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1. Introduction

Poverty is a key measurement of the development for a long time in the history. Sri Lanka as a developing country passed many milestones in reducing poverty in past few decades. Under Millennium Development Goals the achievements against poverty made remarkable bench marks and poverty was reduced by every angle and measurements.

The National Statistics Office of Sri Lanka, (Department of Census and Statistics - DCS) always pursuits new dimensions of poverty calculation. In last few decades new set of poverty indices were introduced directing the policymakers in effective ways to make productive decisions. From 1980 to 1990 the department estimated poverty statistics using data collected from various surveys such as Family Budget Survey, Labour Force and Socio Economic Survey. The emerging demand for poverty data always compelled the department to find new ways of collecting data to compute new set of indices. As a milestone in 1990 the department launched a new survey called Household Income and Expenditure survey (HIES) to cater this climbing demand. DCS conducts two major censuses called "Population Census" and "Economic Census" covering the entire country in every decade and range of other sample surveys to fulfil the national data requirements. This report is mainly based on the data collected from these censuses and surveys.

The main objective of this report is to provide comprehensive knowledge of the current position and trends of poverty in Sri Lanka.

The poverty indices are basically derived either on income data or expenditure data. The analysis and indicators presented in this report are based on the house hold income and expenditure data collected from aforesaid surveys and Population census conducted in 2012.

This report contains eleven chapters. The first chapter provides background details of the report. The other chapters can be arranged as follows.

Chapter 02: Methods of Measuring Poverty: this chapter discusses various methods used to measure the poverty of Sri Lanka. The theoretical back ground, calculations and range of indexes for survey years presented in this chapter.

Chapter 03: Poverty and inequality: Proper definitions of poverty in various angles are focused in this chapter. Especially the introduction of Official Poverty Line and its applications in poverty regarded decision making will be discussed in this chapter.

Chapter 04, 05,06 discuss various estimators of poverty related to the Sri Lanka such as Estimation of poverty in small area, Multi-dimensional poverty and a set of poverty related indicators.

Chapter 07 has been allocated for two special studies done by Department of Census and Statistics related to the GN level vulnerability to the poverty, in this study department rank the GN Divisions in Scientific way how much it is vulnerable to the poverty using Factor analysis techniques.

Chapter 08: Housing Types of Sri Lanka: it is an effort to group the housing units in the country basically on type of the unit. This exercise mainly based on the data collected by Population Census 2012.

Chapter 09: Policy Directions to Eradicate Poverty, this chapter discusses directions towards eradicate poverty using input output tables used to construct national accounts.

Chapter 10: Consists of practical examples of application poverty related data on implementing development projects towards eradicating poverty, special reference to the 'Pukkulama' GN division in Puttlam district.

Chapter 11: Summery.

Annexure: In this part the reader will find range of other data tables, charts and graphs related to the poverty, selected from some important publications of the Department of Census and Statistics.

Note of Compact Disk Presented together with this report:

2. Method of Measuring Poverty

2.1 Household Income and Expenditure Survey

The Department of Census and Statistics of Sri Lanka calculates official poverty measurements using the data collected from Household Income and Expenditure Survey (HIES), which is yearlong survey and being one of the most comprehensive surveys providing measurements on living condition and poverty status of the people in Sri Lanka. The frequency of the survey was once in five years since 1990/91 to 2006/07 and there onwards once in three years due to the fast changes of living patterns of the people. This survey collects most recent data of living conditions and the poverty related information from a sample of households representing the entire country. Those poverty related information of HIES is used to calculate poverty based measurements using "Cost of Basic Needs" method and official Poverty Line.

2.1.1 Overview of Household Income and Expenditure Survey (HIES)

HIES collects detailed information about household expenditure, Household income, household characteristics and the information of basic facilities throughout Sri Lanka.

General objectives of conducting HIES;

- Identify the levels and patterns of household expenditure on a comprehensive range of good and services purchased for private use.

- Identify how household income levels and patterns vary according to the characteristics such as geographical locations and sources of income etc.

- More specifically the HIES data is used to update the weighting of the Consumer Price Index (CPI) to ensure it adequately reflects the spending habits of the population and National Accounts compilation.

2.1.2   Purpose of Conducting Household Income and Expenditure Survey (HIES)

HIES data are used to measure the economic well-being of the population and provide information on individuals and households levels overtime in various dimensions of social and economic characteristics. This survey is the main source of data which is used to calculate poverty indices for Sri Lanka. The survey data enable to assess the economic inequality and the effectiveness of the social safety net programs by different socio economic groups in Sri Lanka. HIES data are used internally for **Consumer Price Index** (CPI) and national accounts.

2.1.3   Coverage of Household Income and Expenditure Survey (HIES)

General sample size of the HIES is 25,000 housing units which provides adequate and reliable statistics at district level,

Information is collected only from usual residents. Usual residence refers to the housing unit at which the person usually lives, i.e. sleeps, keeps his/her clothes and other belongings etc. It is the residence from which a person generally goes to work or if a student, attends to school. A person's usual residence need not always be his/her permanent residence although in many cases the usual residence may happen to be the permanent residence.

2.1.4   Areas Not Covered by Household Income and Expenditure Survey (HIES)

Survey does not cover institutional population such as living in School hostels, Nurses hostels, University hostels, Police and military barracks, Rehabilitation camps, Detention camps, Prisons, Convents, Hospitals, etc and Households which contains member's foreign expatriates which includes diplomatic personnel of overseas governments.

2.2 "Cost of Basic Needs" Method for Estimating Poverty

The "Cost of Basic Needs" (CBN) approach is most commonly used to calculate poverty line. Defining poverty lines based on three methods: the cost of basic needs, food energy intake, and subjective evaluations. It first estimates the cost of acquiring enough food for adequate nutrition—(2030 kilocalories per capita per day) and then adds the cost of other essentials such as clothing and shelter.

2.2.1   Defining a Consumption Bundle

The standard approach for poverty line estimation using the CBN method is to first find a food consumption bundle of the population likely to be poor (called henceforth the "reference group"), and then estimate the cost of consuming this bundle using the prices faced by the reference group. The food expenditure thus derived constitutes what is referred to as the food poverty line. Then non-food component of the poverty line is found.

2.2.2   Food Items in Consumption Bundle

The objective of a poverty line is to capture the basic needs necessary to meet minimum living standards. The cost-of-basic-needs (CBN) method addresses this objective through defining a consumption bundle – incorporating food and non-food items – that is adequate to meet the nutritional requirements, and estimates the purchasing cost of that consumption bundle.

2.2.3   Non-Food Items in Consumption Bundle

The important question related to this method is that of how to estimate the non-food component of the poverty line, in a way such that it captures the basic non-food requirements. A standard approach recommended by a number of researchers, has been to estimate the non-food component from the expenditure composition of households whose food expenditures are close to what is required to achieve the nutritional anchor.

2.2.4   Estimating Official Poverty Line Using CBN Method

Having selected the consumption bundle for CBN approach, it will be next stage to construct the poverty line. Official Poverty Line (OPL) which was established on HIES 2002 data by the DCS is used to measure the poverty since 2004. The OPL is an absolute poverty line which is fixed at a specific welfare level that is a person who meets a certain minimum nutritional intake (2,030 kilocalories per capita per day) to compare over time with household food and non- food consumption and expenditure data. Hence this is called as consumption poverty line and the Cost of Basic Needs (CBN) approach is an internationally recognized method which is being used to determine its value. Therefore, the OPL is the minimum requirement of nutrients plus the other basic needs. *Therefore the 'Poverty Line' is defined as the minimum amount of expenditure per person required to satisfy his/her basic food and non-food expenditure. According to this definition of a person whose* **per capita expenditure value lies below the poverty line is considered as poor**. *The Head Count Index (HCI) is the total number of* **people who live under the poverty line as a percentage of the total population.**

OPL established for Sri Lanka in 2004 was Rs. 1,423/- real total expenditure per person per month is updated for the inflation of prices through the Colombo Consumer Price Index (CCPI) calculated monthly by the DCS. According to the average price index values are adjusted for HIES corresponding survey months, DCS publishes Head count index for each survey periods. Accordingly, the value of poverty lines for the survey periods indicates in the below table.

Table 2-1: Value of the Official Poverty Line in Sri Lanka (From 1990-91 to 2012-13)

Survey periods	Value of OPL (Rs.)
1990/91	475
1995/96	883
2002	1,423
2006/07	2,233
2009/10	3,028

2012/13	3,624
Source: HIES Surveys: Department of Census and Statistics	

2006/07, 2009/10 and 2012/13 are Rs.2, 233, Rs.3, 028 and Rs.3, 624 respectively. The value of poverty line of 2002 was deflated using CCPI to obtain the poverty lines for 1995/96 and 1990 and the values are Rs.833 and

The statistics of poverty based on poverty lines for each and every survey year are given in next chapters as tables.

2.3 Main indicators compiled with HIES

The statistics in this book overlooks range of poverty and inequality related indicators for Sri Lanka giving opportunities to compare the changes of statistics over the time and across geographical regions sector, province and district levels. These statistics will be more useful and valuable for various purposes and number of stakeholders to lead well-informed decision making and subsequent improvement in well-being of the population in Sri Lanka. Following statistics are provided with their scales, ratios and distributions by various disaggregated levels, such as by various demographic conditions and sectorial distributions.

- Household and per capita income
- Household and per capita expenditure
- Poverty head count ratio,
- Gini Coefficient.
- School education
- Health information
- Inventory of durable goods
- Access to infrastructure facilities
- Household debts
- Housing information
- Agriculture holdings & Livestock

- information on the impact analysis of welfare transfer programs

3.   Poverty and Inequality

Poverty can be defined for a person or group of people as 'Inability to meet minimum levels of well-being such as access to certain consumption or income levels , housing, health, education facilities and certain rights recognized according to standards of human needs and socio economic conditions of the society.

Different countries and international organizations use different indicators to measure poverty. Sri Lanka uses Official Poverty Line (OPL) which has been established by the Department of Census and Statistics to measure poverty. The value of OPL is based on Household Income and Expenditure Survey (HIES) data.

3.1 Poverty Headcount Index (HCI)

Poverty incidence in Sri Lanka is measured using Official Poverty Line (OPL) declared by the Department of Census and Statistics. Poverty incidence is given as Poverty Headcount Index (HCI) that is percentage of people below the poverty (the persons who spent less than the value of the OPL) line.

The statistics calculated through series of HIES surveys beginning from 1990/91 to 2012/13 are illustrated from the following tables and charts.

Table 3-1: The Value of Official Poverty Line and Poverty Headcount Index (From 1990-91 to 2012-13)

Survey Period	Value of OPL (Rs.)	Headcount Index (% of population below the OPL)
1990/91	475	26.1
1995/96	883	28.8
2002	1,423	22.7
2006/07	2,233	15.2
2009/10	3,028	8.9
2012/13	3,624	6.7

Figure 3-1: Trend of the Poverty Incidence (Headcount Index) in Sri Lanka - (From 1990-91 to 2012-13)
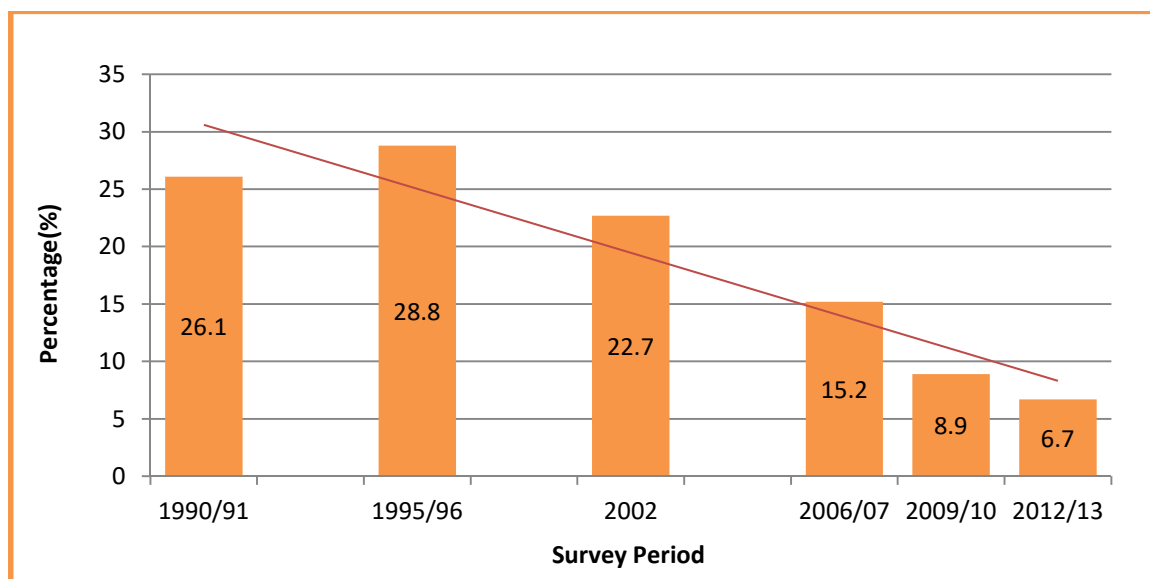
Table 3-2: Poverty Headcount Index by the Sectors of Sri Lanka (From 1990-91 to 2012-13)

Sector	1990/91	1995/96	2002	2006/07	2009/10	2012/13
	(%)	(%)	(%)	(%)	(%)	(%)
National	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	11.4	10.9

- According to the estimates of poverty Indies (poverty incidences) of passed two decades, poverty has drastically declined by 74% from 26.1 in 1990/91 to 6.7 in 2012/13.

- Estate population was more affected by poverty than the other two sectors since 1995/96. However when continuous monitoring the difference in poverty since 1990/91 between estate and rural over and above estate and urban has come very diminutive since 2009/10.

