POPULATION AND DEVELOPMENT

A Festschrift in Honour of Professor K.A.P. Siddhisena

Editors

Lakshman Dissanayake Swarna Ukwatta

Department of Demography University of Colombo Sri Lanka

Population and Development

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Lakshman Dissanayake Swarna Ukwatta

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POVERTY CONCEPTS, TRENDS IN GLOBAL POVERTY AND SRI LANKA

Ruwan Jayathilaka³⁶

Introduction

There is a large body of literature on the concept of poverty in general and its measurement. Poverty has been one of the most debated concepts in development economics and international trade, with the international focus on poverty reduction under Millennium Development Goals (MDG) drawing much attention to its definition and measurement. Over at least the last two decades, the definition of poverty has also been a central issue in policy making towards poverty reduction in developing countries. The reason for this is because poverty definitions and measurements have important implications for poverty reduction policies. A study of India and Peru, drawing on both national data and micro surveys, found that significantly different people were identified as poor in the two countries. This was determined according to two different measurements of poverty ranging from a narrow definition, in terms of the monetary capability, to a broader definition, in terms of the participatory approach adopted by the United Nations Development Programme (UNDP) (Ehrenpreis, 2006). Due to the complexities associated with the definition and measurement of poverty, there is a growing body of literature dealing with these issues (FAO, 2005; Spicker, Leguizamon, Gordon, Poverty, and Council, 2007; World Bank, 2005, 2014). "Fighting poverty in all its dimensions" has become a core developmental policy issue

³⁶ Visiting Lecturer, University of Colombo, Sri Lanka.

for national governments as well as global institutions such as the World Bank and the United Nations (World Bank, 2013).

Existing empirical evidence and various definitions of poverty demonstrate that it is a "multidimensional social phenomenon". The general discourse of poverty includes the material aspects of life, and the inclusion of social, cultural and political aspects when studying poverty. It also questions what may be achieved, given the available resources and the prevailing environment, compared to what is actually achieved? Should the same and measurement methods applied definitions be for comparisons in all countries? Are there "objective" methods, or are value judgments involved? What is the rationale for defining a poverty line? Should it be absolute as in the case of the MDGs and most developing countries, or relative as in the rich Organisation of Economic Co-operation and Development (OECD) countries? (Ehrenpreis, 2006:10). To address the above questions it is necessary to understand the concepts of poverty and its measurement. The rest of this section focuses on these issues, before discussing the trends in global poverty and Sri Lanka.

Concepts of Poverty and Its Definitions

As noted above, the concept of poverty is complex and has led to the term being viewed as "slippery". Poverty means different things to different people in a country as well as to different people living in different countries. For this reason, it has been defined in a variety of ways ranging from a narrow definition, in terms of income or consumption, to broader definitions, in terms of human development, social exclusion, lack of capability in functioning, economic and social vulnerability, livelihood and sustainability, inability to achieve basic needs and relative deprivation. According to the narrow definition, in terms of monetary income, the focus has been on whether individuals or households have enough income to meet their basic needs. On the other hand, broader definitions cover other aspects of poverty beyond an individual's income and consumption (Christiaensen, Scott, and Wodon, 2002; Haughton, 2009; Stewart, Saith, and Harriss-White, 2007; World Bank, 2005). Given the above, it is clear that there is no single, universally accepted definition of "poverty". However, poverty has been traditionally understood to mean a lack of access to resources, productive assets and income resulting in a state of material deprivation³⁷. Recently however, the concept of poverty and the discussion of its causal explanations have been broadened³⁸. As the consumption/income approach to define poverty has come under increased criticism, it has been suggested that in the analysis of poverty, common property resources and the stateprovision of commodities should be taken into account, and the concept of poverty should be broadened to include the lack of dignity and autonomy (Jodha, 1986). The inclusion of the latter in the meaning of poverty draws from the insight that being non-poor implies a "freedom from the necessity to perform activities that are regarded as subservient and (the) ability to choose self-fulfilling and rewarding life styles" (Baulch, 1996:83).

Broader definitions of poverty also focus on well-being. People who lack the "capability" to function in society might have a lower well-being (Sen, 1984) or be more vulnerable to income and price shocks. Thus, poverty means either lack of command over commodities in general (that is, a severe constriction of the choice set) (Watts, 1967) lack of a specific type of consumption (for example, too little food energy intake) deemed essential to constitute a reasonable standard of living in a society, or lack of "ability" to function in a society (Haughton, 2009).

In the first instance, Sen (1976, 1981, 1985, 1987) emphasised that income was the only valuable factor for increasing the ability to overcome the issues of poverty. In the latter instances however, Sen (1999) highlighted, using the term "capabilities framework", that poverty is lack of certain basic capabilities, such as food and literacy, as much as lack of adequate income (Sen, 1999). The new definition formulated by the World Development Report 2000/2001 highlighted health, education, vulnerability to risk and empowerment as economic indicators in the identification of

³⁷ See (Baulch, 1996) for more discussion of the definition of poverty.

³⁸ This discussion draws heavily from (Baulch, 1996; Lipton, 1997).

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levels and locations of poverty. According to this method poverty is better measured in terms of different dimensions, most of which are non-economic dimensions (i.e. basic education, health care, nutrition, water, sanitation and household amenities). Economic dimensions can also be used though, and these include income, consumption, employment and wages.

