



Redefining Poverty Line

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SUMMARY

India claims to have achieved Millennium Development Goal (MDG) of reducing poverty by half from the level of 47.8% in 1990 to 21.9% in 2011–12. But the very definition of Poverty Line with the norm of Rs. 26 per capita per day in rural and Rs. 32 in urban is seen to be too low to be acceptable. The report by Rangarajan Committee which revised upward the Poverty Line to Rs. 32 for rural and Rs. 47 for urban has generated a fresh debate as the raise is viewed as marginal. In view of this, NITI Aayog constituted a Task Force on Elimination of Poverty in India with the mandate to develop a working definition of poverty line and to prepare a roadmap for the elimination of poverty.

The issues which are required to be addressed by the Task Force in developing a working definition are mainly Calorie and/or other Criteria to be used for defining Poverty Line and the Choice of Base Year. An analysis of change in Consumption Pattern, Age & Occupation Structure of the population, Recommended Dietary Allowances etc revealed that the implication of these in constructing a working definition of poverty line involves a multi faceted approach. Importantly, the poverty line should ensure all basic / minimum needs.

Keywords: Calorie norm, Minimum needs, Occupation structure, Per capita consumption expenditure, Population pyramid, Recommended dietary allowances.

1. BACKGROUND

The Planning Commission, Government of India was mandated to bring out estimates of poverty periodically with interval of 5 years. For the year 2011–12, for which latest estimates are available, the methodology followed by Planning Commission is based on Tendulkar Committee recommendation where the national poverty line is tagged at Rs. 26 per capita per day in rural areas and Rs. 32 per capita per day in urban areas. This criteria or norm of poverty line drew lot of attention and severe criticism as with a measly Rs. 32 a day in urban areas or Rs. 26 a day in rural areas, one cannot have two square meals a day and as such, not adequate to lift a person out of poverty. The estimates of the incidence of poverty using these criteria are seen

as too low to be acceptable. In the wake of controversy, the UPA Government found it difficult to defend the definition of poverty line, and hence set up an Expert Technical Group under Dr. C. Rangarajan to revisit the methodology. The Rangarajan Committee was tasked with revisiting the Tendulkar formula for estimation of poverty. The Committee has submitted its report in 2014. According to the report those spending over Rs. 32 a day in rural areas and Rs. 47 in towns and cities should not be considered poor.

The recommendation has generated fresh debate over the poverty measure as the Committee's report has only raised the bar marginally. Recently NITI Aayog constituted a

Task Force under the chairmanship of its Vice Chairman with distinguished Experts and Secretaries of concerned ministries as its members.

In this context it is of paramount importance to have a re-look afresh in a holistic perspective.

This paper outlines the genesis of methodology and highlights the issues requiring attention in redefining Poverty Line.

2. GENESIS OF METHODOLOGY OF POVERTY LINE

The Concept of Poverty line being used by Planning Commission was recommended by the Task Force on Projection of Minimum Needs and Effective Consumption Demand in 1979. The concept is based on the daily calorie norm of 2,400 kcal per capita in rural areas and 2,100 kcal per capita in urban areas, derived by taking in to account the age, sex and occupation structure of the population and corresponding Recommended Dietary Allowances (RDAs) separately for rural and urban areas. Based on actual consumption behavior, the poverty line in monetary terms / units worked out as Rs. 49.09 per capita per month in rural areas and Rs. 56.64 per capita per month in urban areas which correspond to meeting the required calorie norms together with some minimum of non-food spending.

This poverty line that is taken as the base has been reviewed by the several Experts Groups from time to time. Though initially the same poverty line was used across all states, the Lakdawala Panel (1989) constituted by the Planning Commission, suggested using state-specific poverty lines in view of interstate price differentials. Tendulkar Committee (2009) recommended modification in the methodology which continued to be used by Planning Commission till 2011–12.

Rangarajan Committee (2014) though revised downward the calorie norm, increased the non food component thereby resulting in an overall upward revision of poverty line. Now the Task

Force appointed by NITI Aayog is looking afresh and deliberating the issues in developing a working definition of Poverty Line.

The important issues requiring attention by the Task Force in redefining Poverty Line are discussed in what follows.

3. CHOICE OF BASE YEAR

The poverty estimates will vary according to the base year chosen for defining the poverty line. Till now the base year of poverty line was the year 1973–74. The base poverty line is updated only for price increase. This updation does not ensure meeting the calorie norm with the updated monetary poverty line. It is not justified to retain the base poverty line of 1973–74 and continuing with its updation for price increase.