Table 3-3: Poverty Head Count Ratio by Provinces of Sri Lanka (From 1990-91 to 2012-13)

Province	1990/91	1995/96	2002	2006/07	2009/10	2012/13
	(%)	(%)	(%)	(%)	(%)	(%)
Sri Lanka (Total)	26.1	28.8	22.7	15.2	8.9	6.7
Western	19.1	16.3	10.8	8.2	4.2	2.0
Central	30.7	36.2	25.1	22.3	9.7	6.6
Southern	30.2	32.6	27.8	13.8	9.8	7.7
Northern	-	-	-	-	12.8	10.9
Eastern	-	-	-	10.8	14.8	11.0
North-Western	25.8	27.7	27.3	14.6	11.3	6.0
North-Central	24.5	24.7	21.5	14.2	5.7	7.3
Uva	31.9	46.7	37.2	27.0	13.7	15.4
Sabaragamuwa	31.0	41.7	33.6	24.2	10.6	8.8

Notes: "-" Survey was not conducted due to conflict situations prevailed in the areas

Table 3-4: Poverty Head Count Ratio by Districts of Sri Lanka (From 1990-91 to 2012-13)

District	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
Colombo	16.2	12.0	6.4	5.4	3.6	1.4
Gampaha	14.7	14.1	10.7	8.7	3.9	2.1
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
Matale	28.7	41.9	29.6	18.9	11.4	7.8
Nuwara Eliya	20.1	32.1	22.6	33.8	7.6	6.6
Galle	29.7	31.6	25.8	13.7	10.3	9.9
Matara	29.2	35.0	27.5	14.7	11.2	7.1
Hambantota	32.4	31.0	32.2	12.7	6.9	4.9
Jaffna	-	-	-	-	16.1	8.3
Mannar	-	-	-	-	-	20.1
Vavunia	-	-	-	-	2.3	3.4
Mullaitivu	-	-	-	-	-	28.8
Kilinochchi	-	-	-	-	-	12.7
Batticaloa	-	-	-	10.7	20.3	19.4

District	1990/91[*]	1995/96[*]	2002[*]	2006/07[+]	2009/10[-]	2012/13
	(%)	(%)	(%)	(%)	(%)	(%)
Ampara		-	-	10.9	11.8	5.4
Trincomalee	-	-	-	-	11.7	9.0
Kurunegala	27.2	26.2	25.4	15.4	11.7	6.5
Puttalam	22.3	31.1	31.3	13.1	10.5	5.1
Anuradhapura	24.4	27.0	20.4	14.9	5.7	7.6
Polonnaruwa	24.9	20.1	23.7	12.7	5.8	6.7
Badulla	31.0	41.0	37.3	23.7	13.3	12.3
Moneragala	33.7	56.2	37.2	33.2	14.5	20.8
Ratnapura	30.8	46.4	34.4	26.6	10.4	10.4
Kegalle	31.2	36.3	32.5	21.0	10.8	6.7

* Excluding Nothern and Eastern Province - 1990/91 , 1995/96 , 2002

\+ Excluding Northern Province and Trincomalee District in Eastern Province - 2006/07

\- Excluding Mannar,Kilinochchi and Mullaitivu District in Northern Province - 2009/10

Poverty Head Count Ratio by Divisional Secretariat Divisions of Sri Lanka (From 1990-91 to 2012-13)is available in the Compact Disk

3.2 Inequality Measures

Inequality is a broader concept than poverty in that it is defined over the entire population, and does not only focus on the poor. Income/Expenditure inequality is used to measure of disparities in the distribution of Income/Expenditure in a given society. It is defined over the entire population and most of inequality measures do not depend on the mean of the distribution.

Lawrence Curve and Gini Coefficient (Income approach), **Poverty Gap Index** and **Squired Poverty Gap index (Expenditure approach)** are the inequality measurements currently used in Sri Lanka adhering to the international standards. In this section the trends and current situation of these measurements will be discussed in detail.

3.2.1   Lawrence Curve and Gini Coefficient

There're many methods used in internationally to measure the inequality based on the income such as Lawrence Curve and Gini Coefficient, quintile dispersion ratio and Share of income. Lawrence Curve and Gini Coefficient is the most commonly used methods to calculate inequality in Sri Lanka on income basis.

GINI & Lawrence Curve Figures????

The statistics calculated through HIES Surveys on different survey period clearly indicate the situation and trend of this measurement in below tables and figures.

- ◆ The Gini is based on the Lorenz curve which plots cumulative proportions of the total income of the population in y axis and cumulatively share of the population from the lowest to highest income in x axis.

- ◆ The Gini can take values between zero and one and the line drawn at 45 degrees or the diagonal of the Lorenz curve represents a distribution with zero Gini value which indicates perfectly equal or zero level of inequity of the distribution.

- ◆ The range of the Gini coefficient index is between 0 and 1, where 0 indicates perfect equality and 1 indicates maximum inequality. 1, which indicates complete inequality (one person has all the income or consumption, all others have none)

Figure 3-2: Trend Gini Coefficient of household income and expenditure by Survey Periods
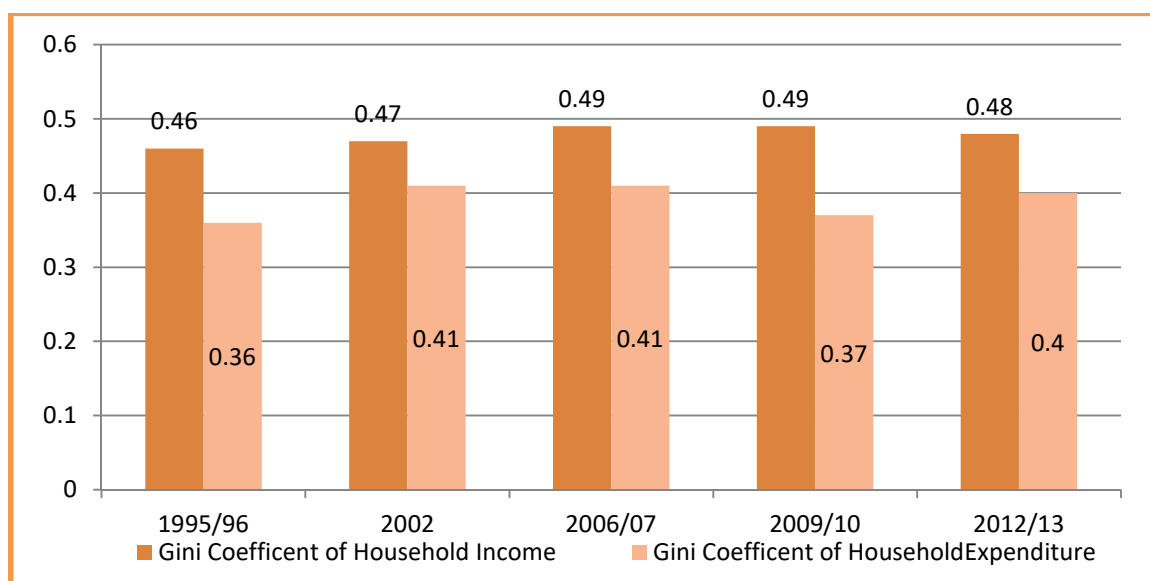
Table 3-5: Share of Income to total household Income, by national household income deciles (From 1990-91 to 2012-13)

National Household Income Decile Group	Share of Income to Total Household Income (%)					
	1990/91	**1995/96**	**2002**	**2006/07**	**2009/10**	**2012/13**
All Deciles	100.0	100.0	100.0	100.0	100.0	100.0
1	1.9	1.8	1.7	1.6	1.6	1.5
2	3.3	3.0	3.1	2.9	2.9	3.0
3	4.3	4.0	4.1	3.9	3.9	4.1
4	5.3	5.0	5.0	4.8	4.9	5.1
5	6.4	5.7	6.0	5.8	6.0	6.2
6	7.5	6.9	7.3	7.0	7.1	7.3
7	9.2	8.4	8.8	8.5	8.7	8.8
8	10.8	10.7	11.2	10.8	10.8	11.0
9	14.8	14.7	15.4	14.6	14.6	14.9
10	36.5	39.8	37.4	40.1	39.5	38.0
	Gini Coefficient					
Gini coefficient of Household Income	0.43	0.46	0.47	0.49	0.49	0.48
Gini coefficient of Household Expenditure	-	0.36	0.41	0.41	0.39	0.40

Table 3-6: Gini coefficient for mean household expenditure and Per Capita expenditure by sector, province and district (From 1990-91 to 2012-13)

Sector /Province / District	2006/2007 Gini coefficient of		2009/2010 Gini coefficient of		2012/2013 Gini coefficient of	
	Mean household expenditure	Mean per capita expenditure	Mean household expenditure	Mean per capita expenditure	Mean household expenditure	Mean per capita expenditure
Sri Lanka	**0.41**	**0.40**	**0.39**	**0.38**	**0.40**	**0.39**
Sector						
Urban	0.42	0.43	0.39	0.41	0.40	0.40
Rural	0.39	0.39	0.38	0.37	0.39	0.38
Estate	0.28	0.26	0.31	0.30	0.30	0.28
Province						
Western	0.41	0.41	0.40	0.41	0.39	0.39
Central	0.38	0.38	0.37	0.37	0.38	0.37
Southern	0.38	0.37	0.35	0.34	0.38	0.37
Northern	-	-	-	-	0.37	0.36
Eastern	0.35	0.33	0.24	0.20	0.32	0.31
North Western	0.38	0.36	0.37	0.37	0.37	0.37
North central	0.41	0.40	0.40	0.39	0.35	0.35
Uva	0.37	0.35	0.34	0.31	0.37	0.35
Sabaragamuwa	0.35	0.34	0.33	0.29	0.36	0.34
District						
Colombo	0.40	0.41	0.45	0.46	0.38	0.38
Gampaha	0.40	0.40	0.34	0.34	0.39	0.39
Kalutara	0.38	0.38	0.37	0.37	0.40	0.39
Kandy	0.39	0.39	0.40	0.39	0.39	0.38
Matale	0.40	0.39	0.35	0.35	0.41	0.41
Nuwara Eliya	0.31	0.29	0.33	0.34	0.33	0.31
Galle	0.39	0.39	0.35	0.34	0.36	0.37
Matara	0.38	0.37	0.37	0.38	0.40	0.38
Hambantota	0.36	0.34	0.33	0.27	0.35	0.35
Jaffna	-	-	0.26	0.24	0.34	0.33
Mannar	-	-	-	-	0.31	0.30
Vavnia	-	-	0.35	0.29	0.39	0.36
Mullaitive	-	-	-	-	0.33	0.31
Kilinochchi	-	-	-	-	0.42	0.39
Batticaloa	0.34	0.32	0.28	0.20	0.35	0.35
Ampara	0.36	0.34	0.21	0.22	0.32	0.29

Sector /Province / District	2006/2007 Gini coefficient of		2009/2010 Gini coefficient of		2012/2013 Gini coefficient of	
	Mean household expenditure	Mean per capita expenditure	Mean household expenditure	Mean per capita expenditure	Mean household expenditure	Mean per capita expenditure
Trincomalee	-	-	-	-	0.30	0.29
Kurunegala	0.37	0.36	0.38	0.36	0.38	0.37
Puttalam	0.38	0.37	0.33	0.36	0.37	0.36
Anuradhapura	0.41	0.40	0.42	0.42	0.35	0.34
Polonnaruwa	0.39	0.39	0.34	0.32	0.36	0.36
Badulla	0.38	0.36	0.38	0.35	0.36	0.36
Moneragala	0.33	0.31	0.26	0.23	0.35	0.32
Ratnapura	0.36	0.36	0.34	0.31	0.34	0.32
Kegalle	0.33	0.31	0.31	0.27	0.38	0.36

"-" Survey was not conducted due to conflict situations prevailed in the areas

General Conclusion on trends of GINI & Lawrence, if necessary??

3.3 Poverty Gap Index

Poverty Gap Index is defined as the "*average poverty gap in the population as a proportion of the poverty line"* (Where the non-poor have zero gaps).The Poverty Gap Index measures **the depth of poverty in a country or region, based on the aggregate poverty shortfall of the poor relative to the poverty line**. Since the Head Count Index is not sensitive to changes in the status of those already below the poverty line, it is inadequate in assessing the impact of specific policies (implemented in eradicating the poverty) on the poor. On the other hand, the Poverty Gap Index increases with the distance of the poor below the poverty line, and thus gives a good indication of the depth of poverty.

The statistics calculated through HIES Surveys on different survey period clearly indicate the situation and trend of this measurement in below tables and figures.

3.3.1   Trends in Poverty Gap

Figure 3-3: Poverty Gap Incidence (PGI) in Sri Lanka (From 1990-91 to 2012-13)
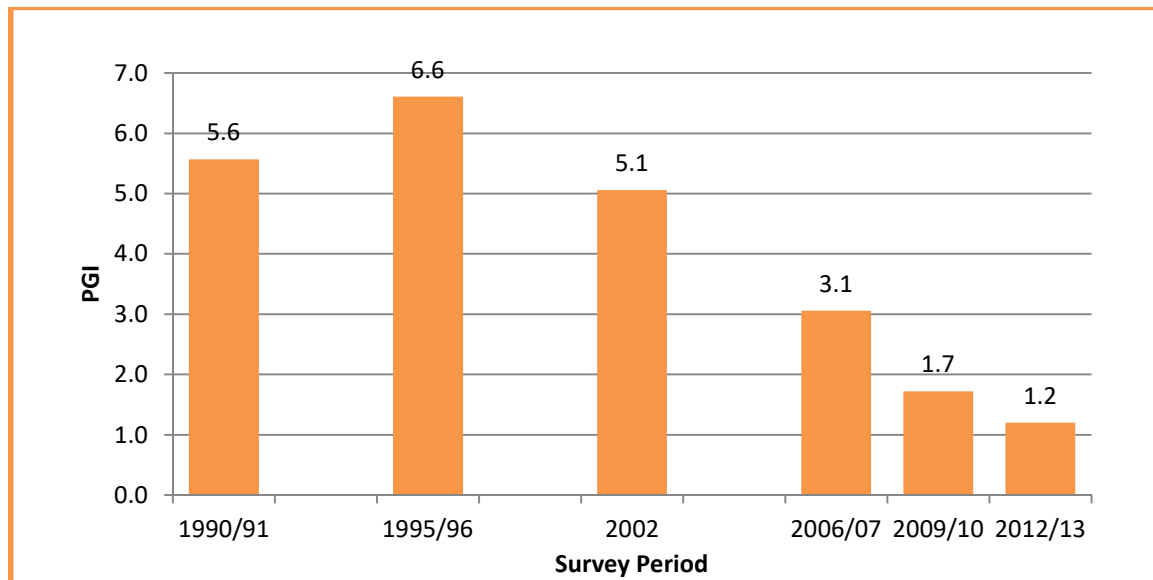
Figure 3-4: Poverty Gap Index (PGI) in Sri Lanka by sector -(From 1990-91 to 2012-13)

