely the Interim PARPA (I-PARPA), PARPA I, PARPA II and PARPA, which were developed to reduce the incidence of absolute poverty over the periods 2000-2004, 2001-2005, 2006-2009 and 2010-2015, respectively. Note that the I-PARPA is simply the Mozambican version of the I-PRSPs, while both PARPAI and II are versions of the fully developed PRSPs. The major difference between PARPA I and PARPA II is that “the priorities of the former include greater integration of the national economy and an increase in productivity; in particular, it focuses attention on district-based development, creation of an environment favorable to growth of the nation’s productive sector, improvement of the financial system, measures to help small and medium-size companies to flourish in the formal sector, and the development of both the internal revenue collection system and the methods of allocating budgeted funds” (GOM, 2006).

In 2002/03, a second nationally representative household survey of living conditions was conducted by the NIE of Mozambique between July 2002 and June 2003. It had a sample size of 8,700 urban and rural households residing in 144 districts. This sample, like the one used in 1996/97 survey, was also designed to be nationally representative. Technically speaking, the 2002/03 survey was similar in design and execution as the 1996/97 survey. Table 2.4 presents the trend in the incidence, depth, and severity of absolute poverty in Mozambique between 1996/97 and 2002/03.

Table 2.4Poverty reduction in Mozambique, 1996/97-2002/03

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Zone/Region | Headcount Index (%)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  1996/97 2002/03 Dif. | | | Poverty Gap Index(%)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  1996/97 2002/03 Dif. | | | Squared Poverty Gap (%)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  1996/97 2002/03 Dif. | | |
| Rural | 71.3 | 55.3 | -16.0 | 29.9 | 20.9 | -9.0 | 15.9 | 10.7 | -5.2 |
| Urban | 62.0 | 51.5 | -10.05 | 26.7 | 19.7 | -7.0 | 14.6 | 9.6 | -5.0 |
| North | 66.3 | 55.3 | -11.0 | 26.6 | 19.5 | -7.1 | 13.9 | 8.9 | -5.0 |
| Centre | 73.8 | 45.5 | -28.3 | 32.7 | 16.0 | -16.7 | 18.0 | 7.9 | -10.1 |
| South | 65.8 | 66.5 | 0.7 | 26.8 | 29.1 | 2.3 | 13.9 | 16.0 | 2.1 |
| National | 69.4 | 54.1 | -15.3 | 29.3 | 20.5 | -8.8 | 15.6 | 10.3 | -5.3 |

Source: MPF *et al*. (2004).

Note: Dif. = difference.

Figures in the above table show that in 2002/03 all the three national-level poverty indexes declined from the levels registered in 1996/97, a baseline year for poverty reduction analysis in Mozambique. With regard to the national poverty headcount (which is the relevant index), there was a 15.3 percentage point decline in the incidence of absolute poverty (corresponding to an annual average change of -2.60 percent). This implies that “average consumption by those who remain below the poverty line rose between those two periods” (GOM, 2006). The poverty line was fixed at MZM 10,395.23 per person per day (roughly $0.44 per person per day) following the CBN method as in 1996.

Figures in the table also show that poverty reductions were more rapid in rural than in urban zones, and that absolute poverty was still more concentrated in rural than in urban areas. More than 79 percent of the poor still continued living in rural areas, and their poverty continued to be deeper and more severe than that of the urban poor (who represented about half of the urban population or 15 percent of the total Mozambican population).

From the table in question, we can see that regional differences continued to be large, but contrary to 1996/97, the 2002/03 survey data show that the poor were more likely to be found in the south than in the center and north. Regional data also show that a major reduction in the incidence, depth, and severity of poverty was recorded in the center, which in 1996/07 had been the poorest region, with less progress in the north, and no progress in the south (where all the poverty figures increased slightly). The above results seem to suggest that in 2002/03 there was a substantially improved poverty picture relative to 1996/97. However, “although high levels of poverty reduction have been achieved, the situation is still critical in the country because 10 million Mozambicans still live in absolute poverty” GOM (2006). In addition, thenational-level 2002/03 poverty headcount is also much higher than the 2004 figure presented in Table 1 for SSA.

In 2008/09, a third nationally representative household survey of living conditions was conducted by the NIE of Mozambique. It had a sample size of 10,832 urban and rural households. This sample, like those used in 1996/97 and 2002/03 surveys, was also designed to be nationally representative. Technically speaking, the 2002/03 survey was similar in design and execution as the previous surveys. Table 2.5 presents the trend in the incidence of absolute poverty in Mozambique between 1996/97 and 2002/03, as well as between 2002/03 and 2008/09.

Table 2.5 Poverty reduction in Mozambique, 1996/97-2002/03 and 2002/03-2008/09

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Zone/Region | Headcount Index (%)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  1996/97 2002/03 Dif. | | | Headcount Index (%)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  2002/03 2008/09 Dif. | | |
| Rural | 71.3 | 55.3 | -16.0 | 55.3 | 56.9 | 1.6 |
| Urban | 62.0 | 51.5 | -10.05 | 51.5 | 49.6 | -1.9 |
| National | 69.4 | 54.1 | -15.3 | 54.1 | 54.7 | 0.6 |

Source: MPF *et al*. (2010).

Note: Dif. = difference.

Figures in the above table show that contrary to what happed in period 1996/97-2002/03, in which there was a 15.3 percentage point decline in the incidence of absolute poverty), there was a 0.6 percentage point increase in the incidence of absolute povertyin subsequent period (from 54.1 percent in 2002/03 to 54.7 percent in 2008/09). These headcount poverty figures have led analysts such as Boom (2011) to point out that the poverty headcount remained practically the same in period in question. Boom also points out that yet, the Mozambican economy showed sustained high growth rates and there is no little evidence that the income distribution has changed dramatically.

**3. National/Country Situation**

The idea behind this work is to produce one paper that will provide a clear and concise review of poverty in Mozambique and Vietnam, and make a comparison of poverty between the two countries. The table below presents the national/country situation for Mozambique.