Rather, the base for poverty line should be changed to the most recent year so as to rightly reflect the current consumption behavior in the estimation of poverty line.

It is important to mention that Consumption preference has undergone change over time. The age, sex and occupation structure have changed considerably. Also the RDAs have been revised.

In order to analyse how all above have changed with time, the highlights are presented in the following sections.

4. CHANGE IN CONSUMPTION PREFERENCES

The consumption expenditure pattern has changed considerably over the last four decades because of increase in income and consumption preferences. Notable changes have been seen in Share of expenditure on food, Proportion of expenditure on Cereals with implication on Calories derived from different food constituents. Salient findings in this regard are discussed below:

4.1 Share of Expenditure on Food

The share of food in consumption expenditure basket has declined sharply. Notably,

till 90's the expenditure on food was about two thirds which is now at only about 40% indicating 180 degree change.

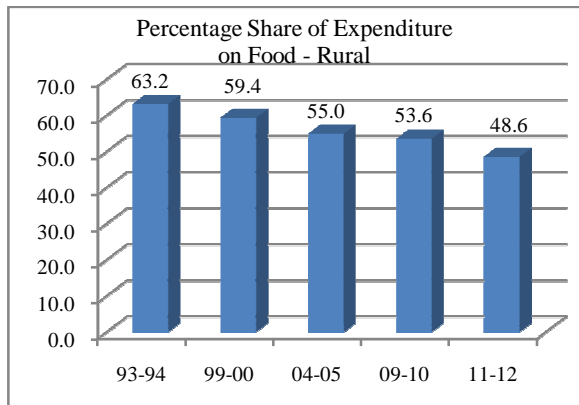


Fig. 1

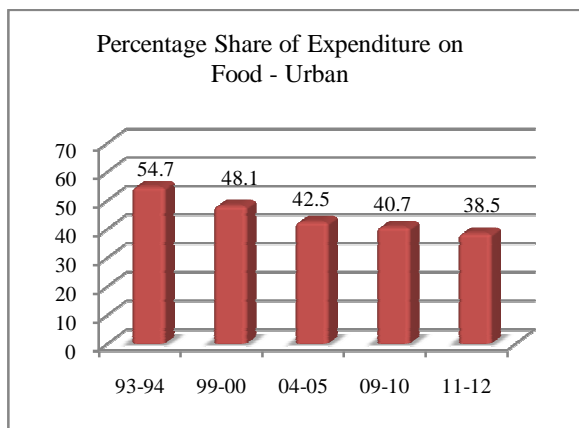


Fig. 2

Source: Reports of National Sample Survey Organization, MoSPI

The sharpest rise in the non-food category is observed in miscellaneous goods and services category which includes education, medical expenditure, consumer services, minor durable goods, and conveyance and toilet articles. This category, now accounts for a significant share of total consumption basket in both rural (26.1% in 2011–12) and urban households (39.7% in 2011–12).

4.2 Proportion of Expenditure on Cereals

The proportion of expenditure on cereals has gone down drastically. In rural areas, the percentage expenditure on cereals has gone down, from 24.2% in 1993–94 to about 12% in

2009–10. Similarly, in urban areas, it has fallen from 14% in 1993–94 to 7% in 2009–10.

