

## Public Welfare Policy, Capability and Rural Poverty: with special reference to Hambantota District in Sri Lanka

W. M. SEMASINGHE

### Abstract

*The impact of public welfare policy on poverty incidence is the widely studied phenomenon by researchers, academics, development activists etc. during the past few decades. In the context of Sri Lanka, most of such studies are on the macro level and based mainly on the secondary data. In this study an attempt was made to assess the impact of major public welfare policies on the poverty incidence of rural households in Sri Lanka. In fact, Sri Lanka is considered as the nation that achieved high level social development as a result of the long standing public welfare policies. This assessment based mainly on the general framework of Capability Approach, and the measurement of poverty rates is based on the 'counting approach' suggested by Alkire and Foster.*

*The achievements of six capabilities namely, access adequately to food, being educated, being healthy, access to improved sanitation, being safely sheltered and access to safe drinking water were assessed by employing the empirical data collected from the 160 households in Sooriyawewa and Katuwan DS divisions in the Hambantota district of Southern Sri Lanka.*

*The analysis concluded that the deprivation of access to improved sanitation, housing (being safely sheltered), health (being health) and access to safe drinking water capabilities among rural households is still critically high. Public policies on these spheres have failed to bring the large number of rural people out of deprivation cut-offs. Only, food and education policies have shown a quite success.*

**Key words:** Public welfare policy, Poverty, Social development, Capability Approach, Capability deprivation.

### Introduction

Undoubtedly, poverty is the greatest challenge faced by the mankind in the 21<sup>st</sup> century. This is because over one-sixth of the world population are poor in terms of income based yardsticks. South Asia, Sub-Saharan Africa and Caribbean are the mostly affected regions.

Poverty incidence adversely affects on the various aspects of human life such as economic, social, cultural and environmental. Not only that, it adversely affects on the political stability of the countries, too. Because of the detrimental nature of poverty international community, international institutions, central governments, INGOs and NGOs etc. are committing ever than before to ascertain the real causes of poverty and to find the acceptable approaches to eradicate or at least to reduce poverty incidence. Declaration of Millennium Development Goals (MDGs) by the UNO is the landmark of this commitment. The Summit emphasized the public sector commitments in achieving these Goals.

In Sri Lanka, public welfare policies have made a remarkable progress particularly in the areas of education and health. The achievements in these spheres are comparable with some of the high income countries while highest among the South Asian countries. Development activists as well as international institutions exemplified Sri Lanka's achievements in the development discussions and considered as a success story that achieved high social progress amid the low per capita income. These achievements of social development are the intrinsic outcome of public investment on people particularly on education, health and food, for a long period of time. Anand et al., (1995: 299) say that '*Sri Lanka has a long record of government intervention in the field of social welfare*'. Indeed, Sri Lanka is one of the first developing countries to understand the multidimensional nature of poverty, and has strongly emphasized on policies of free health and education as early as the 1930s (Lakshman, 1997; World Bank, 2000; Kelegama, 2001). Meanwhile, as evidences show that income poverty also has declined considerably during the last few years. The national headcount ratio has declined from 26.1 percent in 2002 to 15 percent in 2006/07 (DCS, 2008).

However, even amid the high level of overall social development and decline of income poverty, several issues have arisen relate to the incidence of poverty and well-being. Firstly, even though, on the whole, social aspects of development of the country have improved outstandingly, as evidences confirm the achievements are not evenly distributed. There are large regional disparities of achievements. The urban sector shows the significant performance but the achievements of both rural and estate sectors are very disappointing. Still, the achievements of large number of the dwellers in these sectors in most of the essential dimensions such as education, health, sanitation, housing are unsatisfactory and also the accessibility to essential services are inadequate. This might be, on the one hand, the urban biasedness of the public welfare expenditure and on the other hand, relatively less efficiency of public welfare expenditure in other sectors. Secondly, some aspects of social development such as child malnutrition and school dropout rate are becoming crucial issues among the poor. Thirdly, the gap between urban and other areas of the country in terms of availability and accessibility to essential services is widening or at least remaining unchanged. For example, accessibility to improved health facilities, clean drinking water, improved sanitation, quality education, transport etc. are critically inadequate in rural and estate sectors. Fourthly, income poverty in the rural and the estate sectors is relatively high even amid the huge efforts of public sector to alleviate poverty for over three decades. Indeed, reduction of the incidence of poverty is not proportionate among the sectors during the past few years. Poverty has declined largely in urban sector and localities close to the metropolitan hub of Colombo but increased in the estate sector. Rural sector shows only a marginal decline (DCS, 2008). The situation of the thousands of internally displaced people in the North and East is most awful. Since the share of the rural population of the country is large, the deprivation in absolute terms is higher in the rural sector. Therefore, it is reasonable to claims that poverty burden is highest in rural sector.

In addition to these issues, the disturbing characteristic of poverty assessments in the country is that, vast majority of them are based on the monetary measures but are not taken into account the

multidimensional nature of poverty. Thus, poverty figures are partial indicators of the well-being of the people of the country.

Under these circumstances, the problems naturally arise are: what is the level of achievements of essential dimensions of lives of the rural dwellers? Why public welfare policies have not capable to provide adequate opportunities for the rural poor? These issues must be clearly addressed to increase the efficiency of public welfare policies and to design a more effective poverty alleviating framework focusing to improve the quality of life of the people of the country.

The present study mainly intends to assess the existing multidimensional poverty incidence in the rural sector and to identify the contribution of public welfare policies to expand the capabilities of rural inhabitants.