Table 3.1National/Country Situation: Mozambique

|  |  |
| --- | --- |
| The context of the country (close concerning to poverty) | In 1996/97, a national household survey on living conditions was conducted by the National Institute of Statistics. This survey, which was an essential first step to determine the true extent of poverty and where it was most severe, produced poverty estimates indicating a national level of the headcount index of 69.4 percent, indicating that the consumption of over two-thirds of the Mozambicans (about 10.9 million people) fell below the national poverty line. In other words, about 70 percent of people in the county lived in a state of absolute poverty. |
| Poverty definition | The impossibility, owing to inability and/or lack of opportunity for individuals, families, and communities to have access to the minimum basic conditions, according to the society’s basic standards. |
| Poverty identification | Households have been classified as poor if their consumption (which is a measure of living standards) is below the national poverty line and non-poor if it is above that cut-off amount. |
| Characteristics of poverty (the poor, the poor household, the poor community) | Review of poverty profiles by the Government of Mozambique reveals that the poor of Mozambique are more likely to be characterized by poor levels of education of economically active members of households (especially women), high dependency rates in households, low productivity in the family agricultural sector, lack of employment opportunities in the agricultural sector and elsewhere, and poor development of basic infrastructure in rural areas.  Empirical evidence indicates that the poor of Mozambique are more likely to be characterized by large household size, low levels of human capital (including low educational levels and the poor health of most of the population), low productivity in the agricultural sector (where most Mozambicans are employed), a weak physical infrastructure and poor access to basic services (including potable water, health facilities, transportation, communications, and markets), and high rates of fertility and corresponding high dependency ratios. |
| Measurement of poverty | Poverty measured by the Headcount index, the Poverty gap index and the Squared poverty gap Index. These three poverty indexes are members of the Foster-Greer-Thorbecke class of poverty measures proposed by Foster *et al*. (1984),and describe in subsection (2.3). |
| Levels and trend of poverty | Evidence from existing household survey data from three consecutive national poverty assessments indicates that between 1997 and 2009, the poverty headcount sharply declined from 69.4 percent in 1997 to 54.1 percent in 2003, but remained practically the same in the most recent period from 2003 to 2009 (from 54.1 percent to 54.7 percent). |
| Poverty reduction activities (they may be larger than PR programs) | Faced with the widespread poverty, in 2001, the GOM launched the country’s first fully developed PRSP named Action Plan for the Reduction of Absolute Poverty I (PARPA I). With this poverty reduction strategy, the central objective of the government was a substantial reduction in the levels of absolute poverty in Mozambique, and the specific objective was to reduce the incidence of absolute poverty from 70% in 1997 to less than 60% by 2005 and less than 50% by the end of this decade. This national poverty target was set along the lines of the MDGs and the HIPC initiative. Over the past decade poverty reduction in Mozambique has been the primary goal not only of the government, but also of the bilateral and multilateral development agencies, and the PARPA has replaced the Economic Rehabilitation Program as a development strategy. The PARPA is an instrument defining policies and actions that have been periodically reviewed and perfected. As such three reviews and perfections were undertaken so far namely the Interim PARPA (I-PARPA), PARPA I, PARPA II and PARPA, which were developed to reduce the incidence of absolute poverty over the periods 2000-2004, 2001-2005, 2006-2009, and 2010-2015, respectively. The three fully developed PRSPs were needed to move further towards poverty reduction in light of both the MDGs and the HIPC initiative. |
| Is growth in Mozambique pro-poor? | Absolute poverty trends show no decline in the most recent periods, in spite the fact that the economy has been showing sustained high growth rates.  Despite the fact that the economy has been showing sustained high growth rates in the most recent periods, there is little evidence of significant change in income distribution. This fact seems to suggest that growth in Mozambique has been likely not pro-poor in the sense that it does not result in a redistribution in favor of the poor. |

**4. Impacts on Policy and the Policy Debate**

In most cases, poverty measurement in developing countries is usually for policy purpose. Thus, researchers and statistics bureaus make use of the poverty lines and measures to construct poverty profiles. These show how the extent of poverty varies across subgroups of a population, and are usually based on geographic location of residence, age, sex, family status, educational level, sector of employment, etc. They also highlight household and community characteristics such as demographic characteristics, education, health and nutrition, agriculture and land ownership, employment, and access to basic social services. Thus, poverty profiles are mainly used to better understand the causes of poverty and also as guides in targeting resources for poverty reduction, so constructing them is typically the first step in formulating an anti-poverty policy.

In poverty reduction analysis, economic growth, equity, and security have been viewed as fundamental requirements for achieving the international poverty target referred to in subsection (2.5). The argument behind the economic grow requirement is that “economies must grow fast enough to reduce poverty, and this requires sustainable economic growth at a rate substantially higher than population growth” (DFID, 2000). Table 2 presents the growth rates required to halve poverty by 2015 in six regions.

Table 4.1 Growth rates required to halve poverty by 2015

|  |  |
| --- | --- |
| Region | Required poverty-reducing growth rate |
| Sub-Saharan Africa | 5.9 |
| Middle East and North Africa | 2.8 |
| East and the Pacific | 3.5 |
| South Asia | 3.9 |
| Latin America and the Caribbean | 7.0 |
| Eastern Europe and Central Asia | 3.8 |

Source: Dagdeviren et al. (2002).

It has been argued that the poverty-reducing growth rates presented in the above table play an important role in the agenda for reducing global poverty by 2015. DFID (2000), for example, points out that without growth, the poverty reduction target will not be achieved, but it is not enough on its own.

With respect to equity requirement, the argument is that economic growth must be pro-poor, i.e., “it must include the poor by maximizing their opportunities and by utilizing their skills, time and resources; poor people require improved access to health, education, markets and assets; trough this they will be enabled to contribute to economic growth and benefit from increased national income” (DFID, 2000).

The argument behind the security requirement is that “the vulnerability of poor people to shocks needs to be reduced. Events such as conflict, ill health, bad weather or economic downturns can drive poor people deeper into poverty. Resources are also needed to allow affordable transfers at family, community and national levels to those unable to participate in the market” (DFID, 2000).

The proponents of the MDGs have based their calculations of the international poverty target on the past poverty decline that happened in the context of very high growth in both the developing and the developed world between 1990 and 1998. According to Bhalla (2004), the simultaneous presence of high growth and low poverty reduction during that period meant that the development process was not, or more accurately had not been, pro-poor, and thus the growth process was definitely not suggestive of any more ambiguous target than the high poverty level of 15% in 2015. This fact has led many researchers over the past ten years to be concerned with the analysis of what poverty decline should be expected given a certain amount of aggregate economic growth. This is the content of the pro-poor growth hypothesis, whose idea behind it is that economic policy in developing countries should encourage growth that benefits the poor. This is in turn is the content of the equity requirement for achieving the above poverty target, according to which growth must be pro-poor in the sense that it must benefit the poor.

Economic growth is believed to play an important role in reducing absolute poverty in developing countries. This is confirmed by Marcus *et al*. (2002), who examined several PRSPs and found out that most of them give absolute priority to economic growth as a means of poverty reduction, aiming, possibly over-optimistically, for annual growth rates of between 6 and 8 percent.