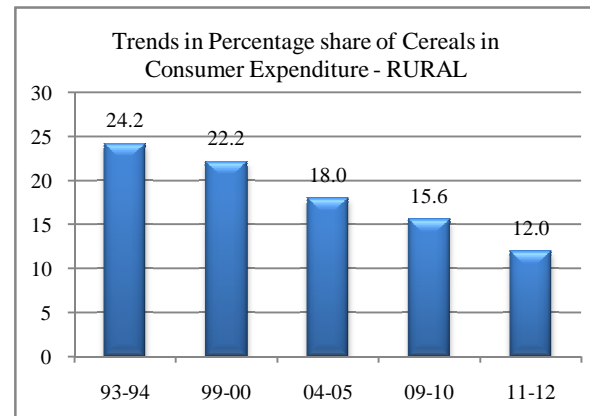


Fig. 3

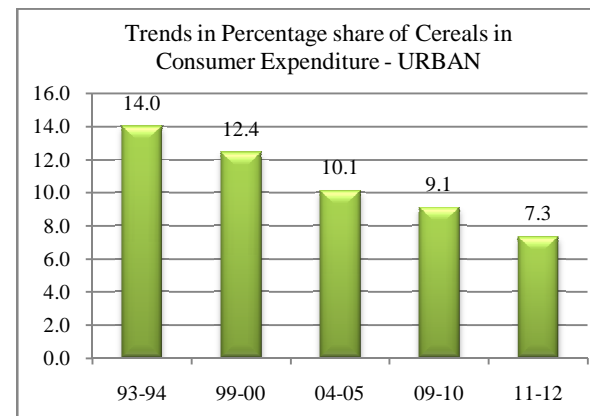


Fig. 4

Source: Reports of National Sample Survey Organization, MoSPI

4.3 Calories Derived from Cereals

As a result of change in consumer taste and preferences the share of calories consumed from cereals has reduced over time.

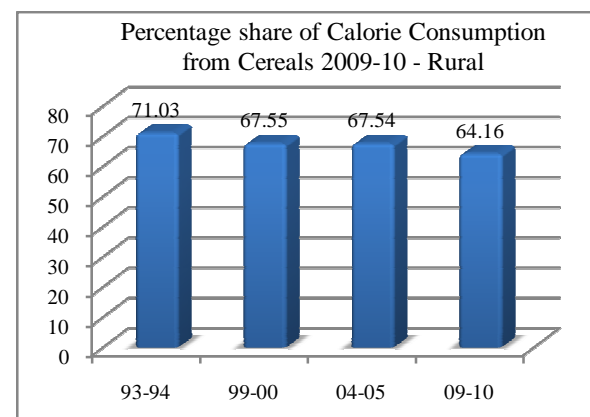


Fig. 5

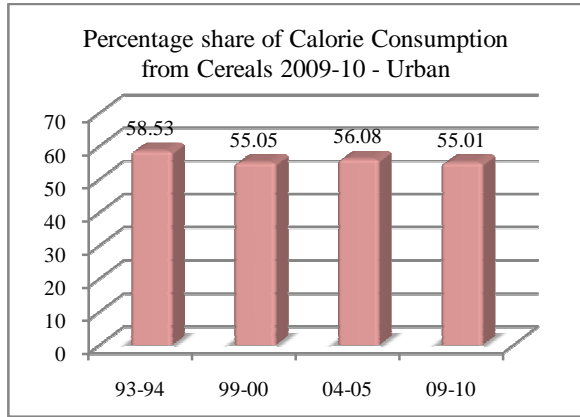


Fig. 6

Source: Reports of National Sample Survey Organization, MoSPI

Also in terms of quantity, the per capita consumption of cereals has declined with time.

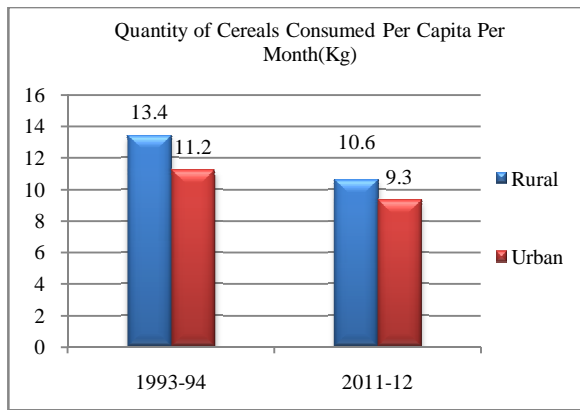


Fig. 7

Source: Reports of National Sample Survey Organization, MoSPI

4.4 Share of Rice and Wheat in Cereals

Rice and Wheat are the main staple foods and the consumption of coarse cereals is only 3-6%.

