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# Regional Inequality and 'Inclusive Growth' in India under Globalization:
## Identification of Lagging States for Strategic Intervention

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# Abstract

The present paper analyses the trends and patterns of economic inequality across Indian states since the early 1990s. The basic objective here is to understand the dynamics of growth in the country which is resulting in regional imbalances and propose measures for alleviating the problem. The inter-state inequality in per capita income and consumption expenditure show a clear increasing trend during the first and second phase of structural reform. However, the strategy of inclusive growth and balanced regional development launched since 2003-04, has led to acceleration in the average growth in the less developed states, including those in the North-East. Unfortunately, however, this has made only a marginal impact in stalling the trend towards accentuation of regional imbalances. Further, poverty reduction has been relatively less in less developed compared to developed states, resulting in concentration of poverty in a few backward states. The composite indices of economic development, constructed based on a select set of indicators exhibit high correlations with that of social development. This is understandable as the capacity of the governments at the state level to make interventions and bring about social transformations is high in relatively developed states. The correlation of economic development with amenities, although statistically significant, is relatively low, which suggests that the problems pertaining to health, education, and access to other amenities cannot be effectively addressed just by focusing on economic development.

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## 1. Introduction

The Indian development scenario looks optimistic, not only in terms of the pace of economic growth but also in its capability to stand out in periods of global economic crises. In the context of growth in employment, too, the economy has done reasonably well over the past decade, allaying fears of jobless growth, the key concern that emerged in the late 1990s. The growth rates, as per all three alternate definitions of employment adopted by National Sample Survey Organization, namely usual status, weekly status, and daily status, have been exceptionally high since the early years of the present decade. The impact of growth in poverty reduction, too, has been significant, although the estimated elasticity of poverty reduction has been lower than several countries in the South Asian region (Devarajan and Nabi: 2006).

The high growth in employment can partly be attributed to demographic dividend the country is currently enjoying due to decline in the natural growth rate in population. Many of the states, particularly in southern India, like Kerala and Tamil Nadu have experienced fertility decline over the past couple of decades, making the Net Reproduction Rate equal to or less than unity. The growth of population in several other states, especially in north and central India has, however, been high, reporting either no decline, or in some cases, even an increase, in recent years, which is a cause for concern. However, as a result of general reduction in fertility, the percentage of adults in the age group 20–35 is expected to grow rapidly over the next few decades. This would help these states to pick up their growth momentum, provided the incremental adult population can be meaningfully absorbed in productive sectors. In the absence of such employment opportunities, a north-south transfer of adult population on a massive scale would have to be considered, which has serious societal implications. Such transfers may indeed be difficult due to the emerging socio-political scenario in the country, which would put enormous pressure on land and infrastructure in many less developed states.

There seems to be a shared concern that the country has not been very successful in transforming its growth into development, which manifests most significantly in serious regional imbalances despite very positive macro economic trends,[1] as discussed above. The major questions confronting policymakers today are: (i) which are the states getting excluded in the development process and how can these be brought into the mainstream of development? (ii) what are the deficiencies in the macro economic growth strategy or the special programmes launched as a part of the policy of inclusive growth and how can these be remedied? The present paper attempts to address these questions.

A class of methodology for constructing composite indices has emerged which is being widely used globally, as also within the country, for identification of backward states or regions in academic as well as policy literature. Taking development as a multi dimensional concept, researchers within and outside the governmental set-up have identified a set of indicators for assessing or articulating the manifestation of development process in different socio-economic dimensions. As the indicators reflect different aspects of socio-economic well-being, these are measured along different scales. Researchers have made the indicators 'scale free' by applying suitable statistical techniques. Standard statistical packages are then applied for working out a set of weightages for the indicators and aggregating these into a composite index. By setting a cut-off point on the composite index, the lagging regions have been identified. Alternately, these regions have been identified using socio-economic distance matrices, constructed on the basis of the scale free indicators through application of the clustering technique. This approach avoids the need for compositing different dimensions of development and identifies lagging regions based on their level and pattern of development.

The standard procedures mentioned above have not been considered appropriate for the present study due to a number of reasons. It is well documented that regionalization, based on composition exercises or discriminant

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[1] Datt and Ravallion (2002) noted that 'States with relatively low levels of rural development and human capital development were not well suited to reduce poverty in response to economic growth'.

functions/clustering method applied on the distance values, becomes mechanical wherein the judgment or development perspective of the researcher/ policymakers plays a minor role. Weightages emerge out of the black box and there is little scope for qualitative judgment of the researcher regarding the process of regional development. It has, therefore, been considered appropriate here to start by analysing the pattern of development across states through a limited set of 'economic' indicators to understand the nature of regional disparity and identify the key determinants of it. Using the scores of different states in these indicators along with the exogenous information and judgment about the nature of structural parameters an attempt would then made to identify the lagging regions in the first stage.

Needless to say, lagging regions should not be identified based only on indicators of the present level of economic well-being. As the term 'lagging' reflects the presence of certain structural constraints upon their growth, inclusion of indicators that reflect possibilities of growth would be important. This makes a case for bringing in a number of indicators pertaining to provision of basic amenities and social development within the analytical framework. Given the diversity of the dimensions and their movements in different directions, it may be useful to combine these through a statistical method of aggregation. Most importantly, lagging regions are likely to exhibit certain characteristics in terms of distribution of population in space, hierarchy of urban centres, and mobility of population from rural to urban areas or its absence, within and outside the state. An analysis of these demographic indicators is likely to shed light on the nature and causes of underdevelopment of the regions and help in identification of lagging regions.

In view of the above perspective, the present paper analyses the trends and patterns of spatial inequality in terms of per capita income, consumption expenditure, investment, and poverty focusing on the period since the early 1990s. This has been attempted in the second section, constructing the indicators for rural and urban segments separately, when possible. The basic objective here is to understand the dynamics of growth in the country which is resulting in regional

imbalances. An analysis of the states' performance in terms of state domestic product (SDP) and its growth is attempted in the next section by considering yearly figures, as also three-yearly averages. In the fourth section, three sets of indicators pertaining to economic development, amenities, and social development have been culled from the current development literature that seem to have significant bearing on the process of economic development in the country. Composite indices have been constructed for these dimensions and their patterns and relationships have been discussed. The fifth section attempts to understand the impact of state interventions through an analysis of the pattern of interdependency among a select set of development and policy linked indicators. The implications of a decline in the rates of migration and urbanization at the macro level in the face of growing regional inequality have been discussed in the following section, to assess how the absence of a balanced settlement hierarchy can become a drag on the growth of a regional economy. The purpose here is to enquire if the rates and patterns of migration and urbanization can become useful bases for determining lagging regions. The final section proposes a multi-stage iterative framework for identification of lagging regions. The initial identification of the lagging regions has then been made based on per capita income and income growth. Subsequently, using the composite indices of three development dimensions, the final set of states has been identified. This helps in bringing in not only the current levels of economic well-being or growth therein into the framework, but also the social and infrastructural dimensions, constraining development in the long run. These states can be taken as a starting point for ushering in strategy of balanced regional development in the country by any national or international agency.

## 2. Trends and Patterns of Economic Inequality across States

It would be important to begin an exploration of the regional scenario of development in the country by looking at the trend of certain indices that articulate regional disparity. The comparisons have to be made over time, and hence, it would be appropriate to compute relative measures rather than absolute ones, since the average income figures have gone up significantly over the years. And

then, there is the issue of considering each state as one unit or assigning it weight proportional to its population, which cannot be easily resolved.

It is a matter of concern that the values of the Coefficient of Variation (CV) and Gini Index for per capita state domestic product (SDP) have gone up systematically during the period from the early 1990s to the middle of the present decade. It is, however, not for the first time that regional inequality has shown an increasing trend in the country. It had gone up during 1960s, and was attributed then to the Green Revolution and its regional concentration in north-west India and a few southern districts (Bhalla: 2006). Similarly, the later half of the 1970s saw an increase in inequality explained in terms of industrial stagnation in backward states (Mathur: 2003). However, the 1980s saw little increase in regional disparity.[2] This is extremely important since this has been considered a period of financial instability resulting in macro economic crisis, compelling the policy makers to opt for policies of economic liberalization in 1990–1.

The period since the early 1990s has come under closer scrutiny as the emphasis has been on economic efficiency, reduction of subsidy, and greater accountability under the strategy of globalization. The latter, that have been impacting, and even reshaping, the programmes and schemes for infrastructural development, have favoured the relatively developed regions. Consequently, except for a year or two in mid-1990s, inequality has been on the increase over the past decade and a half.

**Table 1: Disparity in Per Capita GSDP: Weighted and Unweighted Indices**

| Year | Ratio of Min To Max per Capita GSDP (in per cent) | CV (Weighted by population) | CV Unweighted | Gini Coefficient (Weighted by population) |
|---|---|---|---|---|
| 1993–4 | 30.527 | 34.549 | 38.33 | 0.1917 |
| 1996–7 | 27.586 | 36.781 | NA | 0.2071 |
| 1999–2000 | 28.899 | 37.417 | 35.09 | 0.2173 |

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[2] For example, Ahluwalia (2000) using per capita gross state domestic product noted that 'Gini Coefficient was fairly stable up to 1986-87, but began to increase in the late 1980s and this trend continued through 1990's'.

| 2001–2 | 21.556 | 35.610 | NA | 0.2078 |
|--------|--------|--------|------|--------|
| 2002–3 | 21.608 | 36.686 | NA | 0.2771 |
| 2003–4 | 22.705 | 36.230 | NA | 0.2290 |
| 2004–5 | 20.105 | (a) 38.44<br>(b) 38.90 | (a) 29.81<br>(b) 34.15 | 0.2409 |

*Note: The values for* 1993–4, 1996–7 and 1999–2000 are based on 1993–4 series while those for 2001–2 are based on 1999–2000 Series at current prices, as obtained from the State Domestic Income Tables available at the website of the Central Statistical Organisation. The weighted CV for the year 2004-5 is computed using the values of all the states except Goa (which is an outlier), comparable with the estimates for the years from 2001-2 on wards, is given as estimate (a). The estimate (b) is based on the values of 14 states comparable with those of the years upto 1999–2000. Similarly, the unweighted CV for the year 2004–5 is computed using the values of all the states except Goa (a) and only 14 states (b).