As shown in Figure 1, Baulch (1996:2) has proposed the pyramid of poverty concepts to schematize the range of poverty concepts. The top of the pyramid represents the narrowest definition of poverty (private consumption) while the bottom of the pyramid represents the broadest definition. Referring to this pyramid, Haan and Maxwell (1998:4) liken the World Bank's definition of poverty to the top of the pyramid and UNDP's to the base because of the latter's emphasis on human development (Haan and Maxwell, 1998:4). One could say that the World Bank has adopted a definition of poverty that is close to the top of the pyramid and that UNDP, particularly through its work on human development (UNDP, 1997), has adopted a definition close to the bottom (Haan and Maxwell, 1998).

As shown in the pyramid in Figure 1, when the definition of poverty becomes wider, richer and more meaningful, it also becomes the less practical to operate, and more difficult to use for making quantitative comparisons.

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Figure 1 Pyramid of Poverty Concepts

Source : Baulch (1996) and USAID (2004)

The pyramid of poverty concept provides an important insight into the trade-off between conceptual adequacy and practicality. It seems that income is a much more manageable concept to operate than the more complex multidimensional definitions of poverty. Income is also the central variable in absolute poverty, affecting most or all of the other factors that go into broader definitions of poverty (Institute of Policy Studies, 2005). Hence, most poverty literature (e.g., Haan and Maxwell (1998), Sen (1985) and USAID (2004)) point out that the top of the pyramid represents the narrowest definition which is easier to operate, while the bottom of the pyramid represents the broadest definition of poverty which is difficult to operate.

Objective and Subjective Perspectives

A large number of extant studies on poverty define a poor person as an individual who lacks substantive resources to reach an acceptable standard of living. Generally, the analysis is also restricted to economic deprivation and misery. Although, most researchers seem to agree on this general definition, there have been a large number of discussions about the best approach to measuring poverty. Thus, in recent years, there have been several studies published concerning the effects of using objective (indirect) and subjective (direct) ways of measuring poverty (Kangas and Ritakallio, 1998).

While subjective measures deal with the standard of living which people enjoy, the objective measures focus on people's access to different kinds of resources. For example, subjective indicators are measures of the shortages in the consumption of necessities and of perceived over-indebtedness and scarcity. In short, this means understanding what poverty is and acknowledging that poverty must be defined by those experiencing it themselves. Thus, in some instances definitions of poverty may be disempowering and may not capture the true nature of deprivation. On the other hand, objective poverty measures are defined in a more "scientific" manner and focus on quantifiable dimensions; food baskets which meet nutritional requirements for instance. The main problem of the objective approach though is to find a valid and reliable measure of the economic resources people are in control of, whilst also defining the boundaries of the poverty line³⁹.

Chronic and Transient Poverty

The chronic poor always live in poverty and have very few assets or opportunities to escape it. In contrast, groups which are in transient poverty remain so only for short period of time. These transient poor can move out of poverty once the exogenous shock has passed as their poverty might, for example, be related to seasonality, or to losing a job. The concepts of chronic and transient poverty recognise that poverty is dynamic, and that people may move in and out of it over time.

There are other concepts that come under chronic and transient poverty; namely being chronically poor or transitory poor. If an individual is consistently poor over a long period of time, that person is identified as chronically poor. The transitory poor are identified as individuals who fluctuate between inconsistent

³⁹ This discussion draws heavily from (Kangas and Ritakallio, 1998; Penttilä and Nordberg).

periods of poverty. When an individual is in a state of poverty for a specific period, such individuals can be identified as the occasional poor. The non-poor are individuals who consistently live in conditions which are identified to be above the poverty line. These poverty dynamics are graphically displayed in Figure 2.



On the whole, poverty is rather complex and multi-dimensional. It is not just an inadequacy of income to meet basic needs or the inability to spend. It also depends on the availability of resources for households or individuals to meet their needs. This aspect is based on the comparison of an individual's income, consumption, education or other attributes, which are considered as key factors that contribute to being poor. Poverty is a deprivation of essential assets and opportunities to which every human being is entitled.

Measurements of Poverty

Measuring poverty is even more complex than defining poverty and identifying its different aspects. As Maxwell (1999:1) has stated convincingly, "the complexity of measurements mirrors the complexity of definitions, and the complexity increases when participatory methods are used and people define their own indicators of poverty". Therefore, a large number of poverty measurements have been used in empirical studies since poverty itself is a complex multi-dimensional phenomenon. Within the poverty literature, there are some well-known surveys and reviews on these quantitative techniques used to measure poverty (Alkire and Foster, 2008; Lipton and Ravallion, 1993; Sen, 1987, 1999).

There are two common broader concepts of poverty that have been used to measure poverty by researchers and policy analysts. These are absolute poverty and relative poverty. Absolute poverty measures the number of people living below a certain income threshold or the number of households unable to afford certain basic goods and services. For example; if we take one household and it is below the poverty level income (or expenditure), then that household is in absolute poverty. Relative poverty measures the extent to which a household's financial resources falls below an average income threshold of the economy. Relative poverty compares the lowest segment of a population with the upper segment and is usually measured by income quintiles or deciles. Trends in these two concepts can move in opposite directions. Hence, as a result of the gap between the upper and lower strata of a population reducing due to the decline in the well-being of the former which simultaneously makes such households fall beneath the absolute poverty line, absolute poverty can increase while relative poverty line, absolute poverty can increase while relative poverty decreases (World Bank, 2013, 2014).