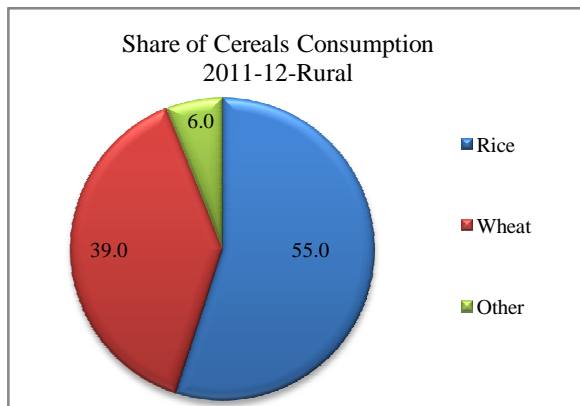


Fig. 8

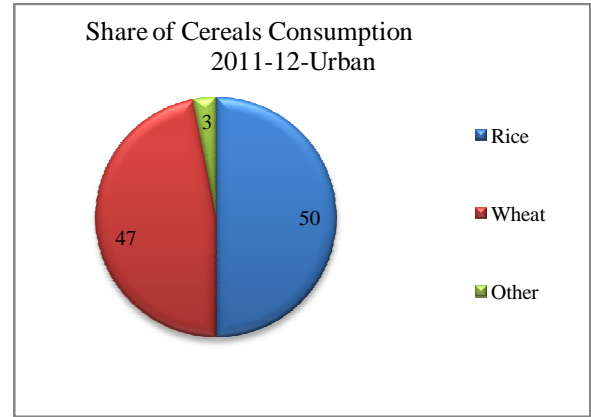


Fig. 9

4.5 Calories from Non-Cereals

As to the non-cereals, the consumption of Meat, Egg and Fish, Milk and Milk products and Misc foods account for significant proportion of calories (60% of non cereals) in the diet. In monetary terms the expenditure on these non cereals is much higher than that for cereals.

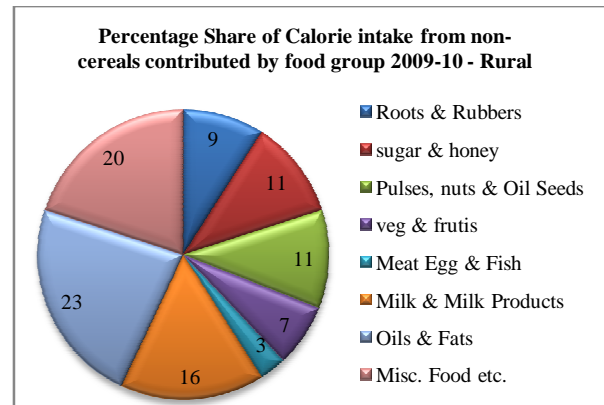


Fig. 10

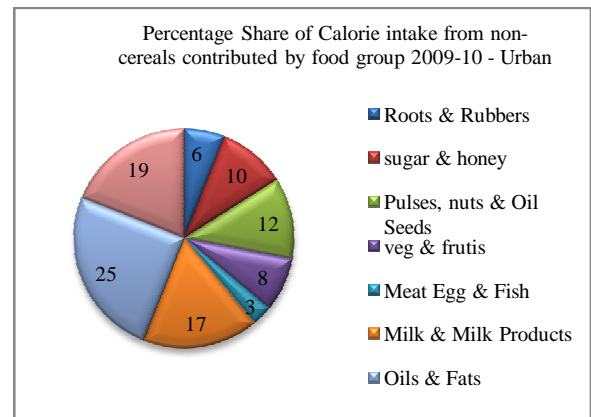


Fig. 11

Source: Reports of National Sample Survey Organization, MoSPI

5. CHANGE IN THE AGE AND OCCUPATION STRUCTURE

There has been sea change in the age and occupation structure of the population during last four decades. This is due to fertility decline and shift in the structure of the Indian economy. This is explained as under:

5.1 Change in Age Structure

The total fertility rate (TFR) which was about 3.5 in early 70s has almost reached replacement level of 2.1. As a result of decline in fertility the Age structure has undergone change as could be seen from the shape of the Population Pyramids for 1970 and 2010.