**Figure 1. Trend in Inter-State Inequality in Per Capita Income:**
**Unweighted and Weighted Indices**
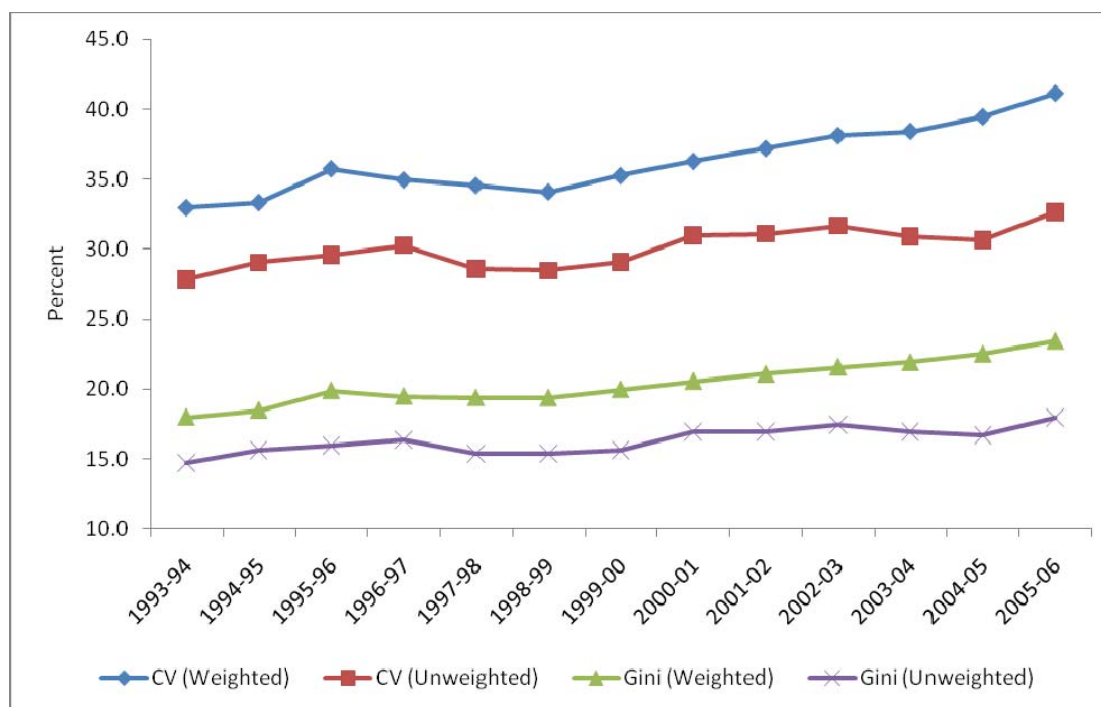


Source: Table 1.

It is important to note that the inequality indices are much higher when these are worked out by weighing the state figures by their population, compared to when each state figure is given equal weight (Table 1 and Figure 1). This can be attributed to the fact that the states with low levels of per capita income have high shares in the population. Furthermore, the weighted indices report a slightly sharper increase during the 1990s than the unweighted indices and this trend has continued till 2004-05. One would infer that the states with low population share have done relatively better than those having large shares in the population.

It has been argued that the governmental strategy of regional development, particularly of federal resource allocations, has not gone simply by the development deficit of the states and their population share, but also by other socio-political considerations. One can take a critical view of this as reflecting vested interests influencing the process of planning and resource allocation, which is responsible for poorer states with a larger share in the population not being able to improve their economic conditions[3]. One can, however, argue that a federal system would always force governments to take into account various social, ethnic, and historical factors in designing development strategy, particularly in devolution of central resources. Understandably, emerging regional identities, aspirations, feelings of deprivation, etc., besides the vulnerability of states due to locations at the national borders, would weigh the system of fund disbursal.

It has been noted that the special category states in India that have small shares in the country's population received relatively higher shares in central assistance, which is responsible for their somewhat better economic performance. As a result, we observe that the weighted CVs are larger than the unweighted CVs. Further, the latter, computed for the 27 states for 2004–5 (estimate (a)) is significantly

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[3] The Gadgil Formula, used as the basis for determining allocations of plan funds across the states, has evolved overtime in a way that it places larger size states at a disadvantage. Further, since the size is fixed in terms of population in 1971, the states registering high population growth get less and less over time in per capita terms. Large size states being also poor, backwardness also tends to get penalized. The plea of the developed states that efficiency in fiscal management and governance should be punished in resource allocation, has led to larger weightages being assigned to tax collections and other efforts at resource mobilization.

below that for the 14 general category states (estimate (b)) (Table 1). The inclusion of the special category states, thus, brings down the regional inequality, as these are slightly better off than the 'average' state. In contrast, the value of the weighted index computed using 27 states, estimate (a), is less than for 14 states, estimate (b), only in decimal points. This can be explained by the fact that these states have low population weight in national aggregative calculations, and hence, do not alter the result.

The inter-state inequality for the other catch-all economic indicator—per capita consumption expenditure—also shows a clear increasing trend as is the case with income[4]. The unweighted CV has increased from 17.6 per cent in 1993–4 to 24.4 per cent in 2004–5, for which data are available (Figure 2). A similar trend is noted in case of weighted CV as well (Kundu and Sarangi: 2010). This all-India pattern can be observed when we compute separate figures for rural areas and smaller urban centres[5], across the states and construct CV. The inter-state inequality in case of metro cities, however, shows temporal fluctuations, reporting a rise during 1993–4 to 1999-2000, and then a decline during 1999–2000 to 2004–5. The Gini Index also shows a similar rising pattern for all-India, rural areas and smaller towns during this period, while the metro cities report a decline between 1999–2000 and 2004–5. One would infer that regional imbalance has gone up during the 1990s and in the following five years – the period which has seen the first and second phase of structural reform. Furthermore, there has been significant increase in unweighted inequality in poverty across the (fourteen) states, both in rural and urban areas since the late 1980s (Kundu and Sarangi: 2010). One would get larger values if one computed inequality by attaching population weights. One can, therefore, argue with a fair degree of confidence that poverty reduction has been relatively less in less developed compared to developed states, in both rural and urban areas. This has resulted in concentration of poverty in a few backward

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[4] All the subsequent discussion on inequality and correlation coefficients are based on unweighted indices.

[5] The consumption expenditure data are available for rural and urban areas. Urban areas are further separated in two categories—Class 1 towns with 10 lakh or above population, and other urban areas having population below 10 lakh. Such disaggregated data on per capita income are not available.

states, and possibly in remote regions within the state that are more difficult to access[6]. The elasticity of poverty reduction to income growth, therefore, is likely to be less in the Eleventh Plan compared to that of earlier plans.

## 3. A State Level Analysis

Given the main objective of the paper to identify a set of lagging states for directed policy intervention, it would be important to probe into the state level scenario in a disaggregative manner by considering the performance of each state separately. In a study undertaken as a part of background research for the World Development Report, 2009, Ahmad and Narain (2008) classify the Indian states into 'high', 'medium' and 'low' income categories. The north-eastern states that belong to a special category, and thereby enjoy special grants from the Finance Commission, as well as other preferential treatment, constitute a separate category[7]. The study shows that most of the states that had low levels of per capita income recorded low income growth, not only in the 1980s, but also in the 1990s. The low income category states and the north-eastern states were noted to have registered growth rates of 2.5 per cent and 2.8 per cent respectively during the 1980s, which was much below the national average. These went down further to 2.3 and 2.5 per cent respectively during the 1990s. These states were in the bottom rung even in the early 1970s[8]. The growth rates for the high and middle income states, on the other hand, increased from about 3.4 and 3.2 per cent to 3.6 and 4.9 respectively during this period.

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[6] Sivaramakrishnan, Kundu and Singh (2005)

[7] Importantly, Jammu and Kashmir, Himachal Pradesh, and Uttarakhand too are classified as special category states, although the latter two have per capita income higher than the national average.

[8] Madhya Pradesh and Rajasthan are the only states that emerge as exceptions (see Ahmad and Narain: 2008)

**Figure 2. Inter-State Inequality in Per Capita Consumption Expenditure: Unweighted Coefficients of Variation**
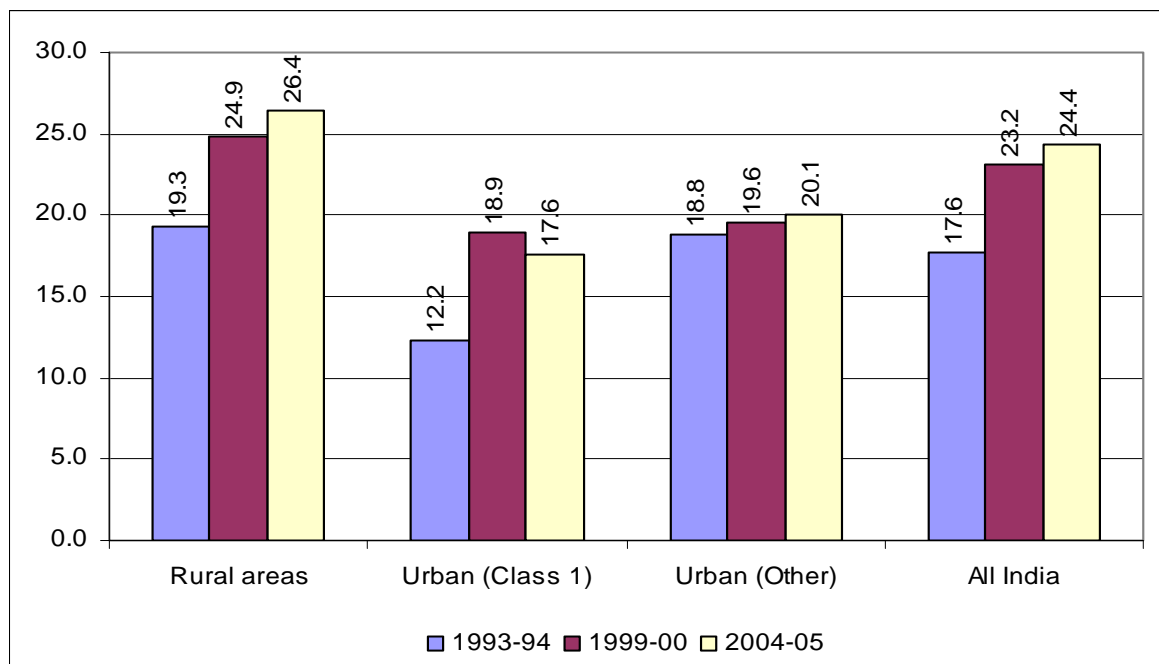


*Note:* The calculation of CV is based on NSS per capita consumption expenditure for 24 states for which comparable data for 1993–4 through 2004–5 are available. Therefore, the 2004–5 figure for Bihar gives combined estimate of Bihar and Jharkhand, the same for Madhya Pradesh presents the combined estimate of Madhya Pradesh and Chattisgarh. Also, Uttar Pradesh figures for 2004–5 are combined estimates of Uttar Pradesh and Uttarakhand.

