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Abstract

In the wake of the economic reform programme undertaken since 1991, distributional issues have received considerable attention and policy concern. In pursuit of such concerns, the government has worked out an approach to the Eleventh Five Year Plan, which lays emphasis on, though without defining, a strategy of inclusive growth. In fact, this form of pursuit of inclusive growth has become virtually a universal concern with even the UNDP harping on it without knowing answers for what it calls a "million dollar question- what inclusive growth is and how to achieve it?" This paper proposes to define inclusion/exclusion for an outcome scenario on broad based growth from three different perspectives, viz., production, income, and consumption distribution. It also provides some illustrations based on the National Accounts Statistics and the National Sample Survey consumer expenditure distributions for the year 2004-05.

Key words: Consumer expenditure, Distribution, Economic reform, Eleventh Five Year Plan

JEL Codes: D31, I32, I38

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1. Introduction

The *Eleventh Five Year Plan* Strategy is '*Towards Faster and More Inclusive Growth*'. Though the Approach Paper (Government of India (GoI) 2006) has not defined the concept of inclusive growth and the proposed strategy pertains to the Eleventh Five year Plan (2007-2012), the latest *Economic Survey 2007-2008* presents some estimates of outcome measures (without any evaluation) of *Inclusive Growth* in India between 1993-94 and 2004-05 (GoI 2008; pp. 241-245).[3]

Similar confusion exists in the international context too with institutions like the UNDP and the World Bank harping on inclusive growth without a well-defined perspective. The United Nations Development Programme (UNDP) is quite open when it admits: "UNDP's Strategic Plan has a number of new terms. Chief among them is a previously not-so-much-talked-about term 'inclusive growth'. So it is high time for UNDP to collectively understand and agree on this million dollar question – what inclusive growth is and how to achieve it?" (UNDP 2008; p. 1).

Since it may not be possible to define a strategy without any understanding of the profile and magnitude of the problem, this paper proposes to define inclusion/exclusion with reference to an outcome scenario for broad based growth as reflected in estimates of production, income,

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[3] Planning process and policy formulation in India is one area, which calls for some serious review and examination. One can cite several instances, which tend to generate such an impression:

- The Sixth Five Year Plan (1980-85) justified its choice of growth with redistribution strategy for poverty reduction with reference to estimates of extent of inequality based on price-unadjusted size distribution of consumption data, which show a trend decline (GoI 1981; p. 81). This exercise is methodologically unsatisfactory and estimates with appropriate corrections for grouping bias and prices do not bear out any such conclusion and the chosen strategy (Suryanarayana 1983).
- Some Plan exercises are carried out imposing assumed values for distributional parameters rendering the entire exercise quite hypothetical rather than one of serious policy pursuits (See, for instance, GoI 1981; p. 233, Suryanarayana 1991).
- Policy debates and recommendations on reforming the public distribution system are based on concepts and empirical issues without any reference to relevant and realistic norms and parameters (Suryanarayana, 1995, Suryanarayana and Silva 2007).

To cite and illustrate one particular consequence of such an approach, India realized the Sixth Five Year Plan target of 30 per cent for poverty not in five years but after pursuing planned pro-poor growth strategies for two and a half decades. Incidence of poverty has finally declined to 28.30 per cent in the rural and 25.70 per cent in the urban sector in 2004/05 (Government of India, 2007b) thanks largely to growth and not any significant reduction in inequality.

and consumption distribution. This should facilitate a sketch of occupational/social/regional profiles of the included/excluded and hence, appropriate policy design/strategy for the inclusion of the excluded in the mainstream/growth process. This study, therefore, makes an attempt to provide a perspective, a measure of inclusion, and finally an evaluation (for illustration) based on the available estimates of consumption distribution for a recent year (2004-05) for India.

This study is organized as follows: Next section provides a brief review based on the Eleventh Plan Approach paper (GoI 2006) and different versions of the concept of *Inclusive Growth*. Section 3 proposes a possible approach to outcome evaluation of *Inclusive Growth* followed by its application and empirical illustration in the Indian context.[4] The final section summarizes the paper.

2. Concept: A Review

The Approach Paper of the Eleventh Plan states that the Plan provides "an opportunity to restructure policies to achieve a new vision based on faster, more broad-based and inclusive growth. It is designed to reduce poverty and focus on brining the various divides that continue to fragment our society." (GoI, 2006; p. 1). These are the broad objectives that successive Five Year Plans in India have sought to achieve in some form or the other right from the beginning. Of course, the context of economic reform, involving changes in the economic policy framework since 1991, has called for a careful scrutiny of the distributional consequences of the growth process and an appropriate strategy to deal with the emerging issues. For that matter, the concept of inclusive growth has gained wide currency in several countries including India (Bolt 2004). If so, what is so exclusive about the *Inclusive Growth*?

The GoI has sought to pursue a strategy without providing even a working definition of it, not to speak of the nature and magnitude of the problem it seeks to address. It does not spell out the reasons for not defining the concept. It could be that the concept is too well known to bear any repetition. However, available literature does not bear this out. Some important interpretations in the available literature are as follows:

- The World Bank has stated that inclusive economic growth can be achieved by "focusing on expanding the regional scope of economic growth, expanding access to assets and thriving markets and expanding equity in the opportunities for the next generation of Indian citizens no matter who they are or where they live" (p. xiv, World Bank 2006).

- Sen (2007) sets a necessary condition for inclusive growth in that the disparity in per worker income between agriculture and non-agriculture should not widen (Sen 2007).

- Besley *et al.* (2007) use growth elasticity of poverty as measures to assess inclusiveness of the poor in the growth process.

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[4] The empirical illustration is based on the National Sample Survey (NSS) (61st round) estimates of household per capita consumer expenditure (unit record data) for 17 major states of the Indian Union. For this purpose, a major state is defined as one with a population of more than 20 million as per the 2001 population census.

- Ahluwalia, the Deputy Chairman of the Planning Commission, provides the following interpretations:
  - "Achieving a growth process in which people in different walks in life…feel that they too benefit significantly from the process" (Ahluwalia, 2007).
  - "Poverty was one-dimensional, but lack of inclusion now is multi-dimensional and interlinked with regional and caste issues…The Plan is no longer about a model, it is now about pulling together a whole lot of forces and impulses... An Inclusive Strategy should provide for health, education and agriculture" (cited in *Sensex* 2007).

- Without any explicit articulation from the horse's mouth, experts have started providing their own versions of *Inclusive Growth*. The prevailing confusion becomes apparent when experts propose their own definitions in term of combinations of a subset of operational strategies for '*Opportunities, Empowerment and Security*' recommended by the World Bank (2001). The confusion comes out sharply when Vittal (2007) starts speculating in his weekly column in the *Mumbai Mirror*. He considers the following options: "What is meant by inclusive growth? One approach may be to consider people who are below the poverty line…Another way…is to look at employment and consider only those who are in the organised sector, as participating in the growth story…if with all the chanting of the mantra of inclusive growth, we may end up with one more set of measures which may only increase corruption and boost Inspector Raj" (Vittal 2007; p. 31).