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Even within absolute poverty countries often distinguish between indigence, or primary poverty and secondary poverty (sometimes referred to as extreme and overall poverty). Indigence usually refers to those who do not have access to basic necessities for human survival, while other forms of poverty refer to a degree of deprivation above that threshold. Poverty can be an absolute notion in the space of capabilities, though relative in commodities or characteristics (Lok-Dessallien, 1999; Makoka and Kaplan, 2005; Sen, 1983, 1985). For example, a household incapable of obtaining sufficient food for survival is considered absolutely poor. However, the cost and composition of a food basket may vary considerably between households across different groups, regions and countries. Absolute poverty refers to the lack of ability to satisfy the needs for physical subsistence; and relative poverty extends the concept to consider individuals as social beings who have a psychological need to participate in a society and share in its customs and norms.

From all the different aspects and definitions of poverty, analysts have used a large number of empirical measurements or indicators. These include the poverty headcount index, the depth of poverty index, the poverty severity of poverty index, the Foster-Greer-Thobecke poverty index, the human poverty index and the multi-dimensional poverty index.

For a long time, the common approach to measuring poverty has been to count the number of people who fall below an identified poverty line (defined with varying degrees of arbitrariness) for income or consumer spending. Measuring poverty levels based on the household expenditure however, is assumed to be more reliable and more stable than using household income (Klasen, 1997). The poverty literature has highlighted several reasons why the use of income is problematic (Christiaensen et al., 2002; Haughton, 2009). First, people might forget what they may have earned over the past period. There is also a tendency for people to not disclose the full extent of their income for several reasons. In addition, some sources of income are difficult to observe, such as the extent to which the value of farm output is rising or falling over time. Due to these disadvantages, most poverty studies used the expenditure based poverty line. Based on the expenditure poverty line, studies used bivariate and multivariate frameworks to identify the differences in poverty status among the different households. The most widely used poverty index in the literature is the Foster Greer-Thorbecke Index (FGT)⁴⁰ which measures the incidence, depth and severity of poverty. The FGT measure has been used in capturing the number of poor households, alongside the depth and severity of this poverty. The FGT Index is defined as:

$$P_{r} = \frac{1}{n} \sum_{i=1}^{q} \left(\frac{z - y_{i}}{z} \right)^{r}$$
where:
n = total population
z = poverty line
y_{i} = income or expenditure of the *i*th individual
q = the number of persons with income below the
poverty line
a= measure of sensitivity of the index to poverty

As α increases, P becomes increasingly sensitive to the living standard indicator of the poorest people. If $\alpha = 0$, the FGT Index reduces to the Headcount Index (HI). When $\alpha = 1$, the index is the Poverty Gap Index (PGI) and if $\alpha = 2$, the index reduces to the Squared Poverty Gap Index (SPGI) (Foster, Greer, and Thorbecke, 1984).

$$HI = \frac{1}{n} \sum_{i=1}^{q} (1) = \frac{q}{n}$$
$$PGI = \frac{1}{n} \sum_{i=1}^{q} \left(\frac{z - y_i}{z}\right)$$
$$SPGI = \frac{1}{n} \sum_{i=1}^{q} \left(\frac{z - y_i}{z}\right)^2$$

First, the HI is a measure of the incidence of poverty and the simplest measure of overall poverty. This HI is the proportion of

⁴⁰ This discussion draws heavily from (Baulch, 1996; Lipton, 1997).286

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the population for whom per capita income (or other measures of living standard) is less than the poverty line. Even though HI is simple to construct and easy to understand, it disregards differences in the quality of life of different poor households. It assumes that all poor are in the same situation and does not take the intensity of poverty into account. Further, this index does not account for changes over time (i.e. if individuals below the poverty line become poorer or richer) as long as a person remains below the poverty line (World Bank, 2005).

Second, the PGI indicates how much income is needed to be transferred to poor individuals in order to allow them to reach the poverty line. This means that this indicator measures the magnitude of poverty, considering both the number of poor people and how poor they are. In addition, the PGI is defined as the ratio of the poverty gap to the poverty line (also called the Foster-Greer-Thorbecke (P1)). It is the poverty gap expressed as a percentage of that line. However, the Poverty Gap and the PGI have the same deficiencies as the HI in that they do not capture differences in the severity of the poverty amongst the poor and ignore "inequality among the poor".

Third, the SPGI is an indicator which is used to measure the severity of poverty. This index takes inequality among the poor into account. This means that a transfer of any measure of the standard of living from poor to even poorer would reduce the index or a transfer of the same from very poor to less poor would increase the index. Therefore, it is difficult to interpret the poverty gap of the poor with the index itself. Further, it is the average value of the square of the depth of poverty for each individual, with the poorest people contributing relatively more to the index (also called the Foster-Greer-Thorbecke (P2)). The poverty severity index provides a weight to the poverty gap. Larger values of the parameter indicate that a greater weight is attached to the poverty gap of the square relative to the poverty gap of the poor.

Given the various sources of arbitrariness in poverty measurement, one can still draw upon stochastic dominance

criteria to make unambiguous comparative rankings of poverty. One of the most commonly used welfare improvement indicators is the Gini Coefficient which is usually measured as follows:

$$GC = \frac{1}{2n^2 \overline{y}} \sum_{i=1}^{n} \sum_{j=1}^{n} |y_i - y_j|$$

where:
n = total population
 \overline{y} = mean income (or expenditure) of the total
population
 y_i and y_j represent income (or expenditure) assigned to
individuals *i*

The value of the Gini Coefficient is bound between 0 and 1. The value zero indicates the case of full equality, and the value one indicates the case where there is complete inequality and all income (or expenditure) accrues to a single individual. Hence, low values of the Gini are associated with a more even distribution of income or expenditure.