*Source:* Computed from NSS unit records CD data

Considering the growth performance of individual states, one would note that the low income states like Assam, Bihar (including Jharkhand), Madhya Pradesh (including Chhattisgarh), Orissa, and Uttar Pradesh (including Uttarakhand) have reported very low average growth rates during the 1980s, which has further gone down in the 1990s. A more alarming fact about these states (excluding Rajasthan) is the instability in growth rates as assessed through their coefficient of variation over time. Furthermore, these states have reported a decline in the absolute figure of per capita income or no growth in at least two years during the 1990s, a problem not encountered in the middle or high income states. What compounds the

problem of the former is that there is marginal or no decline in their population growth rates and these continue to be much above the national average. Himachal Pradesh and Rajasthan seem to emerge as exceptions as they have reported high growth rates in the 1990s - comparable to or even higher than that of the 1980s (Bhattacharya and Sakthivel: 2004) and instability in growth is low. Several other studies using other economic indicators[9] at the state level confirm the increasing trend in inequality during the last two decades of the past century, thus confirming the thesis of accentuation of regional imbalance. Based on the level of per capita SDP and the growth therein, a set of eight states (including three newly formed states) can be identified as belonging to the lagging region category in the first stage operation. These are Bihar, Jharkhand, Orissa, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Uttarakhand, and Assam.

One may, however, note a few limitations of the analysis in Table 1, as also in the studies reviewed above. These are based on yearly data that are subject to seasonal fluctuation and the terminal year is the middle of the present decade. Furthermore, the analyses are based largely on the data pertaining to the undivided states of Uttar Pradesh, Madhya Pradesh, and Bihar. An attempt has, therefore, been made to compute three yearly averages for SDP for 20 large states including the newly formed states, providing the basis for the computation of per capita income as also the growth rates, as presented in Table 2a. The problem of non-availability of data on per capita income for the latest year in a few cases has been taken care of by projecting the figures, using the average of the growth rates for all the preceding years in the decade for each state separately[10].

The average per capita SDP and growth in SDP at constant prices for the late 1990s, the middle of the present decade, and for the final years of the present decade, provide interesting insights in to the dynamics of regional development (Table 2a). It may be noted that eight of the backward states such as Bihar, Uttar

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[9] Singh (2008)

[10] For the states of Maharashtra, West Bengal, Gujarat, Kerala, Delhi, Jammu and Kashmir, Himachal Pradesh Tripura and Goa, the per capita income figures for the years 2008-09 are estimated using the average of their respective growth rates of all the preceding years in the present decade.

Pradesh, Rajasthan, Assam, Orissa, Madhya Pradesh, Chhattisgarh, and Jharkhand occupy the bottom positions in terms of per capita SDP during the latest triennium, 2007–9. Uttarakhand is the only state, identified as backward by Ahmad and Narain (2008) as a part of the state of Uttar Pradesh, wherein the average SDP is about the national average. Considering the growth scenario in SDP, the less developed states reported low figures in the late 1990s, especially during 1998–2000. The situation, however, seems to be changing rapidly. Three of the states, viz., Madhya Pradesh, Rajasthan, and Orissa, showed high income growth during 2004–6. The distinct change in the spatial thrust in growth in favour of backward states has further increased in the subsequent period, as almost all these nine states record high growth rates.

# Table 2: Per Capita SDP and Growth in SDP for Select States

## a. Three-yearly Averages

| | Growth in SDP | | | Per Capita SDP | | |
|---|---|---|---|---|---|---|
| STATES | 1997–9 | 2003–5 | 2007–9 | 1997–9 | 2003–5 | 2007–9 |
| Andhra Pradesh | 5.12 | 9.25 | 9.10 | 10160 | 13996 | 18001 |
| Assam | 1.32 | 4.90 | 6.36 | 6585 | 7602 | 8640 |
| Bihar | 2.47 | 5.48 | 14.11 | 3539 | 3992 | 5332 |
| Chhattisgarh | 2.90 | 10.26 | 8.10 | 8256 | 10412 | 12701 |
| Gujarat | 3.44 | 12.36 | 10.89 | 15613 | 20349 | 26447 |
| Haryana | 4.88 | 9.07 | 9.69 | 14742 | 20260 | 25110 |
| Himachal Pradesh | 6.74 | 8.06 | 8.42 | 11625 | 15590 | 19162 |
| Jammu & Kashmir | 5.11 | 5.52 | 5.90 | 8601 | 9608 | 10696 |
| Jharkhand | 9.75 | 4.49 | 8.08 | 8448 | 9297 | 10967 |
| Karnataka | 8.32 | 8.95 | 8.44 | 11715 | 14518 | 18529 |
| Kerala | 5.83 | 8.46 | 10.00 | 10961 | 15339 | 20104 |
| Madhya Pradesh | 7.36 | 6.83 | 4.94 | 8759 | 9374 | 10204 |
| Maharashtra | 6.23 | 8.79 | 9.01 | 16494 | 20319 | 25190 |
| Orissa | 6.87 | 11.23 | 8.23 | 6466 | 8290 | 10309 |
| Punjab | 4.74 | 5.17 | 6.70 | 16320 | 18900 | 21603 |
| Rajasthan | 5.82 | 11.24 | 8.76 | 9708 | 11021 | 12862 |
| Tamil Nadu | 6.35 | 9.78 | 6.75 | 13243 | 16663 | 21090 |
| Uttar Pradesh | 2.73 | 4.77 | 10.71 | 6452 | 7090 | 8573 |
| Uttaranchal | 1.43 | 15.28 | 7.52 | 8356 | 12844 | 16827 |
| West Bengal | 7.16 | 6.27 | 7.72 | 9827 | 12540 | 14929 |
| **Mean** | **5.23** | **8.31** | **8.47** | **10293** | **12900** | **15864** |
| **SD** | **2.28** | **2.91** | **2.04** | **3566** | **4814** | **6223** |
| **CV** | **0.436** | **0.350** | **0.240** | **0.347** | **0.373** | **0.392** |
| **Weighted CV** | **0.409** | **0.325** | **0.244** | **0.383** | **0.422** | **0.441** |

## b. Correlation Coefficients

| Correlations | gr9799 | gr0305 | gr0709 | Pcsdp9799 | pcsdp0305 | pcsdp0709 |
|---|---|---|---|---|---|---|
| Gr9799 | 1.000 | -0.165 | -0.269 | 0.247 | 0.174 | 0.144 |
| Gr0305 | -0.165 | 1.000 | 0.056 | 0.222 | 0.362 | 0.426 |
| Gr0608 | -0.269 | 0.056 | 1.000 | -0.130 | -0.053 | 0.027 |
| pcsdp9799 | 0.247 | 0.222 | -0.130 | 1.000 | 0.971 | 0.940 |
| pcsdp0305 | 0.174 | 0.362 | -0.053 | 0.971 | 1.000 | 0.992 |
| pcsdp0608 | 0.144 | 0.426 | 0.027 | 0.940 | 0.992 | 1.000 |

The CV (unweighted) in the growth rate has gone down from 44 per cent in late 1990s to 35 per cent in the middle of the present decade due to high growth in less developed states, as discussed above. It has gone down further to 24 per cent in the later years of the decade. The most important point is that the weighted CV of the growth rates works out to be marginally below the unweighted figure, implying that more populated states had a marginal advantage over the others, in the early 1990s. This advantage of the former seems to be evening out in recent years, the inter-state growth differentials becoming less than before. There is no evidence of the growth being higher in more developed states as the correlation between level and growth in income is statistically insignificant (Table 2b). The importance of this more equitable growth pattern notwithstanding, one must note that this, unfortunately, has not made a dent on the trend of regional imbalance. The inequality in per capita SDP has gone up consistently including the recent periods, by both weighted and unweighted CV, as presented in Table 2a. Furthermore, the Gini Index too has maintained a rising trend, as exhibited in the 1990s, as presented in Figure 3, along with the CVs.