- Now the UNDP has come out and defined Inclusive growth by laying emphasis on the production and income side of GDP as "the process and the outcome where all groups of people have participated in the organization of growth and have benefited equitably from it. Thus inclusive growth represents an equation – with organization on the left-hand side and benefits on the right-hand side." (UNDP, 2008; p. 2).[5]

However, GoI provides its own *outcome (not evaluation but) presentation* of *Inclusive Growth* in the latest *Economic Survey 2007-2008* under the sub-title 'Poverty and Inclusive Growth' (GoI, 2008; pp. 241-245):

- It does not define the concept of *Inclusive Growth* but distinguishes between consumption data sets based on different recall periods and examines their comparability. It presents comparable estimates of poverty for rural India, urban India and All (rural-urban combined) India from alternative data sets. For instance, it points out that estimates of poverty based on Uniform Recall Period consumption distribution for the country as a whole (All-India) was 36 per cent in 1993-94 and 27.5 per cent in 2004-05. The estimates for All-India based on Mixed Recall Period consumption data sets are 26.1 per cent for 1993-94 and 21.8 per cent for 2004-05.

- It does not define vulnerability or its source but states that 'vulnerability is a relative term'. Vulnerability could be "gauged from the consumption patterns (in the absence of a better alternative)" (GoI, 2008; p. 243). "Higher" budget weight for food items is interpreted to indicate vulnerability. It is not clear how it is decided that there is no better alternative. The Survey does not specify the norm used for deciding higher budget weight and the source for vulnerability.

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[5] For further details and elaboration, see UNDP (2008).

- It presents descriptive statistics on consumption patterns without interpreting them or drawing any inference (GoI, 2008; pp. 243-244).

- It also provides estimates of compound annual growth rates of real consumption for different percentile groups of population in rural and urban India between 1993-94 and 2004-05.

- It examines the rural and urban temporal changes in terms of mean-based averages, though they are not robust measures for skewed distributions.

- Finally, it does not draw any inference or carry out any evaluation; nor does it make any policy recommendation.

In other words, the issue raises both conceptual and methodological questions. How robust is a mean-based average as a measure of broad-based growth?[6] Is there any better alternative? Given a better alternative measure, how does one measure inclusion? Therefore, it is important to define the concept and chart an approach to outcome evaluation at least from an *ex post* perspective.[7]

3. Inclusive Growth: An *ex post* perspective

Studies generally verify growth performance or welfare improvement in terms of mean-based averages of income/consumption.[8] GoI (2008) too follows such an approach. It may not be appropriate to verify and assess broad-based growth in terms of mean-based averages for the reason already mentioned.[9] Any outcome evaluation of *Inclusive Growth*, which is not even defined in terms of input, output or outcome measures, is anybody's guess. Negative covariance between mean-based averages of income/consumption and incidence of poverty, as generally done in empirical studies, cannot be taken as evidence of inclusion. This is because time series estimates of absolute poverty, measured as the proportion of population living below the subsistence minimum, which is kept invariant, would provide little clue as to

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[6] A mean-based/least squares estimator of average is not a robust measure for a skewed distribution like that of household/personal income/consumption and can often mislead (Mukherjee *et al.* 1998). Hence, it would make sense to use order-based measures for welfare appraisals using data on household/personal income/consumption distributions. However, there is no option other than a mean-based estimator for average value added / per capita domestic product. But it is important to be aware of the limitations of such estimators. For instance, Maharashtra is one of the richest states in terms of per capita state domestic product. This does not mean that there is broad based growth and the State on an average is doing well. This is because high levels of income generated in the four largely urban districts of Mumbai, Thane, Nagpur and Pune together generate more than or about 50 per cent of the income in Maharashtra while districts like Gadchiroli and Osmanabad have a percentage share each of less than one per cent (Government of Maharashtra 2002).

[7] In other words, just as deprivation is defined with reference to outcome measures like income/consumer expenditure, we propose to define inclusion/exclusion in terms of an outcome measure. The framework is based on the author's study on mainstreaming the *National Poverty Reduction Strategy* into the *National Development Plan* of Botswana (Suryanarayana, 2008).

[8] For instance, the entire series of studies on agricultural growth and its trickle down effects is based on estimates of mean based averages of agricultural income or consumption distribution. In addition, verification of trickle down is carried out largely in terms of mean based regression estimators without verifying their appropriateness for the sample under review. For a very informative illustration on how inappropriate application of mean-based regression would result in misleading signs and estimates, see the Chapter on approach in Mukherjee *et al.* (1998).

[9] See footnote # 4.

how far the status of the poor co-varied with the growth process, however measured, of the economy.[10]

3.1. Concept & Measure:

As already noted, there is little by way of conceptual clarity and corresponding empirical evidence on the question to verify whether the observed growth process is broad-based and inclusive. For reasons cited in the preceding sections, we propose to make a departure from the existing studies.

In an ideal set-up, we would prefer to characterize a broad based growth process as one wherein there is all-round improvement as reflected in the three alternative perspectives of macro economy, viz., production, income and expenditure. We propose to measure all-round improvement in terms of a robust order-based average like the median. We would prefer to define inclusion (participation) of the relatively deprived in such a growth process with reference to the order-based average of the outcome measure only, that is, assess their economic status with reference to a threshold, specified as a function of the median.

By 'Inclusive Growth', we intend to convey the idea that the growth process under review or being proposed is such that it has benefited even those sections that are deprived of both physical and human asset endowments and hence, generally belong to the bottom rungs of income distribution and are incapable of participating / benefiting from the growth process. Thus, the definition of the concept presupposes the identification of the set of deprived that cannot and hence, does not (i) participate effectively in the production process; (ii) benefit from it in terms of income generated; and (iii) experience welfare improvements as measured by consumption. At the same time, in order to verify whether this deprived set has benefited / participated in the programme, it is important to ensure that the norm used for its identification is also related to some measure of economic performance so that categorical statements about their participation or otherwise in the process can be made. If so, an absolute norm for identification of the poor may not constitute an appropriate approach. Instead, it has to be the one relative to the average economic performance or level of the economy, which may be measured in terms of a rank-order based median to ensure robustness. Towards this end, we define the set of deprived as given by

$$\theta \;=\; F(\delta\xi_{.50}) \;=\; \int_0^{\delta\xi_{.50}} f(x)dx \tag{1}$$

Where θ = incidence of the deprived.

$0<\delta<1$

(We choose 0.6 as the value for δ following international convention for relative poverty)[11]; and $\xi_{.50}$ such that

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[10] In the Indian context, this minimum has been kept invariant for more than half a century in spite of improvements in infrastructure, technology, health and sanitation facilities, which would involve a reduction in energy requirement. However, academic as well as policy pursuits of determinants of poverty have overlooked such empirical details.