In addition to the above mentioned traditional poverty measures, there are new qualitative, as opposed to quantitative, approaches to poverty assessment which emphasise the poor's own criteria of poverty as well as their own solutions (Chambers, 1997). The policy implications of this new approach have emphasised programmes that enable the poor to exercise their agency as empowerment of the poor is viewed as critical to the success of poverty elimination. This approach is creating a viable environment, by making available critical external resources such as credit. Another recent approach, the social exclusion approach, emphasises the importance of institutions and norms that exclude certain groups from a variety of social networks and the importance of social solidarity in sustaining livelihoods⁴¹. These new insights on poverty have far-reaching

⁴¹ The social exclusion approach was first developed in France to address poverty in the context of Western Europe. It is increasingly 288

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implications for analyzing the gendered nature of poverty as well as the relationship between gender inequalities and overall poverty levels (Haan and Maxwell, 1998; ILO and UNDP, 1996; UN, 1994).

More recently, the United Nations Development Programme Human Development Report introduced the Multidimensional Poverty Index (MPI). The MPI reveals a different pattern of poverty than income poverty, as it illuminates a different set of deprivations. As shown in Figure 3, MPI has three dimensions and ten indicators (Alkire and Santos, 2010). Each of the three dimensions constitute one-third of the total and each indicator within each dimension is equally weighted (Alkire and Foster, 2008). A person is considered poor if they are deprived in at least 30 percent of the weighted indicators. The intensity of poverty denotes the proportion of indicators in which they are deprived.



Figure 3 Dimensions and Indicators of the MPI

Source: UNDP (2010).

being used for understanding poverty in developing country contexts as well.

The MPI can be broken down to show a vivid picture of people living in poverty, both across countries, regions, the world, within countries, by ethnic group, urban/rural location, or other key household characteristics. It is the first international measure of its kind and offers a valuable complement to income poverty measures because it measures deprivations directly. The MPI can be used as an analytical tool to identify the most vulnerable people, to show aspects in which they are deprived and help to reveal the interconnections among deprivations (OPHDI, 2010).

Compared to other measurements however, the use of this index is still debatable. Ravallion (2010:1) points out that there are highly questionable value judgments in the MPI. For example, how can one contend (as the MPI does implicitly) that the death of a child is equivalent to having a dirt floor, cooking with wood, and not having a radio, television, telephone, bike or car or if attaining these material conditions is equivalent to an extra year of schooling (such that someone has at least five years of schooling) or to not having any malnourished family members?

Nonetheless, the MPI attempts to capture multidimensional aspects of poverty. It also attempts to measure the real chronic poor, transient poor and non-poor of any country by adopting not only income or expenditure but also incorporating the many dimensions related to poverty such as health, social and economic dimensions of poverty.

Global Poverty

The discussion in the previous sections indicates that poverty is a complex and multi-dimensional phenomenon. Measuring poverty is even more complex and controversial, however, absolute poverty (head count index) has now become a commonly used and widely accepted measurement in assessing overall performance of poverty reduction at the global level, particularly in developing countries (Chen and Ravallion, 2007:2). Because of complexities involved in poverty and measurement problems, there are different estimates of absolute poverty in the literature (Kaplinsky, 2005). There are two methods of measuring absolute poverty. These are by either

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using national accounts data or by using national survey data, although the data generated using both methods has often been criticised. In this section, internally consistent time-series data on absolute poverty for ten reference years developed by the World Bank (Chen and Ravallion, 2007) is used to provide an overview of global trends in poverty during the period 1981-2008.

The World Bank defines absolute poverty based on the Purchasing Power Parity (PPP) exchange rate. The World Bank defines extreme poverty using a 'US\$1.25-a-day' poverty line and moderate poverty using a 'US\$2.00 a day poverty line'. Table 1 provides both the proportion and number of people living below \$1.25 and \$2.00 a day for different regions of the world from 1981 to 2008. As shown in Table 1, there has been a rapid decline in the absolute poverty rate in the East Asia and Pacific region. Figure 4 further demonstrates that in this region, while the proportion of the people living below \$1.25 has fallen from 77 percent to 14 percent, the proportion of the people living below \$2.00 has fallen from 92 percent to 33 percent in this period. The figures in Table 1 clearly demonstrate that the East Asia and Pacific, Sub-Saharan Africa and South Asia regions have managed to reduce absolute poverty significantly during the last three decades. For example, in South Asia extreme poverty decreased from 61 percent in 1981 to 34 percent in 2008.

Next, Figure 5 shows the absolute numbers of the poor population in each continent. Although South Asia has managed to reduce absolute poverty significantly, in 2008, the region had the highest number of extreme poor population (around 570 million). The extreme poor and moderate poor population in South Asia also increased from 810 million in 1981 to 1,120 million in 2008; indicating that South Asia is home to the largest number of poor in the world. Similar to South Asia, the absolute numbers of the extreme and moderate poor population in the Sub-Saharan Africa region increased from 204 million in 1981 to 386 million in 2008.