**Figure 3: Trend in Inter-State Inequality in Per Capita Income based on Three Yearly Averages: Unweighted and Weighted Indices**
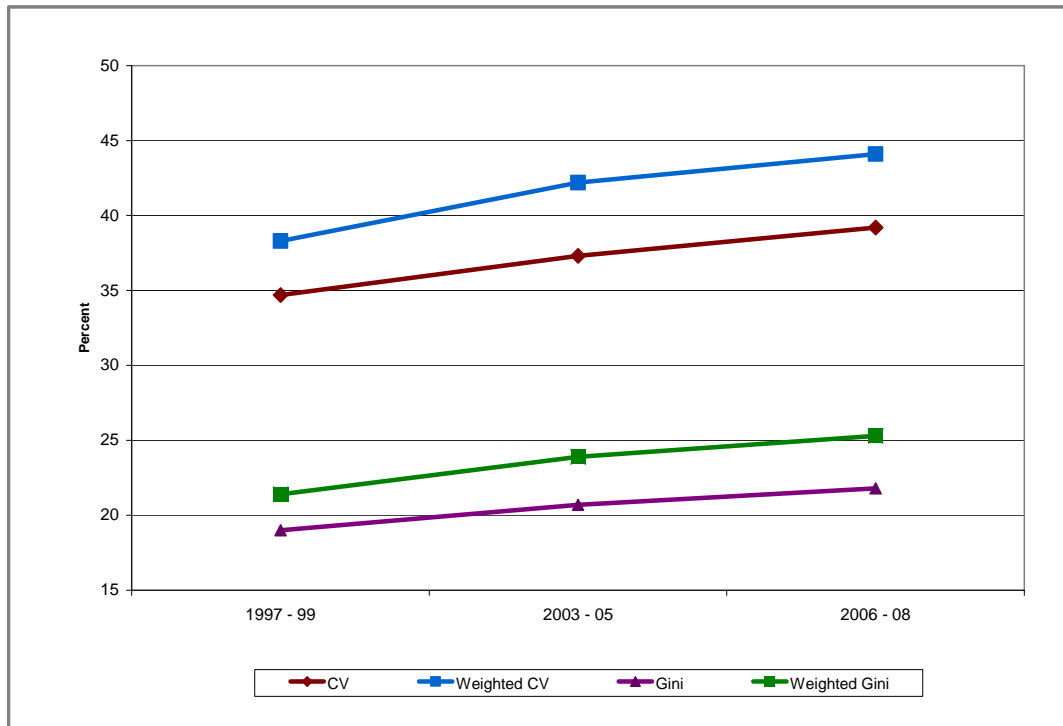


Source: Computed by the authors based on the State Domestic Income Tables available at the website of the Central Statistical Organisation

Understandably, the growth pattern across the states in recent years is significantly different from the pattern of growth in earlier years. This may be inferred from the fact that the correlations of growth indicators with per capita SDP turn out to be statistically insignificant. The correlations between the rates of growth for the three-yearly periods across the states work out to be negative, although not statistically significant (Table 2b). This is because a high growth rate has been recorded in recent years in many of the less developed states that recorded low growth in earlier years, as discussed above. Three newly formed states – Chhattisgarh, Uttarakhand, and Jharkhand have grown faster than the average in the present decade, marking a departure from the trend in late 1990s.

The Plan-wise growth figures, including those for the Eleventh Plan, as projected by the Planning Commission (2008), confirm the above conclusions. The growth rate of less developed states was less than 4 per cent, much below the average of the developed states during the Eighth and the Ninth Plans (Table 3). The figures for the former during the Tenth Plan period are similar to that of the national average or that of the developed states. The same can be said about their projected growth rates during the Eleventh Plan period, suggesting that there has been a paradigm shift in the growth pattern in the country. Happily, the actual growth rates for the less developed states in the first couple of years in this Plan have turned out to be even higher than projected. The same is true for the Special Category States in the North-East. Their growth rates, too, were less than the national average in the Eighth and Ninth Plans, but have caught up with it in the Tenth Plan period. More importantly, these are expected to be above the national average in the Eleventh Plan. One can, therefore, stipulate that the strategy of inclusive growth and balanced regional development has led to acceleration in the average growth rate of the less developed states, including those in the North-East, and this would continue in future. Unfortunately, however, this has made little impact on the trend towards accentuation of regional imbalances measured through per capita SDP.

## Table 3: Annual Growth Rates in State Domestic Product in Different Plan Periods

| S.No. | State/UT | Eighth Plan (1992–7) | Ninth Plan (1997–2002) | Tenth Plan (2002–7) | Eleventh Plan (2007–12) |
|---|---|---|---|---|---|
| **Non Special Category States** | | | | | |
| 1 | Andhra Pradesh | 5.4 | 4.6 | 6.7 | 9.5 |
| 2 | Bihar | 2.2 | 4.0 | 4.7 | 7.6 |
| 3 | Chhattisgarh | NA | NA | 9.2 | 8.6 |
| 4 | Goa | 8.9 | 5.5 | 7.8 | 12.1 |
| 5 | Gujarat | 12.4 | 4.0 | 10.6 | 11.2 |
| 6 | Haryana | 5.2 | 4.1 | 7.6 | 11.0 |
| 7 | Jharkhand | NA | NA | 11.1 | 9.8 |
| 8 | Karnataka | 6.2 | 7.2 | 7.0 | 11.2 |
| 9 | Kerala | 6.5 | 5.7 | 7.2 | 9.5 |
| 10 | Madhya Pradesh | 6.3 | 4.0 | 4.3 | 6.7 |
| 11 | Maharashtra | 8.9 | 4.7 | 7.9 | 9.1 |
| 12 | Orissa | 2.1 | 5.1 | 9.1 | 8.8 |
| 13 | Punjab | 4.7 | 4.4 | 4.5 | 5.9 |
| 14 | Rajasthan | 7.5 | 3.5 | 5.0 | 7.4 |
| 15 | Tamil Nadu | 7.0 | 6.3 | 6.6 | 8.5 |
| 16 | Uttar Pradesh | 4.9 | 4.0 | 4.6 | 6.1 |
| 17 | West Bengal | 6.3 | 6.9 | 6.1 | 9.7 |
| **Special Category States** | | | | | |
| 1 | Arunachal Pradesh | 5.1 | 4.4 | 5.8 | 6.4 |
| 2 | Assam | 2.8 | 2.1 | 6.1 | 6.5 |
| 3 | Himachal Pradesh | 6.5 | 5.9 | 7.3 | 9.5 |
| 4 | Jammu & Kashmir | 5.0 | 5.2 | 5.2 | 6.4 |
| 5 | Manipur | 4.6 | 6.4 | 11.6 | 5.9 |
| 6 | Meghalaya | 3.8 | 6.2 | 5.6 | 7.3 |
| 7 | Mizoram | NA | NA | 5.9 | 7.1 |
| 8 | Nagaland | 8.9 | 2.6 | 8.3 | 9.3 |
| 9 | Sikkim | 5.3 | 8.3 | 7.7 | 6.7 |
| 10 | Tripura | 6.6 | 7.4 | 8.7 | 6.9 |
| 11 | Uttarakhand | NA | NA | 8.8 | 9.9 |
| | **All India GDP** | 6.5 | **5.5** | **7.7** | **9.0** |
| | Developed States | 7.2 | 5.2 | 7.0 | 9.6 |
| | Special Cat States | 5.7 | 5.8 | 7.3 | 7.3 |
| | Less Dev States | 3.7 | 3.8 | 7.2 | 8.0 |
| | **CV in Growth Rates** | 38.8 | **29.9** | **27.8** | **21.7** |

*Note:* Average of 2002–3 to 2005–6 for all States except J&K, Mizoram, Nagaland (2002–3 to 2004–5) and Tripura (2002–3 to 2003–4).

*Source:* CSO (base 1999–2000 constant price) as on 31.8.2007.

## 4. Identification of Socio-Economic Dimensions and Indicators of Development and Composite Indices

### (a)    Economic Development

In order to understand the nature and pattern of the contemporary process of development, (i) economic, (ii) basic amenities, and (iii) social, have been considered the three important dimensions. For articulating the dimension of economic development, the indicator of average per capita state domestic product, analysed above has been taken as the first in the list. This has been computed by taking the average of the SDP figures for three years, 2006–7, 2007–8, and 2008–9 at 1993–4 prices. The second indicator is the average of the annual growth rates for the three years ending in 2008–9.

It is well acknowledged in development literature that analyses based on the levels of SDP in per capita terms and growth rates therein do not capture several important aspects of economic development at the macro- or state-level. Inclusion of a number of other indicators reflecting other aspects of economic well-being has been considered indispensable. Like per capita SDP, per capita consumption expenditure is an important summary measure for assessing the volume of goods and services at the command of individuals. The advantage here is that separate figures are available for rural and urban areas. The data on this are obtained from National Sample Survey for the year 2004–5. Similarly, poverty figures in rural and urban areas are taken from the Eleventh Five Year Plan document for assessing the level of economic deprivation of the population. Subtracting these from 100, the figures of non-poor population have been obtained, which becomes a positive indicator of economic development. Per capita foreign direct investment is the other important economic indicator, reflecting present and potential development in a state. This could also be a proxy for infrastructural development. Although a part of its outcome is captured in the current income levels, its impact is likely to manifest in future years as well. An average figure of investment for three years ending in 2005–6, has therefore, been included in assessing the economic dimension. The percentage of state income coming from the industrial sector is

included in the list as it reflects the strength of the economic base of a state. Similarly, the income derived from the tertiary sector reflects the extent of diversification in the economy as also the impetus it can provide to growth in the period of globalization. It may be noted that separate indicators of infrastructure have not been included in order to limit the number of indicators for the economic dimension, as also because the indicators pertaining to investment and income from industry and the tertiary sector would capture their impact. The indicators that constitute the dimension of economic development are given along with the sources of the data in Table 4a. A composite index of economic development has then been constructed based on these nine indicators, after making these scale-free by dividing the values of each indicator by its arithmetic mean. The composition has been done through the process of two-stage composition. In the first stage, the figures of monthly per capita expenditure have been aggregated for rural and urban areas by giving these equal weightages of 0.5. The aggregative indicator for the non-poor population percentage has been constructed in a similar fashion by combining the rural and urban figures.

**Table 4a: Indicators pertaining to the Dimension of Economic Development**

| S.No | Indicator | Source of Data |
|------|-----------|----------------|
| 1 | Average PC Income 2007–9 | Unpublished data, Central Statistical Organization |
| 2 | Average Growth in SDP 2007–9 | Unpublished data, Central Statistical Organization |
| 3 | Per Capita Expenditure Rural 2004–5 | NSSO Report |
| 4 | Per Capita Expenditure Urban 2004–5 | NSSO Report |
| 5 | Per cent Non Poor Rural 2004–5 | Planning Commission (2008),11th 5 year Plan |
| 6 | Per cent Non Poor Urban 2004–5 | Planning Commission (2008), 11th 5 year Plan |
| 7 | Average Percentage Income from Secondary Sector 2007–9 | Unpublished data, Central Statistical Organization |
| 8 | Average Percentage Income from Tertiary Sector 2007–9 | Unpublished data, Central Statistical Organization |
| 9 | Average Per Capita FDI 2003–5 | Lok Sabha Unstarred Question 182, dated 01.03.2005 and 1032, dated 01.08.2006 |

(b) **Basic Amenities**

A set of nine indicators pertaining to basic amenities have been selected, as given in Table 4b. All these have been taken from the National Health and Family Survey III and pertain to the year 2005–6. The percentages of female and male literates have been included to reflect the level and access to educational facilities in the states. These have been considered more appropriate than the information on the facilities given by the individual states. The percentages of men and women reading newspapers have been taken as a proxy of transportation and social linkages of the distant rural and urban areas to the nearby large centres. These linkages contribute in a significant way to the dissemination of growth impulses in a region. The percentage of households having electricity, improved source of drinking water, toilet facility, non-solid fuel for cooking, and residing in *pucca* houses are direct measures of availability of basic amenities, and consequently, have been included under this dimension.