[11] This approach would do away with price indices associated with updating the poverty lines for exercises of the sort presented in GoI (2008).

$$\int_0^{\xi_{.50}} f(x)dx \;=\; \frac{1}{2} \;=\; \int_{\xi_{.50}}^{\infty} f(x)dx \tag{2}$$

F is the cumulative distribution function.
f(x) is the density function of the variable concerned.
Some important features and implications are as follows:

- It is well known that θ lies in the open interval (0, 0.5).
  - (i) θ tends to 0 as the bottom half of the distribution gets concentrated in the interval, 'inclusion zone', given by [$\delta \xi_{.50}$, $\xi_{.50}$]; and
  - (ii) It approaches 0.5 when its concentration is in the interval, what may be called the 'exclusion zone', given by [0, $\delta \xi_{.50}$).[12]
- From a conceptual perspective,
  - Case (i) represents a situation wherein the growth process is inclusive with the poor participating in the growth process and hence, experience an improvement in their economic lot; and
  - Case (ii) emerges when the growth process is exclusive with little/negative participation by the poor such that there is a slide in their economic position.
- Hence, whether the economic process under review is inclusive or exclusive could be defined and measured with reference to the concentration of the distribution in / out of the 'inclusion zone' given by the interval [$\delta \xi_{50}$, ξ_{50}], which should get reflected in variations in θ.
- Given this conceptual framework, a Coefficient of Inclusion or Poor' Participation may be defined by suitable normalizations with reference to its bounds as follows:

3.1.1 Inclusion in a Singular Society

This section proposes an inclusive measure for the bottom half of the population in a singular society characterized by a single homogenous social group.

i) We define an ' **Inclusive Co-efficient**' (IC) in terms of 'ψ' given by

$$\psi \;=\; 1 - 2 \int_0^{\delta \xi_{.50}} f(x)dx \tag{3}$$

Where $0 < \delta < 1$ and $\xi_{.50}$ such that

$$\int_0^{\xi_{.50}} f(x)dx \;=\; \frac{1}{2} \;=\; \int_{\xi_{.50}}^{\infty} f(x)dx$$

where $0 < \psi < 1$. In this study, we assign 0.6 as the value for δ. It has the following relevant properties:

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[12] In the literature this is called the relative deprivation zone.

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a) When the 'number of relatively poor' participating and hence, benefiting from the mainstream economic process is nil, ψ will tend to the value 0; it will approach unity, as the set of beneficiary poor tends to exhaust the set of all relatively poor.

b) Any value greater than ½ for ψ, would indicate a situation where the proportion of the bottom half of the population falling in the inclusion zone or the mainstream is more than the proportion in the relative deprivation-zone, implying a scenario of inclusion.

c) Progressive improvement in ψ and its positive covariance with median income/consumption would indicate Inclusive Growth; a constant ψ would imply perpetuation of status quo and a decline in ψ with negative covariance with median income/consumption would be evidence of exclusion.

d) Being a rank-order based measure, it will reflect the deterioration / amelioration in the lot of the bottom half of the population satisfactorily. However, for the very same feature, it suffers from the limitation that the measure is not additive and hence, not decomposable.

However, in the absence of comprehensive and related information on production (in particular) and income accounts, one would not be able to estimate and examine order-based averages and inclusion coefficients for these dimensions but only for household consumption distribution. Hence, this paper proposes to cover at least the income dimension (for which information could be obtained from the National Accounts Statistics (NAS)) with reference to co-variation between growth in income and consumption, and measure of inclusion in consumption. In other words, profiles of inclusion could be examined to some extent by examining mean-based estimate of average income and consumption, and order-based estimates of inclusion in consumption distribution. The relevant measures could be as follows:

i. Elasticity of mean consumption with reference to mean income (η), which would indicate, from an economic perspective, whether growth in income is really broad based and inclusive since if growth were concentrated at the top, even mean consumption would not increase at a corresponding rate and η would be less than unity.

Elasticity of mean consumption with reference to mean income $(\eta) = \dfrac{\partial \mu_c / \mu_c}{\partial \mu_y / \mu_y}$,

Where μ_c and μ_y stand for mean consumption and mean income respectively.

ii. Elasticity of median consumption with reference to mean consumption (ε) where

$(\varepsilon) = \dfrac{\partial \xi_{50} / \xi_{50}}{\partial \mu_c / \mu_c}$. A value for ε > 1, would imply a scenario approaching broad based growth. This would further corroborate the results on inclusive growth based on estimates of η; and

iii.   Inclusion coefficient for consumption distribution (ψ).[13]

3.1.2 Inclusion in a Plural Society

This section provides a generalization of the inclusion measure presented in the preceding section for a plural society for the following reasons:

i)   Countries like India have a plural society, that is, a society consisting of different groups like the Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Castes (OBCs) and other social groups called 'Others'.[14] For historical reasons, in India these social groups differ with respect to mean as well as distribution of economic welfare, however measured. For instance, in India SCs and STs constitute the socially vulnerable and economically backward classes.

ii)   In pursuit of social welfare, governments pursue both mainstream economic policies and targeted welfare programmes to uplift the generally backward classes.

iii)   But, for reasons like Type I and Type II errors, even the targeted programmes do not end up providing for a general improvement of the backward social groups.[15] As a result, there are situations when only a subsection of the backward communities get included in the mainstream / benefited from welfare programmes.

iv)   Therefore, inclusion in a plural society has two dimensions: (i) inter-group and (ii) intra-group. Inter-group dimension could be examined with reference to differences / disparities in median levels of income / consumption expenditure across social groups while the intra-group dimension could be examined in terms of ICs defined with respect to group-specific as well as overall median.

Some details about these measures are as follows:

1)   Inter-group inclusion as measured by proximity of sub-group-specific median ($\xi^{S}_{.50}$) to overall median (of the total /mainstream population, i.e., all sub-groups inclusive given by $\xi^{M}_{.50}$).[16] For a given δ such that ($0 < \delta < 1$), there can be two situations:
   a.   Case (a) $\xi^{S}_{.50} < \delta \xi^{M}_{.50}$ implies exclusion of the sub-group
   b.   Case (b) $\xi^{S}_{.50} \geq \delta \xi^{M}_{.50}$ would imply inclusion of the sub-group concerned.

2)   Intra-group inclusion for any given social group 'i' could be measured with respect to either own median ($\xi^{S}_{.50}$) **providing a measure of ψ_i^{S}** (that is, IC-Subgroup) or

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[13] In a corresponding fashion, one could consider a coefficient of broad based income generation and distribution 'γ' with reference to median income/consumption for welfare evaluations where

$$\gamma = \int_{\delta\xi_{50}}^{(2-\delta)\xi_{50}} f(x)dx$$ where f (x) is the income/consumption density function and γ lies in the interval (0,1). In an

ideal scenario on broad based growth that is inclusive, ψ and γ would converge. To verify whether the growth process is broad based one might consider adjusting the median by taking the product of median and γ.

