Census Dept. Classifies GN Divisions by Poverty
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The Government of Sri Lanka places strong emphasis on poverty alleviation as part of its overarching goal of national development. Internationally, the Millennium Development Goals (MDGs) aim to reduce extreme poverty by half by 2015. In this worldwide concern to reduce poverty, the role of poverty statistics cannot be overemphasized. A major problem at present is to effectively reach the poor to address their right to access basic services. This calls for poverty statistics for small areas as a basis for prioritizing, planning and implementing location-efficient development and poverty eradication projects.

In response, the Department of Census and Statistics (DCS) has undertaken several location-specific poverty measurement efforts. The Household Income and Expenditure Survey has been conducted once in four years to estimate poverty indicators at national and district level. In 2006, a special study was conducted by combining data from the 2002 Household Income and Expenditure Survey data with the 2001 Census of Population and Housing data to estimate poverty levels at Divisional Secretariat (DS) division level. In 2006, for the first time, official poverty statistics at the DS division level were released and these were useful to identify the poorest DS divisions for government's rural development projects.

However, the DS level statistics may not be adequate to identify the location and social characteristics of small population groups or communities living in poverty to make effectively targeted interventions. DCS therefore, conducted a study to develop a proxy indicator to measure poverty at the smallest administrative level of Grama Niladari (GN) divisions using data collected at the Census of population and Housing – 2001.

To provide a proxy measure of poverty at the level of GN divisions, this study used nine indicators, which are correlated with poverty measured by Headcount ratio i.e. percentage of population below poverty line. These indicators reflect the type of energy sources used by households for lighting and cooking, housing quality, employment status of household heads, level of education of household heads and level of education of household population over 20 years.

The indicators were selected for their high predictive power of poverty at the DS Division level. The indicators selected for the study were as follows.

        a. Percentage of households using kerosene for lighting
        b. Percentage of households using firewood for cooking
        c. Percentage of housing units not having permanent materials for wall
        d. Percentage of housing units not having permanent materials for floor
        e. Percentage of housing units not having permanent materials for roof
        f. Percentage of household heads who have not passed G.C.E.A/L or above
        g. Percentage of household heads who are not paid employees
        h. Percentage household members age 20 and above who have not passed G.C.E.A/L and above examinations

Statistically these nine indicators were combined into an index and this index was labeled as Unsatisfied Basic Needs Index (UBNI). This method avoids arbitrary indicator selection and the application of arbitrary external weights, both common in many of the composite indices currently used.

Statistically it was tested whether this index is related to the headcount ratio, at DS division level and it was found that these two indicators are strongly and positively correlated. An important feature of this indicator is higher values of the UBNI indicates prevalence of higher levels of poverty and vice versa. As such, UBNI can be considered as a proxy measure of poverty. The UBNI can be considered as an operational poverty assessment tool as it is capable of measuring poverty quite well and it is easy to collect data to compile this indicator.

The Unsatisfied Basic Needs Indicator, which can be considered as a proxy measure of poverty, was then used to classify GN divisions into five classes according to level of poverty within each district and the resulting classification was presented in a set of maps. Spatial distribution of other nine indicators selected for the study, were also mapped to provide a visual comparison against the poverty distribution. This classification was carried out at the GN division level of each district separately so that within district variation of proxy measure of poverty can be compared across districts. To facilitate the comparison of spatial patterns, a standard color-coding was used for all districts ranging from red for the highest level of proxy measure of poverty to green for the lowest level. In the same way maps were prepared for the nine indicators selected for the study as well. DCS recently released a report carrying these maps and data tables.

With the impetus provided by the Millennium Development Goals for poverty reduction and the national focus on targeting interventions for greater effectiveness in reaching the most marginalized, there is a growing and strong demand for small area poverty data. Lack of poverty data for small areas is a conspicuous and often spoken about gap in our knowledge base. This study provides an alternative measure of poverty levels from census data, which is readily available for computing small area statistics.

The study successfully demonstrates that a set of indicators, which capture basic manifestations of poverty, can be statistically converted into a composite index (UBNI) which is highly correlated with headcount ratio. Therefore, UBNI can be used to identify small areas at high levels of poverty. The data can be presented in maps for easy visual examination of spatial distribution of poverty for small areas.

The data required for this index are available from Census of Population and Housing and Household Income and Expenditure Survey and can also be collected more easily and inexpensively. A disadvantage of the method is that it does not provide information on the direct level of poverty. However, in many cases, in the absence of direct measures of poverty at small area levels, it is proxy measures rather than direct poverty that is of concern for the interventions and policies. Poverty is an inherently relative concept, and the tool developed in this paper is indeed aiming to provide a proxy indicator to measure poverty across GN divisions. Therefore, this tool, allows evaluating at low cost the poverty targeting efficiency of development projects. Spatial distribution of poverty across GN divisions is shown for the Colombo district below.

Poverty Levels (as measured by Unsatisfied Basic Needs Index) of GN Divisions
Colombo Distirct - 2001

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Boundaries

District
DS Division
GN Division

Level of poverty

Most poor
Poor
Average
Less poor
Least poor

0　2　4　　　　8 kilometers