In light with the mentioned above equity requirement for achieving the international poverty target, the concept of pro-poor growth has been broadly defined by a number of international organizations as growth that leads to significant reductions in poverty. In attempting to give analytical and operational content to the concept, other definitions of pro-poor growth have emerged, and the major differences between them are in their focus. Among the important definitions are those developed by McCullock and Baulch (1999), Kakwani and Pernia (2000), Ravallion and Chen (2003), and Bhalla (2004). In this context, “the concept of pro-poor growth is taken to mean a labor intensive growth path that encompasses the economic activities of the poor” (Maxwell and Hanmer, 1999). Note that the focus of this definition is on the need for economic growth to be labor intensive and employing generating. Such a need is justified by the fact that “labor is the poor’s most abundant asset concentrated in rural areas, where the bulk of the poor people live, or on those activities/products that are most important to the poor’s living standards”. McCullock and Baulch (1999) in turn defined pro-poor growth as a situation in which any distributional shifts accompanying economic growth favor the poor, meaning that poverty falls more than it would have if all incomes had grown at the same rate. Note that this definition emphasizes changes in inequality during the growth process in the sense that the incomes of the poor grow at a higher rate than those of the nonpoor. According to Kakwani and Pernia (2000), pro-poor growth can be defined as one that enables the poor to actively participate in and significantly benefit from economic activity; it is inclusive economic growth, and its outcome should be that no person in society is deprived of the minimum basic capabilities[[12]](#footnote-12). For Ravallion and Chen (2003), the growth process is said to be pro-poor if and only if poor people benefit in absolute terms, as reflected in an appropriate measure of poverty. Note that this definition focuses on what happens to poverty, or more precisely, on the rate of change in poverty. Finally, the definition by Bhalla (2004), which focuses on the consumption of pre-defined poor, is that pro-poor growth is the excess of the growth in consumption of a pre-defined poor relative to the average growth rate. Bhalladefined pre-defined poor as the fraction of people observed poor in any particular year. However, it has been argued that growth might be expected to be pro-poor if it takes place in areas and sectors where the poor live and work. For the poorest countries and following Maxwell and Hanmer, this means mostly in rural areas and to a large extent in agriculture.

There are several discussions of pro-poor growth in the literature. These discussions have made the pro-poor growth hypothesis a very controversial issue that has been challenged by a number of empirical studies.In examining the effect of growth on poverty, researchers usually want to know whether the poor are sharing in the growth in average living standards. However, results of many empirical studies suggest that economic growth either did not help the poor or actually made them poorer. On the basis of such a type of results, it has been claimed that “in the recent times the poor have lost ground, both relatively and absolutely, even as average standards of living were rising” (Ravallion and Chen, 1997). This claim has led to a common view that the poor are generally left behind, in the sense that they do not share in the benefits of higher average levels of living.

The above definitions of the concept of pro-poor growth that focus on the influence of growth and inequality on poverty have led many economists to often see the problem of poverty as a special subset of the problem of inequality. This point of view has led to the argument that poverty reduction also depends on the income distribution. This is a very debatable issue that has led many researchers to tentatively explain the simultaneous presence of high growth and low poverty reduction that characterized the world period between 1990 and 1998. One of the most interesting explanations is that “if so much growth has occurred and so little poverty decline, then it must have been the case that world inequality had deteriorated, and worsened by a significantly large amount” (Bhalla, 2004). Such an explanation has led to the argument that a poverty target might be achieved not only through faster economic growth alone, but also trough redistribution, or a combination of faster economic growth and redistribution. As pointed out by Dagdeviren*et al*. (2002), there is a widespread recognition that GDP growth should be combined with mechanisms of redistribution to achieve the international poverty target.

The above discussions suggest that better distribution has as much impact on reducing poverty as has increased growth. Thus, reducing poverty requires policies that stimulate economic growth and ensure that its benefits extend firmly to the poor through both pro-poor growth and redistribution.This requirement has led to the argument that “growth is a necessary but not sufficient condition for poverty reduction, since its impact on the poor depends on how it is distributed across the population” (Fall, 2006).

According to the GOM (2001), lessons from international experience show that countries which have been unable to sustain significant growth in income per capita have also failed to reduce poverty, and by contrast, each of the seven countries which sustained high rates of growth between 1970 and 1995, including two Mozambique’s regional neighbors (Botswana and Mauritius), also achieved significant reductions in absolute poverty. Based on this observed nexus between growth and poverty reduction, it has been argued by the government officials and many observers in Mozambique that rapid growth is an essential and powerful tool for poverty reduction in the medium and long-term. In line with this argument, “the PARPA contains policies aimed at stimulating growth in order to achieve average annual GDP growth rate of 8 percent” (GOM, 2001). This is a target that is expected to create conditions for attaining the PARPA’s objectives.

The above lessons from international experience and the nexus between growth and poverty reduction are also illustrated in table below.

Table 4.2 Economic growth and poverty reduction in Africa

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Country | Period | No. of years | Real per capita GDP growth | Average annual change in headcount index |
| Botswana | 1984-1994 | 10 | 4.8 | -4.50 |
| Ghana | 1988-1998 | 10 | 2.0 | -1.86 |
| Kenya | 1989-1998 | 9 | -0.2 | -0.94 |
| Mali | 1986-1996 | 9 | 0.5 | -0.76 |
| Mauritania | 1987-1996 | 9 | 0.4 | -1.67 |
| Mozambique | 1996-2003 | 7 | 6.3 | -2.60 |
| Senegal | 1986-1997 | 11 | 0.0 | -1.68 |
| Tanzania | 1992-1999 | 7 | 0.0 | 0.53 |
| Uganda | 1993-2003 | 10 | 3.2 | -3.90 |
| Zambia | 1992-2001 | 9 | -4.0 | 0.62 |
| Zimbabwe | 1988-1999 | 11 | 0.5 | -0.59 |

Source: GOM (2006)

The above table presents information on economic growth and poverty reduction in 11 African countries, including Mozambique. Following GOM (2006), figures in the table confirm the evidence from other developing countries similar to Mozambique which indicates that “countries that experienced sustainable economic growth for at least a decade experienced significant reductions in poverty levels”. These are the cases of Botswana, Ghana, and Uganda. Such evidence has led government officials to argue that “the living conditions of poor in Mozambique are influenced by economic growth, since between 1996 and 2003, the country’s economy grew at about 6.3 percent per annum and a 2.6 percentage point average annual decline occurred in the incidence of absolute poverty” GOM (2006). Note that this realized economic growth rate falls below the mentioned above required poverty-reducing growth rate. It is likely that not enough additional investment in both physical and human capital has been undertaken, which is needed for the country’s economy to be able to sustain the targeted growth. Note further that figures in the above table also show that Mozambique has experienced a simultaneous presence of relatively higher growth and lower poverty reduction compared to Botswana and Uganda.

With regard to figures in the above table, any can note that “situations where economic growth was not accompanied by a reduction in poverty are very closely associated with the extent to which income is unequally distributed in that country” GOM (2006). However, Klasen and Woltermann’s(2005) calculations indicate that the Gini coefficient in Mozambique increased from 0.5398 in 1996 to 0.5817 in 2003, implying that inequality rose by 4.2 percent over the period in question. Following Hanmer’s (1999) boundaries, the above Gini coefficients suggest that inequality in Mozambique is very high. As pointed out byBhalla (2004), the fact that inequality has worsened over time suggests that growth in Mozambique was likely not pro-poor in the sense that it did not result in a redistribution in favor of the poor.

