



## POVERTY IN INDIA: MEASUREMENT, TRENDS AND OTHER POLICY ISSUES

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### Abstract:

Eradication of poverty is an important objective of economic policy. Therefore, measurement of poverty has to be sound as it has significant policy implications. This paper presents the methodology followed by the Expert Group (Rangarajan) and explains some of the issues that were raised after the publication of the Report. Apart from the methodology, some of the issues discussed in the paper are: use of calories, multi-dimensional poverty, urban poverty, NAS (National Accounts Statistics)-NSS (National Sample Survey) consumption differences, poverty measures in other countries, public expenditure and poverty, NSS and SECC (socio-economic caste census), headcount and depth of poverty, inequality and poverty and, criteria for eligibility under programmes.

**Keywords:** poverty line; poverty ratio; multi-dimensional poverty; poverty alleviation programmes; measurement of poverty.

### Introduction :

Growth is not the sole objective of economic policy. It is necessary to ensure that the benefits of growth accrue to all sections of the society. Eradication of poverty is thus an important objective. Human beings need a certain minimum consumption of food and non-food items to survive. However, the perception regarding what constitutes poverty varies over time and across countries. Nevertheless, there is need for a measure of poverty. Only then, it will be possible to evaluate how the economy is performing in terms of providing a certain minimum standard of living to all its citizens. Measurement of poverty has, therefore, important policy implications. This paper presents the methodology followed by the Expert Group (Rangarajan) and explains some of the issues that were raised after the publication of the Report. There are in fact many approaches for measuring poverty. Some analysts focus on deprivations of people in terms of health, education, sanitation or housing. There are, however, many problems associated with this approach including difficulties in aggregating deprivations on several scores derived from different sources. Perhaps the best approach is look at it in terms of certain minimum consumption expenditure per person or preferably per household. Any household failing to meet this level of consumption expenditure can be treated as a poor household. This minimum level of consumption expenditure can be derived, in turn, in terms of minimum expenditure on food and non-food items. The poverty ratio, which is the ratio of number of poor to the total population is expressed as percentage. It is also known as HCR (headcount ratio). The poverty ratio is measured from an exogenously determined poverty line quantified in terms of per capita consumption expenditure over a month and the class distribution of persons obtained from the large sample survey of consumer expenditure data of the National Sample Survey Office (NSSO).<sup>2</sup> In India, we have had a long history of studies on measurement of poverty<sup>1</sup>. The methodology for estimation of poverty used by the Planning Commission has been based on the recommendations made by Working Group/Task Force/Expert Groups consisting of eminent experts in the field. The Planning Commission has constituted these Groups from time to time to revisit the methodological issues related to the measurement of poverty



so as to make the estimates more relevant to the contemporary economic situation. After the Working Group of the Planning Commission delineated the methodology of poverty estimation in 1962, it has been intensely debated by the academicians, experts, policy planners, etc., over the years. In response, the Planning Commission has constituted Task Force/ Expert Group from time to time to review the methodology. These include the Task Force under the chairmanship of Y.K. Alagh in 1977; the Expert Groups under the chairmanship of D.T. Lakdawala in 1989 and S.D. Tendulkar in 2005. In June 2012, the Government of India (GoI) appointed an Expert Group (C. Rangarajan as Chairman) to take a fresh look at the methodology for the measurement of poverty. The Committee submitted its report towards the end of June 2014.