Table 3-7: Poverty Gap Insdex (PGI) in Sri Lanka by Province -(From 1990-91 to 2012-13)

Province	Survey Period					
	1990/91	1995/96	2002	2006/07	2009/10	2012/13
Sri Lanka	**5.6**	**6.6**	**5.1**	**3.1**	**1.7**	**1.2**
Western	4.1	3.2	2.3	1.5	0.8	0.4
Central	6.8	8.8	5.3	4.6	1.8	1.0
Southern	6.5	7.6	6.5	2.6	1.8	1.4
Northern	-	-	-	-	2.1	2.3
Eastern	-	-	-	2.1	3.2	2.1
North-Western	5.3	5.4	6.1	2.9	2.4	1.1
North-Central	4.4	4.6	4.4	2.8	1.0	1.0
Uva	6.8	12.8	9.0	6.2	2.4	2.6
Sabaragamuwa	7.0	10.5	7.6	4.9	2.1	1.5

"- " Survey was not conducted due to conflict situation prevailed in the areas

Table 3-8: Poverty Gap Index (PGI) in Sri Lanka by District - (From 1990-91 to 2012-13)

District	Survey Period					
	1990/91	1995/96	2002	2006/07	2009/10	2012/13
Sri Lanka	**5.6**	**6.6**	**5.1**	**3.1**	**1.7**	**1.2**
Colombo	3.7	2.1	1.3	1	0.7	0.3
Gampaha	2.6	2.5	2.3	1.4	0.7	0.4
Kalutara	7.2	7	4.4	2.7	1.3	0.5
Kandy	8	9.7	5.6	3.8	2.2	1
Matale	6.3	11	6.3	3.7	2	1.1
Nuwara Eliya	4.2	6.1	4.2	6.8	1	1
Galle	6.5	7.8	5.8	2.9	2.1	1.8
Matara	6	8	6.6	2.4	1.7	1.2
Hambantota	7.2	6.6	7.9	2.5	1.3	0.9
Jaffna	-	-	-	-	2.6	1.7
Mannar					-	4.6
Vavuniya	-	-	-	-	0.3	0.5
Mullaitivu					-	6.2
Kilinochchi					-	2.4
Batticaloa	-	-	-	1.5	5.1	4.5
Ampara	-	-	-	2.4	2.3	0.6
Trincomalee	-	-	-	-	1.8	1.4

District	Survey Period					
	1990/91	1995/96	2002	2006/07	2009/10	2012/13
Kurunegala	5.3	5.1	5.6	3.1	2.6	1.3
Puttalam	5.2	6.2	7.2	2.3	2	0.9
Anuradhapura	4.2	4.6	4	2.8	1	1.1
Polonnaruwa	4.9	4.5	5	2.8	1	0.9
Badulla	6.2	10.1	8.6	5.3	2.2	1.8
Monaragala	7.9	17.2	9.7	7.8	2.8	4.2
Ratnapura	6.3	12.2	7.8	5.3	2.4	1.8
Kegalle	7.9	8.5	7.3	4.3	1.8	1.1

Survey coverage:

1. Excluding Nothern and Eastern Province - 1990/91, 1995/96, 2002

2. Excluding Northern Province and Trincomalee District in Eastern Province - 2006/07

3. Excluding Mannar,Kilinochchi and Mullaitivu District in Northern Province - 2009/10

3.3.2   Squared Poverty Gap- ("Poverty Severity") Index-(SPGI)

Squared poverty gap index measure the severity of the poor. It takes into account the inequality among the poor. Squared poverty gap index weights the PGI itself. So it gives more weight to the very poor. That is a higher SPGI keeps the person/household further away from the poverty line.

Squaring the PG gives greater weight to the PG of the poorest since their PG will be larger value.

PG and SPGI are very important poverty measurements for evaluating project and policies. In some groups poverty incidence (PHI) is very high but Poverty Gap is very low (here numerous people are just below the poverty line) while other groups exist poverty Incidence is very low but PG is very high. (Relatively higher numbers of people are far below the standard of living).

It is very easy to reduce the number of poor impact on PHI by lifting the people who are just below the poverty line taking them out of poverty but might not great impact on poverty gap. Though by giving intervention to very poor might get them very close to poverty line by reducing PG by giving low impact on poverty incidence.

3.3.3   Trends in Squared Poverty Gap Index (SPGI) over time

Figure 3-5: Square Poverty Gap Index (SPGI) in Sri Lanka (From 1990-91 to 2012-13)
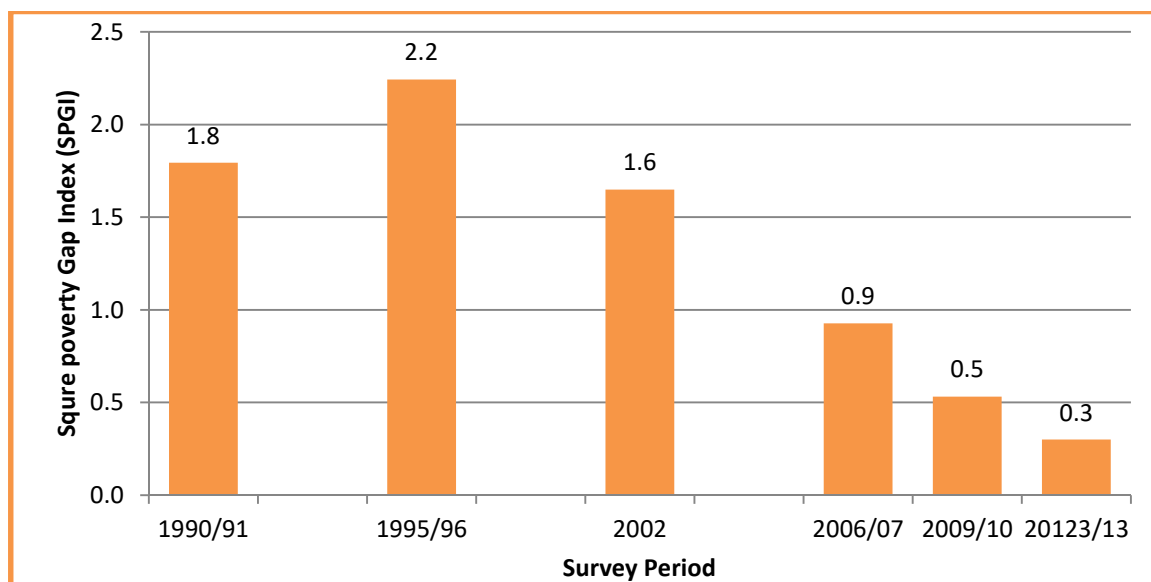
Figure 3-6: Squared Poverty Gap Index (SPGI) in Sri Lanka by sectors -(From 1990-91 to 2012-13)
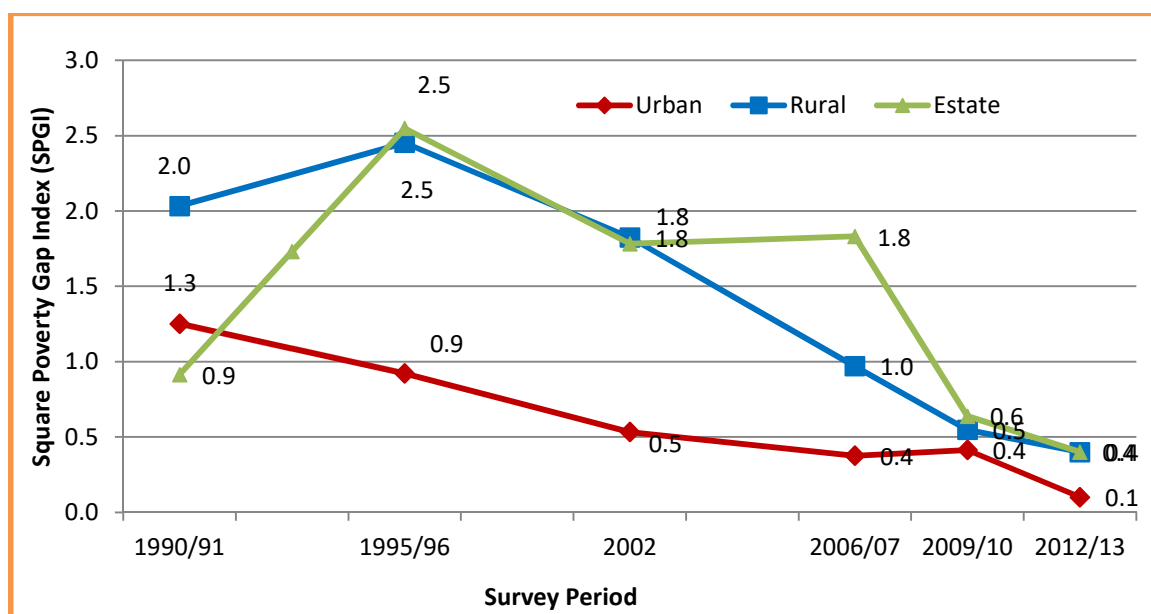
Table 3-9: Squared Poverty Gap Index (SPGI) in Sri Lanka by Province (From 1990-91 to 2012-13)

Province	Survey Period					
	1990/91	**1995/96**	**2002**	**2006/07**	**2009/10**	**2012/13**
Sri Lanka	1.8	2.2	1.6	0.9	0.5	0.3

Western	1.3	1.0	0.7	0.4	0.2	0.1
Central	2.3	3.1	1.7	1.4	0.5	0.2
Southern	2.1	2.6	2.2	0.8	0.5	0.4
Northern	-	-	-	-	0.6	0.7
Eastern	-	-	-	0.6	1.1	0.6
North-Western	1.6	1.6	2.0	0.9	0.8	0.3
North-Central	1.2	1.3	1.3	0.8	0.3	0.2
Uva	2.1	5.0	3.2	2.1	0.7	0.7
Sabaragamuwa	2.4	3.6	2.4	1.5	0.7	0.4

"- " Survey was not conducted due to conflict situation prevailed in the areas

Table 3-10: Squared Poverty Gap Index (SPGI) in Sri Lanka by District - (From 1990-91 to 2012-13)

District	Survey Period					
	1990/91	1995/96	2002	2006/07	2009/10	2012/13
Sri Lanka	**1.8**	**2.2**	**1.6**	**0.9**	**0.5**	**0.3**
Colombo	1.3	0.6	0.4	0.3	0.2	0.1
Gampaha	0.7	0.7	0.7	0.4	0.2	0.1
Kalutara	2.3	2.4	1.4	0.8	0.4	0.1
Kandy	2.7	3.6	1.8	1.2	0.7	0.2
Matale	2.1	4.1	1.8	1	0.5	0.2
Nuwara Eliya	1.5	1.8	1.3	2	0.2	0.3
Galle	2.1	2.9	1.9	0.9	0.7	0.5
Matara	1.9	2.7	2.2	0.6	0.5	0.4
Hambantota	2.5	2.1	2.6	0.7	0.3	0.3
Jaffna	-	-	-	-	0.8	0.6
Mannar	-	-	-	-	-	1.5
Vavuniya	-	-	-	-	0.1	0.1
Mullaitiwu	-	-	-	-	-	1.8
Kilinochchi	-	-	-	-	-	0.7

District	Survey Period					
	1990/91	1995/96	2002	2006/07	2009/10	2012/13
Batticaloa	-	-	-	0.4	1.9	1.5
Ampara	-	-	-	0.7	0.7	0.1
Trincomalee	-	-	-	-	0.5	0.3
Kurunegala	1.5	1.5	1.8	1	0.9	0.4
Puttalam	1.8	1.9	2.4	0.7	0.6	0.2
Anuradhapura	1.1	1.2	1.2	0.8	0.3	0.2
Polonnaruwa	1.5	1.5	1.6	1	0.3	0.2
Badulla	1.9	3.6	2.9	1.7	0.6	0.4
Monaragala	2.6	7.3	3.8	2.8	0.8	1.3
Ratnapura	2.0	4.3	2.6	1.6	0.9	0.5
Kegall	2.9	2.9	2.3	1.3	0.5	0.3
Survey coverage:						
1. Excluding Nothern and Eastern Province - 1990/91 , 1995/96 , 2002						
2. Excluding Northern Province and Trincomalee District in Eastern Province - 2006/07						
3. Excluding Mannar,Kilinochchi and Mullaitivu District in Northern Province - 2009/10						

Conclusion on trends of Poverty Gap, if necessary??

4. Estimation of Poverty at Divisional Secretariat Level

Household Income and Expenditure Survey do not enumerate enough households to reliably estimate statistics below the district level. The poverty map exercise proved to be a powerful tool in measuring and comparing poverty at disaggregate administrative levels below district level. In 2005, the World Bank collaborated with the Department of Census and Statistics (DCS) to conduct the country's first official poverty mapping exercise to measure poverty incidence at the Divisional Secretariat (DS) level. The method combines information from a household survey and a population census to estimate household expenditure for small areas. Using data from the 2001 Census of Population and Housing (CPH) and the 2002 Household Income and Expenditure Survey (HIES), at first time this exercise revealed considerable spatial heterogeneity in poverty and identified areas where poverty remained more prevalent in 2004.

This section presents the poverty estimates at the DS division level, based on data from the 2012/13 HIES and 2012 CPH and the poverty mapping method. The poverty map for 2012/13 has proved to be a powerful tool in measuring and comparing poverty at disaggregate administrative levels at Divisional Secretariat (DS) level.

Few DS divisions have not benefited from this overall progress. For an example Figure 4.1 shows that as of 2012/13 all DS divisions in Moneragala district still remained severely poor. Furthermore, pockets of poverty remain even in the affluent districts, namely Akurana DS division in Kandy district and Kinniya DS division in Trincomalee district.

The analysis has until now focused on documenting the estimated poverty rates, but areas with the highest poverty rates do not necessarily contain the largest number of poor people. Low poverty rates in populous districts such as Ratnapura, Galle, and Kurunegala mask a large number of people living under the poverty line. Kurunegala, for instance, is home to 7.7 percent of the country's poor population even though only 6.5 percent of its population lives under the official poverty line. In contrast, Mullaitivu and Mannar, where estimated poverty rates are very high (28.8 percent and 20.1 percent, respectively), collectively account for only 3.4 percent of poor people nationwide due to their small population sizes.