#### **Public Policies on Social Development and Poverty Reduction in Sri Lanka**

The achievements of social development and poverty reduction of the country are accepted as outcomes of the public sector commitment on social development and poverty alleviation, which was established in the latter part of the 1940 decade, ensuring sound educational policies, an extensive healthcare program and an effective medical system for the nation. This commitment increased significantly with the political independence in 1948. During the first two and half decades since independence, successive governments firmly committed to pursuit the social development goals and to realize the equity objective and poverty eradication, in addition to the growth objective. During this phase, successive governments were committed to develop the country as a 'social welfare state'. The policy framework was guided by the 'welfare first' strategy. Public resources were allocated largely on social and human development. Social expenditure ranged between 10 and 11 percent of GDP in these years.

The major public welfare service in this time was the food subsidy and ration system, which was initiated during the period of World

War II to ensure that every one maintained a minimum consumption level. Mainly rice was the main food stuff which was subjected to subsidy and ration. In addition to that sugar and wheat flour came under the subsidy prices time to time. The quantity of the rice ration changed over the time particularly due to the unbearable cost for the subsidy. Indeed, when the price of rice in the world market went up and the population of the country rapidly increased, the cost of rice subsidy increased becoming a high encumbrance on the budget. As a result, the government tended to make some adjustments on food subsidy. Accordingly, the rice ration issued to income tax payers and their dependents was withdrawn since 1975 (Rasaputra, 1986; Anand et al., 1995). In 1979, food stamps replaced the ration books and the benefits were restricted for the households which declared their income is less than Rs. 3,600 per annum. Accordingly, the decades long provision of 'in kind' subsidy converted into a form of 'financial transfer'. The food stamps could be used to purchase not only rice but also other items at open market prices.

Another most effective welfare service was the free education<sup>1</sup>, which was initiated in the 1940s. Public sector largely committed to provide education for the nation free of charge over the past six decades since independence, though private sector allowed participating in this sector since the end of 1970s. Sri Lanka is one of the few countries that provide free education for all up to the university level. Country's high achievement in education is undoubtedly a reward for the public sector commitment.

The expansion of the human and physical infrastructure in the education sector as a result of public investment creates more opportunities to access to the education and to increase the achievements on education putting Sri Lanka in the highest position

<sup>1</sup> Since the ancient times, there was an education system, which provided associate with the Buddhist temples in the country free of charge, without government assistance. But under the British rule the Western type education restricted to the elites, mostly for the Christians in the urban centers was introduced. *Kannangara Report* in 1943 suggested that the education should be free from the kindergarten to the University level.

in terms of literacy rate, net primary enrolment rate, and net secondary enrolment rate in the South Asian region.

Along with this progress, number of issues has emerged on the quality of education mainly in higher education and on the resources distribution. The public sector domination of university education in Sri Lanka suffers from both an inability to meet the demand for university education and a failure to supply high quality education in many fields, compatible with global trends (CBSLa, 2005, 54).

Undoubtedly, public sector health service is the key factor behind the health achievements of the nation. Initiation of free health by public sector is also goes far back to the colonial era. Over the years, since independence, public sector committed highly to expand the western type of health facilities for the nation, free of charge. The broad aim of Sri Lanka's health policy is to increase life expectancy and to improve the quality of life by controlling preventable diseases through health promotion activities (CBSLa, 2005). Undeniably, the remarkable improvements of life expectancy at birth, crude birth rate, crude death rate and infant mortality rate etc. are the rewards for the public sector commitments of health sector. Even though, private sector allowed to fee levying health service after 1970s, still public sector is the largest provider of health facilities for the nation.

It is undoubted that shelter is the essential requirement for well-being of human being. Even though there were several attempts during the initial phase of independence of Sri Lanka, public sector meditation on providing shelter especially for the low income groups increased markedly since the end of 1970s. In 1978, government launched a large scale housing program to provide houses for rural sector with basic physical and social infrastructure facilities, known as the *Gamudawa* (Village Re-awaking Program or Model Village). This is the first island-wide housing development program in the history.

'One-Million House Program', which commenced in 1984, is another massive scale housing program. This program comprised of six sub-programs i.e. (1) the Rural Housing sub-program, (2) the Urban Housing sub-program, (3) Mahaveli and major Irrigation Settlement

Housing sub-program, (4) Plantation Housing sub-program, (5) Private Sector (formal) Housing sub-program, and (6) Private Sector (informal) Housing sub-program. In 1989, this program was extended to 1.5 Million House Program including other areas additionally (Mendis 1998).

Another island-wide public sector-housing program was started in 1995 under 8 sub-programs. The program adopted the settlement base approach. The 'Jana Udana' was the main settlement program. Concurrently, several other housing programs i.e. Rural Housing Program, Urban Housing Program, Plantation Housing Program; Houses direct construction program, Disaster Housing Program, Fisheries Housing Program and Regional Model Housing Program operated in the public sector. These attempts contributed largely to fulfil the housing requirements of low income households of rural sector. However, not as other areas like education and health, it cannot see the private sector contribution for this area.

In addition to these major welfare services, successive governments invest on number of welfare and social development services such as fertilizer subsidy, land reforms, concessionary agricultural credit facilities, which contributed largely for uplift the living standard of the poor in the country. However, up to the 1980s governments do not pay their attention on the direct poverty alleviation programs. But, the situation emerged in the end of 1980s, particularly the social unrest and other issues such as malnutrition among children, undernourishment, influenced the government to initiate direct poverty alleviation measures.