### **What is New in the Approach for Poverty Line?**

It may be noted that poverty line computed by Rangarajan group has three components: (a) food component, (b) normative level of expenditure for essential non-food items such as education, clothing, conveyence and house rent, and (c) behaviourally determined expenditure for other non-food items. The Group has gone back to the idea of separate poverty line baskets for rural and urban areas. This stands to reason. This is also consistent with the way we have derived the poverty line. The introduction of norms for certain kinds of non-food expenditures is an innovation. It is a simple recognition of the fact that these expenditures constituted a significant part of total consumption. In the absence of any other normative criteria, the median fractile class expenditures were treated as the norm. In fact, non-food consumption as a proportion of total consumption has been steadily rising. That is why the Group decided to take a fresh look at the basket rather than only updating the old basket for price changes. Mishra (2014) says that the expert group takes commodity basket from two fractile groups and it poses a behavioural dilemma. It may be noted that when we adopt two norms one for food and the other for certain non-food expenditures, obviously the emerging basket will not correspond to the behavioural pattern of a particular expenditure class. Our attempt has been to estimate the level of private consumption expenditure which will meet certain minimum requirements. Srinivasan (2007) calls for a new approach to poverty measurement. He says that, “Useful starting points for a new approach lie in anchoring poverty lines in social 13 norms and in the distinction made by PPD8 between goods and services to be bought by households from their own resources and those to be supplied by the state, thus providing a meaningful way of distinguishing the responsibilities of households (i.e., the private sphere) and those of the state (i.e., the public sphere).” In a personal correspondence with one of the authors of this paper he elaborates his idea as follows. “I have suggested an alternative, namely to start from a socially defined poverty bundle of goods and define as those who do not consume that bundle. In valuing the bundle and updating it requires the use of prices actually paid by the poor and also excluding that part of the bundle whose cost is in part met by subsidies”. The suggestion of Srinivasan that we should start from a ‘socially defined poverty bundle of goods’, is a good idea. But, the problem is how to arrive at such a socially defined poverty bundle. In some ways, this is precisely what we have done regarding private expenditure. We have arrived at a minimum level of private consumption expenditure both in relation to food and non-food items. Unless, a method is specified to arrive at socially defined poverty bundle of goods, it may be difficult to measure poverty. We have discussed below on the contribution of public expenditures. Among other things, Subramanian (2014) provides a critique of the expert group’s methodology for identifying the poverty line particularly unvarying “poverty line basket”. It may be noted that the report of the expert group chaired by Lakdawala discussed the issues of fixed commodity basket and varying commodity basket and opted for the fixed one for comparability. It may, however, be noted that while the



basket may remain the same in terms of composition, weights for price indices could change since the updation of the poverty line is to be done using the Fisher Index. As the Expert Group (Tendulkar) says, “the proposed price indices (Fisher Ideal indices in technical terms) incorporate both the observed all-India and the state level consumption patterns in the weighting structure of the price indices” (GoI, 2009: 2).

### **Poverty Estimation:**

Headcount and Depth A World Bank report (2015) on poverty brings out poverty ratios across countries including India. According to these estimates, India’s poverty ratio based on ‘uniform reference period’(U P) in which recall period was 30 days for all items was 21.2 per cent in 2011-12. The poverty line is \$1.90 per capita per day. The report says that poverty in India could be even lower if we use ‘modified mixed reference period’(MM P) in which recall period is 7 days for some food items, one year recall 16 for low frequency non-food items and 30 days for rest of the items. World Bank poverty report indicates that use of MMRP estimates leads to a significantly lower poverty rate of 12.4 per cent in 2011-12.

### **Differing Estimates**

The angarajan Committee on poverty estimates that 29.5% of India’s population was below poverty line in 2011-12. The poverty line for all India is around Rs.1105 per capita per month. In terms of latest purchasing power parity terms this comes to around \$2.44 per capita per day. The World Bank’s poverty line of \$1.90 per capita per day is about 78% of angarajan’s committee’s poverty line. Thus, low poverty line was the reason for low poverty ratio of 12.4 per cent in World Bank estimates as compared to angarajan Committee’s estimate of 29.5% in 2011-12. The poverty problem looks much more manageable if we take World Bank’s poverty line. But, angarajan Committee’s estimates show that poverty was still substantial at nearly 30% based on MMRP in 2011-12. World Bank report also talks about depth of poverty. It examines the trends in new poverty measure called person-equivalent headcounts. According to the report, the depth elasticity at the global level between 1990 and 2012 was 1.18 indicating that the reductions in traditional head count ratios were accompanied by even-larger reductions in person-equivalent poverty ratios. This is true for the regions such as Sub-Saharan Africa, South Asia region and East Asia and Pacific where bulk of the poor reside.