5.   Multidimensional Poverty

Multidimensional poverty Index (MPI) measures poverty in multidimensional approach considering three dimensions with ten indicators which reflects that deprivations of people face at household levels. Each dimension is equally weighted and each indicator within dimension is equally weighted. The method

was developed by Alkire and Santos in (2010) for Human Development Reports in 2010 and further developed by Alkire and Foster (2011). The methodology used for calculation is as follows;

Figure 5-1: Selected indicators under three dimensions

10 Indicators

Health		Education		Standard of Living					
Dietary Energy Requirement	Chronically Ill Or Disabled	Completed Six Years Of Schooling	Not Attending School	Electricity	Drinking Water	Sanitation	Principle Material Of Construction	Type Of Structure	Assets
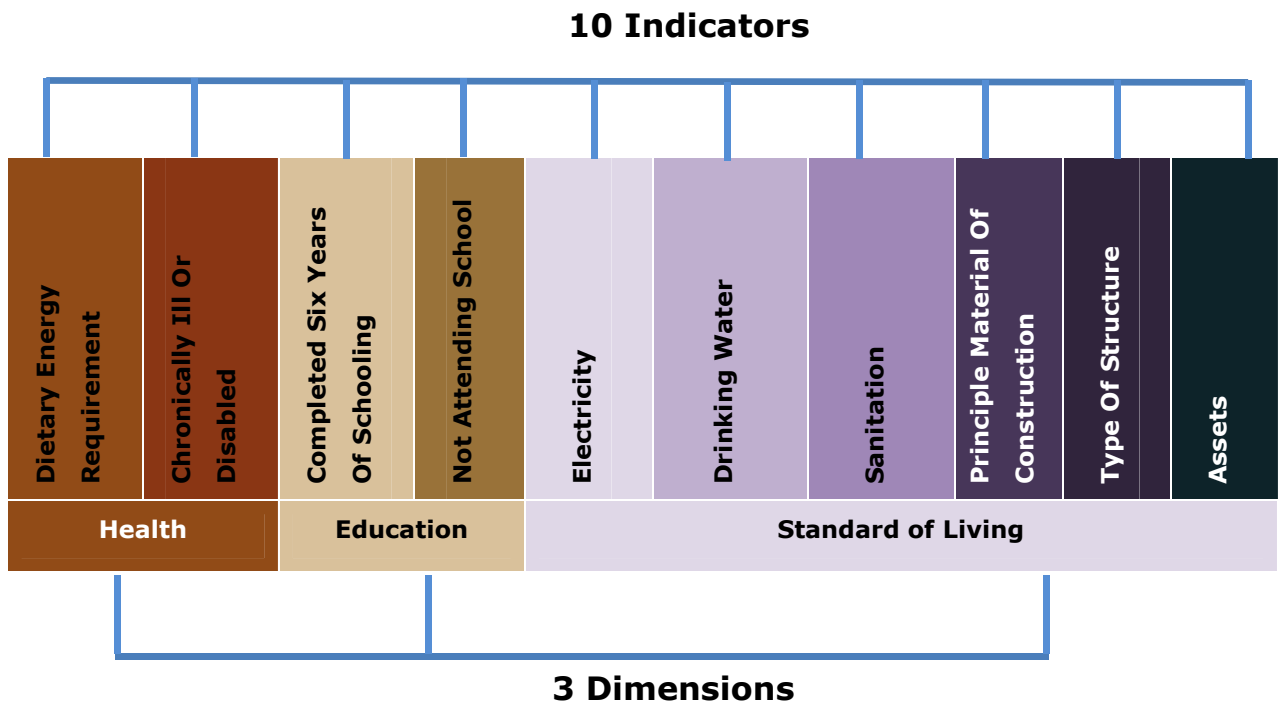
3 Dimensions

5.1 Methodology of Multidimensional Poverty Index (MPI)

Each person is assigned a deprivation score according to his or her household's deprivations in each of the 10 component indicators. The maximum score is 100 percent, with each dimension equally weighted (thus the maximum score in each dimension is 33.3 (100/3) percent). The education and health dimensions have two indicators each, so each component is worth 33.3/2 (100/6) percent.

The standard of living dimension has six indicators, so each component is worth 33.3/6 (100/18) percent.

To identify the multidimensional poor, the deprivation scores for each indicator are summed to obtain the household deprivation score, **C**. A cutoff of 33.3 percent which is equivalent to 1/3 of the weighted indicators is used to distinguish between the poor and non-poor.

- Multidimensional poor: Deprivation score, C >=33.3 percent

- Vulnerable to poor: 20<=Deprivation score, C<33.3 percent

- Severely multidimensional poor: Deprivation score, C>=50 percent

Calculation of Multidimensional Poverty Index

The Multidimensional Poverty Head Count Ratio, **H** = Number of multidimensional poor population

Total population

Intensity of Poverty, **A**   =   The sum of deprivation scores of multidimensional poor population

Total number of multidimensional poor population

Multidimensional Poverty Index = H*A

5.2 Who is Poor as of Multidimensional Poverty Index

A person is considered as poor in multidimensional if he or she is deprived in at least one third of the weighted indicators. That is if the deprivation score is 33.3 percent or greater, that household (and everyone in it) is multidimensional poor.

5.3 Variables Used in the Multidimensional Poverty Index

1. Education (each indicator is weighted equally at 1/6)

i. **Years of Schooling:** deprived if no household member has completed five years of schooling

ii. **School Attendance:** deprived if at least one school age child who is not attending school **(Proxy indicator)**

2. Health (each indicator is weighted equally at 1/6)

i. **Nutrition**: Deprive if having at least 80 percent of average per capita dietary energy requirement **(Proxy indicator).**

ii. **Illness** : Deprive if the head of the household is chronically ill or disabled **(Proxy indicator).**

3. Standard of living (**each indicator is weighted equally at 1/18)**

i. **Electricity** –Deprive if household not having access to electricity

ii. **Drinking water** - Deprive If household not having access to safe drinking water or if the source of clean drinking water is located more than 1 km away by walking **(Proxy indicator).**

iii. **Sanitation** - Deprive If household not having access to improved sanitation (not connected with water seal or not connected with drainage system) or if improved, it is shared (No availability of toilet within unit exclusive for the household or no availability of toilet outside unit exclusive for the household)

iv. **Principle material of construction** - Deprive If not having a living home with a permanent wall and permanent floor and permanent roof **(Proxy indicator).**

v. **Type of structure** - Deprive If household is line room/row house, slum/shanty or other **(Proxy indicator).**

vi. **Assets** - Deprive If household not having at least one asset related to access to information (radio/cassette player, television, domestic telephone, mobile telephone and not having at least one asset related to mobility (bicycles, motor cycles / scooters, three wheelers, motor

cars/vans, bus/lorry/tipper) or at least one asset related to livelihood (refrigerator, agricultural land (arable land), livestock)

Table 5-1: Multidimensional Poverty Statistics by survey period (From 2006/07 to 2012/13) in Sri Lanka

Multidimensional Poverty Statistic	Survey period		
	2006/07*	2009/10**	2012/13***
Multidimensional poor (%)(MPHCI) -(C >= 33.3 %)	7.0	5.8	3.8
Vulnerable to multidimensional poor (%) - (20 % <= C < 33.3 %)	22.5	21.4	15.8
Severe multidimensional poor (%) - (C >= 50 %)	2.0	1.4	0.9
Average MP score	14.3	13.5	11.6
Intensity (average MP score among poor)	45.2	44.0	44.1
Multidimensional poverty Index (MPI)	0.032	0.026	0.017
Contribution of education dimension to MPI (%)	17.8	15.0	18.8
Contribution of health dimension to MPI (%)	47.4	52.2	50.1
Contribution of living condition dimension to MPI (%)	34.8	32.8	31.1
Contribution of education indicator 1 to MPI (%)	13.1	11.9	14.6
Contribution of education indicator 2 to MPI (%)	4.7	3.1	4.1
Contribution of health indicator 1 to MPI (%)	23.5	26.3	24.8
Contribution of health indicator 2 to MPI (%)	23.9	25.9	25.3
Contribution of living condition indicator 1 to MPI (%)	6.7	5.7	5.4
Contribution of living condition indicator 2 to MPI (%)	4.6	3.6	3.9
Contribution of living condition indicator 3 to MPI (%)	8.4	9.2	6.5
Contribution of living condition indicator 4 to MPI (%)	3.6	3.1	3.9
Contribution of living condition indicator 5 to MPI (%)	7.9	7.4	7.8
Contribution of living condition indicator 6 to MPI (%)	3.6	3.8	3.5

* Excluding the entire Northern Province and Trincomalee district in Eastern Province
** Excluding Mannar, Mullaitivu and Kilinochchi districts in Northern Province
*** Covered all the 25 districts

Table 5-2: Multidimensional Poverty Headcount Index by sector, province, and district (From 2006/07 to 2012/13) in Sri Lanka

Sector/Province/District	Multidimensional Poverty Head Count Index(MPHCI)		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)

Sector/Province/District	Multidimensional Poverty Head Count Index(MPHCI)		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Sri Lanka	**7.0**	**5.8**	**3.8**
Sector			
Urban	7.2	6.6	3.7
Rural	5.8	4.9	3.2
Estate	24.1	18.1	14.0
Province			
Western	5.2	4.5	3.1
Central	9.5	7.6	4.9
Southern	5.6	4.9	2.9
Northern	-	8.7	6.1
Eastern	7.4	5.9	5.0
North-western	7.2	5.7	2.4
North-central	5.7	4.5	3.2
Uva	9.5	8.3	5.5
Sabaragamuwa	9.3	6.9	4.3
District			
Colombo	7.7	5.9	4.3
Gampaha	3.7	3.5	1.7
Kalutara	3.4	3.5	3.4
Kandy	7.0	7.7	3.8
Matale	8.3	6.8	4.5
Nuwara Eliya	14.5	7.8	7.3
Galle	6.3	5.6	2.8
Matara	5.7	5.0	3.8
Hambantota	4.3	3.3	1.9
Jaffna	-	10.1	4.8
Mannar	-	-	7.8
Vavunia	-	4.2	8.3
Mullaitivu	-	-	7.0
Kilinochchi	-	-	7.3
Batticaloa	8.0	8.2	9.8
Ampara	7.1	2.9	2.9
Trincomalee	-	8.0	2.0
Kurunegala	6.9	4.5	2.4

Sector/Province/District	Multidimensional Poverty Head Count Index(MPHCI)		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Puttalam	7.8	8.1	2.4
Anuradhapura	6.0	3.7	3.3
Polonnaruwa	5.0	6.0	3.2
Badulla	11.2	10.3	6.6
Moneragala	6.4	4.7	3.4
Ratnapura	10.8	7.6	4.3
Kegalle	7.2	6.0	4.3
*HIES 2006/07 - Excluding the entire Northern Province and Trincomalee district in Eastern Province			
** HIES 2009/10 - Excluding Mannar, Mullaitivu and Kilinochchi districts in Northern Province			
*** HIES 2012/13 - Covered all the 25 districts			

Table 5-3: Percentage of multidimensional vulnerable to poor population by sector, province, and district (From 2006/07 to 2012/13) in Sri Lanka

Sector/Province/District	Multidimensional vulnerable to poor population		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Sri Lanka	**22.5**	**21.4**	**15.8**
Sector			
Urban	24.6	22.8	16.4
Rural	21.2	20.2	14.5
Estate	36.5	35.4	34.1
Province			
Western	21.3	22.8	15.2
Central	27.1	20.2	19.2
Southern	20.1	35.4	14.0
Northern	-	22.8	20.0
Eastern	21.6	20.2	15.0
North-western	22.8	35.4	11.7
North-central	21.9	22.8	16.2
Uva	23.1	20.2	17.9
Sabaragamuwa	23.1	35.4	17.1
District			
Colombo	26.2	21.0	16.6

Sector/Province/District	Multidimensional vulnerable to poor population		
	2006/07	**2009/10**	**2012/13**
	(%)	(%)	(%)
Gampaha	18.3	19.2	13.8
Kalutara	17.1	17.5	15.1
Kandy	23.3	26.1	16.7
Matale	27.6	24.5	15.8
Nuwara Eliya	33.7	28.4	26.2
Galle	21.2	24.0	14.5
Matara	15.8	20.5	14.7
Hambantota	24.1	20.9	12.2
Jaffna	-	21.8	15.4
Mannar	-	-	25.7
Vavunia	-	27.3	22.2
Mullaitivu	-	-	26.4
Kilinochchi	-	-	30.7
Batticaloa	22.1	24.0	18.6
Ampara	21.3	19.3	11.2
Trincomalee	-	19.3	16.7
Kurunegala	22.6	19.7	10.9
Puttalam	23.4	21.3	13.5
Anuradhapura	22.2	16.9	14.5
Polonnaruwa	21.2	18.1	19.7
Badulla	24.7	26.3	18.9
Moneragala	20.2	18.0	16.1
Ratnapura	23.1	24.6	17.8
Kegalle	23.2	16.9	16.3

Table 5-4: Percentage of multidimensional severe poor population by sector, province, and district (From 2006/07 to 2012/13) in Sri Lanka

Sector/Province/District	Multidimensional severe poor population

	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Sri Lanka	**2.0**	**1.4**	**0.9**
Sector			
Urban	1.5	1.0	0.6
Rural	1.6	1.2	0.8
Estate	10.1	6.3	4.8
Province			
Western	1.1	0.7	0.6
Central	3.1	1.9	1.4
Southern	1.6	1.2	0.7
Northern	-	2.2	1.4
Eastern	2.5	1.8	1.6
North-western	2.2	1.9	0.7
North-central	1.6	0.6	0.9
Uva	3.1	2.1	1.5
Sabaragamuwa	3.3	2.1	0.9
District			
Colombo	1.7	1.0	0.6
Gampaha	0.5	0.4	0.3
Kalutara	1.0	0.7	1.3
Kandy	2.1	2.0	1.1
Matale	2.5	2.0	1.6
Nuwara Eliya	5.4	1.8	1.9
Galle	1.4	1.6	0.6
Matara	2.1	0.9	1.0
Hambantota	1.1	0.7	0.6
Jaffna	-	2.5	1.2
Mannar	-	-	1.6
Vavunia	-	1.1	0.7
Mullaitivu	-	-	2.6
Kilinochchi	-	-	1.9
Batticaloa	2.9	3.1	3.4
Ampara	2.2	0.4	0.8
Trincomalee	-	2.4	0.6
Kurunegala	2.2	0.7	0.5
Puttalam	2.3	4.3	1.1
Anuradhapura	1.8	0.7	0.7