Many researchers over the years have tried to analyze poverty reduction in developing countries. By so doing, they have focused their analyses on the argument that well designed policies and development strategies may lead to substantial poverty reduction in developing countries. A much common analysis over the past ten years is that based on the current discussions of pro-poor growth described above. In this context, authors such as Fall (2006) have argued that “the impact of growth on poverty varies according to the initial degree of inequality, the quality of the growth, and the policies adopted to guarantee pro-poor growth (i.e., growth that benefits especially the poor by attempting to improve the distribution of income).

Most of the existing studies have analyzed the effect of macroeconomic factors on poverty. These studies consist of three main types, namely factual, econometric, and macro-simulation studies. They have been either bivariate or multivariate, mainly employing models in which poverty measures or poverty proxies are regressed on economic growth, inequality, and other macroeconomic variables discussed. Some of the studies have adopted a cross-country approach while others have used panel data models. There also a few studies that have employed time series analysis to examine the relation for specific countries. Most of the empirical results reported so far have shown that countries that have been successful in terms of economic growth are also very likely to have been successful in reducing poverty. How strong a poverty-reducing effect growth has, depends on what happens to income distribution. Countries that have combined rapid growth with improved income distribution have reduced poverty the fastest. However, when policies aimed at equity have had a negative side-effect on growth, the poverty reduction impact has been limited or even negative.

Among the important econometric studies are those undertaken by Ravallion and Chen (1997),Barros *et al*. (2000), De Janvry and Sadoulet (2000), Easterly and Fischer (2001), Dollar and Kraay (2001), and Agenor (2004). In this context, Ravallion and Chen (1997) tested the common view that the poor are generally left behind, in the sense that they do not share in the benefits of higher average levels of living.To do so, they used national household survey data for 67 developing countries to estimate a panel data regression model in which the headcount index was regressed on economic growth. The data covered the period 1987-93, and the countries included in the model are from the six regions presented in Table 2.1. They obtained OLS results indicating that “overall, there was a small decrease in poverty incidence in 1987-93, though experiences differed across regions and countries”. These results seem to support the pro-poor growth hypothesis slightly.

Barros *et al*. (2000) investigated the relationship between inflation and unemployment on the one hand and poverty on the other hand. As such, they regressed poverty (measured by the average income-gap) on inflation measured by variations in consumer price index (CPI) and unemployment rate. Utilizing aggregate monthly time series data for Brazil and pooling regional data for six major Brazilian metropolitan areas, they obtained results revealing that both inflation and unemployment are harmfully related with poverty. The inflation-poverty correlation result seems to support the claim that “inflation is the cruelest tax of all, which is often interpreted as meaning that inflation hurts the poor relatively more than the rich” (Easterly and Fischer (2001).

De Janvry and Sadoulet (2000) analyzed the determinants of changes in the incidence of urban and rural poverty, stressing in particular the role of aggregate income growth measured by the real per capita gross national income (GNIpc growth). In their study, they used separate models for the rural and urban populations, and regressed poverty rates (measured by the headcount indexes) on GNIpc growth, real exchange rate growth, hyperinflation dummy, qualitative features of growth (measured by the coefficient of variation of GNIpc, which was used as a measure of adjustment policies), and structural variables (share of agriculture in GDP, population growth, urban/rural population share, secondary education, inequality, and the incidence of urban/rural poverty). The two authors estimated their models using poverty data for 12 Latin American countries between 1970 and 1994, and found that “aggregate income growth reduces urban poverty, the depreciation of the RER increases urban poverty, adjustment policies have a short run cost on poverty, and structural variables have no significant effects”. Note that the growth-poverty correlation results support the pro-poor growth hypothesis, as Ravallion and Chen (1997) also found.

In their survey-based study, Easterly and Fischer (2001) examined the view that inflation makes the poor worse off. Using household survey data for 42 developing and transition countries over 1981-93, they regressed poverty (measured by change in percent of households below the country-specific constructed poverty line) on real GDP, per capita growth, and the inflation tax rate. The two authors found that “high inflation tends to increase poverty”. Note that this result is consistent with that obtained by Barros *et al*. (2000), so it supports the view that inflation makes the poor worse. They also obtained OLS results indicating that “the growth rate has a negative effect on the change in poverty”. Note that this finding, which is consistent with both Ravallion and Chen’s (1997) and De Janvry and Sadoulet’s (2000), supports the pro-poor growth hypothesis.

Dollar and Kraay (2001) regressed the log of per capita income of the poor on the log of real per capita GDP and a set of control variables (lagged levels of mean income, growth rates of mean income, regional dummies, time trend, and interactions of income with dummies). Utilizing unbalanced panel data covering 137 developed and developing countries over the period 1950-1999, and employing OLS and two-stage least squares (2SLS) estimation procedures, they obtained results showing that “the relationship between growth of income of the poor and overall economic growth is one-to-one, a finding that suggests that a range of policies and institutions that are associated with higher growth will also benefit the poor proportionately”. Note that this finding is consistent with both Ravallion and Chen’s (1997) and Easterly and Fischer’s (2001), so it supports the pro-poor growth hypothesis. Dollar and Kraay also examined the poverty effects of five macroeconomic and institutional variables that have been identified as pro-growth in the empirical growth literature (inflation, government consumption, exports and imports relative to GDP, a measure of financial development, and a measure of strength of property rights or better rule of law), but all of them were found to have statistically insignificant effect on poverty.

Finally, Agenor (2004) investigated the links between macroeconomic adjustment and poverty. He specified a log-linear cross-country regression model, and regressed poverty rate (measure by the headcount index for the population as a whole) on inflation rate in consumer prices, youth illiteracy rate, hospital beds per 1,000 persons, real per capita GDP, real per capita GDP growth rate, rate of change of the real effective exchange rate (REER), relative share of the urban population in proportion to total population, rate of change of the terms of trade, standard deviation of the real exchange rate and inflation, and openness to international trade. Utilizing data from 40 developing countries, Agenor estimated his poverty regression using OLS with fixed effects, and obtained results indicating that “changes in the terms of trade, the urbanization ratio, the illiteracy rate and the volatility of inflation do not have a statistically significant impact on poverty”. The results also indicate that “real exchange rate depreciation, a higher degree of openness, and better health conditions tend to lower poverty, whereas inflation and macroeconomic volatility tend to increase it”. However, Agenor found no evidence of asymmetric effect of the level of real per capita GDP on poverty, but by contrast, he found that “positive growth rates of output have no statistically significant effect on poverty, whereas higher negative growth rates affect significantly and adversely the poverty”. He also found that “the fixed effects are statistically significant, suggesting that country-specific factors are important in determining the behavior of poverty rates”. Note that the inflation-poverty correlation result, which is consistent with that obtained by both Barros *et al*. (2000) and Easterly and Fischer (2001), supports the view that inflation makes the poor worse off. Note further that contrary to Ravallion and Chen (1997), Easterly and Fischer (2001), and Dollar and Kraay (2001), Agenor obtained a growth-poverty correlation result that does not support the pro-poor growth hypothesis.