Accordingly, *Janasaviya* was introduced in 1989 as the people based first poverty alleviation program in the country. This was guided by the perspective of strengthening people economically. The intention of the programme was to enable the poor to establish a mode of income, either by becoming micro entrepreneurs or by acquiring relevant skills to obtain better jobs (Wickramasinghe, 2005). In 1995, Samurdhi program superseded the *Janasaviya* programme. At present it is the government's main poverty alleviation and income-generating program. The concept of the program was to alleviate poverty at the national level, starting from the family unit, through the improvement

of conditions in marginalized poverty groups, strengthening the rural production base through appropriate intervention, human resources development and developing an alternative banking process to assist the rural population who were not so far benefited from the existing system (CBSLa, 1995).

Overall, Sri Lanka's social development policy framework exhibits several essential characteristics. Successive governments since independence were committed to develop the country as a 'social welfare state'. Overall, policy framework was guided by the 'welfare first' strategy. In the initial phase of independence the services were provided to all (universally) without considering beneficiaries' income or any other status. Policy agenda in this time was dominated by 'welfare politics' (Jayasuriaya, 2001). In other words, electoral politics was highly influenced on public welfare policies.

Government commitment on social development was slightly changed with the change of the overall policy orientation of the country in the end of 1970s. There are several fundamental attributes of social development policies of Sri Lanka under neo-liberal economic policy framework. Governments committed to promote neo-liberal economic policies and growth focus policies were favored instead of 'welfare state'. Public expenditure on social welfare was severely curtailed. Social services were targeted to most needy people based on 'Need based approach', and the universalistic welfare policies were abandoned. State sponsored 'safety nets' (*Janasaviya*, *Samurdhi*) intended not only to enhance the living standard of the poor but also linked with growth and development. Poverty eradicating purpose came to fore as an inevitable responsibility of the public sector. Meanwhile, private sector was encouraged to invest in social development services.

#### Dimensions of the Rural Poverty

This study, mainly focused on examines the role of public welfare policies on improving the well-being of the people in rural Sri Lanka, is enlightened from the general framework of Sen's Capability Approach. Sen's view on poverty, fundamentally, departs from the

welfarist as well as other non-welfarist approaches. While he advocates within the broader framework of Capability Approach that person's well-being determines a person's *doings* and *beings*, he rightly says that "What is valued intrinsically are people's *capabilities* to function, and *poverty* is interpreted as lack of capacities (1987: 25). That is, lack of capabilities for 'doings' and 'beings'. Thus, poverty can be seen as "the failure of basic capabilities to reach certain minimally acceptable levels" (Sen, 1992: 109). Many of the poverty analysis on Sri Lanka have based on the so-called income or consumption based approaches. Those have considered poverty as merely an incident of material deprivation i.e. lack of income that required to fulfil food or/and some other basic necessities particularly education and health. By doing so, those were unable to capture the non-material aspects such as education, health, sanitation, drinking water, housing, dignity, social relation, which are essential requisites for people's well being. Country's poverty alleviation strategies based mainly on this narrow perspective. This might be the reason for inadequate performance and low effectiveness of public sector poverty alleviation strategies implemented during the past few decades. For more effective policy measure, poverty should be identified taking into account its multidimensional nature.

The most important but difficult step of the assessment of poverty based on Capability Approach is selecting of relevant capabilities. Sen has not given specific set of capabilities that can be used in assessing poverty. Given this intrinsic nature, each application of Sen's capability approach required making an appropriate list of capabilities. Therefore, researchers have freedom to choose relevant capabilities. The capabilities that should be included in the capability set vary according to the factors such as social, cultural, regional, environmental, economic etc. Further, the selected capabilities should sensitive to the context as well as objectives of the study. Some capabilities may be easy to describe, but no great interest in most context (Sen, 1992). Since the present study mainly intended to examine the role of public social welfare policy on capability expansion of rural people, the selected capabilities should sensitive to the lives of rural dwellers. Based on the criterion suggested by

Robeyn (2003)<sup>2</sup>, purposively, following capabilities are selected for the present study:

Ability to:

- |                              |                                  |
|------------------------------|----------------------------------|
| a. Access adequately to food | d. Access to improved sanitation |
| b. Being educated            | e. Being safely sheltered        |
| c. Being healthy             | f. Access to safe drinking water |

It is no doubt that all others are essential dimensions of lives of human-being in any society.

Next, the question arisen is that how these capabilities are measured? In fact, the most logical way is to measure the capabilities indirectly through the functionings. Functionings show what he/she achieved. For example, the level of education of a person can be used as a proxy for the ability to being educated. Accordingly, the levels of achievement of a person or a household of each of these capabilities together will provide a sufficient description of the levels of living standard of the rural households.

Next, to assess the levels of achievement of persons or households, it is required to identify the appropriate indicators for each of these capabilities. Even though, there is not an accepted guidance, the literature, for example Hussain et. al. (2004), Sen (1992, 1999), Alkire, (2002), Robeyns, (2000, 2003) Nussbaum, (2000), Clark and Qizilbash, (2004; 2005), and Kuklys (2004), provides the intimations about the appropriate indicators. Accordingly, the range of indicators can be used to characterize the each of these capabilities. For example, type of the dwelling, tenure of the dwelling, space for person etc. can be used to measure the achievement level of housing. But, practically, it is difficult to handle the large number of indicators. Therefore, an attempt is made to use the less number of indicators but

<sup>2</sup> Robeyn (2003) has suggested five criterions that should meet in drawing a list of functionings. Those are (a). Explicit formulation, (b). Methodological justification, (3). Sensitivity to context, (d). Different levels of generality, and (e). Exhaustion and non-reduction.

adequate to cover the implication of a particular capability. The selected indicators are given below:

Capability	Indicator
Access adequately to foods	• Number of meals generally have a day
Being educated	• Highest level of education reached
Being healthy	• Number of times visited a doctor for treatment within last 3 months
Access to improved sanitation	• Type of the toilet
Access to safe drinking water	• Source of drinking water
Being safely sheltered	• Type of the house

It is expected that these indicators are capable to measure sufficiently the implications of the relevant capabilities and altogether to measure the level of living standard of the rural mass.