Sector/Province/District	Multidimensional severe poor population		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Polonnaruwa	1.3	0.3	1.3
Badulla	3.9	2.9	1.8
Moneragala	1.7	0.8	1.0
Ratnapura	4.1	3.0	0.9
Kegalle	2.1	1.0	0.9

Table 5-5: Intensity (Average MP Score among poor) by sector, province and district (From 2006/07 to 2012/13) in Sri Lanka

Sector/Province/District	Intensity (Average MP score among poor)		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Sri Lanka	**45.2**	**44.0**	**44.1**
Sector			
Urban	43.7	43.1	42.1
Rural	44.8	43.8	44.1
Estate	48.0	45.9	46.2
Province			
Western	43.4	42.7	42.8
Central	46.0	44.2	44.9
Southern	44.6	43.6	43.7
Northern	_	45.4	43.6
Eastern	45.1	44.7	45.7
North-western	45.7	45.1	44.5
North-central	44.2	41.8	44.1
Uva	47.0	43.7	44.8
Sabaragamuwa	46.6	45.7	44.1
District			
Colombo	44.0	43.5	41.8
Gampaha	41.6	41.4	41.8
Kalutara	44.6	42.6	45.8
Kandy	45.0	44.4	44.8
Matale	47.7	44.6	45.8

Sector/Province/District	Intensity (Average MP score among poor)		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Nuwara Eliya	46.3	43.5	44.7
Galle	43.9	44.2	42.1
Matara	45.5	42.9	45.1
Hambantota	44.7	43.4	44.4
Jaffna	_	45.7	43.3
Mannar	_	_	44.1
Vavunia	_	42.9	42.2
Mullaitivu	_	_	47.2
Kilinochchi	_	_	43.4
Batticaloa	46.1	45.8	47.0
Ampara	44.4	41.7	43.2
Trincomalee	_	44.8	43.1
Kurunegala	45.5	42.8	43.4
Puttalam	46.0	47.6	46.8
Anuradhapura	44.2	42.5	43.5
Polonnaruwa	44.2	41.1	45.4
Badulla	46.9	43.9	44.5
Moneragala	47.4	43.1	45.5
Ratnapura	47.3	47.3	43.5
Kegalle	45.2	42.9	44.8

Table 5-6: Multidimensional poverty index by sector, province, and district (From 2006/07 to 2012/13) in Sri Lanka

Sector/Province/District	Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
Sri Lanka	**0.032**	**0.026**	**0.017**
Sector			
Urban	0.031	0.028	0.016
Rural	0.026	0.022	0.014
Estate	0.116	0.083	0.065
Province			
Western	0.023	0.019	0.013
Central	0.044	0.033	0.022
Southern	0.025	0.021	0.013
Northern	-	0.040	0.027
Eastern	0.034	0.027	0.023
North-western	0.033	0.026	0.011
North-central	0.025	0.019	0.014
Uva	0.045	0.036	0.024
Sabaragamuwa	0.043	0.032	0.019
District			
Colombo	0.034	0.026	0.018
Gampaha	0.015	0.014	0.007
Kalutara	0.015	0.015	0.016
Kandy	0.032	0.034	0.017
Matale	0.040	0.031	0.021
Nuwara Eliya	0.067	0.034	0.033
Galle	0.027	0.025	0.012
Matara	0.026	0.022	0.017
Hambantota	0.019	0.014	0.008
Jaffna	-	0.046	0.021
Mannar	-	-	0.035
Vavunia	-	0.018	0.035
Mullaitivu	-	-	0.033
Kilinochchi	-	-	0.032
Batticaloa	0.037	0.038	0.046
Ampara	0.032	0.012	0.012
Trincomalee	-	0.036	0.009

Sector/Province/District	Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
Kurunegala	0.031	0.019	0.011
Puttalam	0.036	0.039	0.011
Anuradhapura	0.026	0.016	0.014
Polonnaruwa	0.022	0.025	0.014
Badulla	0.052	0.045	0.029
Moneragala	0.030	0.020	0.016
Ratnapura	0.051	0.036	0.019
Kegalle	0.032	0.026	0.019

Table 5-7: Contribution of education dimension to multidimensional poverty index by sector, province (From 2006/07 to 2012/13) in Sri Lanka

Sector/Province/District	Contribution of Education Dimension to Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Sri Lanka	**17.8**	**15.0**	**18.8**
Sector			
Urban	9.2	8.6	11.4
Rural	17.0	13.7	19.8
Estate	26.9	26.7	22.1
Province			
Western	9.7	8.0	12.4
Central	19.8	17.0	19.1
Southern	18.0	16.0	23.9
Northern	_	18.4	12.8
Eastern	30.7	17.2	25.7
North-western	18.5	13.8	17.5
North-central	14.5	13.0	24.0
Uva	21.8	19.7	23.2
Sabaragamuwa	20.9	19.6	19.9
District			
Colombo	8.5	7.5	10.5
Gampaha	5.6	6.6	13.1

Sector/Province/District	Contribution of Education Dimension to Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Kalutara	23.2	12.5	15.7
Kandy	16.0	13.5	17.4
Matale	16.5	15.1	24.9
Nuwara Eliya	24.2	24.6	18.4
Galle	19.4	17.3	25.0
Matara	19.2	15.4	25.9
Hambantota	12.1	12.9	15.4
Jaffna	_	17.8	10.0
Mannar	_	_	14.3
Vavunia	_	23.2	14.4
Mullaitivu	_	_	12.4
Kilinochchi	_	_	18.2
Batticaloa	29.6	19.3	23.2
Ampara	31.4	13.8	31.1
Trincomalee	_	15.9	30.9
Kurunegala	16.0	9.4	15.9
Puttalam	22.8	18.0	20.6
Anuradhapura	14.2	13.5	24.2
Polonnaruwa	15.1	12.3	23.5
Badulla	23.4	19.7	23.2
Moneragala	16.7	19.9	23.2
Ratnapura	24.4	22.8	26.4
Kegalle	13.4	13.7	11.7

Table 5-8: Contribution of health dimension to multidimensional poverty index by sector, province and district (From 2006/07 to 2012/13) in Sri Lanka

Sector/Province/District	Contribution of Health Dimension to Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Sri Lanka	47.4	52.2	50.1
Sector			

Sector/Province/District	Contribution of Health Dimension to Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Urban	65.4	64.9	69.7
Rural	50.2	55.7	49.8
Estate	24.6	25.1	33.4
Province			
Western	64.0	66.1	66.5
Central	39.8	46.4	43.2
Southern	50.0	54.3	51.3
Northern	-	36.8	49.8
Eastern	37.2	54.6	41.0
North-western	50.3	55.1	51.9
North-central	49.7	58.4	52.3
Uva	36.0	40.7	35.6
Sabaragamuwa	37.6	42.2	44.6
District			
Colombo	65.0	68.3	70.6
Gampaha	69.8	65.4	67.7
Kalutara	47.7	59.7	56.7
Kandy	47.6	53.0	50.7
Matale	46.9	48.1	40.7
Nuwara Eliya	30.6	33.1	36.8
Galle	50.5	51.1	53.4
Matara	47.3	58.3	46.1
Hambantota	54.2	56.0	60.6
Jaffna	-	36.4	49.5
Mannar	-	-	57.5
Vavunia	-	40.3	58.9
Mullaitivu	-	-	44.9
Kilinochchi	-	-	32.9
Batticaloa	35.2	51.1	43.0
Ampara	38.5	59.5	34.9
Trincomalee	-	57.4	41.1
Kurunegala	53.5	58.2	56.6
Puttalam	45.0	52.2	42.6
Anuradhapura	49.4	58.2	54.7

Sector/Province/District	Contribution of Health Dimension to Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Polonnaruwa	50.4	58.6	47.3
Badulla	33.2	41.1	33.7
Moneragala	45.0	38.9	42.0
Ratnapura	33.2	36.7	39.5
Kegalle	46.9	52.6	51.2
	47.4	52.2	50.1

Table 5-9: Contribution of living condition dimension to multidimensional poverty index by sector, province, and district (From 2006/07 to 2012/13) in Sri Lanka

Sector/Province/District	Contribution of living condition dimension to Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Sri Lanka	**34.8**	**32.8**	**31.1**
Sector			
Urban	25.3	26.5	19.0
Rural	32.8	30.6	30.4
Estate	48.5	48.1	44.5
Province			
Western	26.3	25.9	21.1
Central	40.4	36.6	37.7
Southern	31.9	29.7	24.8
Northern	-	44.8	37.4
Eastern	32.1	28.2	33.3
North-western	31.2	31.1	30.6
North-central	35.9	28.6	23.8
Uva	42.2	39.6	41.2
Sabaragamuwa	41.5	38.1	35.5
District			
Colombo	26.4	24.2	18.9
Gampaha	24.6	28.0	19.2
Kalutara	29.1	27.7	27.5

Sector/Province/District	Contribution of living condition dimension to Multidimensional Poverty Index		
	2006/07	2009/10	2012/13
	(%)	(%)	(%)
Kandy	36.4	33.5	31.9
Matale	36.6	36.8	34.4
Nuwara Eliya	45.2	42.3	44.8
Galle	30.1	31.5	21.6
Matara	33.5	26.3	28.0
Hambantota	33.7	31.1	24.0
Jaffna	-	45.8	40.5
Mannar	-	-	28.2
Vavunia	-	36.5	26.6
Mullaitivu	-	-	42.7
Kilinochchi	-	-	48.9
Batticaloa	35.1	29.6	33.8
Ampara	30.1	26.7	34.0
Trincomalee	-	26.7	28.0
Kurunegala	30.5	32.5	27.5
Puttalam	32.3	29.8	36.7
Anuradhapura	36.4	28.3	21.2
Polonnaruwa	34.5	29.1	29.2
Badulla	43.4	39.2	43.1
Moneragala	38.3	41.2	34.7
Ratnapura	42.3	40.5	34.1
Kegalle	39.7	33.8	37.2

Figure 5-2: Percentage of Contribution to multidimensional poverty from school education, health and living condition dimensions - 2012/13
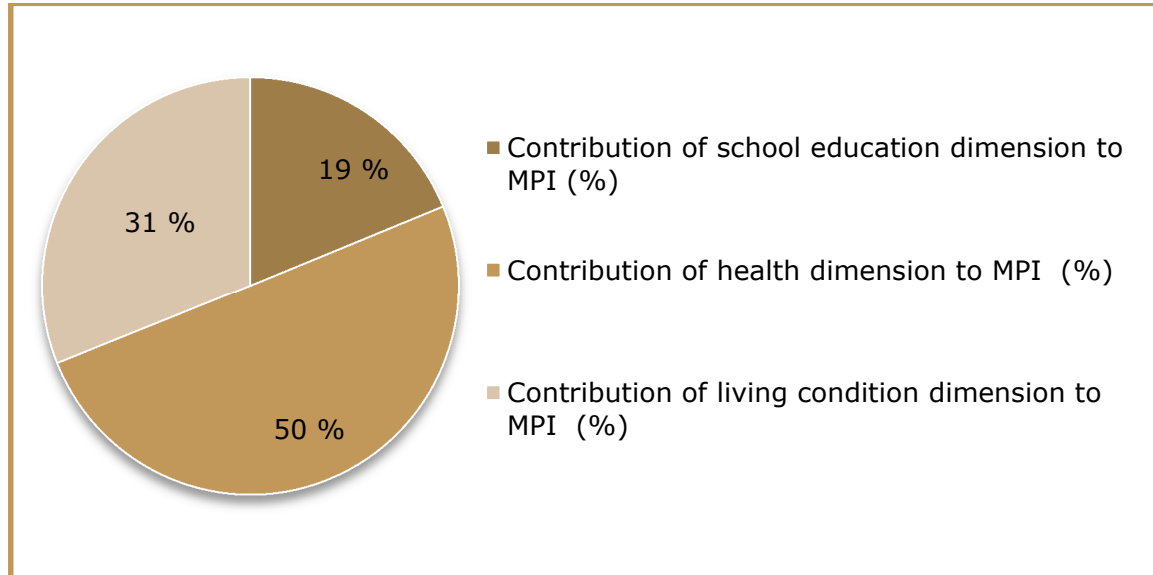
Figure 5-3: Percentage of Contribution to multidimensional poverty from ten indicators under school education, health and living condition dimensions - 2012/13
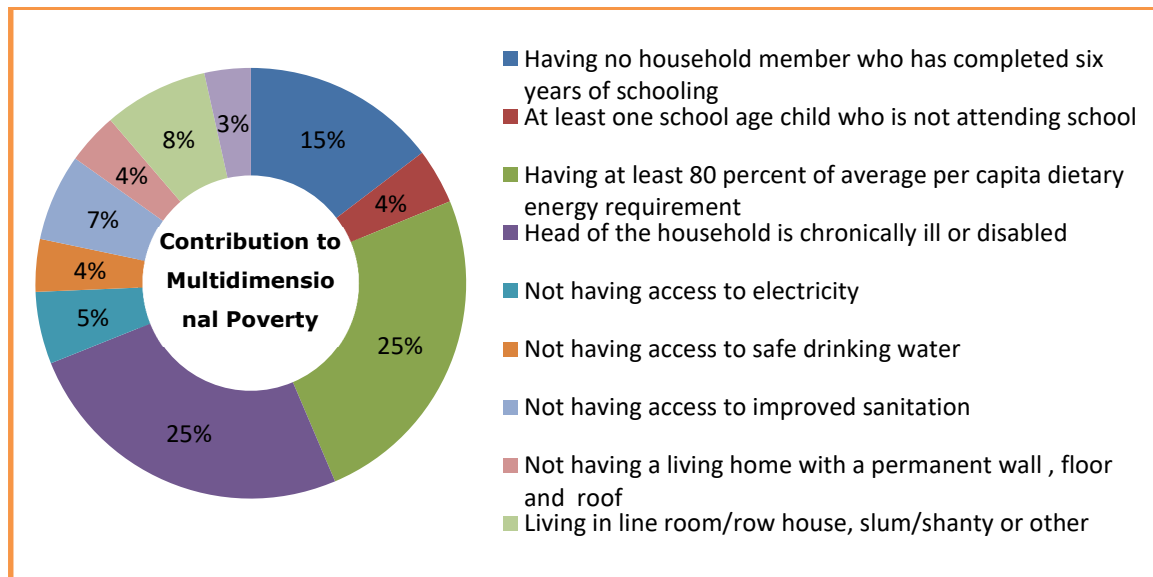
6. Proxy Indicator on Vulnerability to Poverty

6.1 GN Level Composite Index on Vulnerability to Poverty

This special study was conducted with the view of ranking GN divisions with respect to their infrastructure facilities and housing conditions. The objective of the ranking is to identify least developed or most vulnerable GN divisions in the Country. It will be an eye opener to recognize the most appropriate GN divisions to allocate more funds for development.

