This article is the fifth in a series of articles by the Centre for Poverty Analysis (CEPA) exploring various dimensions of poverty in Sri Lanka.

Deconstructing the CCPI(N): Implications of the new index

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On 8th January 2007 the Centre for Poverty Analysis held its 33rd Open Forum to discuss the implications of the updated Colombo Consumer Price Index. Panellists included D C A Gunewardena, Director Price Statistics from the Department of Census & Statistics, Dr Harsha De Silva, Lead Economist from LIRNEasia and Deshal De Mel, Research Officer from the Institute of Policy Studies.

The Colombo Consumer Price Index (CCPI) is the most widely used tool for measuring changes in the cost of living or inflation which are important in formulating economic policies and making investment decisions, so the Department of Census and Statistics' revised Colombo Consumer Price Index (CCPI(N)) marks a significant milestone. The CCPI has been considered the 'official CPI' since 1953 and has been used as the official indicator of changes in cost of living allowances payable to government servants and workers in other industries under the operation of the Wages Board Ordinance. The weighting pattern used in the index was based on the average expenditure of a sample of 455 working class households, as identified in the Colombo Family Budget Survey 1949/50, and revalued at 1952 prices. Economic analysts and trade unions have long argued that a new CPI is needed to eliminate many inherent problems and limitations, such as representation of population, geographical coverage, the basket of items and the weights of those items. The new index introduced by the DCS, CCPI(N), is based on 2002 Household Income and Expenditure Survey (HIES) data and represents more up to date consumer patterns for a much larger sample size, as well as an increased coverage area within Colombo for price collection.

Whilst there was overall agreement that the DCS' new index was welcome, the debate at CEPA's 33rd Open Forum highlighted some issues which continue to concern analysts and users of the data. The two main areas of concern were *which group* the index is representative of, and *how* the index is used.

Which group's basket of goods?

The new index is no longer based on a 'working class' sample of households, and reflects a conscious decision on the part of the DCS to collect data from *all* socio-economic groups,

creating an overall average basket of goods and average weightings. There is, therefore, concern that the index is not representative enough of the impacts of inflation on the poorest groups in society – those groups which usually suffer most from increases in the cost of living, particularly on food items. Including the most affluent households in such an average is known to skew the data towards the higher end of the scale, particularly the weightings, since the poor spend a higher proportion of their income on food, for example, than the better off. This means that an index which has a lower weighting on food and a higher weighting on non-consumables, such as clothes, communication, education and transport, may not give an accurate picture of how poorer households are experiencing changes in prices. The index also continues to be limited to Colombo urban consumer patterns and prices which makes it difficult to judge the impacts of inflation on rural and estate populations in the rest of the country (who make up the majority of the population, and the majority of the poor). This is highlighted in the difference between the proportion of income spent on food in the Western Province (29.7%) and in Sabaragamuwa Province (45.6%).

It should also be noted that despite ILO recommendations dating from 2003 that consumer price indices should cover all types of consumer goods and services of significance to the reference population – "without any omission of goods that may not be legally available or may be considered socially undesirable", tobacco and alcoholic beverages are excluded in the CCPI(N)'s basket of item. The prices of these items are frequently revised therefore could have a significant impact on inflation figures, but in an attempt to de-link any cost of living increases to the consumer's ability to purchase alcohol and tobacco and to discourage the consumption of these items the government specifically requested that they be left out of the index.

Fit for which purpose?

In many countries the problem of one index not accurately reflecting the impacts of inflation on the poor is addressed by using purpose-defined indices which reflect the reality of consumption patterns for a specific group, e.g. the USA has two major indices, one which covers all urban consumers (87% of the population) and the other which covers only urban wage earners (only 32% of the population). This is used to determine increases in cost of living allowances and social security payments since this is the group most vulnerable to those payments. So, should Sri Lanka also have such purpose-defined indices? Two issues would need to be considered; one is the problem of data collection – do we have the systems in place to be able to collect data for more than one index and from areas outside Colombo? The DCS has already acknowledged that it has difficulty collecting market prices outside the capital, hence the reliance upon the Colombo CPI rather than the now abandoned Sri Lanka Consumers' Price Index (SLCPI), introduced in

1997 but never widely used. The second issue is that of usage, how is the index currently used and is there a demand for purposive indices?

Whilst the CCPI is widely used as an indicator of how the economy as a whole is faring, the extent to which it is used in wage bargaining appears to be less influential. Cost of living allowances payable to government servants and industries which fall under the Wages Board Ordinance are linked to the CCPI, but in most other private and informal sectors the market and trade union-led collective wage bargaining agreements tend to drive wage rates. This means that a significant proportion of people's wages are not directly impacted by the CCPI, and pensions are also not officially linked to the index. Further, without legislation to approve the change, the revised CCPI(N) will not be used to calculate changes in cost of living allowances, the value of which are still linked to the old 'official' index.