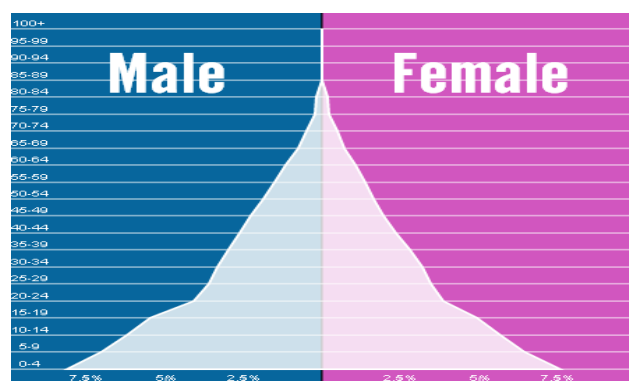


Fig. 12. Population Pyramid India-1970

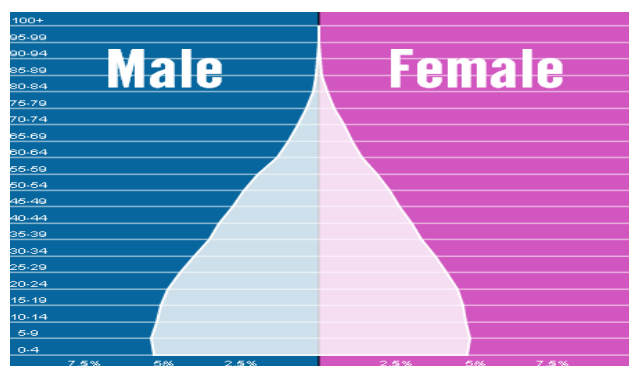


Fig. 13. Population Pyramid India-2010

5.2 Change in Occupation Structure

The structure of Indian Economy in terms of share of Primary, Secondary and Tertiary sectors in GDP has also undergone change. The share of primary sector (Agriculture, Mining etc.) in India's GDP has gone down from 53.71% (1950–51) to 16.17% (2011–12). The share of secondary sector (manufacturing, construction, electricity

and water supply) has increased slowly from 14.35% (1950–51) to 25.45% (2011–12), while the share of services (trade, hotels, transport and communication; financing, insurance, real estate and business services; community, personal and social services all combined) has increased from 31.93% (1950–51) to 58.39% (2011–12).

This has resulted into change in the occupation structure as larger proportion is now engaged in the sedentary activities than the heavy and moderate activities.

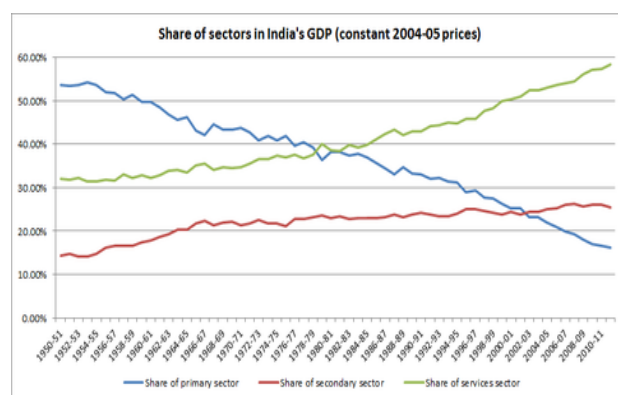


Fig. 14

6. CHANGE IN RECOMMENDED DIETARY ALLOWANCES (RDA)

Table 1. Recommended dietary allowances (RDA) 2010

Group	Category	Energy (Kcal/Day)	
		Revised	Old
MAN	Sedentary	2320	2425
	Moderate	2730	2875
	Heavy	3490	3800
WOMAN	Sedentary	1900	1875
	Moderate	2230	2225
	Heavy	2850	2925
	Pregnant	+350	+300
	Lact.<6 mths	+600	+550
	Lact.6-12 mths	+520	+400
INFANTS	0-6 mths	92/kg	108/kg
	6-12 mths	80/kg	98/kg
CHILDREN	1-3 yrs	1060	1240
	4-6 yrs	1350	1690
	7-9 yrs	1690	1950
BOYS	10-12 yrs	2190	2190
GIRLS	10-12 yrs	2010	1970
BOYS	13-15 yrs	2750	2450
GIRLS	13-15 yrs	2330	2060
BOYS	16-17 yrs	3020	2640
GIRLS	16-17 yrs	2440	2060

Source: Indian Council of Medical Research 2011

Indian Council of Medical Research (ICMR) is mandated to recommend the nutrient requirement and dietary allowances for Indians. The RDAs have now been updated for the year 2009–10. Table below presents a comparison of revised RDAs with those used in defining poverty line for 1973–74 by Planning Commission.

In view of this, the calorie norm needs to be reworked with the latest information.

7. CALORIE NORM

It has been a practice to derive the Per Capita Calorie Norm as the average for entire population taking into account the age, sex, occupation, structure of the population together with corresponding RDAs. This is what was being used by Planning Commission all these years and also used by the Rangarajan Committee (2014).

Although with change in structure of GDP, those engaged in Heavy and Moderate activities have declined, the poor continue to be engaged in heavy and moderate activities mainly. So applying the average norm of entire population for poor is not appropriate.