**Table 4b: Indicators pertaining to the Dimension of Basic Amenities**

| S. No | Indicator |
| --- | --- |
| 1 | Education Female |
| 2 | Education Male |
| 3 | Per cent women (15–49) reading newspaper at least once a week |
| 4 | Per cent men (15–49) reading newspaper at least once a week |
| 5 | Percentage of household with electricity |
| 6 | Percentage of household with improved source of drinking water |
| 7 | Percentage of household with toilet facility |
| 8 | Percentage of household using non-solid fuel for cooking |
| 9 | Percentage of household living in a *pucca* house |

Source: International Institute of Population Sciences: 2007

The composite index for the dimension of basic amenities has been computed using a two-stage model, as in case of economic development discussed above. Aggregative indices for education and newspaper reading have been constructed

in the first stage of composition under the dimension of basic amenities by combining the values for men and women. In view of the key role played by female literacy and social mobilization of women in the process of development, the indicators pertaining to the women have been given twice the weightage as that for men. These two aggregative indices have then been combined with the remaining five indicators of amenities, by assigning these equal weightages after making these scale-free through division by the mean.

## (c) Social Development

Ten indicators identified under the dimension of social development, as presented in Table 4c, reflect 'deficit in development' and can be described as negative indicators. The first two indicators—infant mortality rate and total fertility rate—articulate the basic demographic character of the state. In a way these two bring out the sum total of the developmental interventions on the demographic front. The indicators of malnourished children in the age group of 0–3 years and of under-weight children below 5 years reveal the physical health of the children. The indicator pertaining to anemia in women captures the health status for persons in the reproductive age group. The sixth and seventh indicators reflect the pre-natal and post-natal facilities to expectant women, young mothers, and children. The eighth indicator captures malnutrition among people as also absence of preventive facilities against tuberculosis. The last two indicators have been included to articulate the prevalence of modern values relating to family planning among men and women.

**Table 4c: Indicators pertaining to the Dimension of Social Development**

| S.No | Indicator |
|---|---|
| 1 | Infant Mortality Rate Current |
| 2 | Total Fertility Rate Current |
| 3 | Malnutrition of Children (0–3 Years) Current |
| 4 | Percentage of children under age 5 years with weight for age -3SD |
| 5 | Anemia among Women (15–49 Years) Current |
| 6 | Percentage of women who had no antenatal care by doctor |
| 7 | Percentage of children (Below 6 years) who has not received any ICDS service |
| 8 | Number of persons per 100,000 suffering from Tuberculosis |
| 9 | Percentage of Women (15–49) wanting children |
| 10 | Percentage of Men (15–49) wanting children |

Source: International Institute of Population Sciences: 2007

The composite indices reflecting the absence of social development have been worked out in two stages, as in the case of basic amenities. In view of the overlapping of information between the indicators pertaining to malnourished and underweight children, these two have been aggregated in the first stage by giving them equal weightages. The total number of indicators, thus, gets reduced to nine. All these have been composited in one shot at the second stage by assigning them equal weightages. The reciprocal of these composite values reflect the levels of social development.
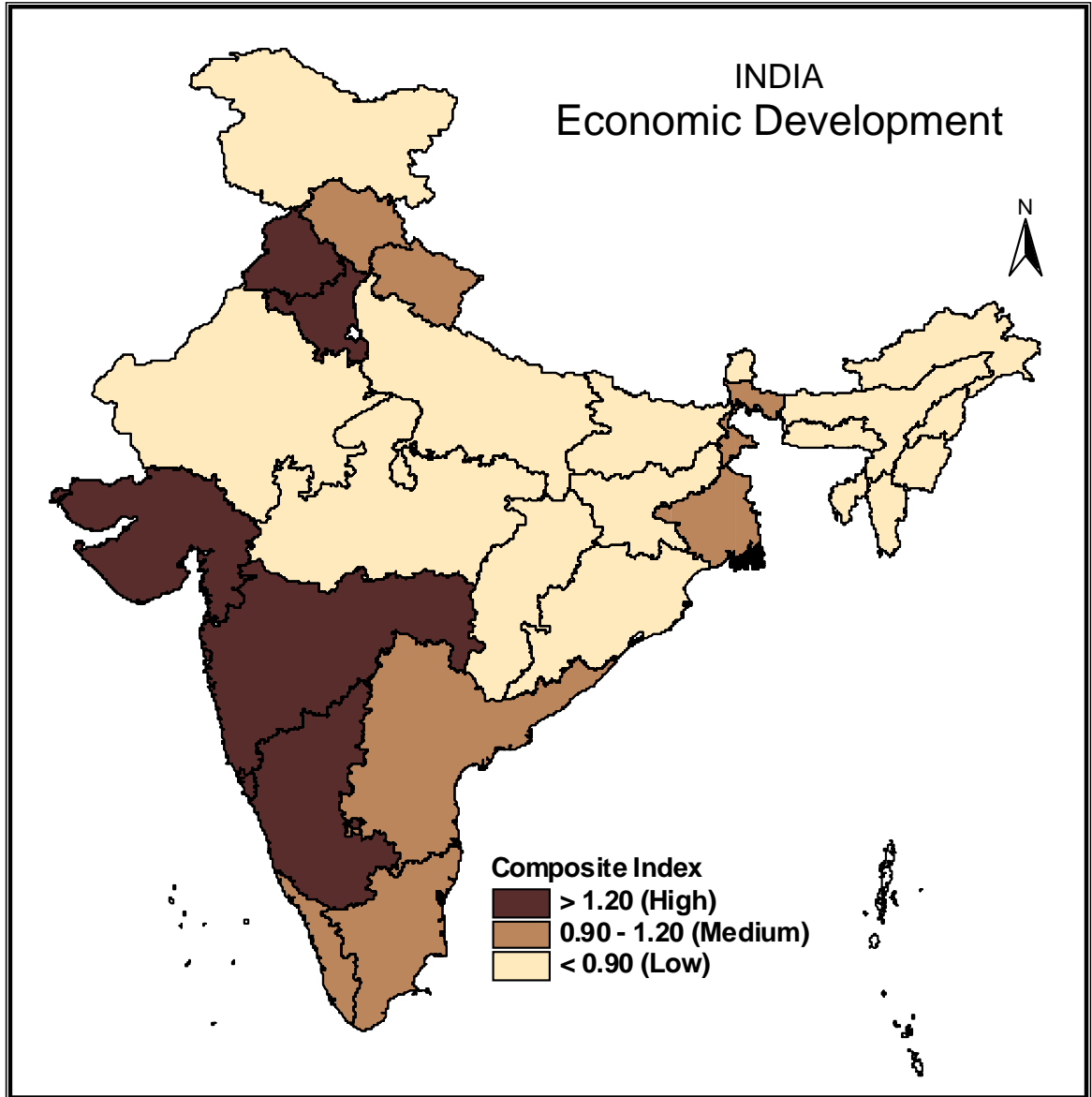
The three composite indices pertaining to economic development, basic amenities, and social development are presented in Table 5. The values of the indices have been placed under three categories—low, medium, and high—identifying the cut-off points based on 'natural breaks' in the distribution. These are shown in Maps 1, 2, and 3 that clearly bring out the areas of overlap among the states.

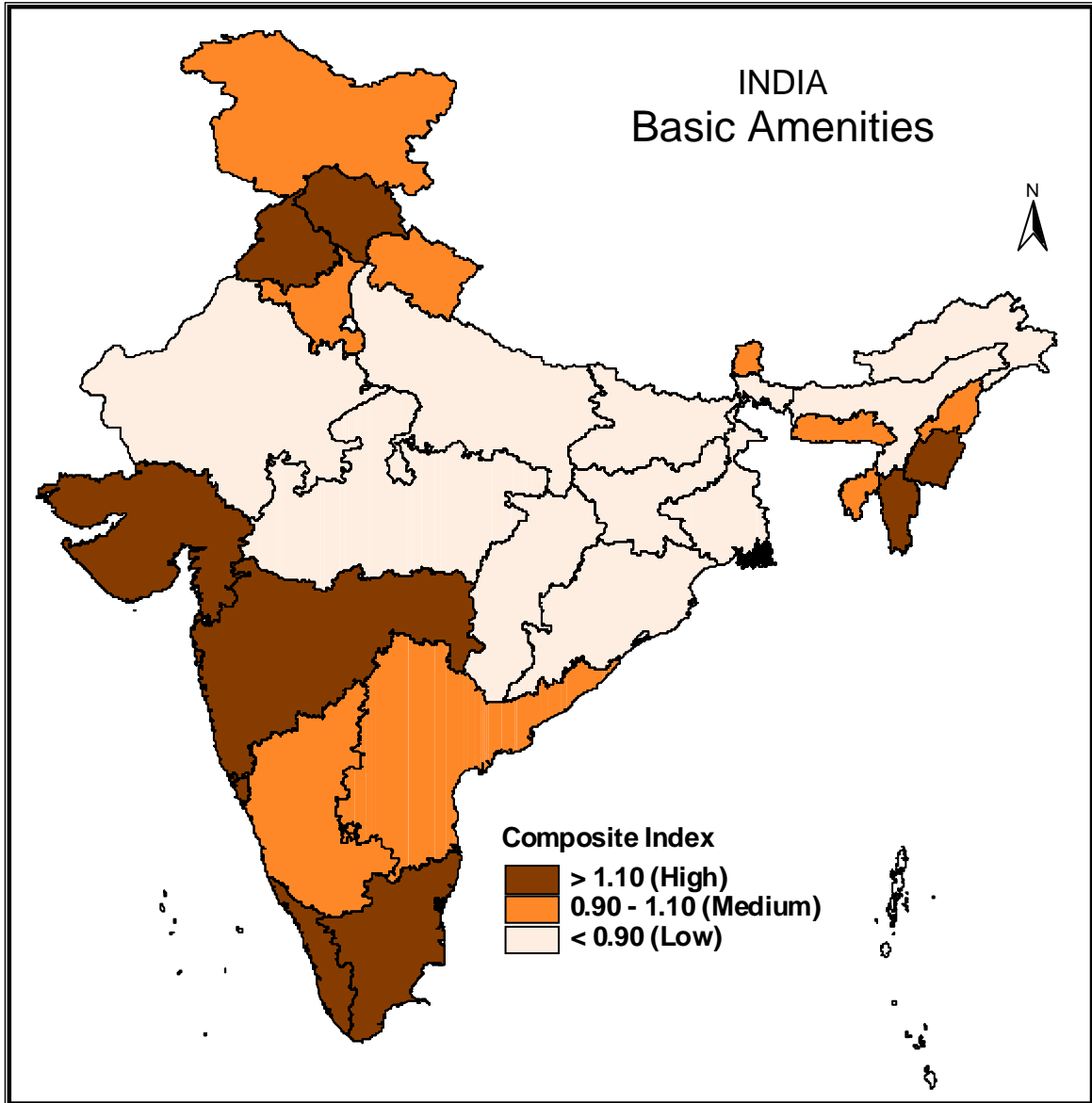**Table 5: The Composite Indices Articulating Three Different Dimensions of Development and their Correlations**