Figure 6 goes on to show the share of the regional population below the \$1.25 and \$2.00 poverty lines. It is clear that the share of poor people in South Asia and Sub-Saharan Africa has increased compared with other continents and South Asia and Sub-Saharan African continents are consequently home to a very large proportion of the poor in the world. In 1981, 30 percent of the world's poor people were from the South Asian continent and this share increased to 45 percent in 2008. In terms of the Sub-Saharan Africa, in 1981, 11 percent of the share of poor people resided in that continent and this more than doubled in 2008. Therefore, although the aggregate poverty rate in these regions has fallen over the last three decades, the proportion of poor people has increased in the South Asia and Sub-Saharan Africa continents.

l'able 1											
Poverty Across the Globe											
	1981	1984	1987	1990	1993	1996	1999	2002	2005	2008	
Poverty headcount ratio at \$1.25 a	day (PPP) (% of popt	ulation)								
East Asia and Pacific	77.18	65.03	54.07	56.24	50.72	35.90	35.58	27.61	16.70	13.70	
Europe and Central Asia	1.91	1.56	1.50	1.91	2.92	3.87	3.79	2.26	1.30	0.40	
Latin America and Caribbean	11.89	13.63	11.96	12.24	11.41	11.09	11.86	11.86	7.40	5.40	
Middle East and North Africa	9.56	7.97	7.09	5.75	4.76	4.79	5.01	4.17	3.00	2.10	
Sub-Saharan Africa	51.45	55.15	54.44	56.53	59.40	58.09	57.89	55.69	52.80	49.70	
South Asia	61.14	57.42	55.30	53.81	51.70	48.61	45.11	44.28	39.30	34.10	
Number of poor (1,000,000)											
East Asia and Pacific	1,096.50	969.99	847.61	926.42	870.77	639.69	655.59	523.11	332.08	284.36	
Europe and Central Asia	8.21	6.89	6.81	8.87	13.70	18.19	17.83	10.62	6.26	2.23	
Latin America and Caribbean	43.33	52.93	49.33	53.43	52.51	53.63	60.10	62.72	47.60	36.85	
Middle East and North Africa	16.48	15.05	14.63	12.96	11.50	12.30	13.64	12.00	10.47	8.64	
Sub-Saharan Africa	204.93	239.08	256.80	289.68	329.98	349.18	375.97	390.23	394.78	386.02	
South Asia	568.38	573.76	592.97	617.26	631.86	630.76	619.46	640.47	598.26	570.89	
Poverty headcount ratio at \$2.00 a	day (PPP) (% of popu	ulation)								
East Asia and Pacific	92.41	88.25	81.59	80.97	75.76	63.97	61.74	51.93	39.03	33.24	
Europe and Central Asia	8.32	6.68	6.33	6.87	9.18	11.23	12.13	7.92	4.60	2.20	
Latin America and Caribbean	23.77	26.84	22.35	22.36	21.72	21.04	21.99	22.23	16.69	12.38	
Middle East and North Africa	30.06	27.13	26.14	23.46	22.13	22.22	21.96	19.73	17.37	13.90	

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	1981	1984	1987	1990	1993	1996	1999	2002	2005	2008	
Poverty headcount ratio at \$1.25 a day (PPP) (% of population)											
East Asia and Pacific	77.18	65.03	54.07	56.24	50.72	35.90	35.58	27.61	16.70	13.70	
Sub-Saharan Africa	72.20	74.70	74.20	75.95	78.12	77.51	77.42	76.11	74.08	70.08	
South Asia	87.20	85.55	84.48	83.58	82.67	80.71	77.83	77.41	73.36	70.89	
Number of poor (1,000,000)											
East Asia and Pacific	1,312.87	1,316.34	1,279.01	1,333.79	1,300.66	1,139.87	1,137.60	983.89	757.51	659.15	
Europe and Central Asia	35.75	29.52	28.76	31.90	43.06	52.78	57.05	37.23	21.66	10.42	
Latin America and Caribbean	86.63	104.23	92.19	97.61	99.95	101.75	111.44	117.55	91.74	70.51	
Middle East and North Africa	51.82	51.24	53.94	52.88	53.47	57.08	59.78	56.78	52.73	44.48	
Sub-Saharan Africa	287.58	323.82	350.44	389.20	433.98	465.91	502.81	533.32	559.07	562.25	
South Asia	810.65	854.84	909.85	958.75	1,010.37	1,047.29	1,068.77	1,119.67	1,113.06	1,124.65	

Source: Table extracted form World Bank (2014).



Figure 4



Source: Based on the data extracted form

(http://data.worldbank.org/topic/poverty) on October 09, 2014.



Figure 5 Poor Population and their Country Groups, 1981-2008

Source: Based on the data extracted form

(http://data.worldbank.org/topic/poverty) on October 09, 2014.



Figure 6 Share of the Regional Population Below \$1.25 and \$2.00 Poverty Lines

Source: Figure extracted form

(http://data.worldbank.org/topic/poverty) on October 09, 2014.

As seen from Table 1 and Figure 6, currently more than 95 percent of the poor in the world are living in three regions: East Asia and Pacific, South Asia, and Sub-Saharan Africa. Even if the poverty line is defined as \$2.00 a day, these three regions would still account for more than 90 percent of the poor for the 1981 to 2008 period. In the East Asia and South Asia regions, the majority of those living in poverty are from China and India.

Table 2 presents, for five South Asian countries, the percentage of people living below the national and international poverty lines, as measured by the Gini coefficient and the country's population (in millions). As can be seen from column (8), the South Asian region has a population of over 1.5 billion, with India the most populated and Sri Lanka the least populated among the 5 countries. A comparison of the percentage of population living in poverty, from columns (5) and (6) based on international poverty lines, demonstrates that Bangladesh and Nepal have the highest rates of poverty and Sri Lanka has the lowest rate of poverty. Based on the poverty lines of the individual countries, the poverty rate is 40 percent in Bangladesh, 30.9 percent in Nepal, 27.5 percent in India, 22.3 percent in Pakistan and 15.2 percent in Sri Lanka. According to the World Bank 2012 report, 29.1 percent of Sri Lanka's population lived on under \$2.00 a day in 2007, compared with 7 percent living under \$1.00 a day. Among the five countries, Sri Lanka has the least number of people living in poverty. However, comparing the Gini coefficients, income inequality is higher in Sri Lanka than the other four countries in the region.