We extend our review to only two studies that attempt to test the pro-poor hypothesis which are not based on the growth elasticity of poverty reduction. These are studies undertaken by McCulloch and Baulch (1999) and James *et al*. (2005). In this context, McCulloch and Baulch (1999) applied their PBG to test data from two Indian states, Andhra Pradesh and Uttar Pradesh. The data covered the period between 1973 and 1989, during which both states secured substantial reductions in the incidence, depth and severity of poverty. The two researchers obtained results revealing that “during the period in question growth in Uttar Pradesh was accompanied by worsening income distribution, whereas in Andhra Pradesh the reverse was true”. These results have led the two researchers to conclude that “growth in Andhra Pradesh was pro-poor whilst growth in Uttar Pradesh was biased against the poor”.

In their discussion paper, James *et al*. (2005) used the 1996/97 and 2002/03 household survey data to examine the extent to which growth in Mozambique has been pro-poor. Their study was based on the trends in economic growth, poverty incidence, and inequality over the period 1996-2003, during which Mozambique’s economy grew about 6.3 percent per annum, the incidence of absolute poverty declined by 2.6 percent annually, and inequality rose by 4.2 percent. In determining whether growth in Mozambique has been pro-poor, James *et al* used the definitions of the concept of pro-poor growth, andconcluded that if one defines Kakwani’s definition that growth is only pro-poor if it reduced inequality, then Mozambique’s recent growth has not been pro-poor. They also concluded that if, on the other hand, one defines economic growth as pro-poor when the incidence of poverty falls, then the recent pattern of growth in Mozambique is definitely pro-poor”.

**5. Conclusions and lessons learnt**

In this paper, an attempt was made to provide a clear and concise review of poverty inMozambique. Such a review will be used to make a poverty comparison between Mozambique and Vietnam.

The review shows that in Mozambique, poverty is defined as the impossibility, owing to inability and/or lack of opportunity for individuals, families, and communities to have access to the minimum basic conditions, according to the society’s basic standards. Note that this definition is based on the basic needs and capabilities perspectives.

The review also shows that evidence from existing household survey data from three consecutive national poverty assessments for Mozambique indicates that between 1997 and 2009, the poverty headcount sharply declined from 69.4 percent in 1997 to 54.1 percent in 2003, but remained practically the same in the most recent period from 2003 to 2009 (from 54.1 percent to 54.7 percent).

The review shows that a review of poverty profiles by the Government of Mozambique reveals that the poor of Mozambique are more likely to be characterized bypoor levels of education of economically active members of households (especially women), high dependency rates in households, low productivity in the family agricultural sector, lack of employment opportunities in the agricultural sector and elsewhere, and poor development of basic infrastructure in rural areas.

Finally, empirical evidence from Mozambique indicates that the poor of Mozambique are more likely to be characterized by large household size, low levels of human capital (including low educational levels and the poor health of most of the population), low productivity in the agricultural sector (where most Mozambicans are employed), a weak physical infrastructure and poor access to basic services (including potable water, health facilities, transportation, communications, and markets), and high rates of fertility and corresponding high dependency ratios.

The lessons learnt from this review are as summarized below:

* The consumption of about55 percent of the Mozambicans falls below the national poverty line. In other words, more than 50 percent of the Mozambican population is in state of absolute poverty;
* Absolute poverty trends show no decline in the most recent periods, in spite the fact that the economy has been showing sustained high growth rates;
* Despite the fact that the economy has been showing sustained high growth rates in the most recent periods, there is little evidence of significant change in income distribution.This fact seems to suggest that growth in Mozambique has been likely not pro-poor in the sense that it does not result in a redistribution in favor of the poor.

**References**

Adams, R. H. and Page, J. (2003): “Poverty, Inequality and Growth in Selected

Middle East and North Africa Countries, 1980–2000,” *World Development*, 31(12), 2027-2048.

African Development Bank and African Development Fund (2001): “*Critical Factors*

*in Three Successful Structural Adjustment Programs*,” ADB/ADF/01/13.

Agenor, P. R. (2004): “Macroeconomic Adjustment and the Poor: Analytical Issues

and Cross-Country Evidence,” *Journal of Economic Surveys*, 18(3), 351-408.

Angle, R. F. and C. W. J Granger (1987): “Co-Integration and Error Correction:

Representation, Estimation and Testing,” *Econometrica*, 55(2), 254-276.

Appleton, S. (2001): “The Rich Are Just Like Us Only Richer: Poverty Functions or

Consumption Functions?,” *Journal of African Economies*, 10(4), 433-469.

Arndt, C., H. T. Jensen, and F.Tarp (2002): “Stabilization and Structural Adjustment

in Mozambique: An appraisal,” *Journal of International Development*, 12(3), 299-323.

Baltagi, B. H. (2005): “*Econometric Analysis of Panel Data*,” West Sussex: John

Wiley & Sons Ltd.

Baltagi, B. H. and P. X. Wu (1999): “Unequally Spaced Panel Data Regressions with

AR(1) Disturbances,” *Econometric Theory*, 15(6), 814-823.

Barros, R. P., C. Corseuil, R. Mendonça, and M. C. Reis (2000): “Poverty, Inequality,

and Macroeconomic Instability,” Working Paper No. 750, Rio de Janeiro: Applied Economic Research Institute.

Bhargava, A., L. Franzini, and W. Narendranathan (1982): “Serial Correlation and the

Fixed Effects Model,” *Review of Economic Studies*, 49, 533-549.

Bigsten, A. and J. Levin (2001): “*Growth, Income Distribution,and Poverty,*”

Helsinki: United Nations University/World Institute for Development Economics Research.

Bhalla, S. S. (2004): “Poor Results and Poor Policy: A Comparative Analysis of

Estimates of Global Inequality and Poverty,” *CESifo Economic Studies*, 50(1), 85-132.

Boom, B. v. d. (2011): “Analysis of Poverty in Mozambique: Household Poverty Status,

Children Malnutrition and Other Indicators 1997, 2003, 2009,” Amsterdam: Center for World Food Studies.

Bruck, T. and K. Broeck (2006): “*Growth, Employment and Poverty in Mozambique*,”

Discussion Paper 21.

Bruck, T. (1997): “*Macroeconomic Effects of the War in Mozambique*,” Working

Paper Number 11.

Callan, T. and B. Nolan (1991): “Concepts of Poverty and the Poverty Line,” *Journal*

*of Economic Surveys*, 5(3), 243-261.