#### Measuring Multidimensional Poverty Incidence

Identification of the poor depends on the 'cut-off' or 'poverty line'. Basically the present study intends to use the 'counting approach' suggested by Alkire and Foster (2007; 2008). They have suggested 'dual cut-off approach', which involves two set of cut-offs or poverty lines to identify multidimensionally poor. First cut-off is the dimension specific poverty line  $z$  which is set to identify the individuals or households who are poor in terms of a particular dimension. When the achievement of a person in a particular dimension is below  $z$ , he is poor in terms of that dimension. More specifically, when the achievement of  $i^{\text{th}}$  person of dimension  $j$  is below  $z_j$ , the person  $i$  is considered to be deprived of dimension  $j$ . Then,  $z$  is a row vector of dimension specific cut-offs. Second cut-off is the dimension deprivation cut-off  $k$  that specifies the minimum number of dimensions in which a person must be deprived in order to a person be a multidimensionally poor.

There are two mostly used identification methods called *union method* and *intersection method*. In the case of the first method, a person  $i$  is poor if he or she is deprived of at least one dimension. Indeed, this criterion seems too strong and might exaggerate poverty because a person can be deprived of one among number of dimensions due to a reason other than poverty. However, if the every dimension is truly essential for avoiding poverty, this approach would be quite intuitive and straightforward to apply.

According to the intersection method, person  $i$  is identified as a poor only if the person is deprived of all dimensions. This method suffices if any single dimension among the set of dimension is enough for a person to be free from poverty. Indeed, this criterion is too strong particularly when the number of dimensions is large. When the achievements of all dimensions of person  $i$  are below the dimension specific poverty lines except for a single dimension, he is classified as non-poor, hence, it might underestimate existing poverty level. Accordingly, there may be a very little number of poor though many persons are experiencing extensive deprivation.

Since all the dimensions examine in the present study are truly essentials for avoiding poverty, union method of identification is used to be identified the poor.

After separating poor from non-poor at the identification step, the next is to measure the distribution of poverty. In this process the data on poor households are brought together into an overall indicator or index of poverty. The most widely used poverty measure in the unidimensional poverty approach is the *head count ratio* ( $H$ ), which measures the percentage of population whose income or consumption is below the poverty line. In measuring multidimensional poverty, this measure can be applied with appropriate adjustments. Alkire and Foster (2008) defined the multidimensional head count ratio  $H_0 = H_0(y_i; z)$  as  $H_0 = q/n$ . Where,  $n$  is the total number of individuals/households and  $q$  is the number of poor identified according to the threshold vector  $z$  and the cut-off  $k$ .

### Study Area

Main study area is the Hambantota district in southern Sri Lanka. It covers 4 percent of the total land extent and 3 percent for the total population of the country. Percentage of the rural population of the district is 96 percent. Ethnically majority of the population is Sinhalese (98 percent) followed by Sri Lankan Moors (1 percent) and Sri Lankan Tamils (0.4 percent). Major economic activity is agriculture and forestry. 40 percent of the labor force employed in this sector. There are 12 Divisional Secretariat (DS) divisions and 576 Grama Niladhari (GN) divisions in the district. It is one of the most backward and relatively marginalized, in some sense, districts in the country. The urban population in the district is only a 4 percent. 8 percent of the schooling aged population is not attending to school. Majority of them are females. Labor force participation rate among the male is 64.4 percent while female is only 24.2 percent (DCS, 2002). 43 percent of the population is poor in terms of consumption poverty. In some of the DS divisions especially in the interior divisions such as Katuwana and Sooriawewa, more than 70 percent of the total number of families is recipients of government poverty alleviation programs (Dangalla, 2002). Its rank in terms of the countries human poverty index is 11<sup>th</sup> while in terms of combined score of consumption poverty and human poverty is 8<sup>th</sup> out of 17<sup>th</sup> districts. Adult literacy rate is 87 percent, access to safe water and sanitation only 72 percent and 87 percent respectively (Government of Sri Lanka, 2002)<sup>3</sup>. National averages of these events are respectively 91.9, 77 and 94. Adult illiteracy is higher among females (86.8 percent) than males (91.4 percent).

### Sampling Technique, Sampling Units and Data Collection

Mainly purposive sampling techniques were adopted to select the basic sample units. In the first stage, from the 12 Divisional Secretariat (DS) divisions, two divisions i.e. Sooriyawewa and Katuwana were selected according to the purposive sampling method considering several factors such as location, sectoral composition of the population i.e. rural and urban, and diversity of the divisions.

<sup>3</sup> North and East provinces have not been included in this study.

These two are the most disadvantaged divisions in the district. Physical infrastructure in the both divisions is very poor. Particularly, road network within the divisions is extremely weak. This situation has made burdens access efficiently to other services such as health and education. Though, both divisions have government schools, the facilities for secondary education is very poor. Main economic activity of the dwellers is agriculture, mainly paddy farming. In addition to that banana cultivation and chena cultivation make support for the livelihood. Over 40 percent of the households in these two divisions are Samurdhi recipients.