Poverty Rates in the South Asian region										
	Populati	ion below	Percent	age of po	opulation	ıt	น (เ			
	nationa	l poverty	below	v interna	ational	i ien	lior			
Country	li	ne	р	overty li	ine	fic	ula Ilin			
	Survey National S		Survey	\$1.25/	\$2.00/) oef	ido u u			
	year	%	year	day	day	С	Г Ю			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
Bangladesh	2005	40.0	2005	49.6	81.3	0.32ª	164			
India	2005	27.5	2005	41.6	75.6	0.34ª	1171			
Nepal	2004	30.9	2004	55.1	77.6	0.33ª	30			
Pakistan	2006	22.3	2006	22.6	60.3	0.30 ^b	173			
Sri Lanka	2007	15.2	2007	7.0	29.1	0.36ª	20			

Table 2

Note[.] a denotes coefficient value based on 2010.

b denotes coefficient value based on 2008.

Source: World Bank (2012b).

Figure 7 shows the changes in Gini coefficient, in selected South Asian Countries, from 1978 to 2010. Except for Pakistan, the Gini coefficients for the other four countries increased until 2002. In particular, the Gini coefficients increased sharply in Sri Lanka and Nepal during the 1984 to 2002 period. However, after the mid-2000s most of the South Asian countries' Gini coefficients decreased except for India. Income inequality in Sri Lanka also rose significantly from 0.32 in 1991 to 0.41 in 2002. Although the Gini coefficient in Sri Lanka decreased slightly to 0.36 in 2010, at present Sri Lanka has been recorded as having the highest income inequality compared to the other countries in the region.



Source: Numbers extracted form (http://data.worldbank.org/topic/poverty) on August 08, 2013.

Poverty in Sri Lanka

In the previous section, the overall trends in global poverty were highlighted. This section focuses on poverty in Sri Lanka, in detail, in order to lay the foundation for this study. Sri Lanka is a developing country in South Asia with better living conditions and relatively lower poverty levels than its neighbours (see Table 2). Following the common and traditional practice used for decades in policy analysis, the location of households in Sri Lanka can be categorised into three regions; urban, rural and estate. Areas governed by either a municipal council or urban council are considered as the urban region. Plantation sites with tree crops, namely tea, rubber and coconut, spanning more than 20 acres and having not less than 10 residential labourers, are considered as the estate region. Residential areas which do not belong to the urban or estate regions, are considered as the rural region. The socio-economic characteristics of households in these three regions are significantly different.

Table 3 demonstrates the basic characteristics of the above three sectors in terms of the distribution of population, monthly income and the level of education.

Table 3Basic Characteristics of the Population Distribution, 2012										
	Popula	tion	Average	Household Incor	monthly ne	Level of educ the househo	Share of food			
	In million	%	household size	Mean SLRs.	Median SLRs.	No schooling (%)	Up to grade 5 (%)	expenditure		
Sri Lanka	20.2		3.9	46,207	30,400	4.0	24.4	37.6		
Urban	3.6	17.82	4.0	68,336	41,958	2.6	19.5	31.4		
Rural	15.7	77.72	3.8	42,184	28,921	3.9	24.5	39.1		
Estate	0.9	4.46	4.1	31,895	25,664	12.1	41.6	49.6		

Note: Excluding Mannar, Kilinochchi and Mullaithivu districts in the Northern Province. Source: Based on the DCS (2012).

As shown in Table 3, over 78 percent of Sri Lankans (or about 15.7 million) still live in the rural sector. While 17.8 percent of the total population (3.6 million) live in the urban sector, only 4.5 percent of the total population are live in the estate sector (0.9 million). The overall average household size for Sri Lanka is four people. However, households in the estate sector tend to have a larger family size compared to the urban and rural sectors. Table 3 further shows that the household monthly income in Sri Lanka is around SLRs. 46,207. Comparing the three sectors, the urban sector has the highest average household monthly income (SLRs. 68,336) and the estate sector has the lowest average household monthly income (SLRs. 31,895). As shown by the education figures presented in Table 3, it is also clear that most uneducated households belong to the estate sector as the estate sector holds the highest percentage of household heads with no schooling (12 percent) and education only up to grade 5 (42 percent). In addition, the highest share of food expenditure comes from the estate sector at 49.9 percent, which implies that households in the estate sector spend more on food than the households in the urban and rural sectors. All these values confirm that the living conditions for households in the estate sector are the worst among the three sectors in Sri Lanka.



Figure 8

Source: Based on data from DCS, various years.

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A number of measurements of poverty are widely available for Sri Lanka. Figure 8 illustrates the trends in poverty since the 1990s for households at the sectoral and national levels in Sri Lanka (DCS, 2011, 2014).

The incidence of poverty (as measured by the standard headcount ratio) at the national level has shown a steady decline from 26.1 percent in 1990/1 to 6.7 percent in 2012/13. In other words, poverty has decreased by 74 percent during this period. However, the gap in poverty incidence between the sectors widened from 1990/91 to 2006/07, before decreasing in 2009/10. Urban and rural poverty also declined by 59 percent and 47 percent, from 1990 to 2006, respectively. In contrast, the inverse trend is apparent in the estate sector, with poverty increasing by about 56 percent during the same period.