[14] For that matter, one could consider different occupations/regions/sectors/states instead of social groups.

[15] When a targeted welfare programme fails to reach/benefit the intended beneficiaries, it is called Type I error. Type II error refers to a situation when the programme benefits the unintended beneficiaries (Cornia and Stewart 1993).

[16] The mainstream median ($\xi^{M}_{.50}$) may be defined with reference to different combinations of the social groups including as well as excluding the sub group under review depending upon the context. For illustration purpose, we have considered the median of the total population here.

overall median ($\xi^M_{.50}$) providing a measure of ψ_i^M (that is, IC-Mainstream). These two measures would (a) be distinct and different for situations when there is inter-group exclusion; and (b) converge with progressive inter-group inclusion:

    a. IC-Subgroup (ψ_i^S) would measure the extent of inclusion of the bottom half of the sub-group under review in its *own* progress.

    b. IC-Mainstream (ψ_i^M) would measure the extent of inclusion of the bottom half of the sub-group under review in the progress of the *country/society as a whole*. The limits for IC-Mainstream (ψ_i^M) are as follows:

ψ_i^M = (-) 1 implies perfect exclusion of the sub-group
ψ_i^M = 1 implies perfect inclusion of the entire subgroup

3) IC index in a Plural Society: The ratio (ω_i) of IC-Mainstream (ψ_i^M) to IC-Subgroup (ψ_i^S) for a given social subgroup 'i' would provide a measure of its inclusion from an integrated perspective.

$$\omega_i \quad = \quad \frac{\psi_i^M}{\psi_i^S} \tag{4}$$

where 'ψ_i^M' = IC-Mainstream defined with respect to median of the *total* population ($\xi^M_{.50}$)
    'ψ_i^S' = IC-Subgroup defined with respect to median of the *Social group* population ($\xi^S_{.50}$)

The conceptual Limits for IC index (ω) are given below:

ω = *(-) infinity* implies perfect intra- and inter-exclusion.
ω = *infinity* implies perfect intra-exclusion and inter-inclusion of the entire subgroup.

4) For situations when $\xi^S_{.50} < \delta\, \xi^M_{.50,}$ a comprehensive measure of inclusion for the entire (as against for the bottom half) social sub-group 'i' population in the mainstream would be indicated by the β-measure given by:

$$\beta_i = \tfrac{1}{2}\,(1 + \psi_i^M) \tag{5}$$

where $0 \le \beta_i \le 1$.

The β-measure indicates the proportion of the subgroup population participating/included in the growth process as reflected in outcome measures like consumer expenditure distribution. Its limiting values will be zero and one; it will be zero when the entire social sub group is excluded from the mainstream and unity, otherwise.

4. Empirical Illustration for India

4.1 Broad based & Inclusive Growth: A singular perspective on the nation

This subsection provides estimates of elasticity measures for mean and median consumer expenditure between 1993-94 and 2004-05 and the coefficient of inclusion for consumer expenditure distribution in 2004-05 for India as a whole (rural and urban sectors combined). The estimates of income from the National Accounts Statistics (NAS) refer to the financial year and those for consumption are from the NSS corresponding to the agricultural year. In addition to the differences in period, other factors like concept, design and methods of estimation render their direct comparison difficult. Hence, these estimates are provided in Table 1 largely for illustration:

i)   Between 1993-94 and 2004-05, per capita income in India increased by 58.31 per cent. However, the corresponding increase in (mean) per capita consumer expenditure has not been equi-proportionate. It increased by 14.91 per cent implying an elasticity coefficient of 0.26.

ii)   This limited increase in consumption was not broad based: Median consumption did not increase to the same extent; the extent of increase in median consumption (7.26 per cent) was less than half of that in mean consumption. The estimate of elasticity of median consumption with respect to mean consumption, as a result, turned out to be 0.49, which is less than unity implying that the country has not made much progress on realizing the benefits of growth in terms of welfare distribution. This is reflected in estimates of mean relative to median consumption; the percentage difference with respect to median increased from 26 to 35 per cent, that is, by nine points between 1993-94 and 200-405; corresponding percentage point increase was three for the STs, six for the SCs and 10 for the 'Others'.

iii)   The coefficient of inclusion, however, is 0.74, which is greater than 0.5 implying thereby that the dominant fraction of the bottom half of the population falls in the inclusion zone as defined with respect to the median. Since the median itself has not kept pace with the mean, it would only imply that growth is not broad based but limited to the top few.

Table 1: Measures of Inclusion: A singular perspective

(All India rural and urban sectors combined)

Measure/Variable	1993-94	2004-05
Per capita net national product (Rs at 1999/00 prices)	12207.00	19325.00
Monthly mean per capita consumption (Rs at 1993/94 prices)	325.18	373.67
Monthly median per capita consumption (Rs at 1993/94 prices)	258.59	277.37
Excess of mean over median per capita consumption (%)	25.75	34.72
Elasticity of mean consumption with reference to mean income (η)	-	0.26
Elasticity of median consumption with reference to mean consumption (ε)	-	0.49
Inclusion coefficient (ψ)	0.75	0.74
Coefficient of broad based welfare(γ)	0.61	0.59

Notes:

a. The NAS estimates of per capita net national product at 1999/00 prices were derived using implicit deflators worked out using data in Table1.1 (GoI, 2008; p. A-3).
b. The NSS Estimates of consumption at 1993/94 prices were worked out using price deflators implicit in the poverty lines published by the Planning Commission.
c. The estimates of elasticity of median consumption w.r.t. mean consumption (ε) (for the year 2004-05) for three different social groups for which data are available are as follows: 0.00 for the STs, 0.63 for the SCs and 0.48 for 'Other Social Groups', which includes the OBCs and the 'Others'.
d. The percentage difference between mean and median with median as the base increased from 19 to 22 per cent for the STs, 17 to 23 per cent for the SCs and 27 to 37 per cent for 'Others'. These estimates are not reported in the tables to conserve space but area available with the author.
e. For details on Coefficient of broad based welfare(γ), refer footnote # 12.