6.1.1 Methodology

Ranking of GN divisions was done based on constructing a composite index (CI). CI is a useful tool in policy analysis and public communication. CI measures multi-dimensional aspects which cannot be captured properly by a single variable.

Here it has been considered five variables. Out of them one variable was related infrastructure facility and other four variables were related to housing conditions.

Table 6-1: Considered variables for Composite Index

Factor	Variable	Source
Infrastructure Facility	Percentage of the places with basic facilities, more than 5 Km away from the GN	GNI - 2011
Housing Conditions	Percentage of households, which used kerosene and other sources of non-electricity for lighting	CPH - 2012
	Percentage of low quality households	CPH - 2012
	Percentage of households using un-protected water sources	CPH - 2012
	Percentage of households with low quality sanitary facilities	CPH - 2012

6.1.2 Description of the Data Source

1) GNI – 2011

This is an exploratory study and data required for this study was collected by applying a technique called Knowledge Based Scoring. These GN level data reported by respective Grama Niladhari at the time of conducting Census of Population and Housing 2011. The Grama Niladharis, based on their best of knowledge reported data for a set of selected indicators. Since the absence of official data at lower level administrative units, this could be considered as worthy effort to get necessary data to understand infra-structure facility of GN divisions.

Considered basic facilities under GNI

i. Bazaar/Fair/Market

ii. Government or Private Hospital (Western/Ayurvedic)

iii. Government or Private Dispensary

iv. Maternity house/Baby clinic

v. Government or Private School which is conducted G.C.E. (A/L) classes

vi. Government or Private School which is not conducted G.C.E. (A/L) classes

vii. Montessori/Pre-School/Early Childhood Development Centre

viii. Government Post office/Sub Post Office/agency Post Office

ix. Vidatha Centre/Nanasala Centre

x. Communication centers

xi. Public and Private Bank

xii. Public Play Ground/Children Park/ Public Hall

xiii.   Public Library/Reading Room

xiv.   Public Cemetery

xv.   Road where traveling passenger transport busses/vans/lorries via Division or bordering it/Railway Station

xvi.   Police Station which GN Division belongs to

xvii.   Divisional Secretariat Office which GN Division belongs to

xviii.   Local Government Council which GN Division belongs to

2)   CPH – 2012

Census of population and housing conducted in 2012

6.1.3   Statistics Analysis

Factor Analysis under Multivariate Statistical Analysis was used. All the variables were indicated in one factor. All of them were significantly contributed to that factor.

• The value of the constructed CI varied between -1.4385 and 6.2013

• The most vulnerable GN gets the highest CI value

Table 6-2: Ranked List of Grama Niladhari (GN) Divisions by Poverty using Composite Index

No.	GN Name	Composite Index Value	GN Code	Divisional Secretariat	District	Island Rank
1	Marichchukaddi	6.2013	4215100	Musalai	Mannar	**50**
2	Palaikuli	6.1796	4215085	Musalai	Mannar	**49**
3	Karadikkuli	6.0523	4215090	Musalai	Mannar	**48**
4	Kilaly	6.0084	4503030	Pachchilaipalli	Kilinochchi	**47**
5	Kokuthoduvai North	5.9940	4415090	Maritimepattu	Mullaitivu	**46**
6	Kakkayankulam East	5.9765	4209025	Madhu	Mannar	**45**
7	Vadamunai	5.9305	5110030	Koralai Pattu South	Batticaloa	**44**
8	Kokuthoduvai South	5.7129	4415095	Maritimepattu	Mullaitivu	**43**
9	Awaranthulawa	5.5999	4306030	Vavuniya South	Vavuniya	**42**
10	Kithuluthuwa	5.5821	5312045	Morawewa	Trincomalee	**41**

No.	GN Name	Composite Index Value	GN Code	Divisional Secretariat	District	Island Rank
11	Thennaimaravady	5.4988	5306005	Kuchchaveli	Trincomalee	40
12	Eralakkulam	5.4458	5112075	Eravur Pattu	Batticaloa	39
13	Kallikulam	5.4454	4309050	Vavuniya	Vavuniya	38
14	Udagaladebokka	5.4360	2121050	Minipe	Kandy	37
15	Koddaikaddiyakulam	5.4309	4403040	Tunukkai	Mullaitivu	36
16	Karunaddukerny	5.4019	4415065	Maritimepattu	Mullaitivu	35
17	Pukkulama	5.4008	6206005	Vanathavilluwa	Puttalam	34
18	Nagathalvu	5.3949	4203205	Mannar Town	Mannar	32
19	Perillaveli	5.2679	5110040	Koralai Pattu South	Batticaloa	31
20	Ooththuchenai	5.2464	5110020	Koralai Pattu South	Batticaloa	30
21	Ilamaruthankulam	5.2463	4309045	Vavuniya	Vavuniya	29
22	Panchenai	5.2389	5121105	Manmunai West	Batticaloa	28
23	Allipallai	5.2045	4503005	Pachchilaipalli	Kilinochchi	27
24	Thannimurippu	5.1825	4415205	Maritimepattu	Mullaitivu	26
25	Periyamadhu West	5.1792	4206050	Manthai West	Mannar	25
26	Ponnaveli	5.1728	4512095	Poonakary	Kilinochchi	24
27	Kumarapuram	5.1559	4415105	Maritimepattu	Mullaitivu	23
28	Poomaduwa	5.1391	4306010	Vavuniya South	Vavuniya	22
29	Periyakulam	5.1202	4412105	Oddusuddan	Mullaitivu	21
30	Upparu	5.1075	5324155	Kinniya	Trincomalee	20
31	Rankethgama	5.0975	4306015	Vavuniya South	Vavuniya	19
32	Mahilankulam	5.0968	4309035	Vavuniya	Vavuniya	18
34	Pallamadhu	5.0038	4206060	Manthai West	Mannar	17
35	Vallipunam	5.0012	4409080	Puthukudiyiruppu	Mullaitivu	16
36	Karampaham	5.0008	4130215	Thenmaradchi (Chavakachcheri)	Jaffna	15
37	Kanchikudicharu	4.9771	5245090	Thirukkovil	Ampara	14
38	Urewa	4.9748	7103055	Padaviya	Anuradhapura	13
39	Vidathaltheevu Central	4.9623	4206080	Manthai West	Mannar	12
40	Periyamadhu East	4.9589	4206045	Manthai West	Mannar	11
41	Thanankilappu	4.9499	4130060	Thenmaradchi (Chavakachcheri)	Jaffna	10
42	Periyanavatkulam	4.9340	4203195	Mannar Town	Mannar	9
43	Uyilankulam	4.9230	4403085	Tunukkai	Mullaitivu	8
44	Arumuhathanputhukulam	4.9149	4309020	Vavuniya	Vavuniya	7

No.	GN Name	Composite Index Value	GN Code	Divisional Secretariat	District	Island Rank
45	Panrikkeithakulam	4.8949	4309015	Vavuniya	Vavuniya	6
46	Ambalaperumalkulam	4.8610	4403015	Tunukkai	Mullaitivu	5
47	Iyankankulam	4.8409	4403030	Tunukkai	Mullaitivu	4
48	Thangavelayudapuram	4.8384	5245110	Thirukkovil	Ampara	3
49	Koppavely	4.8356	5112185	Eravur Pattu	Batticaloa	2
50	Keerisuddan	4.8321	4209010	Madhu	Mannar	1

The higher Composite Index Value indicates higher vulnerability to the poverty, the top 50 vulnerable GN divisions of Sri Lanka listed in the above table.

Complete List of GN divisions and vulnerability index is available in the Compact Disck Provided

6.2 Relationship between Poverty and several Indicators

DCS has published poverty Head count ratios (PHCR) by DS level. In this study, it has been tested the relationship between poverty and following indicators.

1. DS level vulnerability index: Under study 1, GN level vulnerability index was constructed. Taking the mean of GN index values for each DS divisions, new set of vulnerability index was constructed by DS level.

2. Number of Industries located in the DS division

6.2.1   Analysis

Relationships between those variables were statistically tested using Pearson Correlation coefficients.

6.2.2   Poverty Head Count Ratio and Vulnerability Index

Pearson Correlation Coefficient = 0.737, p-value = 0.000

According to the results, there is a strong positive linear relationship between poverty and vulnerability index. That means, with the increment of vulnerability index values, poverty goes high.   It is depicted in the following graph.

Figure 6-1: Relationship between Poverty Head Count Ratio and Vulnerability Index
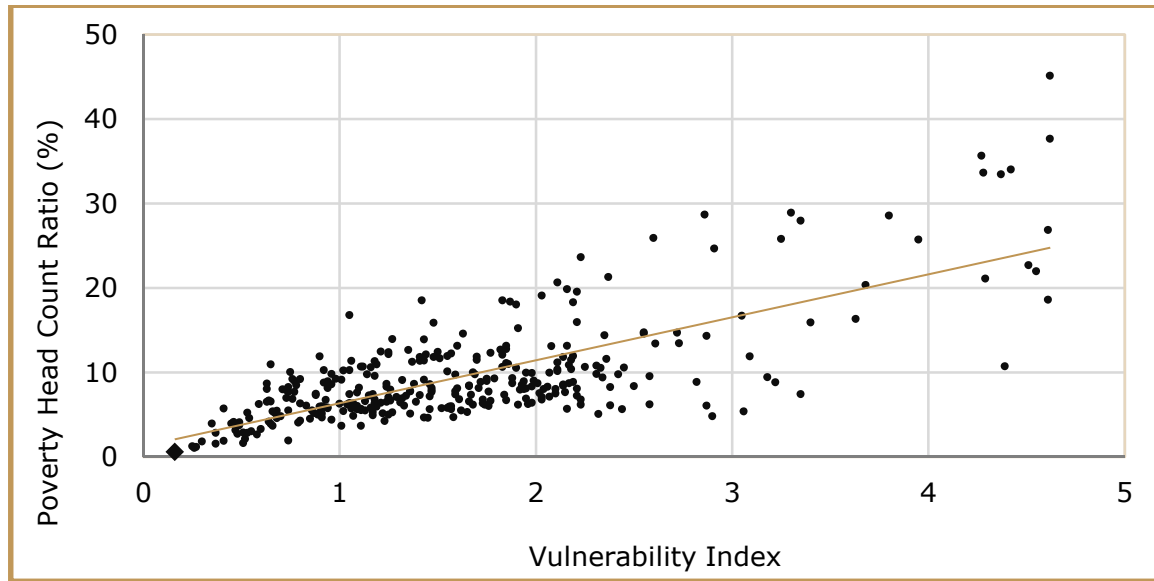
Conclusion: When the infra-structure facilities and housing conditions among GNs of a DS division are at a low level, it's level of poverty is high.

6.2.3 Poverty Head Count Ratio and Number of Industries located in the DS division

Pearson Correlation Coefficient = -.417, p-value = 0.000

According to the results, there is a strong negative linear relationship between poverty and the number of industries located in the DS division. This relationship is shown in the following graph.

Figure 6-2: Relationship between Poverty Head Count Ratio and Vulnerability Index
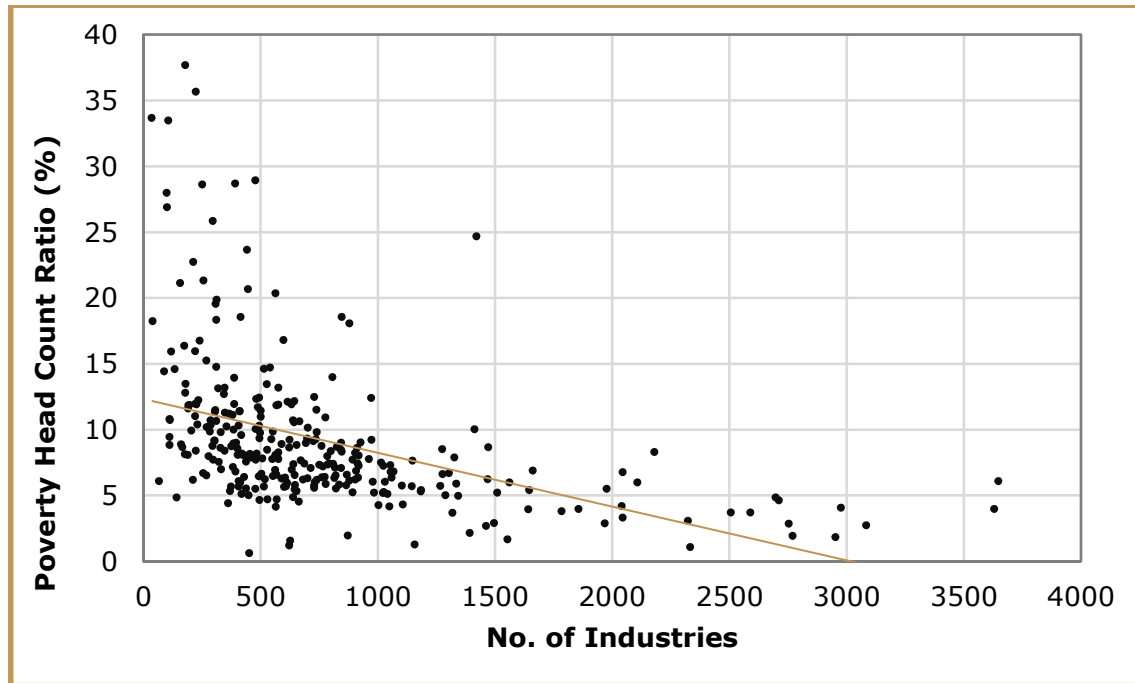
Conclusion: Number of industries established in a DS division goes up, then the level of poverty of that division tends to go down.