Poverty in Sri Lanka is predominantly a rural phenomenon (Datt and Gunewardena, 1997). Although the level of poverty in the estate sector is very high, the share of total population in that sector is relatively small (Figure 8). Therefore, poverty analysts very often label Sri Lankan poverty as a rural phenomenon. Several studies have shown that poor households are more likely to be found in the rural than in urban areas due to working members being employed in agriculture and other primary production activities (Datt and Gunewardena, 1997). At the sectoral level, poverty in the rural sector, which comprises of 80 percent of the country's population, increased from 29.5 percent in 1990/91 to 30.9 percent in 1995/96 before falling to 9.4 percent in 2009/10. The sharp drop of rural poverty from 2001/02 is the main contributor for the unprecedented drop in poverty at the national level. However, the estate sector which accounts for about 5.5 percent of the population saw their poverty increasing from 30 percent in 2001/02 to 32 percent in 2006/07. Nevertheless, in 2009/10, the estate sector's poverty rate has decreased by two-thirds as a result of the drop in the relative prices of food items and an increase in employment and wages.

Poverty Headcount Index (percentage) by District								
Sectors and	Poverty	headcoun	t index (percentage	by survey	period		
Districts	1990/91	1995/96	2002	2006/07	2009/10	2012/13		
Sri Lanka	26.1	28.8	22.7	15.2	8.9	6.7		
Urban	16.3	14.0	7.9	6.7	5.3	2.1		
Rural	29.5	30.9	24.7	15.7	9.4	7.6		
Estate	20.5	38.4	30.0	32.0	11.4	10.9		
District								
Ampara	-	-	-	10.9	11.8	5.4		
Anuradhapura	24.4	27.0	20.4	14.9	5.7	7.6		
Badulla	31.0	41.0	37.3	23.7	13.3	12.3		
Batticaloa	-	-	-	10.7	20.3	19.4		
Colombo	16.2	12.0	6.4	5.4	3.6	1.4		
Galle	29.7	31.6	25.8	13.7	10.3	6.2		
Gampaha	14.7	14.1	10.7	8.7	3.9	2.1		
Hambantota	32.4	31	32.2	12.7	6.9	4.9		
Jaffna	-	-	-	-	16.1	8.3		
Kalutara	32.3	29.5	20.0	13.0	6.0	3.1		
Kandy	35.9	36.7	24.9	17.0	10.3	6.2		
Kegalle	31.2	36.3	32.5	21.1	10.8	6.7		
Kilinochchi	-	-	-	-	-	12.7		
Kurunegala	27.2	26.2	25.4	15.4	11.7	6.5		
Mannar	-	-	-	-	-	20.1		
Matale	28.7	41.9	29.6	18.9	11.5	7.8		
Matara	29.2	35	27.5	14.7	11.2	7.1		
Monaragala	33.7	56.2	37.2	33.2	14.5	20.8		
Mullaitive	-	-	-	-	-	28.8		
Nuwara-Eliya	20.1	32.1	22.6	33.8	7.6	6.6		
Polonnaruwa	24.9	20.1	23.7	12.7	5.8	6.7		
Puttalam	22.3	31.1	31.3	13.1	10.5	5.1		
Ratnapura	30.8	46.4	34.4	26.6	10.5	10.4		
Trincomalee	-	-	-	-	11.7	9.0		
Vavuniya	-	-	-	-	2.3	3.4		

Table 4

Source: Based on data from DCS, various years.

For administrative purposes, Sri Lanka is divided into 25 districts. These are listed in Table 4 which presents the poverty head count index for the three regions and 25 districts. Intradistrict variations of the poverty head count index from 1990/91 to 2009/10 are depicted in Figure 9. This map shows that for every district, poverty has decreased considerably. In addition, significant reductions of poverty were recorded in every district, during 2009/10, except for the Batticaloa and Ampara districts. The highest percentage of poor households in 2009/10 was from the Batticaloa (20.3 percent) and Jaffna (16.1 percent) districts, while the lowest percentage was reported from the Colombo district at 3.6 percent. Table 4 reveals that, in 2006/07, the poverty head count ratio for Batticaloa and Ampara was 10.7 and 10.9 percent respectively, however in 2009/10 these two districts' poverty head count ratio rose to 20.3 and 11.8 percent. Furthermore, Hambantota district, which had showed a poverty reduction of as much as 60 percent between 2001/02 and 2006/07, showed a further 46 percent fall in the poverty head count ratio between 2006/07 and 2009/10. Nuwara-eliya, Moneragala, Rathnapura and Badulla, the poorest four districts in 2006/07, reported around 50 percent improvement in 2009/10.

Comparing 2009/10 and 2012/13 periods, poverty head count index in the Monaragala district has increased significantly from 14.5 in 2009/10 to 20.8 in 2012/13. In addition, the poverty level has also slightly increased in the Anuradhapura and Polonnnaruwa districts during these periods. Besides these districts, poverty level is high in Mullaitivu (28.8 percent), Mannar (20.1 percent), Batticaloa (19.4 percent) and Killinochchi (12.7 percent) in 2012/13.

A FESTSCHRIFT IN HONOUR OF PROFESSOR K.A.P. SIDDHISENA



Figure 9 Poverty head count index by districts – 1990/91, 1995/96, 2001/02, 2006/07 and 2009/10

Source: Illustrations based on HIES 1990/91, 1995/96, 2001/02,

Although poverty has evidently decreased quite significantly in recent years, studies shows many people who have managed to get out of poverty are still at risk of slipping back, as a large proportion of them are only just above poverty line. For example, if the poverty line is increased by 10 percent the percentage of poor increases to 12.8 percent (HIES 2009/10). This amounts to an increase of around 800,000 poor people (Nanayakkara, 2012). Therefore, any short or long term

economic shock, due to whatever reason, may push them back to poverty.