4.2 Broad based Growth: A plural perspective on the federation
4.2.1 Levels

This section presents estimates of measures of broad based averages based on the latest available NSS data set on consumption distribution for the year 2004-05. Given the framework described above, the question of broad based growth for India, a plural society consisting of different social groups, could be examined in terms of social group specific as well overall (all social groups combined) median and the corresponding ICs. For this purpose, the following social groups (for which data are available) are considered: Scheduled Tribes (STs), Scheduled Castes (SCs), Other Backward Castes (OBCs) and Others. To begin with, the general levels of welfare across social groups in absolute as well as relative terms for all-India could be examined in terms of Tables 2 to 3 respectively. The salient features are as follows[17]:

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[17] The share of ST population in the rural sector is less than 10 per cent in the states of Andhra Pradesh, Bihar, Haryana, Karnataka, Kerala, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal (Table 9). Its corresponding share in the urban sector is less than 10 per cent in the major states considered here, except Chhatisgarh (Table

- The consumer expenditure distributions for all the social groups as well as for the total population are positively skewed in both rural and urban sectors (Table 2).
- The profile for thickness of tails with reference to the 99th percentile, which is a measure of incidence of extreme values of the consumption distribution for the different social groups is as follows: thickness of tails for 'Others' social group is higher than that for the OBCs, which is higher than that for the SCs; which in turn is higher than that for the STs in both rural and urban all-India. (Table 3).
- It goes without saying that mean-based averages, under the influence of extreme values, would mislead regarding location. Accordingly, mean estimate exceeds the median by a larger margin for the SCs than for the STs, for the OBCs than for the SCs, and for the Others than for the OBCs both in rural and urban sectors.[18] This would imply that any comparison of levels of average welfare across social groups based on mean-based averages would overstate the extent of inter-social-group disparities as shown in Table 2. Between rural and urban sectors, the relative overestimation is higher in the urban than in the rural sector. Across states, contrary to the general perception, the percentage excess of mean over median is the highest for Kerala in both the rural (36 per cent) and the urban (43 per cent) sectors.[19]
- Therefore, the following discussion would be based on median and related order-based statistics.

Rural Sector:

- As one would expect about the general levels of living in rural all-India, the average consumption levels, as represented by the median, for the STs are lower than that of SCs which in turn are below that for the OBCs.
- Though the OBC median is less than that of the 'Others', it is about equal to the overall median for the total rural population. This pattern does not hold good uniformly across states (Table 4). For instance:
  a) STs are better off than even the Others in Assam;
  b) STs' median consumption levels fall short of the corresponding overall median by more than 20 per cent (which is the average shortfall at the national level) in the states of Maharashtra and Orissa; and
  c) The OBCs are doing better than the Others in Assam and West Bengal. In other words, at least from an economic outcome perspective, the profile across social groups is not uniform across states in the country.
- By our criterion, STs as a subgroup are excluded from the mainstream in rural Kerala. This may be because with a demographic share of less than 2 per cent, it is not empowered.

Urban Sector
- The ordinal ranking of SCs, OBCs and Others in terms of median is the same as that observed for the rural sector. However, the general levels of living of the STs are

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9). This fact may be noted while comparing levels of living across social groups. Hence, estimates for this social group are not considered for discussion for the urban sector at the state level.

[18] Between 1993-94 and 2004-05, this difference favouring the mean increased more for the 'Others' than for the SCs in the rural and urban sectors separately as well as combined.

[19] Of course, the profile across sates differs among social groups; estimates are available with the author.

higher than that of both SCs and OBCs.[20] Unlike the rural scenario, OBCs in the urban sector have not caught up with the mainstream average and fall short of it by about 13 per cent.

- Across states,
    a) SCs are worse off in majority of states like Bihar, Chattisgarh, Haryana, Jharkhand, Kerala, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu and West Bengal, where the shortfall is greater than that in the national average.
    b) OBCs also fall short of the mainstream across all states. To be noted are, Chattisgarh, Gujarat, Haryana, Jharkhand and Madhya Pradesh where the shortfall is greater than at the national level.
    c) SCs are an excluded sub-group in urban Jharkhand.

Table 2: Descriptive Statistics: A Select Profile for All-India Consumption Distributions (Rural & Urban) 2004-05

	Median	Mean	% Overestimation by mean over median	Disparity: % wrt Average for the STs		Bowley's Coefficient of Skewness (b_s)
	(Rs per capita per month at current prices)			Median	Mean	
Rural All-India						
ST	366.50	426.20	16.29	0.00	0.00	0.22
SC	406.30	474.70	16.83	110.86	111.38	0.20
OBC	457.90	556.70	21.58	124.94	130.62	0.19
Others	547.60	685.30	25.15	149.41	160.79	0.20
Total Population	455.80	558.80	22.60	-	-	0.20
Urban All-India						
ST	721.20	857.50	18.90	0.00	0.00	0.12
SC	610.80	758.40	24.17	84.69	88.44	0.25
OBC	685.70	870.90	27.01	95.08	101.56	0.25
Others	992.80	1306.10	31.56	137.66	152.31	0.22
Total Population	792.20	1052.40	32.85	-	-	0.25

Source: Author's estimates based on the NSS unit record data.

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[20] It may be noted that estimated population share of STs in urban all-India is 2.92 per cent.

Table 3: Percentiles of Consumption Distributions for different Social Groups: All-India (Rural & Urban) (2004-05)

(Rs per capita per month at current prices)

Rural India				
Percentiles	p50	p75	p95	p99
ST	366.50	503.34	809.00	1301.33
SC	406.33	541.00	900.33	1549.80
OBC	457.88	619.86	1119.00	2068.75
Others	547.60	760.00	1424.06	2799.13
As % of corresponding percentile for the ST population				
ST	100	100	100	100
SC	110.87	107.48	111.29	119.09
OBC	124.93	123.15	138.32	158.97
Others	149.41	150.99	176.03	215.10
Urban India				
ST	721.20	1062.14	2014.88	2776.50
SC	610.83	900.83	1671.00	2905.42
OBC	685.67	1006.75	1917.25	3365.40
Others	992.83	1525.42	3130.13	6226.25
As % of corresponding percentile for the ST population				
ST	100.00	100	100	100
SC	84.70	84.81	82.93	104.64
OBC	95.07	94.78	95.15	121.21
Others	137.66	143.62	155.35	224.25

Source: Author's estimates based on the NSS unit record data.