Considering a typical family size of 5 for a poor household, the average per capita calories norm works out as 2560 as per details given below:

Table 2

Category	Gender	Activity	RDA
Adult	Male	Heavy 0.80	3400 Cal
		Moderate 0.20	2730 Cal
Adult	Female	Heavy 0.50	2850 Cal
		Moderate 0.50	2230 Cal
Adolescent	Boy		3020 Cal
	Girl		2330 Cal
Child	Boy / Girl		1690 Cal

The poor households could have different family structures as under:

- Two Adults (Husband & Wife), both parents (Father & Mother) and one child.
- Two Adults (Husband & Wife), only mother or father and two children.
- Two Adults (Husband & Wife), Brother, Sister and a child.
- One Adult Male, Both parents, Younger Brother and Sister.
- And likewise

In view of these, it is safe to assume a per capita Calorie Norm of 2400 for poor.

8. IS IT APPROPRIATE TO BASE POVERTY TO CRITERIA OF CALORIE NORMS?

The monetary equivalent of calorie requirement norm can be worked out by taking into account the actual consumption behavior for the latest round of National Sample Survey Organisation (NSSO) which could be 2011–12 or any other subsequent year.

If poverty is based on criteria of calories it is difficult to convince that the poverty is on decline when the trend on calorie intake as well as proportion below desired Calorie intake does not indicate change in that direction. This is shown as under. Graph below presents trend in Per Capita Calorie intake over time. Evidently, the per capita calorie intake does not show any increase with time rather it is showing a declining trend.

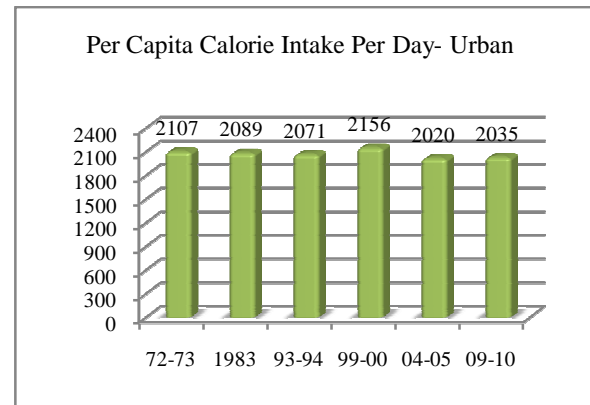


Fig. 15

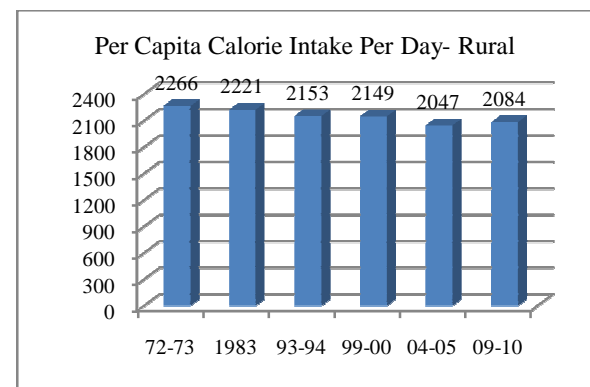


Fig. 16

Source: Reports of National Sample Survey Organization, MoSPI

Table below provides results on proportion of households below calorie intake of 2700 per Consumption Unit. Here too there is no decline in the percentage of households consuming lesser calorie than the norm.

Table 3. Percentage of households below calorie intake of 2700 per consumer unit per day

Year	Rural	Urban
93-94	51.5	57.2
99-00	55.8	57.2
04-05	61.3	63.1
09-10	57.1	58.5

Thus, if poverty is based on sole criteria of calories it is difficult to convince that the poverty is on decline when the trend on calorie intake is in the opposite direction.

9. POVERTY LINE BASED ON ALL MINIMUM NEEDS

Relating poverty to single criteria of calorie norm has otherwise been questioned as this is only one of the ingredients of minimum needs. Ideally, poverty line should make allowances for all basic needs relating to Food, Clothing, Housing, Health, Education, Travel etc.

As an alternative to the calorie norm, the basis of the minimum needs for food can be in terms of provision for two square meals a day and the cost for the same based on least cost basket. For other basic needs the norms could be set up based on rational consideration of ensuring minimum level of living. For this the actual expenditure incurred by Upper Middle Class i.e.

50th to 60th percentile could be tagged together with the monetary equivalent of providing two square meals a day in developing an acceptable definition of poverty line.

The monetary equivalent of benefits which would accrue to poors through government plans and programmes could be discounted in the poverty line so developed.

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