7. Housing Types and Household Facilities of Sri Lanka

The Census of Population and Housing is the only government involved complete population enumeration of the country conducted by the Department of Census and Statistics. This census is conducted in every decade covering the entire country and collects range of information related to the population and housing characteristics of Sri Lanka. Starting from 1871 the last census conducted in 2012 is the 14th of the series and after 31 years of time this census covered the entire country including North and East provinces.

Information on Housing types and house hold facilities are very essential in poverty study as it reflects the current living standards of people. To indicate poverty in smallest administrative level ("Grama NIladhari Division Level") it is important the information collected from Population Census 2012.

There is a comprehensive database relates to the housing types and house hold facilities in Sri Lanka are included in the Compact Disk provided with this publication.

These data has been categorized under below topics.

- Total Population
- Total number of households
- Principal source of drinking water
- Principal type of cooking fuel
- Principal type of lighting
- Toilet facilities
- Type of toilet
- Principal method of solid waste disposal
- Ability to access Internet
- Number of housing units
- Principal materials of construction of the housing unit

Please Click here to view the complete Set of data

8. Employment and House Hold Income Multipliers

Policies to reduce or eradicate poverty may be formulated in three ways.

1. Policies to improve infrastructure and necessary utilities that are closely related to well-being of people
2. Policies that increase purchasing power of poor people through transfer payments
3. Policies to increase production through investment that makes spillover effects on economy by increasing employment and household income

Mostly, data required for formulating above policies are supplied by National Accounts Estimates including Gross Domestic Product (GDP). Department of census & Statistics(DCS) which is the National Statistics Office (NSO) of Sri Lanka is fully entrusted to compile National Accounts Estimates from the year 2007. Until 2007, National Accounts Estimates had been compiled by both DCS and central Bank of Sri Lanka. Currently, National Accounts estimates for Sri Lanka are prepared with consistency to 2008 System of National Accounts which provided recommendations in compiling national accounts estimates. National Accounts Estimates are released quarterly and annually with a 75 days lag through the DCS website. (statistics.gov.lk)

Input Output Table which is an extension of basic compilation of national accounts estimates and used for policy making is also compiled by DCS. So far, DCS prepared two Input Output Tables for the years 2006 and 2010 which are compiled by using international recommendations. The Symmetric input Output Table (SIOT) can be used as a policy tool to identify key industries (sectors) in formulating economic policies through an investment in industries. Transformation of Supply table and the Use table into a single table where row and column totals are equal brings some of advantages in policy making and this table is called as Input- Output Table (IOT). This is a snapshot of an economy taken in a particular time considering production, income and expenditure dimensions. One of the main uses of an Input Output Table is possibility to calculate different multipliers such as household income multiplier, employment multiplier and output multipliers that can be used to access the links between industries of the economy.

The multiplier can be defined as "estimated number by which the amount of a capital investment (or a change in some other component of aggregate demand) in multiplied to give the total amount by which the total output (or income, employment and etc) is increased". This multiplier takes all direct and indirect effects from that investment (or from the change in demand) in to account.

Household income is closely related with poverty because, expenditure made on goods and services largely depends on their household income. Household income mainly generates salaries and wages received as a compensation from producers for supplying labor. Therefore household income multiplier and employment multiplier can be used in the process of formulating poverty alleviation policies and programs. Household income multipliers and employment multipliers have recently been calculated and published by the Department of Census and Statistics (DCS) as a byproduct of 2010 input Output Table (IOT) framework.

- Household Income multiplier captures the impacts of final demand spending changes into changes in income received by households

- Employment multiplier measures the impact on employment due to the change of final demand of one unit of output for a sector

Summery table

One policy implication is "*increasing employment in industries that has higher employment multipliers household income can be increased*". Accordingly Growing of rice, growing of cereals, Manufacturing of grain mill products, manufacturing of sugar, milk production, egg production industries represent highest employment multipliers. As an example, employment multiplier of growing of paddy (9.21) tells that if final demand for paddy increase one million rupee worth, then employment increased by 9.21 units.

Another policy implication is "investment in industries represent higher household income multipliers lead to increase household income and thereby poverty can be reduced". The industries represent higher household income multipliers are education, public administration, health, growing of beverage crops, growing of oleaginous fruit (coconut), milk production, growing of rubber

in Sri Lankan economy. As an example, household income multiplier of education industry (0.9) tells that if final demand for education service increase one million rupee worth, then household income can be expected to be increase by 0.9 Million rupees.

Higher purchasing power of people allows people to purchase a large quantity of goods and services. This purchasing power reduces when there is an inflation. Therefore real household income is much important to reduce poverty than money income. So Monetary policy should be handled so as to maintain the general price level of the country.

Table 8-1: Employment Multipliers

Industry	Household Income Multiplier	Rank
Growing of rice	9.21	1
Growing of cereals (except rice), leguminous crops and oil seeds	8.84	2
Growing of vegetables and melons, roots and tubers	5.04	6
Manufacture of grain mill products	4.97	7
Growing of Rubber	4.01	8
Growing of oleaginous fruits	4.00	9
Growing of beverage crops Tea	3.95	10
Growing of Tobacco	3.42	11
Growing of beverage crops Coffee - Cocoa	3.31	12
Growing of sugar cane	3.28	13
Processing and preserving of fruit and vegetables	2.91	17
Growing of spices, aromatic, drug and pharmaceutical crops	2.68	21
Egg Production	2.52	22
Manufacture of macaroni, noodles, couscous and similar farinaceous products	2.44	23
Manufacture of wood and of products of wood and cork, except furniture;	2.39	24
Manufacture of sugar	2.36	25
Milk Production	2.35	26
Manufacture of bakery products	2.32	27
Manufacture of cocoa, chocolate and sugar confectionery	2.30	28
Manufacture of other rubber products	2.19	32
Livestock	2.18	33
Education	2.06	35
Postal and courier activities	1.99	37
Manufacture of footwear	1.98	38
Manufacture of rubber tires and tubes; retreading and rebuilding of rubber tires	1.80	39
Manufacture of machinery for mining, quarrying and construction	1.61	40
Manufacture of machinery for food, beverage and tobacco processing	1.61	41
Manufacture of other special-purpose machinery	1.60	42
Manufacture of agricultural and forestry machinery	1.60	43
Manufacture of machinery for metallurgy	1.60	44

Table 8-2: Household Income Multipliers

Industry	Household Income Multiplier	Rank
Education	0.90	4
Public administration and defense; compulsory social security	0.87	5
Human health and social work activities	0.87	6
Postal and courier activities	0.69	9
Forestry and logging	0.68	10
Growing of spices, aromatic, drug and pharmaceutical crops	0.65	11
Growing of beverage crops Coffee - Cocoa	0.62	14
Growing of beverage crops Tea	0.55	18
Growing of oleaginous fruits	0.52	20
Growing of Tobacco	0.51	22
Milk Production	0.51	24
Growing of Rubber	0.50	25
Growing of rice	0.50	26
Fishing	0.50	27
Rental and leasing activities	0.45	31
Scientific research and development	0.45	33
Accommodation, Food & Beverages Serving Activities	0.42	36
Processing and preserving of meat	0.41	37
Processing and preserving of fruit and vegetables	0.39	39
Manufacture of grain mill products	0.37	40
Manufacture of other rubber products	0.34	43
Manufacture of cocoa, chocolate and sugar confectionery	0.34	44
Manufacture of vegetable and animal oils and fats	0.33	45
Processing and preserving of fish, crustaceans and mollusks	0.32	46
Growing of vegetables and melons, roots and tubers	0.32	47
Mining & Quarrying	0.31	49
Manufacture of wood and of products of wood and cork, except furniture;	0.30	50
Manufacture of other food products i.e..	0.30	51
Manufacture of rubber tires and tubes; retreading and rebuilding of rubber tires	0.29	53
Manufacture of bakery products	0.28	54
Manufacture of footwear	0.28	55

9. A Case Study

The Government has declared 2017 as the year of eradicate poverty. Furthermore, the government also aims to achieve the global sustainable development goals and make Sri Lanka a poverty-free country by 2030. Thereby, several programs are scheduled to be implemented next year to eradicate poverty. This view provides recognition to the need for Sri Lanka to have poverty eradication programmes and relevant attention to this approach. The purpose of this study is to provide guidelines in order to review the situation with the use of data.

This case study illustrates the use of data analytics including the use of the Poverty Head Count Index (PHI), Multidimensional Poverty, Grama Niladari (GN) Level Composite Index (CI) and housing characteristics of Sri Lanka. This ground level report analyzer will illustrate how planners and other organizations can use poverty measurement data to evaluate their social performance and implement new poverty eradication programmes.

At the beginning of the year 2017, Puttalam District Secretarial N.H.M. Chiththrananda had advised to all district heads who representing departments of the district to prepare a plan for the poverty alleviation year. Under the gaudiness of Puttalam district secretarial with the technical assistance district statistics branch, Department of Divineguma Development, District Development Unit, Samurdhi Authority and *Divisional Secretariat Offices have implemented several poverty* eradication programmes based on the Household Income and Expenditure Survey (HIES) and *Censuses of Population and Housing (*CPH) data. The criteria for selection of projects were based on poverty headcount index and Composite Index published by the Department of Census and Statistics Sri Lanka. In accordance with development projects implemented after 2012, had been omitted from the list of the GN divisions and rest of the list of GN divisions had been considered regarding issues. Furthermore, they have already planned to continue these programmes and start new programmes in the future. The Puttalama District Secretarial Office has been

identified most preferable geographical area for implementing rural poverty alleviation projects in district as well what are the most vulnerable areas in it.

District report had prepared at GN level within *Divisional Secretariat(DS)* division and had submitted to Divisional Secretariats to pay attention as well as implement poverty alleviation projects. This study will give some data applications in Vanathavilluwa DS division and Pukkulama GN divisionwith the great support of Mrs. Sanjeewani, Divisional Secretarial Vanathavilluwa and Mr. M.M.N. Somathilake Assistant Divisional Secretarial Vanathavilluwa.

9.1 Selection Methodology

Two procedural concepts and other two simple steps were used to identify the most desirable and vulnerable areas. The first involve was the Poverty Headcount Index. It was used to identify DS division level complications in the district.

The Poverty Headcount Index is given only for district level and DS division level poverty and it is inadequate for (GN) division level statistics. Therefore, Composite Index can be used to measure poverty at the smallest administrative level of GN divisions using data collected at the Census of Population and Housing – 2012. Composite Index is a proxy indicator of poverty. The proxy is in fact something giving an indirect measurement of poverty. The objective of the developing Composite Index is to identify least developed or most vulnerable GN divisions in the Country. Percentage of the places having basic facilities where more than 5 Km away from the GN division, energy sources used by households for lighting and cooking, sanitation, having unprotected water and housing quality were used to develop the Composite Index.

Third part of the selection procedure is omitting the GN division, which have already implemented development projects after 2012. Because Composite Index **had** been calculated using data collected in 2012. Rest of the list of GN divisions had been considered regarding issues. With great support of Grama

Niladari officer and other officers of the divisional secretarial office had been identified present situation and cross checked it with Composite index.
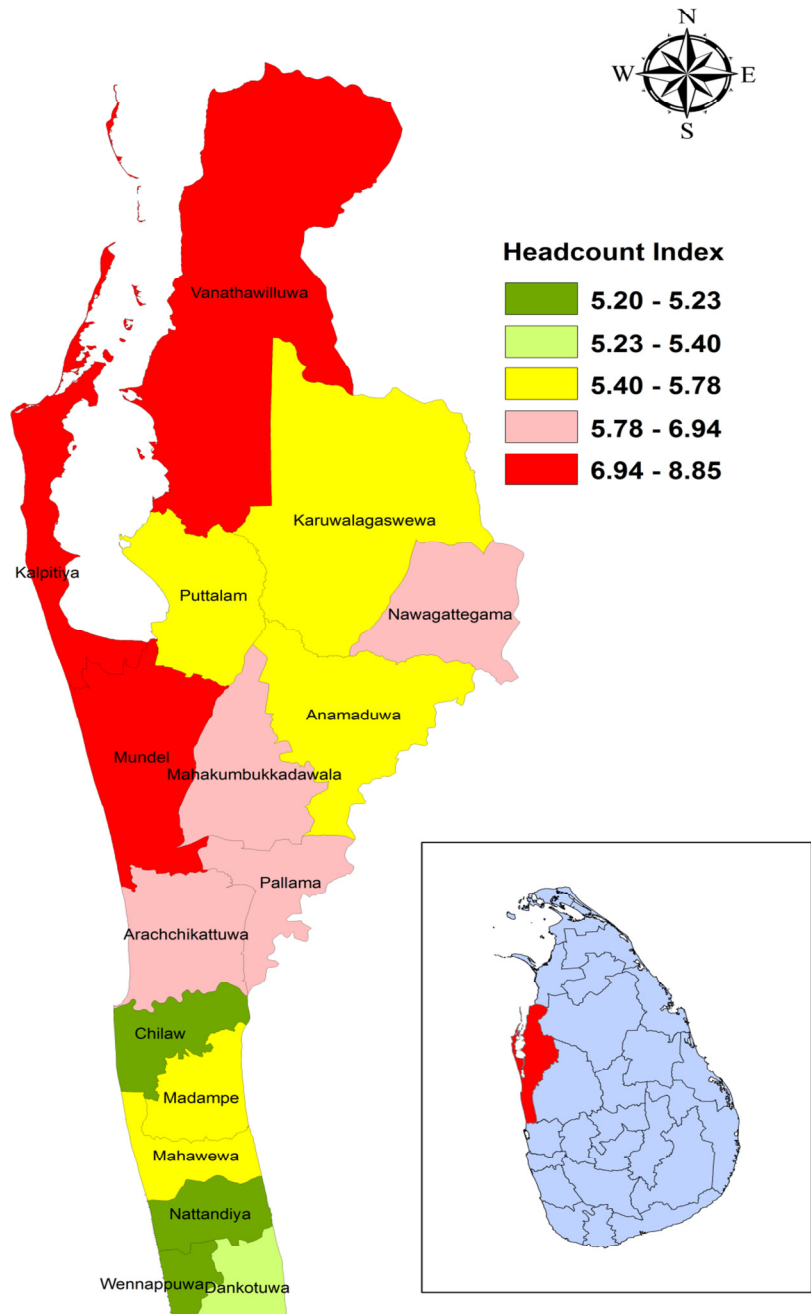
Finally, GN division level demographic and housing characteristics were considered to detect and review the project type. Demographic and housing characteristics database can produce thousands of data related to poverty variables easily and they are available at each GN division in Sri Lanka.