| States | Economic | Amenities | Social |
|---|---|---|---|
| Andhra Pradesh | 1.12 | 0.98 | 1.10 |
| Arunachal Pradesh | 0.76 | 0.81 | 0.67 |
| Assam | 0.75 | 0.85 | 0.81 |
| Bihar | 0.72 | 0.58 | 0.66 |
| Chhattisgarh | 0.89 | 0.68 | 1.04 |
| Goa | 1.90 | 1.51 | 1.52 |
| Gujarat | 1.49 | 1.18 | 0.94 |
| Haryana | 1.20 | 1.05 | 1.05 |
| Himachal Pradesh | 1.10 | 1.13 | 1.50 |
| Jammu & Kashmir | 0.78 | 1.03 | 1.47 |
| Jharkhand | 0.82 | 0.58 | 0.75 |
| Karnataka | 1.41 | 1.06 | 1.44 |
| Kerala | 1.13 | 1.51 | 1.58 |
| Madhya Pradesh | 0.69 | 0.74 | 0.91 |
| Maharashtra | 1.76 | 1.25 | 1.31 |
| Manipur | 0.74 | 1.14 | 0.89 |
| Meghalaya | 0.77 | 0.96 | 0.78 |
| Mizoram | 0.79 | 1.52 | 1.00 |
| Nagaland | 0.83 | 0.95 | 0.95 |
| Orissa | 0.73 | 0.67 | 1.00 |
| Punjab | 1.45 | 1.22 | 1.38 |
| Rajasthan | 0.84 | 0.83 | 0.91 |
| Sikkim | 0.77 | 1.05 | 1.04 |
| Tamil Nadu | 1.17 | 1.15 | 1.17 |
| Tripura | 0.74 | 0.92 | 0.92 |
| Uttar Pradesh | 0.78 | 0.73 | 0.83 |
| Uttarakhand | 0.92 | 1.06 | 1.10 |
| West Bengal | 0.94 | 0.88 | 0.95 |

Source: Computed by the authors

Map – 1



INDIA
Economic Development

Composite Index
> 1.20 (High)
0.90 - 1.20 (Medium)
< 0.90 (Low)

Map – 2



INDIA
Basic Amenities

N

**Composite Index**

> 1.10 (High)
0.90 - 1.10 (Medium)
< 0.90 (Low)

Map – 3



INDIA
Social Development

**Composite Index**
> 1.35 (High)
1.05 - 1.35 (Medium)
< 1.05 (Low)

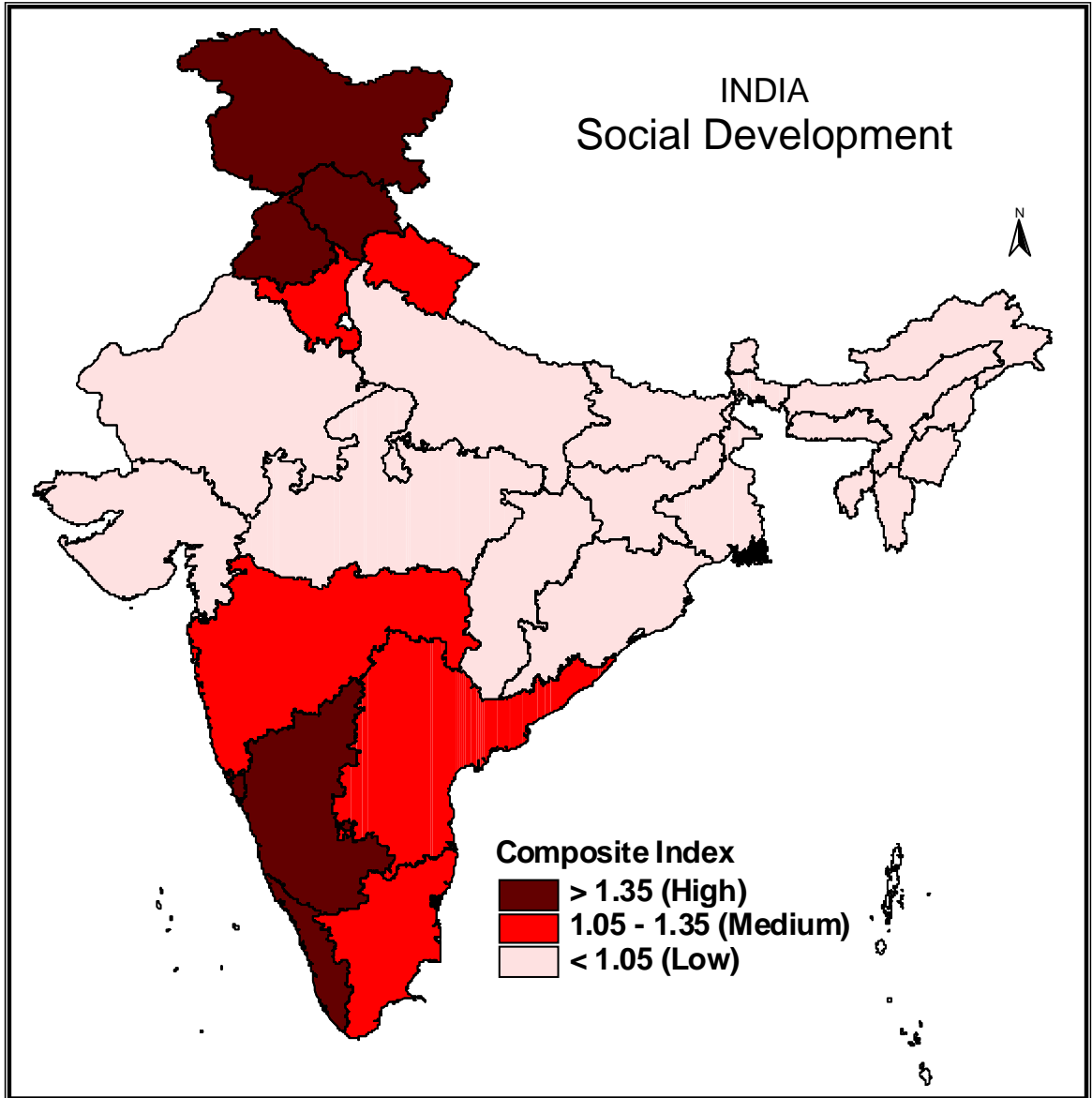**Based on the figures reported in Table 5**

The composite index of amenities exhibits a very high correlation with that of social development (Table 6). This is because they pertain to the similar aspects, capturing inputs or the outcomes. Economic development, too, has a high correlation with social development. This is understandable as the capacity of the governments at the state level to make interventions and bring about social transformations would be higher in relatively developed states. The correlation of economic development with amenities, although statistically significant, is relatively low, which suggests that the problems pertaining to health, education, and access to other amenities cannot be effectively tackled in all the states, just by focusing on economic development.

**Table 6: Coefficients of Correlation among the Three Composite Indices**

|  | Economic | Amenities | Social |
|---|---|---|---|
| **Economic** | 1 |  |  |
| **Amenities** | 0.603 | 1 |  |
| **Social** | 0.645 | 0.680 | 1 |

**Source: Computed by the authors**

## 5. State Interventions and Changing Face of Regional Development

An analysis of the pattern of interdependency among a select set of development and policy linked indicators would be helpful in identifying the factors that are responsible for accentuation of regional inequality. Based on a review of literature and policy documents, 15 indicators have been identified pertaining to economic growth and state intervention in terms of financial allocation under major developmental programmes and the stipulated growth rates in different sectors for the period of the Eleventh Plan. The specifications of the indicators and their average values along with their coefficients of variation (unweighted) are given in Table 7[11].

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[11] The matrix of correlation coefficients is not included in the paper which can be obtained on request from the author.

**Table 7: Select Indicators of Economic Development and State Interventions with their Averages and Coefficients of Variation**

| | Economic Development | Mean | CV |
|---|---|---|---|
| 1 | Growth Rates in State Domestic Product Eighth Plan | 6.0 | 38.8 |
| 2 | Growth Rates in State Domestic Product Ninth Plan | 5.1 | 29.9 |
| 3 | Growth Rates in State Domestic Product Tenth Plan | 7.2 | 27.8 |
| 4 | Poverty Rural 1993 | 35.1 | 37.9 |
| 5 | Poverty Rural 2004 | 25.2 | 48.8 |
| 6 | Poverty Urban 1993 | 29.2 | 44.1 |
| 7 | Poverty Urban 2004 | 24.1 | 52.5 |
| | **State Interventions** | | |
| 8 | Per Capita Allocation of central funds PMGSY | 146.9 | 121.4 |
| 9 | Per Capita Allocation of central funds NRHM | 140.6 | 73.3 |
| 10 | Per Capita Allocation of central funds SSA | 133.0 | 72.3 |
| 11 | Per Capita Allocation of central funds IAY | 43.3 | 78.0 |
| 12 | Per Capita Allocation of central funds Supplementary Nutrition | 23.3 | 58.2 |
| 13 | Growth Target for the Eleventh Plan : Agriculture | 3.9 | 51.3 |
| 14 | Growth Target for the Eleventh Plan : Industry | 10.0 | 25.3 |
| 15 | Growth Target for the Eleventh Plan : Services | 8.8 | 18.6 |

Source: Computed by the authors

The patterns of growth in SDP across states in various Plan periods reveal that these are not strongly correlated, as discussed above. The relatively high correlation between the growth rates registered during the Tenth Plan with the projected figures for the Eleventh Plan shows that the present strategy is to promote growth in relatively less developed, newly formed, and special category states, and that there are some signs of success emerging from the latest growth figures.