In the second stage, two Grama Niladhari (GN) divisions of each DS division were selected considering their peculiarities. Accordingly, Hathporuwa and Weliwewa Grama Niladhari divisions in the Sooriyawewa DS division and Udha Alupothdeniya and Udagomadiya Grama Niladhari divisions in the Katuwana DS division were selected for the filed survey. In the third stage, four villages, one from each Grama Niladhari division were selected. The selected villages were Hathporuwa, Weliwere, Uda Alupothdeniya and Udagomadiya. In the final stage, sampling units were selected randomly from the selected villages. Individuals were considered as sampling units in this study.

The data were collected from the selected sample units using a pre-tested questionnaire. The data were on existing levels of education, health condition, housing facilities, drinking water facilities, sanitation facilities, land entitlement and the weaknesses of the selected public services, the people's perceptions on the public welfare services and their opinions etc.

### Incidence of Poverty among the Rural Dwellers: Empirical Data Analysis

This section of the study to analyze the empirical data collected from the selected sampling units in the study area. Even though the data were collected from two locations i.e. from two DS divisions, the study does not expect to calculate the location specific measures. Instead, an attempt is made to evaluate the overall situation of the

deprivation of the study area. In the survey, 160 sample units, 40 from each village, were investigated. Heads of the selected households were the sample units. When he/she could not contact, the next responsible person of the households was investigated.

#### Socioeconomic Characteristics of the Respondents

Total population of the surveyed households is 736. The average household size is about 4.3. This is quite high compared with national average (4.1) of the country but lower than the average of the Southern Province (4.49). The range of the family size is 2 and 8. Of the total population, 52.6 percent is female. Age structure of the population reveals that about 9.4 percent is below 10 years of age while 8.2 percent is over 65 years. All the villagers are ethnically Sinhalese and religiously Buddhist. 95 percent of the surveyed households are headed by the males. To the contrary, 5 percent of the households are headed by the females.

#### Age Structure

Since the respondents are the heads of the households, all of them are over 20 years of age. Age structure reveals that about 50 percent of them are in the middle age, i.e. between 31 and 50 years of age. 12 respondents (about 7.5 percent) are in the 20 to 30 years of age group. Only 12.5 percent are in the old age group (over 60 years).

**Table 1: Age Distribution**

Age group	No. of respondents	Percentage
20 – 30	12	7.5
31 – 40	34	21.25
41 – 50	48	30.0
51 – 60	46	28.75
61 – 70	16	10.0
70+	4	2.5

Source: Field survey data, 2008

#### Employment Status

Employment status of the respondents was divided into 7 categories, i.e. government employment, semi-government employment, private

sector employment, farming, self-employment, retired and casual labor.

**Table 2: Distribution of Employment Status**

Employment category	No of respondents	Percentage
Government	14	08.75
Semi-government	22	13.75
Private sector	27	16.87
Farming	82	51.25
Self-employment	07	04.38
Retired	02	01.25
Causal labor	06	03.75

Source: Field survey data, 2008

As indicated in the Table 2, over half of the respondent's main livelihood is farming, mainly cultivation of paddy and seasonal crops. Causal labors who work for daily wage are only about 4 percent. About 9 percent of the respondents are government servants and 14 percent are semi-government servants. There are 7 (4.38 percent) self-employed, which carry on the small-scale business. These figures reveal that still the main livelihood of the rural sector is agriculture.

#### Average Per-capita Income

Per capita income levels of the respondents were divided into six categories as indicated in the Table 3. It shows the adult equivalent per capita average monthly income of the respondent's households.

According to the estimates, minimum adult equivalent per capita income per month is Rs. 1850 while maximum per capita income is Rs. 9150. Hence, the range of per capita income is Rs. 7300. This proves that there is a large variation among adults in terms of per capita income. Estimated mean adult equivalent per capita monthly income of the surveyed households is Rs. 3927 while median per capita income is Rs. 3550. This implies that half of the surveyed households received less than Rs. 3550 per month.



**Table 3: Average Per-capita Income**

Income category (Rs)	No of respondents	Percentage
Less than 2000	5	3.25
2001 – 3000	21	13.12
3001 – 4000	98	61.25
4001 – 5000	17	10.62
5001 – 6000	11	6.86
Over than 6000	8	5.0

Source: Field survey data, 2008

As evident from the Table 3, about three- fourth of the households receive less than Rs. 4000 adults equivalent per capita income per month.

#### Achievements of Essential Capabilities

##### Educational Achievements

It can be observed an unprecedented motivation for and inspiration on education among the rural mass. Even within the relatively as well as absolutely insufficient educational opportunities, almost all parents are making every efforts to send their children to schools.

**Table 4: Distribution of Educational Achievements**

Education level	No. of respondents	Percentage
No schooling	5	3.12
Up to grade 5	24	15.00
Grade 6 – 8	19	11.88
Grade 9 – 10	26	16.25
G.C.E.(O/L)	52	32.50
G.C.E.(A/L)	30	18.75
Graduates	4	2.50

Source: Field survey data, 2008

In the present analysis, the main focus was only on the educational achievements of the respondents, i.e. heads of the surveyed households. Table 4 above describes the educational achievements of them.

There are only 5 (3.12 percent) respondents who did not have attended into the formal education, hence cannot read and write. 2 out of them are females. 4 respondents are graduates. Largest group (32.5 percent) is the respondents, who passed the G.C.E (O/L). About 19 percent has completed the G.C.E. (A/L). 15 percent has received only the primary education. About 12 percent has reached to the secondary level (grade 6 -8) and 16 percent to the senior secondary (grade 9 – 10) level.