Chen, S. and M. Ravallion (2007): “*Absolute Poverty Measures for the Developing*

*World, 1981-2004,*” Policy Research Working Paper 4211, World Bank.

Chen, S. and M. Ravallion (2004): “How Have the World’s Poorest Fared since the

Early 1980s?,” *World Bank Research Observer*, 19(2), 141-69.

Chen, S. and M. Ravallion (2001): “How Did the World’s Poorest Fare in the

1990s?,” *Review of Income and Wealth*, 47(3), 283-300.

Chen, D., and M. Ravallion (forthcoming): “*Global Poverty Measures 1987-1998 and*

*Projections for the Future*”, In Bigsten, A. and J. Levin (2001): “*Growth, Income Distribution,and Poverty,*” Helsinki: United Nations University/World Institute for Development Economics Research.

Chen, S., G. Datt, and M. Ravallion (1998): “*POVCAL: A Program for Calculating*

*Poverty Measures from Grouped Data*,” World Bank: http://www.worldbank.org/lsms/tools/povcal/.

Dagdeviren, H., R. Hoeven, and J. Weeks (2002): “Poverty Reduction with Growth

and Redistribution”, *Development and Change*, 33 (3), 383-413.

Datt, G., K. Simler, S. Mukherjee, and G. Dava (2000): “*Determinants of Poverty in*

*Mozambique: 1996/97,*” FCND Discussion Paper No. 78, Washington D.C.: International Food Policy Research Institute.

Datt, G. and D. Jolliffe (1999): “*Determinants of Poverty in Egypt: 1997,*” FCND

Discussion Paper No. 75, Washington D.C.: International Food Policy Research Institute.

Datt, G. and M. Ravallion (1992): “Growth and Redistribution Components of

Changes in Poverty: A Decomposition with Application to Brazil and India,” *Journal of Development Economics*, 38, 275–295.

Deaton, A. S. (2001): “Counting the World’s Poor: Problems and Possible Solutions,”

*World Bank Research Observer*, 16(2), 125-147.

Deaton, A. and J. Muellbauer (1986), “On Measuring Child Costs: With Applications

to Poor Countries,” *Journal of Political Economy*, 94(4), 720-744.

De Janvry, A. and E. Sadoulet (2000): “Growth, Poverty, and Inequality in Latin

America: A Causal Analysis – 1970-94,” *Review of Income and Wealth*, 46(3), 267-287.

Demery, L. and L. Squire (1996): “Macroeconomic Adjustment and Poverty in

Africa: An Emerging Picture,” *World Bank Research Observer*, 11(1), 39-59.

Department for International Development (UK) (2000): “*Halving World Poverty by*

*2015: Economic Growth, Equity, and Security*”, London: DFID.

Dickey, D. A. and W. R. Bell, and R. B. Miller (1986): “Unit Roots in Time Series

Models: Tests and Implications,” *American Statistician*, 40(1),12-26.

Dickey, D. A. and W. A. Fuller (1981): “Likelihood Ratio Statistics for

Autoregressive Time Series with a Unit Root,” *Econometrica*, 49(4), 1057-1072.

Dickey, D. A. and W. A. Fuller (1979): “Distributions of the Estimators for

Autoregressive Time-Series with a Unit Root,” *Journal of the American Statistical Association*, 74(3), 427-431.

Dollar, D. and A. Kraay (2002): “Growth is Good for the Poor,” *Journal of Economic*

*Growth*, 7(3), 195-225.

Easterly, W. (2001), “*The Effect of IMF and World Bank Programmes on Poverty*,”

Discussion Paper No. 2001/102, World Institute for Development Economics Research.

Easterly, W. and S. Fischer (2001), “Inflation and the Poor,” *Journal of Money,*

*Credit and Banking*, 33(2), 160-178.

Engsted, T. and J. Bentzen (1997): “Dynamic Modeling of Energy Demand: A

Guided Tour throughthe Jungle of Unit Roots andCointegration,” *OPEC Review*, 21(4), 261-293.

Engle, R. F. and C. W. J. (1987): “Cointegration and Error Correction:

Representation, Estimation, and Testing,” *Econometrica*, 55(2), 251-276.

Fall, B. (2006): “*Modelling Poverty Reduction,*” Publication No. 9, London: Debt

Relief International Ldt.

Fields, G. S. (1998): “Poverty, Inequality, and Economic Well-Being: African

Economic Growth in Comparative Perspective,” Collaborative Research Project.

Foster, J., J. Greer, and E. Thorbecke (1984): “A Class of Decomposable Poverty

Measures,” *Econometrica*, 52(3), 761-766.

Fox, L., E. Bardasi, and K. V. Broeck (2005): “*Poverty in Mozambique: Unravelling*

*Changes and Determinants,”* African Region Working Paper Series No. 87, World Bank.

Gaiha, R. (2003): “Are Millennium Goals of Poverty Reduction Useful?,”*Oxford*

*Development Studies*, 31(1), 59-84.

Gerster, R. and S. Zimmermann (2005), “*UP- Scaling for Poor ICT-Policies and*

*Practices: A Review of Experiences with Emphasis on Low-Income Countries in Asia and Africa,*” Berne: Swiss Agency for Development and Cooperation.

Glennerster, H., J. Hills, D. Piachaud, and J. Webb (2004): “*One Hundred Years of*

*Poverty and Policy*,” York: Joseph Rowntree Foundation.

Government of Mozambique (2006): “*Action Plan for the Reduction of Absolute*

*Poverty: 2006-2009 (PARPA II),*” Maputo: Government of Mozambique.

Government of Mozambique (2005): “*Mozambique Macro-Framework Mission*,”

Maputo: Ministry of Planning and Finance.

Government of Mozambique (2001): “*Action Plan for the Reduction of Absolute*

*Poverty: 2001-2005 (PARPA),*” Maputo: Government of Mozambique.

Government of Mozambique (2000): “Interim *Poverty Reduction Strategy Paper:*

*Incorporating the Action Plan for the Reduction of Absolute Poverty,”* Maputo: Government of Mozambique.

Greene, W. H. (2003): “*Econometric Analysis*”, New Jersey: Prentice-Hall.

Greer, J. and E. Thorbecke (1986): “Food Poverty Profile Applied to Kenyan

Smallholders,” *Economic Development and Cultural Change*, 35(1), 115-141.

Grosh, M. E. and P. Glewwe (1998): “Data Watch: The World Bank's Living

Standards Measurement Study Household Surveys,” *Journal of Economic Perspectives*, 12(1), 187-96.

Hanley, E. (2001): “Thinking and Doing Things aboutPoverty: New Initiatives from

the Centre,” *Progress in Development Studies* 1 (1), 57-61.

Hanlon, J. (1997): “*Peace without Profit: How the IMF Blocks Rebuilding in*

*Mozambique,”* In Farahane, M. J. (1998): *“The Efficacy of Devaluations as an Adjustment Policy Tool in Mozambique,”* Gaborone: University of Botswana.