It is important to note that the disparities (CV) in the growth rates, both projected and realized, are much less than those in per capita income (Tables 2a and 7). Further, the former has reported a decline over the various Plans while disparities in income have gone up. This implies that despite the avowed bias in favour of less developed states in the current strategy and even with a low inequality in growth rates, that in level of income continues to grow, as suggested above.

A distinct bias in allocation in favour of backward states under all these flagship programmes may be inferred from the negative correlation of per capita allocations with per capita income of the state. Furthermore, the latter shows negative correlation with the share of the states in the Planning Commission Assistance for the current year as also the Twelfth Finance Commission transfers. Poverty levels in rural and urban areas are negatively correlated with per capita income, while their relations with per capita allocation for the central sector schemes are positive. These correlations, although not always statistically significant, reveal a concern on the part of the Central Government to make larger resources available to backward states under the policy of inclusive development.

The allocations, made by the Planning Commission and Finance Commission, however, do not exhibit positive correlation with the proposed income growth rates or the projected per capita SDP, implying that the allocations would not immediately turn into higher growth outcomes. It would, indeed, be unreasonable to expect that these higher allocations in the laggard states by themselves would be able to push up the overall growth in the states or their income levels. One cannot expect the income scenario at the state level to change in five to seven years. There is, thus, 'a strong case for proactive public policy to induce more investment in backward states either through public investment or through fiscal incentives' directed towards infrastructural facilities and basic amenities (Bhattacharya and Sakthivel: 2004)**.**

Many of the relatively backward states that have large shares in population and are experiencing rapid demographic growth have, understandably, not been able to address the problems of underdevelopment and poverty due to their low rates of economic growth, as well as their inability to put up strong anti-poverty programmes. The capacity of their governments to mobilize resources in the market or institutional sources is low. This has come in the way of their launching development projects on their own, despite opportunities provided to them through measures of decentralization and devolution of powers and responsibilities.

It is thus evident that the devolution of resources to state governments through the institutional mechanisms of the Finance Commission and the Planning Commission is inadequate to alleviate the normative budgetary deficits, or meet a desirable level of Plan expenditure in less developed states. The government undertook major expenditure cuts during the 1990s as a policy package of reforms for achieving targeted fiscal 'balance'. Instead of increasing revenues through tax—direct and indirect—massive reductions were made in capital expenditure. As a result, the capital expenditure of central government as a proportion of GDP, declined steadily from 7.01 per cent in 1986–7 to as low as 1.66 per cent in 2006–7 (Figure 4). Public investments in crucial areas like agriculture, rural development, infrastructure development, and industry were scaled down.

The progressiveness in allocation by these central level institutions has declined in recent decades along with the total volume of resources. They could not make larger allocation in favour of less developed states that have large shares in population. The problem has become more serious in recent years due to measures of fiscal reforms with the launching of the programmes of globalization. This has adversely affected the already fragile infrastructure in the less developed states and led to a setback in public services like education, public health and sanitation.

**Figure 4: Revenue and Capital Expenditure of Central Government as Percentage of GDP**
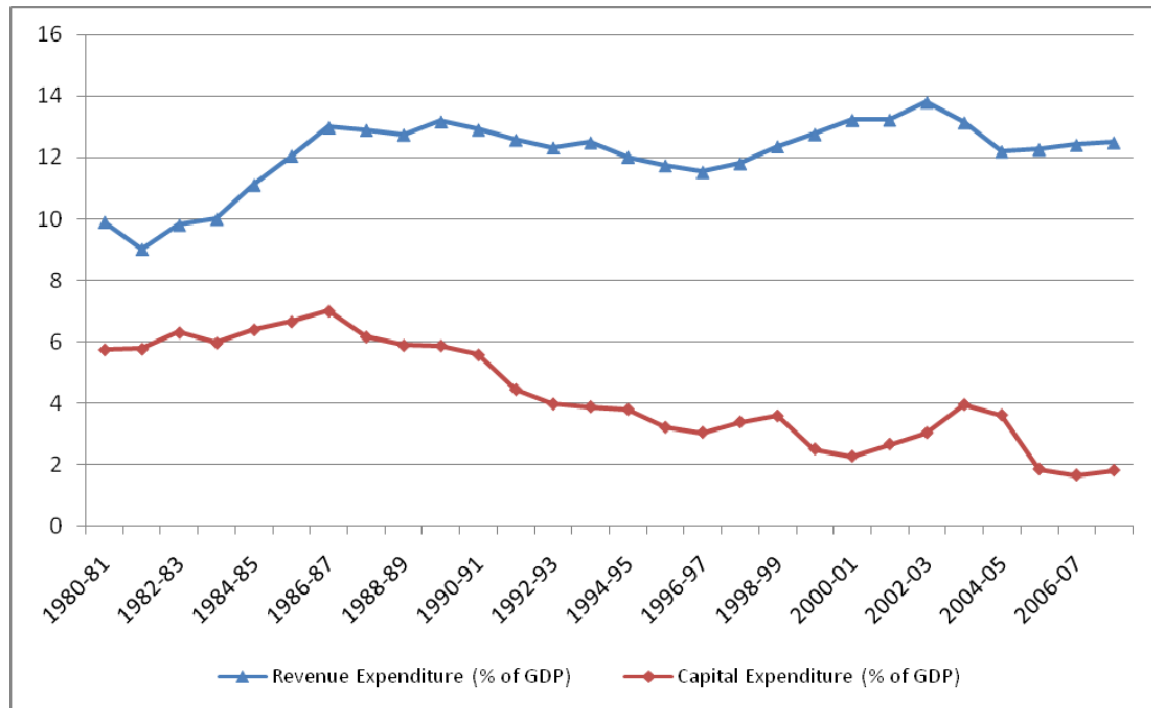


Source: Computed by authors using data obtained from Handbook of Statistics on Indian Economy (2008).

## 6. Urban Structure, Rural Urban Dichotomy and Mobility of Population

As per the neo-classical models of growth and labour mobility, spatial disparity in development, *ceteris paribus*, would result in migration from backward to developed states and regions, which would help in bringing about optimality in the spatial distribution of population. The mobility pattern observed in India fits well in these models. The analysis of interstate migrants, attempted on the basis of Census as well as NSS data, reveals that the less developed states report a high percentage of net out-migrants. The developed states, on the other hand, turn out to be in-migrating in character (Kundu: 2006). In the decades since India's Independence, however, the migration pattern has turned out to be different. There has been a steep and consistent decline in the rates of net out-migration from the backward states like Bihar, Rajasthan, Uttar Pradesh, etc. Most importantly,

Madhya Pradesh and Orissa stand out as exceptions as these report net inflow of population. This could be explained in terms of massive public sector investment, resulting in creation of job opportunities in industry and business. The local population, unfortunately, is unable to take advantage of this due to their low level of literacy and skill. The developed states like Maharashtra, Tamil Nadu, West Bengal, Karnataka, Gujarat, etc. that had attracted large scale in-migration during the colonial period now report decline in in-migration rates (Kundu: 2006)[12].

There has been marginal improvement in internal mobility during the decade of 1991–2001, which can be attributed to transitional factors and globalization[13]. The percentage of migrants as per the 2001 Census, nonetheless, works out to be less than that in 1961 and 1971. The data from NSS for the period from 1983 to 1999–2000, too, confirm the declining trend of migration for males, both in rural and urban areas, although the fall is less than that reported in the Census. The general conclusion thus emerging is unmistakably that mobility of men, which is often linked to the strategy of seeking livelihood (women's mobility getting affected by a host of socio-cultural factors), has gone down systematically over the past few decades. This would certainly come in the way of the poor in deprived regions finding their strategy of survival or improving their economic well-being.

Decline in the rate of migration, despite accentuation of regional imbalance and improvement in transport and communication facilities, is a matter of concern. Scholars have tried to explain this in terms of growing assertion of regional identity, education in regional languages up to high school, adoption of Master Plans and land use restrictions at the city level, etc., all directly or indirectly discouraging migration. This seriously discounts the proposition that the mobility of labour, operationalized through market, would ensure optimal distribution of economic activities in space.

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[12] The state of Gujarat does not show this declining trend due to its growing dominance in the industrial map of India. Similarly, Haryana reporting high in-migration rates during recent decades can be explained in terms of migration from Punjab due to political instability and communal tensions.

[13] Many of the illegal migrants from neighbouring countries being recorded as interstate migrants could also explain the rising migration trend in the 1990s.

In a fast globalizing economy like India, new employment opportunities are coming up in selective sectors and in a few regions/urban centres. While the poor constitute a large proportion among the migrants, a substantial number belong to the middle and high income categories, grabbing the new opportunities thrown up by the process of globalization. It would, therefore, be erroneous to consider most migrants to be destitute or economically and socially displaced persons, moving from place to place as a part of their survival strategy.

The fact that the percentage of migrants has declined and their economic and social status is better than that of non-migrants and has even improved over time, reflects barriers to mobility for the poor. With the present rigidities in the agrarian system, growing regionalism, changes in skill requirements in labour market etc., the emerging productive and institutional structure in the cities too has become hostile to newcomers. This has made the migration process selective wherein poor and unskilled labourers are finding it difficult to access the livelihood opportunities coming up in developed regions and large cities. A major factor responsible for persistence of high poverty in the backward states is the difficulty encountered by the poor trying to move into developed states.