Potential implications for wages

There have been concerns expressed by employers who use the CCPI for cost of living allowances about the implications of using a revised index. This comes amidst claims by employee unions that a revision of the old index (which used the 1952 baseline) means a significant upward revision of the per unit figure, and therefore a significant increase in cost of living allowances. However, the calculations below demonstrate that the new index does not impact the actual pro-rata value of increases and that the only potential impact is the difference in the rate of inflation registered by each index. The trap that many fall into is to assume that the increase in the baseline figure of consumption from 1952 (Rs.202.07) to the year 2002 (Rs.17,997) is solely explained by inflation, whereas the figures are also impacted by real per capita growth and also affected by the significant difference in reference population for the sample.

Calculation of Cost of Living Allowance based on CCPI(N)

Salaries/wages are generally compared with the cost of living computed by the Consumer Price Index and adjusted for inflation. They are adjusted or compensated periodically in most of the employment sector. Some are adjusted annually based on average inflation and some are adjusted monthly based on the increase in the number of index points in the previous month (based on the percentage increase in prices). What difference would it make to salaries if the CCPI(N) was used to calculate cost of living allowances? Would employees be better off with the new index?

Based on the old CCPI, the compensation is calculated at the rate of around Rs.2.00 per index point increase. (For the purposes of these calculations we have used this figure of Rs.2.00 per

unit increase.) If the CCPI starts at (5954.9) in December 2007 and increases by 5% to January 2008, then the compensation for the price increase is Rs.595.49 (Rs.2 x 297.745). It is therefore the case that if the price increases by double this, 10%, the calculation would be Rs.2x 595.49 = Rs.1,190.98 and for 15% the calculation would be (Rs.2x 893.235 = Rs.1,786.47). This demonstrates that whether a percentage increase is used or a number of units increase is used in the cost of living allowance, the outcome is the same.

Comparing the two indices, let us assume both increased by 5% from December 2007 to January 2008. As per the calculations above based on the CCPI of 5954.9 in December 2007 an increase of Rs.595.49 (Rs.2x 297.745) should be compensated. That amount should the same as a 5% increase in the CCPI(N) which was 178.1 in December 2007 (5% of 178.1 = 8.905 points) based on CCPI(N). Hence for 1 percentage point increase in CCPI(N), the cost of living allowance has to be increased by Rs.66.87 (Rs.595.49 divided by 8.905).

Therefore **a Rs.2.00 per unit value for the CCPI is equivalent to a Rs.66.87 per unit value for CCPI(N).** *(This figure may vary slightly based on the period used to start comparing both indices. In this example, it is December 2007. If calculated based on the year 2002 (the base year for the CCPI(N) index the per unit cost will be around Rs.63.50.)*

If the movement of both indices is same, the same amount is compensated; if not there will be advantages and disadvantages to using either index depending on the movement. If both indices reflected actual inflation, both should increase at the same percentage rate. But in reality since they reflect a different basket of goods over one period CCPI may increase more than the CCPI(N) and over another period CCPI may increase less than CCPI(N) (as already observed in the past). Over 12 months in 2006 the compensation based on CCPI is higher than it would have been based on CCPI(N), but this is reversed for the 12 months in 2007 when compensation based on CCPI(N) would have been higher than that based on CCPI.

It is important to separate the impacts of inflation, real growth and changes in reference population when calculating increases in income or consumption. The increase in average consumption of the reference population from 1952 (Rs.202.07) to the year 2002 (Rs.17,997) cannot be explained solely by inflation. Per capita real growth in consumption *as well as* inflation have contributed to the increase in this figure over the past 50 years. Significantly, the reference population is also very different for both figures; Rs.17,997 is the average consumption of *all urban households* in Colombo household in the year 2002 whereas Rs.202/07 refers to the *bottom 40%* of the households in the Colombo Municipal Council in 1952. The average consumption of the bottom 40% in the year 2002 would certainly be less than Rs.17,997. This

highlights that calculations in wage increases cannot be based on comparisons between the 1952 and 2002 baseline figures.

Painting a similar picture?

The reality of the situation is that whether we are using the old CCPI, the new CCPI, the SLCPI or hypothetical purposive indices for different groups – the overall picture of recent inflation will be the same, rapidly increasing. For this reason some may choose to either discredit or welcome but not act on the new index. Perhaps in a lower inflationary environment, discussion on the need for and use of indices which better reflect the consumption patterns of different socio-economic groups may be welcomed and taken more seriously by both private and public sector employers. The unwillingness of many to act on the figures reflected in the new index appears to be based on the simple fact that they don't like the emerging picture rather than because of criticisms of the index's technical faults. However, it is vital to remember that inflation hurts the poor first and foremost, and for this reason the shortcomings of the new index in reflecting the impacts on the poor should not be taken lightly.