Hausman, J. A. (1978): “Specifications Tests in Econometrics, ”*Econometrica*, 46(6),

1251-1271.

Hope, K. R. (2004): “The Poverty Dilemma in Africa:Toward Policies for Including

the Poor,” *Progress in Development Studies* 4(2), 127-41.

Hsiao, H. (2003): “*Analysis of Panel Data*,” New York: Cambridge University Press.

International Monetary Fund (2007a): “*Poverty Reduction Strategy Papers (PRSP),*”

IMF: http://www.imf.org/external/np/prsp/prsp.asp/.

International Monetary Fund (2007b): “*International Financial Statistics Online:*

*Mozambique,”* Washington, D.C.: International Monetary Fund.

International Monetary Fund and the World Bank (1999): “*Poverty Reduction*

*Strategy Papers: Operational Issues,*” Washington, D.C.: IMF/World Bank.

Jahan, S. (2000): “*Measurements of Human Development: Seven Questions*,” New

York: United Nations Development Program.

James, R. C., C. Arndt, and K. R. Simler (2005) “*Has Economic Growth in Mozambique Been Pro-Poor?*,” FCND Discussion Paper 202, Washington, D.C.: International Food Policy Research Institute.

Johansen, S. (1991): “Estimation and Hypothesis Testing of Cointegration Vectors in

Gaussian Vector Autoregressive Models,” Econometrica, 59(6), 1551-1580.

Johansen, S. (1988): “Statistical Analysis of Cointegration Vectors,” *Journal of*

*Economic Dynamics and Control*, 12(2), 231-254.

Johansen, S. and K. Juselius (1994): “Identification of the Long-Run and the Short-

Run Structure: An Application to the ISLM Model,” *Journal of Econometrics*, 63 (1): 7-36.

Johansen, S. and K. Juselius (1992): “Testing Structural Hypotheses in a Multivariate Cointegration Analysis at the Purchasing Power Parity and the UncoveredInterest Parity for the U.K.,” *Journal of Econometrics*, 53(2), 211-214.

Johansen, S. and K. Juselius (1990): “Maximum Likelihood Estimation and Inference

onCointegration with Applications to the Demand for Money,” *OxfordBulletin of Economics and Statistics*, 52(2), 169-210.

Kakwani, N. and E. M. Pernia (2000): “What Is Pro-Poor Growth?,” *Asian*

*Development Review.*18(1), 1-16.

Klasen, S. and Woltermann, S. (2005): “*The impact of Demographic Dynamics on*

*EconomicDevelopment, Poverty and Inequalityin Mozambique*,” Discussion Paper Series 126, University of Goettingen, Germany.

Klugman, J. (2002): “*A Sourcebook for Poverty Reduction Strategies*,” Washington,

D.C.: World Bank.

Laabas, B. and I. Limam (2004): *“Impact of Public Policies on Poverty,Income*

*Distribution and Growth,”* Arab Planning Institute, Kuwait.

Lanjouw, P. and M. Ravallion (1995): “Poverty and Household Size,” *Economic*

*Journal* 105(433), 1415-1434.

Levine, R. and D. Renelt (1992): “A Sensitive Analysis of Cross-Country Growth

Regressions,” *American Economic Review*, 82(4), 942-963.

Lipton, M. and M. Ravallion (1993): “*Poverty and Policy*,” WPS 1130, World

Bank.

Maddala, G. S. (2005): “*Introduction to Econometrics,*” Chichester: John Wiley &

Sons, Ltd.

Marcus, R., J. Wilkinson, and J. Marshali (2002): “Poverty Reduction Strategy Papers

(PRSPs): Fulfilling their Potential for Children in Poverty?,” *Journal of International Development,* 14(8), 1117-28.

Maxwell, S. and L. Hanmer (1999): “*For Richer, for Fairer:Poverty Reduction and*

*Income Distribution*”, ID21 Insights No. 31, London: Overseas Development Institute.

McCulloch, N. and B. Baulch (1999): “*Tracking Pro-Poor Growth: New Ways to*

*Spot the Biases and Benefits*,” ID21 Insights No. 31, Sussex: Institute of Development Studies.

Ministry of Planning and Finance/International Food Policy Research Institute, and

Purdue University (2004): *“Poverty and Well-Being in Mozambique: The Second National Assessment,”* Washington, D.C.

Ministry of Planning and Finance, Eduardo Mondlane University, and International

Food Policy Research Institute (1998): *“Understanding Poverty and Well-Being in Mozambique: The First National Assessment (1996–97),”* in Government of Mozambique (2001): “*Action Plan for the Reduction of Absolute Poverty: 2001-2005 (PARPA),*” Maputo: Government of Mozambique.

Pesarani, M. H. (2004): “*General Diagnostic Tests for Cross-Section Dependence in*

*Panels*,” IZA Discussion Paper No. 1240, University of Cambridge.

Randolph, W. C. (1988): “A Transformation for Heteroscedastic Error Components

Regression Models,” *Economics Letters*, 27(4), 349-354.

Ravallion, M. (1997): “Can High-Inequality Developing Countries Escape Absolute

Poverty?,”*Economics Letters*, 56(1), 51-57.

Ravallion, M. (1996): “Issues in Measuring and Modelling Poverty,” *Economic*

*Journal*, 106(438), 1328-1343.

Ravallion, M. and S. Chen (2003): “Measuring Pro-Poor Growth,” *Economics*

*Letters*, 78(1), 93-99.

Ravallion, M. and S. Chen (1996): “*What Can New Survey Data Tell Us about Recent*

*Changes in Distribution and Poverty?*,” Policy Research Working Paper 1994, World Bank.

Ravallion, M. and Bidani, B. (1994): “How Robust is a Poverty Profile?,” World Bank

Economic Review, **8(1), 75-102.**

Romer, C. D. and D. H. Romer (1998): “*Monetary Policy and the Well-Being of the*

*Poor*,” Working Paper No. 6793, National Bureau of Economic Research.

Rowntree, B. S. and G. R. Lavers (1951): “*Poverty and the Welfare State,*” In Sen, A.

(1983): “Poor, Relatively Speaking”, *Oxford Economic Papers*, 35(2), 153-169.

Rowntree, B. S. (1901): “*Poverty: A study of Town Life*,” In Glennerster*et al*. (2004):

“*One Hundred Years of Poverty and Policy*,” York: Joseph Rowntree Foundation.

Rowntree, B. S. (1901): “*Poverty: A study of Town Life*,” In Ruggles, P. (1990):

“*Alternative Poverty Measures and Their Implications for Public Policy*,” Washington, D.C.: The Urban Institute Press.

Rupasingha, A. and S. J. Goetz (2003): “*The Causes of Enduring Poverty: An*

*Expanded Spatial Analysis of theStructural Determinants of Poverty in the US*,”Rural Development Paper No. 22, The Northeast Regional Center for Rural Development.