Table 4: Estimates of Broad based Averages: Rural Sector
2004-05

State	Median per capita consumption (Rs per 30 days)					% Difference wrt overall Median			
	ST	SC	OBC	Others	Overall	ST	SC	OBC	Others
Andhra Pradesh	360.83	435.50	488.10	598.25	488.88	-26.19	-10.92	-0.16	22.37
Assam	547.14	478.33	525.09	497.67	514.71	6.30	-7.07	2.02	-3.31
Bihar	348.75	320.86	390.83	467.58	379.75	-8.16	-15.51	2.92	23.13
Chattisgarh	310.00	371.60	367.16	391.69	345.33	-10.23	7.61	6.32	13.42
Gujarat	422.71	463.27	481.64	698.94	508.67	-16.90	-8.93	-5.31	37.41
Haryana	1087.50	517.80	636.11	858.00	673.71	61.42	-23.14	-5.58	27.35
Jharkhand	351.03	337.33	399.83	414.85	378.50	-7.26	-10.88	5.64	9.60
Karnataka	395.67	371.25	424.42	464.00	425.55	-7.02	-12.76	-0.27	9.04
Kerala	438.25	584.32	723.80	890.15	744.58	-41.14	-21.52	-2.79	19.55
Madhya Pradesh	305.63	350.33	401.00	508.30	377.33	-19.00	-7.16	6.27	34.71
Maharashtra	331.83	384.65	468.67	539.72	459.08	-27.72	-16.21	2.09	17.57
Orissa	250.07	326.50	366.33	430.10	335.25	-25.41	-2.61	9.27	28.29
Punjab	578.67	552.13	655.83	902.06	693.42	-16.55	-20.38	-5.42	30.09
Rajasthan	434.92	454.33	548.29	581.33	515.14	-15.57	-11.80	6.44	12.85
Tamil Nadu	435.13	411.33	495.40	694.36	469.63	-7.35	-12.41	5.49	47.85
Uttar Pradesh	421.67	385.75	440.33	513.79	437.00	-3.51	-11.73	0.76	17.57
West Bengal	406.14	462.13	525.50	484.55	475.00	-14.50	-2.71	10.63	2.01
All India	**366.50**	**406.33**	**457.88**	**547.60**	**455.75**	**-19.58**	**-10.84**	**0.47**	**20.15**

Source: *Author's estimates based on the NSS unit record data.*

Table 5: Estimates of Broad based Averages: Urban Sector
2004-05

State	Median per capita consumption (Rs per 30 days)					% Difference wrt overall Median			
	ST	SC	OBC	Others	Overall	ST	SC	OBC	Others
Andhra Pradesh	520.50	647.63	700.25	883.31	748.35	-30.45	-13.46	-6.43	18.03
Assam	759.00	699.88	786.25	942.67	899.40	-15.61	-22.18	-12.58	4.81
Bihar	392.45	376.58	495.25	824.29	541.75	-27.56	-30.49	-8.58	52.15
Chattisgarh	712.75	491.00	523.03	1016.63	698.25	2.08	-29.68	-25.09	45.60
Gujarat	751.88	817.92	671.80	1086.05	932.88	-19.40	-12.32	-27.99	16.42
Haryana	1198.56	607.00	677.50	1090.20	871.40	37.54	-30.34	-22.25	25.11
Karnataka	507.01	595.58	679.33	1009.36	763.68	-33.61	-22.01	-11.05	32.17
Kerala	2267.25	630.67	841.46	1303.42	903.12	151.05	-30.17	-6.83	44.32
Madhya Pradesh	607.10	461.43	534.60	875.00	641.90	-5.42	-28.11	-16.72	36.31
Maharashtra	748.65	729.96	800.80	981.07	863.90	-13.34	-15.50	-7.30	13.56
Orissa	425.50	399.40	541.38	747.08	579.50	-26.57	-31.08	-6.58	28.92
Punjab	704.67	678.25	839.75	1221.80	929.30	-24.17	-27.01	-9.64	31.48
Rajasthan	848.86	525.00	665.40	935.33	708.21	19.86	-25.87	-6.04	32.07
Tamil Nadu	1021.02	594.43	810.63	1554.03	819.37	24.61	-27.45	-1.07	89.66
Uttar Pradesh	623.57	512.98	567.52	794.80	636.50	-2.03	-19.41	-10.84	24.87
West Bengal	640.94	603.03	730.67	940.44	833.25	-23.08	-27.63	-12.31	12.86
All India	**721.20**	**610.83**	**685.67**	**992.83**	**792.17**	**-8.96**	**-22.89**	**-13.44**	**25.33**

Source: *Author's estimates based on the NSS unit record data.*

4.2.2 Inclusion: A singular perspective on the federation

Since the country has only begun its pursuit of (undefined) *Inclusive Growth*, we would not present any time series estimates of ICs and its evaluation. Instead we prefer to present estimates of ICs based on the latest available NSS data set on consumption distribution for the year 2004-05 and interpret them.[21] Table 6 presents an aggregate profile by sector across states in India. Major features are as follows:

- IC at the national level is 0.79 for the rural sector and 0.63 for the urban, which implies that the extent of inclusion is greater in the rural than in the urban sector at the all-India level.
- Across states, the extent of inclusion of the deprived in the rural growth process is one of the highest (greater than 90 per cent) in the states of Bihar and Karnataka, and the lowest in Kerala.
- As regards the urban sector, the IC is the highest in Bihar and lowest in Chhatisgarh and Jharkhand (0.53).
- Consistent with the all-India profile, the estimates of IC are generally higher for the rural sector than for the urban across states.
- As regards the rural sectors of the BIMAROU states, the ICs are generally as high as the all India average. However, the extent of inclusion in the urban sectors of Chattisgarh and Jharkhand is much less than the all-India average.
- There are inter-state variations in ICs both in rural and urban sector; the range is higher for the urban than for the rural sector.

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[21] For conceptual difficulties in defining and estimating per capita income at the state level by sectors, this Section does not present estimates of elasticities discussed in the Section 4.1.

- To examine whether the states with higher median also have relatively high inclusion, we estimate the rank correlation between the median monthly per capita consumer expenditure (MPCE) and the IC separately for each sector, which was found to be negative and insignificant for both rural ((-). 28) and the urban sector ((-).14). This indicates that both median MPCE and the IC are weakly associated across states. In other words, states with higher median MPCE need not have higher inclusion and vice versa.

Table 6: Inclusion Coefficient and the Median by sector: Major states

States	Inclusion Coefficient		Median (MPCE)	
	Rural	Urban	Rural	Urban
Andhra Pradesh	0.79	0.71	488.88	748.35
Assam	0.85	0.59	514.71	899.40
Bihar	0.90	0.75	379.75	541.75
Chattisgarh	0.83	0.53	345.33	698.25
Gujarat	0.79	0.72	508.67	932.88
Haryana	0.75	0.69	673.71	871.40
Jharkhand	0.88	0.53	378.50	807.33
Karnataka	0.91	0.67	425.55	763.68
Kerala	0.70	0.63	744.58	903.12
Madhya Pradesh	0.81	0.67	377.33	641.90
Maharashtra	0.77	0.62	459.08	863.90
Orissa	0.79	0.65	335.25	579.50
Punjab	0.81	0.68	693.42	929.30
Rajasthan	0.86	0.72	515.14	708.21
Tamil Nadu	0.85	0.68	469.63	819.37
Uttar Pradesh	0.84	0.69	437.00	636.50
West Bengal	0.84	0.59	475.00	833.25
All States	**0.79**	**0.63**	**455.75**	**792.17**

Note: MPCE = monthly per capita consumer expenditure.
Source: Author's estimates based on the NSS unit record data.