Income Distribution

Average income per month per spending unit in Sri Lanka has increased rapidly from SLRs. 881 in 1980/81 to SLRs. 35495 in 2009. During this period, income of all the three sectors has increased considerably. For instance, during this period, urban income increased from SLRs. 1274 to SLRs. 46196, rural income increased from SLRs. 795 to SLRs. 34329, and estate income rose from SLRs. 753 to SLRs. 25649. Though all the income groups enjoyed an increase in income, not all increases were distributed evenly among the groups.

Income Distribution, 1980-2009, Selected Years											
	1980/81	1985/86	1990/91	1995/96	2002	2006/07	2009				
Average income per month, rupees per spending unit (SLRs.)	881	2012	3549	6476	13038	26286	35495				
Urban	1274	3176	5741	11240	23436	41928	46196				
Rural	795	1725	3057	5852	11819	24039	34329				
Estate	753	1551	2429	4059	7346	19292	25649				
Mean income and income share of lowest 4 deciles of spending units (SLRs.)	n.a	n.a	5266 14.8	11875 15.2	17952 13.8	34678 13.2	n.a				
Mean income (SLRs.) and income share of highest 2 deciles of spending units	n.a	n.a	18272 51.4	30395 50.3	70160 53.8	143905 54.7	n.a				

Table 5 Income Distribution, 1980-2009, Selected Years

Note: n.a denotes not available.

Source: DCS (2011), various years.

As shown in Table 5, the share of income for the poorest 40 percent of the spending units increased from 14.8 percent in 1990 to 15.2 percent in 1995/96. It then progressively fell to 13.2 percent in 2006/07. During this period, the share of income of spending units in the richest 20 percent declined from 51.4 percent in 1990/91 to 50.3 percent in 1995/96 before continuously increasing to 54.7 percent in 2006/07. Thus, the richest 20 percent have received more than 50 percent of the total household income in all three surveys over the period while the share of the poorest 40 percent has remained around 14 percent. However, average income per spending unit shows that all the income groups have benefited from an increase in income even though the increases were not evenly distributed across the income groups. The distribution of income suggests that most of the increased income has been accumulated by the upper income deciles.



Figure 10 Gini Coefficient Index by Sector

Source: Based on data from DCS, various years.

Since Sri Lanka's independence in 1948, income distribution in Sri Lanka, as measured by the Gini coefficient, has moved towards lower inequality. However, since 1980, Sri Lanka's income inequality has worsened with the Gini coefficient for spending units increasing from 0.43 in 1980/81 to 0.51 in 2012/13, and reaching a high of 0.54 in 2006/07 (Figure 10). The Gini coefficient for the sectors also shows that the distribution of income is uneven within sectors. The urban sector displayed the highest inequality in 1990/91, reaching a high of 0.62, but falling again, in 2009, to almost the same coefficient in 1980/81 before increased to 0.51 in 2012/13. The lowest inequality, in the earlier years, can be seen in the estate sector where the Gini coefficient fluctuated only between 0.25 and 0.34. However, in 2009/10, the coefficient peaked at 0.43 to exceed that for the other two sectors. It then fell, in 2013, to approximately that for the other two sectors. In other words, the estate sector has had the highest growth in income inequality. The Gini coefficient has shown the least fluctuations for the rural sector. For the period 1980 to 2013, the data clearly shows that for Sri Lanka as a whole, the disparities between the rich and the poor have remained stagnant.

Conclusion

Poverty is a complex and multi-dimensional phenomenon. Measuring poverty is even more complex and controversial. This study discussed the various definitions of poverty and its measurements in order to broaden the term's connotations and emphasise that poverty does not refer merely to a lack of income. This study also served to highlight the fact that poverty is a complex phenomenon with various social, health and economic influences. Following a survey of definitions of poverty and descriptions of poverty measurements, this study provided an overview of global trends in poverty and poverty in Sri Lanka. Although the aggregate poverty rates declined in the world, the number of poor people increased in South Asia and Sub-Saharan Africa continents. Compared to the other South Asian countries, Sri Lanka has had better living conditions and a declining trend in poverty. Income inequality however, has grown in Sri Lanka in recent years as it has in the rest of South Asia. Further, the aggregate poverty level in Sri Lanka has also declined recently, however, inequality has grown.

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POPULATION AND DEVELOPMENT

Globally, the first serious dialogue on interrelationship between Population and Development arguably began with the World Population Conference held in Bucharest in 1974. Sri Lanka's discussion on population and development was a mirror image of that conference followed by the establishment of the Population Division in the Ministry of Plan Implementation under the visionary leadership of its Permanent Secretary Dr. Wickrema Weerasooriya and consequent setting up of 11 projects including the Demographic Training and Research Unit (DTRU) in the University of Colombo. As a member of the DTRU who joined the DTRU in the early 1970s, Professor K.A.P. Siddhisena can be regarded as one of the researchers who passionately occupied in the population and development debate in the country for more than four decades.

This volume is a product of both national as well as international researches that contribute to the ongoing dialogue on the interrelationship between population and development. Accordingly, this volume brings both locally and internationally renowned researchers who have drawn their themes relevant to the discussions of the World Summit 2000, International Conference on Population Development 1994 (ICPD 1994) and the Post 2015 Development Agenda. This book is unique because it recognizes contemporary demographic dynamics in Sri Lanka such as 'low fertility and population ageing', 'mortality and morbidity' and 'migration and human mobility' by steering discussions within the context of socio-economic development which has an immense policy relevance. This book is therefore, invaluable for students, policy planners, academics and researchers who are interested in understanding the interrelationship between population and development.

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