Sen, A. (1979): “Issues in the measurement of Poverty,” *Scandinavian Journal of*

*Economics*, 81(2), 285-307.

Sen, A. (1976): “Poverty: An Ordinal Approach to Measurement,” *Econometrica*,

44(2), 219-231.

Simler, K. R. and V. Nhate (2005): “*Poverty, Inequality, and Geographic Targeting:*

*Evidence from Small-Area Estimates in Mozambique,*” FCND Discussion Paper 192, Washington D.C.: International Food Policy Research Institute.

Simler, K. R., S. Mukherjee, G. Dava, and G. Datt (2004): “*Rebuilding after War:*

*Macro-Level Determinants of Poverty Reduction in Mozambique,*” Research Report 132, Washington D.C.: International Food Policy Research Institute.

Tarp, F., C. Arndt, H. T. Jensen, S. Robinson, and R. Heltberg (2002): “*Facing the*

*Development Challenge in Mozambique: An Economywide Perspective,*” Washington, D.C.: International Food Policy Research Institute.

Tarp, Finn, Kenneth Simler, Cristina Matusse, Rasmus Heltberg and Gabriel Dava (2002) "The

robustness of poverty profiles reconsidered". *Economic Development and Cultural Change* 51(1): 77-108.

Takayama, N. (1979): “Poverty, Income Inequality, and Their Measures: Professor

Sen’s Axiomatic Approach Reconsidered,” *Econometrica*, 47(3), 747-759.

United Nations Development Program (1997): “*Human Development Report 1997,*”

New York: Oxford University Press.

World Bank (2007a): “*World Development Indicators 2006: Mozambique,”* 2007

CD-ROM, Binghamton University Library.

World Bank (2007b): “*World Bank Africa Database 2005 Online: Mozambique,”*

2007 CD-ROM, Binghamton University Library.

World Bank (1990): “*World Development Report 1990*,” Washington, D.C.: World Bank.

1. “This poverty line is based on an average of national poverty lines in poor countries, which reflect people’s ability to afford a diet sufficient to meet minimal nutritional requirements. It is measured in 1993 purchasing power parity (PPP)prices, which are defined as the number of units of a country’s currency required to purchase the same amount of goods and services as one dollar would in the United States. It is an attempt to remove the distortionary effect of imperfect exchange rates, and create proper comparisons of living standards” (DFID, 2000). According to Deaton (2001), “the current concept for world poverty is the number of people who live in households whose daily consumption per head is less than the PPP equivalent of $1/day in constant 1985 PPP dollars. In the latest revision, this has been updated to $1.08 in constant 1993 PPP dollars, but is still conveniently referred to as the $1/day poverty line”. [↑](#footnote-ref-1)
2. This is one of the several approaches that have been adopted in developing countries to setting poverty lines. It was developed by Ravallion and Bidani (1993), and considers poverty as “a lack of command over basic consumption needs, and the poverty line as the cost of those needs”. It allows constructing the total poverty line as a sum of a food and non-food poverty line, and involves estimating a specific regression model for household *i* in region *j*. [↑](#footnote-ref-2)
3. According to Kakwani (1980), there are two drawbacks with the poverty gap (an index that has been used by the U.S. Social Security Administration): “(i) it is completely insensitive to the number of power; (ii) it does not take into account the inequality of income among the poor”. [↑](#footnote-ref-3)
4. According to Ravallion (2001), “the Gini coefficient is the most popular measure of income inequality.Following Fall (2004), “it was developed by the Italian statistician CorradoGini, and expresses a number between 0 and 1, where 0 corresponds with perfect equality (where everyone has the same income) and 1 corresponds with perfect inequality (where one person has all the income, and everyoneelse has zero income). When the Gini coefficient is multiplied by 100, the measure of inequality is referred to as the Gini Index, which ranges from zero (when everyone has the same income) to 100% (when the richest person has all the income)”. Another popular measure of income inequality is the one defined as “the income or expenditure of the poorest 20% of the population as a percentage of total national income” (DFID, 2000). [↑](#footnote-ref-4)
5. According to Grosh and Glewwe (1998), the World Bank established the LSMS in 1980 to explore ways of improving the accuracy, timeliness and policy relevance of household survey data collected by government statistical offices in developing countries. Their objective is to collect data on many dimensions of household well-being that can be used to assess household welfare, understand household behavior, and evaluate the effect of various government policies on the living conditions of the population. [↑](#footnote-ref-5)
6. Accordind to Deaton and Muellbauer (1986), the Engel method rests on the supposition that the standard of living of adults is correctly indicated by the share of the household budget devoted to food. [↑](#footnote-ref-6)
7. There are eight MDGs: “eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; and develop a global partnership for development” (Gaster and Zimmermann, 2005). [↑](#footnote-ref-7)
8. This poverty line is an internationally agreed measure of absolute poverty. According to DFID (2000), the international poverty line is based on an average of national poverty lines in poor countries, which reflect people’s ability to afford a diet sufficient to meet minimal nutritional requirements. It is measured in 1993 purchasing power parity (PPP)prices, which are defined as the number of units of a country’s currency required to purchase the same amount of goods and services as one dollar would in the United States. It is an attempt to remove the distortionary effect of imperfect exchange rates, and create proper comparisons of living standards. [↑](#footnote-ref-8)
9. From 1987 to 1999, “the bulk of IMF concessional lending was provided under the ESAF” (IMF, 2007). [↑](#footnote-ref-9)
10. This argument is confirmed by Klugman (2002), who points out that “the international development community has mandated that all low-income countries receiving debt relief under the HIPC initiative or concessional lending from the World Bank, through the IDA, or the IMF, through the PRGF, should develop country-owned poverty reduction strategies; these are on the agenda of some 77 low-income countries”. [↑](#footnote-ref-10)
11. *PARPA* is a Portuguese acronym standing for Action Plan for the Reduction of Absolute Poverty. [↑](#footnote-ref-11)
12. (Kakwani and Pernia, 2000) strengthen their definition as follows. “The poor have much lower well-being than the nonpoor because they lack the resources to satisfy the minimum basic necessities of life. The growth process that results from market forces generally benefits the rich proportionally more than the poor. This is because the rich have inherent advantages (e.g., human and material capital) in a market economy. Moreover, in many countries, governments knowingly or unknowingly adopt policies that are biased in favor of the rich. Consequently, the gap in well-being between the poor and the rich tends to persist, if not widen, over time. To foster the overall well-being of society, governments need to pursue policies that will reduce this gap. Promoting pro-poor growth requires a strategy that is deliberately biased in favor of poor so that the poor benefit proportionately more than the rich. Such an outcome would rapidly reduce the incidence of poverty so that those at the bottom end of the distribution curve of consumption would have the resources to meet their minimum basic needs” (Kakwani and Pernia, 2000). [↑](#footnote-ref-12)