4.2.3 Inclusion: A plural perspective on the federation.

Given the contemporary interest in disparities across social groups and the policy emphasis on inclusion of the socially disadvantaged groups like the SCs and STs, it would be of interest to examine the extent of inclusion with respect to social group specific as well as overall averages. The corresponding estimates for the rural and urban sectors are presented in Tables 7 and 8 respectively. The salient features are as follows:

Rural Sector:
- Intra-group inclusion as defined with respect to social group specific median (IC-Subgroup) is high (more than 75 per cent) for all social groups in rural all-India. This would imply that more than three-fourths of the bottom half of the population fall outside the relative deprivation zone defined with respect to their own sub-group progress.

- However, consistent with the profile of the median across social groups in rural all-India, extent of inclusion with respect to the mainstream (total economy as a whole) (IC-Mainstream) is the highest for Others, followed by OBCs, SCs and STs respectively (Table 7). IC with respect to the overall median (IC-Mainstream) is just about 1/3 rd for the STs implying that just that much of the bottom half of the STs population in rural all-India enjoys levels of living in the neighborhood of the mainstream population.
- The SCs are slightly better off in the sense that about half of the bottom half of their population is in the mainstream-inclusion zone (as defined by the mainstream average (IC-Mainstream)).
- However, this pattern does not hold good uniformly across states for the rural sector. For instance, IC-Mainstream for the STs is more than 90 percent and it is higher than those for the SCs and even the OBCs in the states of Assam and Karnataka; in Assam it is higher than that for the Others also.
- In a similar way, IC-Mainstream for the OBCs is higher than that for Others in the states of Assam, Jharkhand, Tamil Nadu and West Bengal.
- In Rural Tamil Nadu, IC-Subgroup for the Others is even less than half while IC-Mainstream is more than ¾ and median is higher than that of mainstream by more than five per cent. This would imply the social sub-group 'Others' is doing well when compared with other social groups and the economy as whole. However, there is limited intra-group inclusion as indicated by the IC-Subgroup, which is less than ½.
- Most important to note is that 'ω' is about one for the OBCs in majority of the states implying that the extent of their inclusion is the same with reference to both intra-group and mainstream median.

Urban Sector:

- In urban all India, intra-group inclusion (IC-Subgroup) is the highest for the SCs, followed by the OBCs, Others and STs.
- Others as a social group enjoy a lower IC-Subgroup than IC-Mainstream; this could be because they have an average level of consumption higher than that of the total population.
- IC-Mainstream is lower in the urban sector than in the rural for the SCs and OBCs. In other words, these two social groups do not seem to have really caught up with the other social groups in the urbanization process of economic development.
- STs as a social subgroup have a very low IC-Mainstream in Jharkhand; for the SCs IC-Mainstream is even negative implying that virtually the entire population lies in the exclusion zone as defined with respect to the mainstream median.

Table 7: Inclusion Coefficients by Social Groups: Major states (Rural)

States	STs			SCs			OBCs			Others		
	IC-S	IC-M	ω	IC-S	IC-M	ω	IC-S	IC-M	ω	IC-S	IC-M	ω
Andhra Pradesh	0.78	0.43	0.55	0.83	0.69	0.83	0.83	0.83	1.00	0.78	0.92	1.19
Assam	0.90	0.94	1.04	0.88	0.81	0.92	0.84	0.87	1.04	0.87	0.82	0.95
Bihar	-	-	-	0.98	0.83	0.84	0.89	0.91	1.02	0.86	0.98	1.15
Chattisgarh	0.80	0.73	0.91	0.87	0.90	1.04	0.83	0.87	1.05	0.86	0.93	1.08
Gujarat	0.74	0.58	0.78	0.89	0.80	0.89	0.86	0.80	0.93	0.77	0.97	1.26
Haryana	-	-	-	0.82	0.52	0.63	0.82	0.74	0.90	0.83	0.93	1.12
Jharkhand	0.90	0.82	0.91	0.93	0.77	0.83	0.92	0.94	1.02	0.83	0.89	1.07
Karnataka	0.97	0.95	0.98	0.97	0.84	0.87	0.90	0.90	1.00	0.93	0.96	1.04
Kerala	-	-	-	0.84	0.53	0.63	0.71	0.69	0.97	0.71	0.84	1.19
Madhya Pradesh	0.90	0.65	0.72	0.80	0.75	0.93	0.84	0.88	1.05	0.85	0.95	1.13
Maharashtra	0.85	0.43	0.51	0.82	0.64	0.78	0.84	0.86	1.02	0.76	0.86	1.14
Orissa	0.86	0.50	0.58	0.81	0.78	0.97	0.83	0.90	1.09	0.85	0.95	1.12
Punjab	-	-	-	0.95	0.70	0.74	0.84	0.79	0.95	0.83	0.95	1.14
Rajasthan	0.92	0.71	0.77	0.87	0.77	0.88	0.87	0.90	1.04	0.89	0.97	1.09
Tamil Nadu	-	-	-	0.89	0.81	0.90	0.81	0.86	1.06	0.49	0.78	1.59
Uttar Pradesh	-	-	-	0.89	0.76	0.85	0.83	0.84	1.01	0.80	0.91	1.14
West Bengal	0.91	0.75	0.82	0.90	0.88	0.97	0.81	0.87	1.08	0.82	0.84	1.02
All States	**0.79**	**0.31**	**0.39**	**0.84**	**0.53**	**0.63**	**0.82**	**0.68**	**0.84**	**0.78**	**0.83**	**1.06**

Note: IC estimates have not been reported for states where the corresponding population share of the Social Group concerned is less than five per cent.

IC-S = IC-Subgroup

IC-M=IC-Mainstream

Source: Author's estimates based on the NSS unit record data.

Table 8: Inclusion Coefficients by Social Groups: Major states (Urban)

States	STs			SCs			OBCs			Others		
	IC-S	IC-M	ω	IC-S	IC-M	ω	IC-S	IC-M	ω	IC-S	IC-M	ω
Andhra Pradesh	-	-	-	0.85	0.57	0.68	0.81	0.74	0.92	0.63	0.77	1.23
Assam	0.84	0.38	0.45	0.85	0.27	0.31	0.68	0.51	0.75	0.70	0.72	1.03
Bihar	-	-	-	0.91	0.25	0.27	0.87	0.78	0.90	0.54	0.86	1.60
Chattisgarh	0.37	0.37	1.01	0.73	0.23	0.32	0.86	0.46	0.53	0.51	0.82	1.60
Gujarat	0.71	0.52	0.73	0.75	0.64	0.86	0.90	0.49	0.55	0.70	0.85	1.22
Haryana	-	-	-	0.68	0.33	0.49	0.75	0.54	0.71	0.73	0.88	1.20
Jharkhand	0.83	0.03	0.04	0.95	-0.05	-0.05	0.72	0.58	0.79	0.59	0.79	1.35
Karnataka	-	-	-	0.66	0.38	0.57	0.69	0.59	0.86	0.57	0.83	1.46
Kerala	-	-	-	0.81	0.36	0.44	0.63	0.57	0.89	0.60	0.86	1.45
Madhya Pradesh	0.48	0.46	0.97	0.78	0.34	0.44	0.80	0.57	0.71	0.67	0.92	1.37
Maharashtra	-	-	-	0.58	0.45	0.77	0.68	0.62	0.91	0.57	0.68	1.20
Orissa	0.72	0.38	0.53	0.74	0.34	0.46	0.70	0.59	0.85	0.56	0.83	1.49
Punjab	-	-	-	0.92	0.40	0.44	0.76	0.66	0.86	0.65	0.83	1.28
Rajasthan	-	-	-	0.86	0.44	0.52	0.77	0.71	0.92	0.58	0.89	1.52
Tamil Nadu	-	-	-	0.84	0.39	0.46	0.72	0.71	0.99	0.59	0.88	1.51
Uttar Pradesh	-	-	-	0.80	0.48	0.61	0.74	0.62	0.83	0.63	0.84	1.34
West Bengal	-	-	-	0.79	0.31	0.39	-	-	-	0.57	0.67	1.18
All India	**0.55**	**0.45**	**0.82**	**0.73**	**0.39**	**0.53**	**0.71**	**0.54**	**0.77**	**0.59**	**0.78**	**1.32**