Overall, the analysis reveals that educational achievements of the heads of the households are reasonably high though majority of them has not achieved high level of education. Illiterates are only 3 percent. About 82 percent has reached at least secondary education level.

##### Health Achievements

Health achievement is determined mainly by the availability of health facilities and the accessibility to health care. As in most other rural areas, public hospitals provide basic health care for the inhabitant in the surveyed area. There are two government hospitals, one in Katuwana and other in Sooriyawewa. In providing services, both these hospitals suffer from the shortage of health personals and essential drugs, lack of equipments and enough building facilities for indoor service. In some instances, indoor patients have to be on the mats without beds. Even though few private sector dispensaries provide outdoor service, those also neither accomplished with necessary equipments nor trained health personals. These have critically affected on the health achievements of the villagers. Over 82 percent of the respondents revealed that they have gone at least one time to see a doctor for the treatment of the members of their families during the last three months.

It seems that health condition of the village dwellers are linked largely with the inadequate achievements of some other capabilities such as drinking water and sanitation. Moreover, better utilization of existing health services is prevented by the poor transportation and weak road condition. Moreover, health condition of the people links

with good health practices and the awareness of the diseases, mainly on the communicable diseases. As informal discussions revealed, most of the villagers do not have a proper idea on good health practices. Thus, they have failed to avoid the preventable diseases relating to mouth, eyes, ears, skin etc. and communicable diseases like dengue fever.

The clinics in these villages are functioning quite well. In fact, they are making a great contribution to the health care of pregnant women and infants. The clinics are conducted regularly. Villagers are quite satisfied with service of the field officers particularly of Midwives.

Overall, health achievements of rural dwellers are low mainly due to the inadequate availability and accessibility to health facilities. Public sector health service has not been successful to provide sufficient health protection to the villagers.

#### **Housing Achievements**

In determination of living standard of human being, housing plays a vital role. It provides not only shelter but also an essential requirement for the achievement of other capabilities such as health and education. Housing achievements of the surveyed households are assessed by use of two indicators i.e. type of the house and the ownership of the house.

#### **Type of Housing**

The classification of the type of housing units is based on the classification of Department of Census and Statistics in its surveys on Population and Housing. According to this classification, in general, the housing units where the materials used are of the durable type like bricks, cement, tile, asbestos sheets etc. are classified as permanent. The housing units where the walls and roof are made of cadjan, Palmyrah or other inferior or non-durable material are classified as improvised. The housing units, where the walls and roofs are made up of a mixture of durable and non-durable materials are classified as semi-permanent. Table 5 shows the distribution of type of housing units of the surveyed households:

**Table 5: Distribution of the Types of Housing Units**

Type of housing unit	Number of respondents	Percentage
Improvised	5	3.13
Semi-permanent	40	25.00
Permanent	115	71.87

Source: Field survey data base, 2008

Of the surveyed households, around 72 percent are living in permanent housing units, even though the quality and structure of the houses differ largely. The percentage of semi-permanent housing units is about 25. There is very little number of improvised housing units among the surveyed households. However the average number of bed rooms of these housing units is inadequate compared to the average family size.

#### **Ownership of Housing Units**

Ownership of housing units can also be used as a supplementary indicator to assess the achievement of housing. This is important because, it assesses the public sector involvement on housing in the rural sector. The distribution of ownership of houses is given in the table below:

**Table 6: Distribution of the Type of ownership of Housing Units**

Type of ownership	No. of housing units	Percentage
A member of the family	136	85.00
For the parents	16	10.00
For the relative/friend (free of rent)	02	1.25
Rented/leased	01	0.63
Provided by the government	04	2.50
Provided by the employer	01	0.63

Source: Field survey data base, 2008

Table 6 reveals that about 85 percent of the surveyed households are living in the houses owned to a member of the household. The percentage of houses provided by the government under its direct

housing programs is only about 2.5. In fact, in addition to the direct provision of houses, public sector has provided assistance by means of concessionary loans through the public sector financial institutions for house constructions. Sixteen households (10 percent) are living in the houses belong to their parents. The number of houses includes into other categories is very small. Renting of houses in these areas is uncommon. Moreover, the houses provided by the employer can be seen only in the schools.

#### **Drinking Water Achievement**

As one of the basic human needs, sustainable access to safe drinking water, acquire a greater importance in determination of well-being of human beings. As mentioned earlier, source of drinking water is used to assess the accessibility to safe drinking water. Similar to the definition of DCS (2001), the households that use any of the following types of water supply for drinking, with accessibility within 1km distance, are defined as households with sustainable access to safe drinking water: piped water (mainline), tube well and protected wells. Even though, the Department of Census and Statistics has included 'protected rain water' (rain water tanks) into this category, since those households which drink water from the rain water tanks are unable to access water sufficiently throughout the year, in the present analysis, they have considered as deprived of drinking water. In addition to the protected sources there are several households drink water from the unprotected sources such as unprotected well and channel. Further, some households have to travel more than 1km to have drinking water. Table 7 shows the distribution of surveyed households according to the water source:

**Table 7: Distribution of Households by Source of Drinking Water**

Source	No. of households	Percentage
Piped water(mainline)	16	10.00
Tube well	20	12.50
Protected well	86	53.75
Rain water tanks	17	10.62
Unprotected sources	21	13.12

Source: Field survey data base, 2008

Majority of the surveyed households drink water from the protected wells (53.75 percent) and 20 households (12.5 percent) get water from the tube wells. Ten percent of the households use piped born water for drinking. Approximately, 11 percent and 13 percent of the households receive drinking water from the rain water tanks and from the unprotected sources, respectively. They all are deprived of drinking water capability. Hence, sustainable access to safe drinking water is enjoyed by only about 76 percent of the surveyed households. This is quite higher to the district average (83 percent) in 2001 (DCS, 2001). Moreover, in the severe drought seasons some have to travel long distance to find drinking water. Therefore, undoubtedly, the households which deprived of water capability will be larger than this estimate.