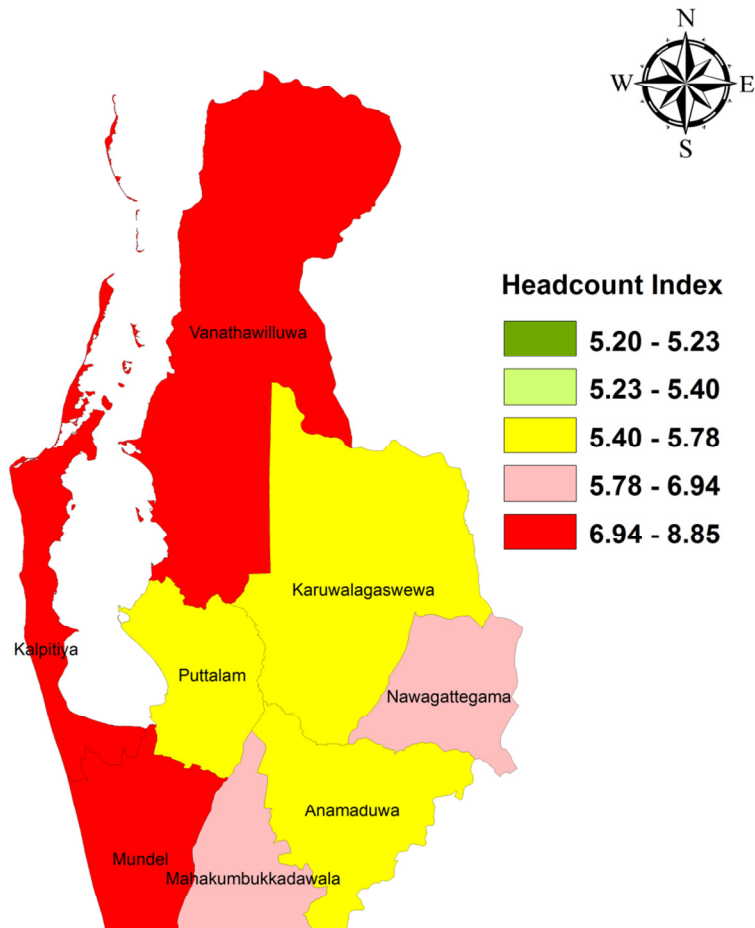## 9.2 Data use of Rural Poverty Alleviation Projects in Puttalama District

Poverty headcount index from 2012/13 HIES was 5.1 in Puttalama district. According to Sri Lanka's official national poverty line, a person is identified as being poor if his or her real per capita consumption expenditure falls below Rs.4130 per month. District official poverty line for Puttalama district is Rs.4125 per month at present.

According to the statistics from 2002 to 2013, Puttalama district poverty rate has fallen from 31.3% to 5.1% and that have been the lowest poverty rate recoded in past. Poverty reduction can be observed in all DS divisions in the district. Poverty rates were fallen more rapidly in some DS divisions than others. However, several DS divisions and GN divisions show relatively small reduction in Poverty. The lowest headcount index (5.2%) was reported from Chilaw DS division while the highest headcount index (8.85%) was reported from Vanathavilluwa DS division. The ranking of poverty rate among DS divisions are showed in the following map and the table. These figures, which are calculated directly from the 2012/13 rounds of the HIES, have already been publicly released by the DCS.

Headcount Index by DS Division in Puttalam District Sri Lanka - 2012/13

Headcount Index

- 5.20 - 5.23
- 5.23 - 5.40
- 5.40 - 5.78
- 5.78 - 6.94
- 6.94 - 8.85

Vanathawilluwa

Karuwalagaswewa

Kalpitiya

Puttalam

Nawagattegama

Anamaduwa

Mundel

Mahakumbukkadawala

Pallama

Arachchikattuwa

Chilaw

Madampe

Mahawewa

Nattandiya

Wennappuwa Dankotuwa

Headcount Index by DS Division in Puttalam District
Sri Lanka - 2012/13

Table 9-1: Estimated Poverty headcount index and Rank by DS divisions within the districts – HIES 2012/13

| District	Divisional Secretariat	Rank DS	Estimated poverty headcount index (%)
Puttalama	Kalpitiya	174	8.28
	Vanathavilluwa	195	8.85
	Karuwalagaswewa	69	5.69
	Nawagattegama	93	6.19
	Puttalam	76	5.78
	Mandel	177	8.34
	Mahakumbukkadawala	97	6.23
	Anamaduwa	71	5.7
	Pallama	127	6.94
	Arachchikattuwa	96	6.22
	Chilaw	50	5.2
	Madampe	75	5.76
	Mahawewa	66	5.58
	Nattandiya	52	5.23
	Wennappuwa	53	5.25
	Dankotuwa	59	5.42

Highest poverty Headcount index (%) within the districts

According above graphs and table clearly show Vanathavilluwa, Kalpitiya, Mandel are the poorest DS divisions in within district. It is most important to note that some DS divisions are show low poverty and some are show more poverty in district. Following table shows Composite Index by GN Division in Vanathavilluwa DS division – 2012.

**Table 9-2 : Composite Index by GN Division in Vanathavilluwa DS division – 2012**

Divisional Secretariat	GN Name	Rank Sri Lanka	Rank District	Rank DS	Percentage of the places having basic facilities where more than 5 Km away from the GN	Percentage of households which are used kerosene and other sources of non-electricity for lighting	Percentage of low quality households	Percentage of households having un-protected water sources	Percentage of households having low quality sanitary facilities
Wanathavilluwa	Pukkulama	17	1	1	0.00	100.00	100.00	0.00	97.50
	Karadipuwal	286	6	2	19.05	60.14	57.97	96.38	35.51
	Wijayapura East	436	7	3	19.05	60.34	50.21	86.92	13.08
	Karathivu South	449	9	4	42.86	52.43	50.56	77.15	40.07
	Bandaranayakapura	541	12	5	23.81	41.46	52.26	90.59	12.89
	Ralmaduwa	589	14	6	47.62	44.17	46.12	83.98	25.73
	Mangalapura	650	19	7	23.81	44.98	50.17	95.85	17.65
	Samagipura	841	29	8	42.86	34.24	44.36	95.33	10.89
	Vanathawilluwa North	1068	48	9	52.38	34.63	49.35	99.13	9.09
	Vanathawilluwa South	1070	49	10	52.38	34.11	44.90	96.21	16.62
	Serakkuliya	1137	53	11	23.81	50.97	40.11	22.84	20.33
	Wijayapura West	1218	56	12	23.81	35.71	44.76	95.24	8.57
	Aluth Eluwankulama	1306	60	13	38.10	31.44	35.57	78.87	10.31
	Parana Eluwankulama	1366	64	14	9.52	40.91	19.70	59.09	19.70
	Mailankulama	1726	82	15	28.57	24.19	36.29	54.44	13.31
	Vattakandal	1961	97	16	33.33	24.04	16.62	93.82	4.67
	Karathivu North	7782	331	17	38.10	14.14	16.90	12.41	3.10

Figure 9-1: Percentages of households, who used kerosene and other sources of non-electricity for lighting, low quality housing units and having low quality sanitary facilities - 2012

■ Percentage of households which are used kerosene and other sources of non-electricity for lighting

■ Percentage of low quality housing units

■ Percentage of households having low quality sanitary facilities
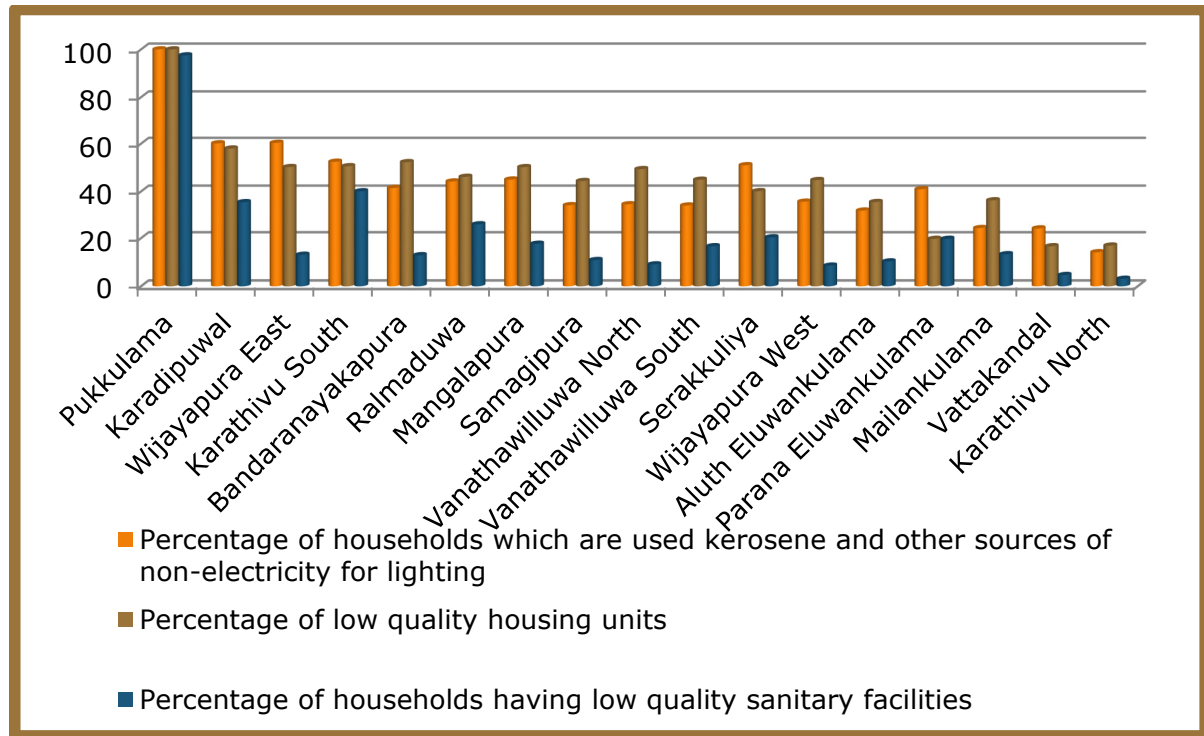
Figure 9-2: Percentage of the places having basic facilities where more than 5 Km away from the GN and households using un-protected water sources

Percentage of the places having basic facilities where more than 5 Km away from the GN
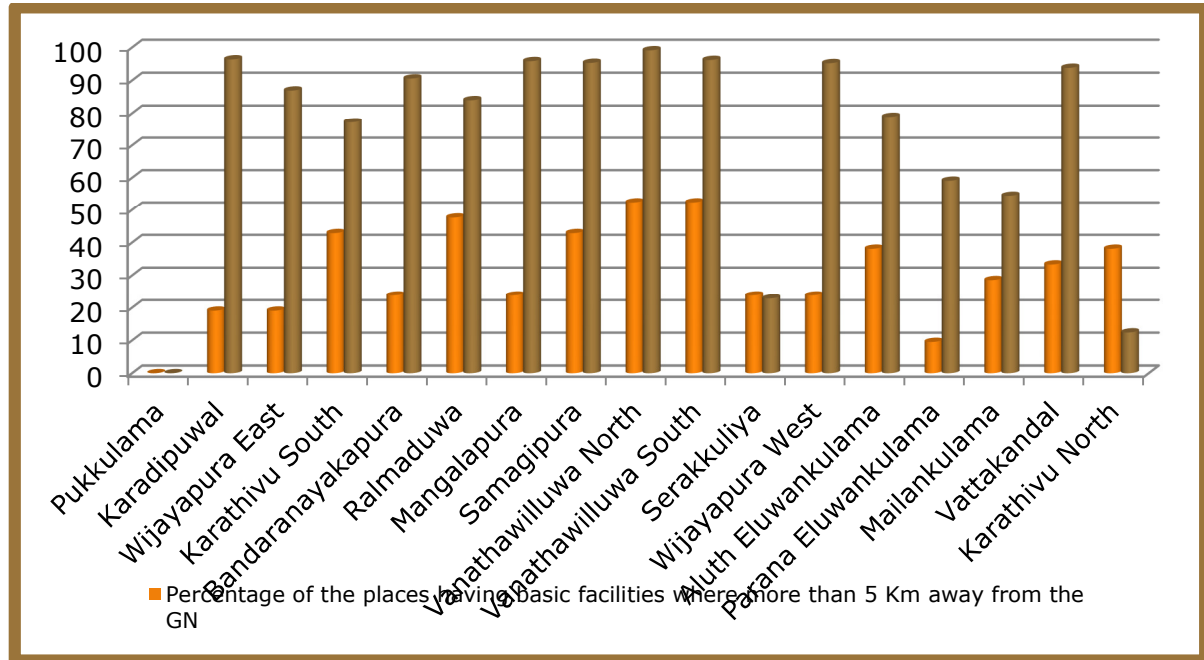
Table 9-3: Some of the Implemented projects in Pukkulama GN Division.

Project	Used data	Institution	Expected task to be completed
Providing Land	Housing Data(Permanent/ Semi Permanent)	Wildlife Authority	Giving 15 perches lands for 30 families
Preparation of Houses	Housing Data(Permanent/ Semi Permanent)	*Divisional Secretariat office and Ministry of resettlement*	Constructing 20 Houses
Renovation of Community building	Distance to access basic facilities	*Divisional Secretariat office*	Renovation of School building abandoned
Provided well and water motor	Water facilities	World vision Institute	Constriction of a well
Renovation of Tank	Water facilities	*Divisional Secretariat office*	Renovation of tank wall
Bathing ferry	Water facilities	*Divisional Secretariat*	Constriction of

		office	bathing ferry
Livelihood development project/ subsidies programmes	Gama Niladari data	Department of Divineguma Development	Expected to give loans and assistance to develop self-employment project