Note: IC estimates have not been reported for states where the corresponding population share of the Social Group concerned is less than five per cent.
IC-S = IC-Subgroup
IC-M=IC-Mainstream

Source: Author's estimates based on the NSS unit record data.

Table 9: Percentage Distribution of Population by Social Groups: States and All-India (2004-05)

States	Rural					Urban				
	ST	SC	OBC	Others	All	ST	SC	OBC	Others	All
Andhra Pradesh	8.55	19.51	47.62	24.32	100.00	2.54	14.9	44.68	37.88	100.00
Assam	18.90	9.60	17.46	53.76	100.00	7.29	13.15	18.94	60.36	100.00
Bihar	0.57	23.02	59.94	16.32	100.00	0.67	10.9	57.64	30.33	100.00
Chhattisgarh	35.24	14.56	44.76	5.45	100.00	16.79	12.36	40.5	30.35	100.00
Gujarat	20.47	11.21	44.71	23.62	100.00	3.93	9.09	28.8	58.18	100.00
Haryana	0.27	28.01	32.20	39.52	100.00	0.32	18.5	24.98	56.2	100.00
Jharkhand	29.89	13.02	45.75	11.35	100.00	9.63	12.22	41.17	36.98	100.00
Karnataka	8.37	20.26	38.84	32.52	100.00	2.70	12.73	39.38	45.19	100.00
Kerala	1.92	11.19	59.39	27.51	100.00	0.48	8.28	62.88	28.36	100.00
Madhya Pradesh	25.84	18.16	40.08	15.93	100.00	6.11	14.86	37.3	41.73	100.00
Maharashtra	13.60	14.83	35.74	35.83	100.00	3.11	17.22	23.79	55.88	100.00
Orissa	25.64	17.58	39.40	17.33	100.00	9.00	13.69	30.53	46.78	100.00
Punjab	0.38	40.07	21.43	38.12	100.00	0.59	27.15	18.18	54.08	100.00
Rajasthan	16.06	20.96	46.60	16.38	100.00	2.57	20.82	37.63	38.98	100.00
Tamil Nadu	0.54	27.06	70.54	1.86	100.00	0.64	14.52	74.74	10.09	100.00
Uttar Pradesh	0.49	25.40	54.64	19.37	100.00	0.45	13.65	45.37	40.53	100.00
West Bengal	8.18	28.92	7.05	55.79	100.00	1.40	20.11	4.63	73.83	100.00
All India	**10.57**	**20.92**	**42.75**	**25.71**	**100.00**	**2.92**	**15.64**	**35.6**	**45.81**	**100.00**

Source: GoI (2007a); p. 36.

5. Summing Up

In the wake of the economic reform programme undertaken by the GoI since 1991, distributional issues have received considerable attention and policy concern. In pursuit of such concerns, the GoI has worked out an approach to the Eleventh Five Year Plan, which lays emphasis on, though without defining, a strategy of inclusive growth. In fact, this form of pursuit of inclusive growth has become virtually a universal concern with even the UNDP harping on it without knowing answers for what it calls a "million dollar question- what inclusive growth is and how to achieve it?"

This paper proposes to define inclusion/exclusion for an outcome scenario on broad based growth from three different perspectives, viz., production, income, and consumption distribution. However, for want of detailed information on the production and income dimensions, the paper examines their co-variation. Given the methodological inadequacies of verifying a broad based growth process in terms of mean-based averages of income and absolute-norm based measures of deprivation, the study proposes order based averages for verifying broad based growth and extent of inclusion of the poor in terms of consumer expenditure distribution. In addition, to facilitate verification and comparison of both inter-

and intra-group inclusion in a plural society, normalized measures with reference to both mainstream/overall and sub-group averages are worked out.

The study provides empirical evidence to show that mean-based estimates exaggerate disparities across social groups in India. Among other findings, the following stand out:

Tentative estimates, if valid, indicate that the growth process between 1993-94 and 2004-05 has bypassed the majority and was not inclusive. At the national level, the inclusion coefficient is higher for the rural sector than for the urban. The association between median consumption and inclusion coefficient across states is weak, which would imply that there is no cross-sectional evidence to believe that growth in India is inclusive.

As regards the rural sector, inclusive coefficient is the lowest in rural Kerala; this is contrary to what one would expect given the progressive policies pursued in the state. It is one of the highest in Bihar and Karnataka. The profile across social groups conveys a different message. There is intra-group inclusion at the level of each and every social group (that is, the proportion of the bottom half of the population in each sub-group participating in its own growth is more than half) in both rural and urban sectors at the national level. However, the extent of inclusion in the mainstream in rural all-India is the least ($1/3^{rd}$) for the STs, followed by the SCs (1/2), OBCs (0.68) and the Others (0.83). However, this pattern does not hold good uniformly across states for the rural sector. For instance, IC-Mainstream for the STs is more than 90 percent and higher than those for the SCs and even the OBCs in the states of Assam and Karnataka. In a similar way, IC-Mainstream for the OBCs is higher than that for Others in the states of Assam, Jharkhand, Tamil Nadu and West Bengal. Intra-group as well as mainstream inclusion is the same for the OBCs in most of the states.

As regards the urban sector, inclusion is the highest in Bihar (0.75) and lowest in Chhatisgarh and Jharkhand (0.53). As regards the urban profile across social groups, intra-group inclusion is the highest for the SCs, followed by the OBCs, Others and STs at the all-India level. IC-Mainstream is lower in the urban sector than in the rural for the SCs and OBCs. In other words, these two social groups do not seem to have really caught up with the Others in the urbanization process of economic development. STs as a social subgroup have a very low IC-Mainstream in the states of Assam, Chattisgarh, Jharkhand and Orissa.

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