#### **Sanitation Achievement**

Even though sanitation is an important capability for the well-being and it indirectly affects the health achievements, poor rural households pay less attention on this capability. In classifying the sanitation achievement, the households with access to facilities that hygienically separate human excreta from human, animal and insect contact were considered as the households that achieved sanitation capability. This includes pour flush latrines, water sealed latrines and ventilated improved pit latrines considering that they are either private or shared but not public. The toilet facility of a given household does not fit with one of these categories and the households do not have a toilet facility are considered as a household that deprived of sanitation capability.

**Table 8: Distribution of Households by the Type of Toilet Facilities**

Type of Toilet	No. of Households	Percentage
Pour flush	08	05.0
Water sealed	78	49.0
Improved pit	24	15.0
Temporary pit	42	26.0
No toilet	08	05.0

Source: Field survey data base, 2008

As shown in Table 8, nearly 69 percent of the surveyed households have toilet facilities to hygienically separate human excreta. However, the number of households that use pour flush latrine is very small. Five percent which do not have a toilet use mostly the surrounding jungle. With these households, 26 percent, which use temporary pit toilets clearly deprived of sanitation capability. According to the Census of Population and Housing in 2001, district average of the deprived households of sanitation capability is only 5 percent.

#### The Assessment of Multidimensional Poverty Incidence

The assessment of existing multidimensional poverty level of surveyed households is based on the 'counting approach' suggested by Alkire and Foster (2007; 2008) with appropriate adjustment. According to the approach, firstly, it is needed to construct dimension specific cut-off  $z_j$ s for each basic capability to determine whether a person is deprived of or not in a given dimension. Secondly, it is necessary to construct dimensional deprivation cut-off  $k$  that specifies the minimum number of capabilities in which a person must be deprived of in order to consider the particular person/household to be multidimensionally poor. For the aggregation, multidimensional headcount ratio is to be computed employing the empirical data.

**Table 9: Indicators and Dimension Specific Cut-offs for Selected Capabilities**

Capability	Indicator	Cut-off $z_j$
Access adequately to foods	Number of meals (in general) have a day	3 meals a day
Being educated	Highest level of education reached	Grade 6
Being healthy	Number of times visited a doctor for treatment within last 3 months	Non (Zero times)
Access to improved sanitation	Type of the toilet	Improved pit
Access to safe drinking water	Source of drinking water	Protected source
Being safely sheltered	Type of the house	Permanent

Source: Researcher's definitions

Relevant indicators and the dimension specific cut-off for each capability are given in Table 9. Accordingly, the cut-off for food capability is 3 meals per day. This indicates that the person who is unable to receive, generally, all 3 meals per day is deprived of food capability. On the contrary, the person who is capable to receive all 3 meals is regarded as affluent of this capability. Similarly, the person who does not have reached to grade 6 is considered as deprived of education capability. This cut-off may be controversial. However, there is not an accepted cut-off that can be used to separate deprived individuals of education from others. If a person has visited a doctor at least one time during the past 3 months for the treatments, he is deprived of health capability. To the contrary, if the person in question had not visited a doctor for treatment during the past three month period, his achievement on health is good enough to move out of health poverty. Since, basically, ventilated improved pit toilets can be considered as the improved toilet facility, it is used as the cut-off for sanitation capability. Accordingly, the person who does not use at least improved pit toilet is considered as impoverished of sanitation capability. The use of protected water source is the cut-off for drinking water capability. Thus, the surveyed individuals who drink water from one of the protected sources such as protected wells, tube wells and from the main supply are ranked as affluent of water capability. Finally, living in a permanent house is the cut-off for housing capability. Accordingly, the housing units, which are built using the durable materials like bricks, cement, tile, asbestos sheets are classified as permanent.

By use of these cut-offs, we can separate the persons who are deprived of each capability. In other words, we can measure the dimension specific deprivation or dimension specific poverty levels. Table 10 shows the dimension specific poverty levels among the rural inhabitants.

**Table 10: Dimension Specific Poverty**

Capability	No of respondents	Percentage
Access adequately to foods	14	8.75
Being educated	29	18.1
Being healthy	35	21.9
Access to improved sanitation	50	31.25
Access to safe drinking water	38	23.8
Being safely sheltered	45	28.1

Source: Field survey data base, 2008

#### **Food Poverty**

The people who are not capable to access adequately to daily food requirements are considered as poor in terms of food. As indicated in the Table 10, about 9 percent of the rural inhabitants fall below the food capability cut-off. However, this is the lowest deprived capability of rural mass. This implies that public policies focusing on providing assistance to acquire enough food are reasonably successful. Currently, *Samurdhi* is the only public sector program, which focuses the poor. But, some other policies such as price controls of essential food items, fertilizer subsidy etc. indirectly lead to enhance the accessibility to foods by the poor.