### **Where Do We Stand?**

There are three conclusions from the all India and state-wise analysis. First, the rate of decline in poverty ratios for lowered cut-off is similar or more than those for PL or raised PL. Second, poverty is concentrated around the poverty line. Third, the percentage of population for 50% of PL is negligible at all India and state level. There is a considerable amount of debate on how to measure poverty. Prescribing a minimum level of income or consumption expenditure for defining poverty appears to be the most appropriate method. Obviously even with reference to the prescription of a minimum, there can be considerable differences of opinion. There is bound to be a range of poverty lines. Our Committee in 2014 had set out a methodology for prescribing the minimum level of consumption expenditure of food and non-food items. The World Bank uses a single poverty line defined in terms of dollar and uses purchasing power parity exchange rate to determine each country’s poverty line. This becomes inevitable when comparisons across countries have to be made. We must however recognise the limitations of such an exercise. Head count ratio is a reasonable indicator of poverty measurement, although we may need to supplement it with some measures of depth. Bunching of poverty around the poverty line in our country gives us hope that the problem of reducing poverty is more manageable. On the other hand, had the poor been concentrated at the



lower level, the task could have been more arduous. The yardstick that we have chosen to measure poverty is more stringent than the one used by World Bank.

### **Multi-dimensional Poverty**

Ray and Sinha (2014) are critical of the report saying that the group did not widen the concept of poverty in terms of multidimensional poverty as mentioned in the terms of reference. They use NSS and NFHS data to highlight multidimensionality. Subramanian (2014) also says that the expert group has “forfeited an opportunity to press the case for a multidimensional assessment of poverty”. It may be noted that the group discussed these issues and has given the reasons in the report why it has not attempted estimating multidimensional poverty. The search for non-income dimensions of poverty possibly stems from a view that, in terms of the capabilities approach to the concept and measurement of poverty, some of these ‘capabilities’, may not be tightly linked to the privately purchased consumption basket in terms of which the poverty lines are currently drawn. Therefore, poverty based on income or consumption is different from deprivations based on education or health. Even the trends given by multi-dimensional poverty are similar to that of estimates of consumption based poverty. Amidst the din caused by the story of rising billionaires, the message on India’s poverty decline in a report of the Oxford Poverty and Human Development Initiative has been lost. UNDP and Oxford University released the report on Global Multidimensional Poverty Index (MPI) 2018. This report covers 105 countries. The MPI is based on 10 indicators: Health, child mortality, years of schooling, school attendance, cooking fuel, sanitation, drinking water, electricity, housing and assets. This report has specifically discussed the case of India. It is well worth quoting the opening paragraph on India: “India has made momentous progress in reducing multidimensional poverty. The incidence of multidimensional poverty was almost halved between 2005/6 and 2015/16, climbing down to 27.5 per cent. The global Multidimensional Poverty Index (MPI) was cut by half due to deeper progress among the poorest. Thus within ten years, the number of poor people in India fell by more than 271 million — a truly massive gain”. This is indeed high praise. The report also says that the poorest groups had the biggest reduction in MPI during the period 2005/6 to 2015/16, indicating they have been “catching up”. Is the conclusion of global MPI a new revelation? No. The estimates of poverty based on consumer expenditure and using the Tendulkar committee methodology show over a seven-year period between 2004-05 and 2011-12, the number of poor came down by 137 million despite an increase in population. According to the Rangarajan Committee methodology, the decline between 2009-10 and 2011-12 is 92 million, which is 46 million per annum. For a decade, it will be larger than that of global MPI. The poverty ratios based on Tendulkar and Rangarajan Committee methodologies are lower than as estimated by global MPI. We have reservations on using multiple indicators as these multidimensional indicators/measures raise several issues regarding their measurability, aggregation across indicators, and, crucially, of databases that provide the requisite information at reasonably short intervals. These need to be considered and evaluated carefully. Aggregation is another problem. In principle, they should be independent. Access to safe drinking water, for example, cannot be aggregated with indicators like child mortality. Even in respect of independent indicators, analytically appropriate rules of aggregation require that all of them relate to the same household. More generally, this requirement poses several data constraints. It may be noted that we are not against multidimensional poverty or deprivations. One can analyse the progress of non-income indicators like education, health, sanitation, drinking water, child mortality etc. over time with income or consumption poverty. But, converting all of them into an index poses several problems. Deaton and Ravallion (2014) also indicate that “it is important to supplement expenditure-based poverty estimates with other indicators of living standards, relating for instance to nutrition, health, education and the quality of the