#### **Education Poverty**

The individuals who are not capable to reach the grade 6 (secondary level) are considered as the education poor. According to the analysis, 18 percent of the heads of the rural households have failed to reach to the secondary education. This indicates that, whatever the reason, public education policy has not sufficiently contributed to provide education opportunities for the rural inhabitants. However, this measure depends necessarily on the dimension specific cut-off. If we took into account the literacy rate as the cut-off, only about 3 percent is deprived of education. About two-third of the education poor individuals are older than 50 years of age. This implies that the

contribution of public education policy in providing education has improved over time.

#### **Health Poverty**

As indicates in the Table 10, 22 percent of the individuals are poor in terms of health achievements. In fact, this is a quite large percentage. In the rural sector, mostly people do not go to see a doctor for normal illnesses. They use home made medicines. Since, only the person who visited a doctor at least one time is ranked as the deprived of health capability, the people who did not go to see a doctor although they suffered from illnesses, is counted as the healthy people. Therefore, the real situation might be larger than this.

#### **Sanitation Poverty**

People who do not have hygienically improved toilet facilities are ranked as sanitation poor. The cut-off for the sanitation capability is 'the use of improved pit toilets'. As indicated in the Table 10, about 31 percent are deprived of sanitation capability. In fact, this is the highest deprived capability of rural people. One of the possible reasons for this high deprivation is that the least attention made by the rural people on this capability. Generally, they do not much care about the sanitation as other capabilities. They are not aware of its significant link with the achievements of other capabilities like health. Certainly, this is one of the spheres that public sector has given lower priority in there welfare agenda.

#### **Drinking Water Poverty**

Respondents who do not have access to protected sources to obtain drinking water are graded as deprived of drinking water capability. As shown in Table 10, about 24 percent of the rural people deprived of drinking water capability. There might be a linkage of high deprivation of water capability with lower achievement of health capability among the surveyed individuals because low quality of water leads to water born diseases. Even though, shortage of drinking water is a long standing issue in the part of the area, public sector has not involved sufficiently easing this issue.

### Housing Poverty

An individual, which is not living in a basic permanent house, is ranked as deprived of housing capability. According to the Table 10, about 28 percent of the surveyed individuals are housing poor. This is the second highest deprived capability by rural people. Low income is the major reason for this higher deprivation. If the per capita space of the houses were taken into account, clearly, the deprivation is larger than this. Although, public sector has involved highly on housing sector, particularly targeting low income groups for over past few decades, absence of proper shelter is still a big problem in the rural sector.

The analysis reveals that housing, sanitation, drinking water and health are the highly deprived capabilities by rural people. Public welfare policies on these spheres have not been capable to free the large number of rural people from poverty. Indeed, these dimensions should receive high priority in policymaking. Also, policymakers must reconsider the existing strategies.

Deprivation of food capability is relatively small. This low deprivation is mainly because, as main economic activity agriculture provides the basic food necessities for the rural dwellers. Fertilizer subsidy has directly contributed to increase the productivity of paddy and indirectly to increase the accessibility to food of the rural people. However, Samurdhu program make only a marginal contribution to increase food capability.

Deprivation of education capability is relatively low. Private sector involvement on education has contributed significantly to increase the accessibility to education in the rural areas. Both public and private sectors can do more things to increase further the accessibility to education in the rural sector.

### Multidimensional Poverty Incidence

According to the proposed methodology to measure multidimensional poverty incidence, in the next step, it is necessary to construct dimensional deprivation cut-off  $k$ . As mentioned earlier, *union*

*method* of identification is to be employed to separate poor from non-poor. Accordingly, a person  $i$  is poor if he deprived at least in one of the 6 basic capabilities.

**Table 11: Distribution of Deprivation Counts**

Number of capabilities	Frequency	Percentage	Cumulative Percentage
0	91	56.88	56.88
1	24	15.00	71.88
2	18	11.25	83.13
3	13	8.12	91.25
4	12	7.50	98.75
5	2	1.25	100.0
6	0	0.00	100.0
Total	160	100.0	

Source: Field survey data base, 2008

As indicates in the Table 11, about 57 percent of the surveyed people have capable to reach to or above the cut-off achievement levels of all selected capabilities. In other words, they have deprived none of the capabilities. 15 percent has deprived only one capability. None has deprived all capabilities. Highest deprivation count is 5. Two people have deprived 5 capabilities.

According to the union method of identification individuals who deprived of at least one capability is poor. Thus, as Table 11 indicates, 69 people are poor since they have deprived at least one of the selected capabilities. 91 are non-poor. The computed multidimensional headcount ratio ( $H_1$ ), associate with these figures is 0.43. This reveals that 43 percent of the rural people are multidimensionally poor. In fact, this is significantly higher than recently estimated income poverty levels of the rural sector. According to the estimates of Department of Census and Statistics (2008), only 15.7 percent of the rural population is poor. The headcount ratio for Hambantota district is 12.7 percent. This confirms that, as expected, multidimensional poverty incidence is higher than the uni-dimensional poverty incidence.

### Conclusions

As a result of the long standing public social welfare policies and specific poverty alleviation efforts, income poverty of the country as a whole and poverty in the rural sector has reduced markedly during the past decades. However, even amid the huge efforts, deprivation of some aspects of multidimensional poverty in the rural sector is still critically high. More specifically, rural people are highly deprived of access to improved sanitation, housing, health and drinking water capabilities. Public policies on these spheres have failed to bring the large number of rural people out of deprivation cut-offs. Only food and education policies have shown a quite success.

For more effective poverty reduction in the rural sector, policymakers should reconsider the existing policies, particularly on housing, sanitation, and drinking water. Instead of universal strategies, area specific strategies could be introduced to improve the achievements more effectively in these spheres. Moreover, awareness programs are essential to improve the achievements in health and sanitation capabilities.

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