environment”. On multidimensional issues Srinivasan (2007) says viewing the public services as another dimension besides consumption in a multidimensional conceptualisation of poverty is more fruitful. However, he is critical of multidimensional indices. He says that “collapsing many relevant but not necessarily commensurate dimensions into a single index defined as an arbitrarily weighted sum of disparate indexes makes little sense. The Human Development Index pioneered by the United Nations Development Programme is an example of an arbitrarily weighted sum of noncommensurate indexes. It certainly is not a multidimensional conceptualisation in any meaningful sense but simply yet another arbitrary unidimensional index” (Srinivasan, 2007: 4162). In the minds of most people, being rich or poor is associated with levels of income. The various non-income indicators of poverty are in fact reflections of inadequate income. Defining poverty in terms of income or in the absence of such data in terms of expenditure seems most appropriate and it is this method which is followed in most countries.

### Conclusion

To conclude, one has to review from time to time the methodologies for arriving poverty estimates in keeping with the changing needs of the population. Poverty lines are only approximations to the socially accepted minimum standards. Thus, in any poverty line approach, an inevitable element of arbitrariness is inescapable. It is by nature subjective and judgmental. There is a hilarious description of how the poverty line evolved in the United States in the latest book by Deaton (2013) entitled *The Great Escape*. Nevertheless an attempt has been made in the report of Expert 38 Group (Rangarajan) to approach the subject on methodology of measurement of poverty as systematically as possible. The methodology adopted by the new group on poverty is based on sound principles. However, as the group has clearly indicated, this measure is not considered as an appropriate basis for determining entitlements under various programmes. Each programme focusing on a particular deprivation may have to choose that criterion which is most appropriate for it. But to obtain a general picture of the progress of the country, a suitable measure on poverty is useful. Poverty is not the same as hunger. Hunger is far worse. Nor does the poverty line mean a comfortable standard of living. It represents absolute minimum. Obviously, policy should work towards not only to reduce the number of people below that line but also ensure that people in general enjoy a much higher standard of living. Numbers do indicate that poverty ratio in India is coming down even though it may remain at a high level. Policy makers must continue to follow the two-fold strategy of letting the economy grow fast and attacking poverty directly through poverty alleviation programmes.

### References

- Anand, I. and A. Thampi (2016), “Recent Trends in Wealth Inequality in India”, *Economic and Political Weekly*, Vol.51, No.50
- Att, Gaurav, Martin Avallion and Inku Murugai “Growth, Urbanisation and Poverty Reduction in India” Policy Research Working Paper 7568, World Bank, Washington DC.
- Deaton, Angus (2013). *Great Escape: Health, Wealth and the Origins of Inequality*. USA: Princeton University Press.
- Deaton, A. and J. Cartwright (2014). “Squaring the Poverty Circle”, *The Hindu*, 25 July. 39
- Dev, S. Mahendra (2005). “Calorie Norms and Poverty”, *Economic and Political Weekly* 40(8).
- EPW (2014). “Rangarajan’s Measure of Poverty”, Editorial, *Economic and Political Weekly* 31, 2 August.
- GoI (1979). Report of the Task Force on Projection of Minimum Needs and Effective Consumption Demands. Chaired by Y.K. Alagh. Planning Commission, Government of India.



Himanshu (2015), “Inequality in India”, Seminar, No. 672, August, 2015

Himanshu and Abhijit Sen (2013). “In-kind Transfers: Impact on Poverty”, Economic and Political Weekly 48(45-46).