The low rate of urbanization and declining percentage share of migrants, particularly among urban males, can be attributed to provision of basic amenities based on market affordability and inhospitable social environment in cities and towns,. The pattern is similar for their female counterparts, although the rate of decline in migration in their case is less than that noted for the male counterpart. A fall in the rate of urbanization during 1981–2001 confirms this thesis and questions the UN projections of urban explosion in India and the Asian region. Urban population grew at an annual exponential rate of 3.8 per cent per annum during 1971–81 which was the highest in the last century. Despite the growing rural-urban (RU) disparity, improvements in transport and communication facilities, modernization resulting in relaxation of traditional social barriers, etc., the rate came down to 3.1 per cent and 2.7 per cent respectively during the 1980s and 1990s.

The pattern of urban growth (and urban rural growth differential) at the state level during the 1970s and 1980s showed negative or no relationship with income or consumption expenditure in per capita terms, share of industries in state income, agricultural productivity, etc. Many of the backward states that experienced rapid demographic growth recorded rapid urbanization, resulting in increased pressure on their urban infrastructural facilities and basic amenities. One would infer the presence of push factors behind RU migration. This nonetheless suggests that the poor in rural areas in backward regions were able to obtain a foothold in urban centres and seek livelihoods. The decline in the rate of urbanization in the 1990s, however, suggests that this process has had a setback due to the new system of governance and infrastructural improvement programmes in the cities, not merely discouraging the growth of slum population, but also evicting the existing squatter settlements. Urban growth has, thus, become exclusionary in character, exhibiting positive correlation with indicators of infrastructural and economic development, both in rural and urban areas, and a negative relation with the percentage of poor or their inflow over time.

A cross classification of migrants[14] across consumption expenditure categories reveals that at the macro level, economic deprivation is not the critical factor in migration decisions of men, both in rural and urban areas. The migration rate is high in the highest monthly per capita expenditure category, which goes down systematically with the level of expenditure, the rate being the lowest in the lowest class in rural areas. The same is valid in urban areas as well.

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[14] A major limitation confronting this exercise is the sampling design of NSS which is supposed to be appropriate for generating estimates of consumption expenditure and poverty only at the state and (NSS) region level. Recent publications of NSS point out that as a result of inadequate sample size (largely due to difficulties in increasing the field staff), the estimates have had high standard errors and consequently low reliability, in a large number of states. It is difficult to overcome this limitation unless the sample size is increased. Without that, the identification of the factors explaining the incidence of poverty for different size class of urban centres at the state level would have problems of reliability. These would, however, be less vulnerable to sample size and report lower standard error if obtained only at the national level. Keeping this in view, the present paper analyses the variations in the incidence of poverty and for different size class of towns only at the national level.

Based on the differences in consumption expenditure of migrant and non-migrant households in rural and urban areas, one can argue that migration is an instrument of improving economic well-being. However, it is not only the poor who benefit from it as the non-poor constitute a large segment of the migrants. Economic gains of migration are higher in large cities compared to lower order cities/towns (Kundu and Sarangi: 2007). Further, education or skill emerges as the most important factor in reducing the risk of a person falling below the poverty line, both for migrant and non-migrant population, irrespective of the size class of cities/towns. One observes that better-off sections of the population with higher levels of skills find it easier to get absorbed in the city economy and avail the 'opportunity' offered through migration. Unfortunately, poor and unskilled male labourers (seeking absorption in informal activities as casual workers) are finding it increasingly difficult to become a part of the process and avail the benefits in large cities. Understandably, their migration rate has gone down, which is reflected in a significant decline in the percentage of poor in metropolitan and Class I cities during the last decade and a half. They are able to obtain a foothold in small and medium towns but here opportunities for employment and poverty alleviation are low, as noted above. As a result of these factors, migration for poverty alleviation has become a less important component in the mobility stream and it is likely to become an even smaller one over time.

The most disconcerting fact is that there has been a deceleration in rural to urban migration during the 1990s despite increase in economic inequality, which confirms the fact that urban centres have become less hospitable and less accommodating for the poor. The propositions of spatially unbalanced growth through 'dispersal of concentrations' and then of reaching out to the poor through a human settlement strategy (World Bank, 2009), therefore, needs to be examined with empirical rigour. Migration becoming an instrument of sharing the benefits of uneven growth across states and districts needs to be questioned in the context of increasing social and economic costs of migration which the conventional models, including those employed in this paper, fail to incorporate or highlight.

## 7. Identification of Lagging States for Targeted Intervention

The identification of lagging states, as also the factors constraining these in picking up growth momentum and thereby resulting in accentuation of inequality, has not been very definitive in India. The planning apparatus in the country being essentially centralized, there has not been serious empirical research to determine the policies that drive the growth process at the state level. Indeed, without the state-focused studies, it is impossible to answer this issue with a reasonable level of empirical rigour. The neglect of state-level policies and decentralized governance has led to persistence of poverty surrounding islands or enclaves of economic affluence.

From the 1950s through to the '70s, attempts were made, mostly as a part of the federal system, to determine and guide investments in different states and regions, as also to control credit and financial markets. With the launching of the reform measures, the share of public investment—mostly made by the central government agencies and that backed up by targeted credit delivery—in the overall investment has been steadily declining. Globalization has led to erosion of capability of the federal machinery to determine the overall resource allocations in the economy and control the institutional framework at the state level, which is responsible for micro level programme implementation.

Based on the figures of per capita SDP and growth in SDP upto 2004-05, a set of eight states was identified as economically lagging in our initial exercise presented in Section 3. These states had very high poverty ratios in 1993-94, with Assam (41 per cent), Bihar (including Jharkhand) (55 per cent), Madhya Pradesh (including Chhattisgarh) (43 per cent), Orissa (49 per cent) and Uttar Pradesh (including Uttarakhand (41 per cent). These states altogether had 44 per cent of the Indian poor in 1973–4, 48 per cent in 1987–8, and 52 per cent in 1993–4. These states accounted for 60 per cent of the Indian poor in 2004–5.

The north-eastern states, except Assam, are excluded from the category due to

their relatively high growth in income in recent years, as also for enjoying higher per capita central government allocations. It would be important that the central government pursues this policy of giving greater attention to these special states due to economic, social, as also political reasons. The non-governmental organizations, especially those with international character, may then focus on the other, less developed states in the country, as identified above. The accentuation of regional inequality, when a weighed measure of disparity is used, reveals that states that have a relatively higher share in population have received less of central government transfers in per capita terms and are more deprived in terms of economic and social development outcomes as also access to basic amenities.

The analysis in the paper shows that the bottom nine positions in terms of the composite index of economic development are occupied by the eight lagging states identified above. Jammu and Kashmir, however, occupies the fifth position and Uttarakhand is pushed out of the list. Among the identified lagging states, the latter is the only one which records a relatively high score of economic development. It can be bracketed with the other special category state of Himachal Pradesh, as they enjoy a relatively higher level of economic well-being (Table 5). One must note that Rajasthan, which was not identified as a lagging state in the earlier analysis, belongs to the list of the bottom nine in terms of economic development. This is because the state registered significant decline in its growth in SDP in recent years, and consequently, it went down in terms of the composite score on economic development

It is noted that Jammu and Kashmir, along with many others in the North-East, report low scores in economic development (Table 5). It can, however, be argued that the figures of per capita SDP in all these states do not adequately capture economic well-being because of serious data problems. A large part of the income derived by households from land resources goes unrecorded. Also, governmental subsidies tend to distort the prices, and consequently, the income figures do not reflect the real well-being of the population. More importantly, all these states, except Assam, are doing reasonably well in terms of amenities and social

development. It is, therefore, proposed that these states need to be distinguished from the other backward states in the country. In view of the location and geo-political factors, it is argued that development of these states may be best left to the central and state governments, as international NGOs may face operational and logistic problems. These problems and data difficulties are less serious in case of Assam, and hence, its inclusion in the list of laggard states can be justified. Uttarakhand, however, is not among the bottom nine states in terms of any of the three composite indices. It is a special category category state but does not emerge as extremely deprived in terms of different dimensions of development. Even in terms of per capita income and growth in SDP, it is at the top among the less developed states. One may, therefore, propose to replace Uttarakhand by Rajasthan, the latter belonging to the low category as per all the three dimensions of development.

**Table 7: States with Population over 5 million ranked by Composite Indices of Development in Selected Dimensions**

| S.No | States | Economic | | Amenities | | Social |
|---|---|---|---|---|---|---|
| 1 | MP | 0.69 | Jharkhand | 0.58 | Bihar | 0.66 |
| 2 | Bihar | 0.72 | Bihar | 0.58 | Jharkhand | 0.75 |
| 3 | Orissa | 0.73 | Orissa | 0.67 | Assam | 0.81 |
| 4 | Assam | 0.75 | Chhattisgarh | 0.68 | UP | 0.83 |
| 5 | J & K | 0.78 | UP | 0.73 | MP | 0.91 |
| 6 | UP | 0.78 | MP | 0.74 | Rajasthan | 0.91 |
| 7 | Jharkhand | 0.82 | Rajasthan | 0.83 | Gujarat | 0.94 |
| 8 | Rajasthan | 0.84 | Assam | 0.85 | West Bengal | 0.95 |
| 9 | Chhattisgarh | 0.89 | West Bengal | 0.88 | Orissa | 1.00 |
| 10 | Uttarakhand | 0.92 | AP | 0.98 | Chhattisgarh | 1.04 |
| 11 | West Bengal | 0.94 | J & K | 1.03 | Haryana | 1.05 |
| 12 | HP | 1.10 | Haryana | 1.05 | AP | 1.10 |
| 13 | Andhra Pradesh | 1.12 | Karnataka | 1.06 | Uttarakhand | 1.10 |
| 14 | Kerala | 1.13 | Uttarakhand | 1.06 | Tamil Nadu | 1.17 |
| 15 | Tamil Nadu | 1.17 | HP | 1.13 | Maharashtra | 1.31 |
| 16 | Haryana | 1.20 | Tamil Nadu | 1.15 | Punjab | 1.38 |
| 17 | Karnataka | 1.41 | Gujarat | 1.18 | Karnataka | 1.44 |
| 18 | Punjab | 1.45 | Punjab | 1.22 | J & K | 1.47 |
| 19 | Gujarat | 1.49 | Maharashtra | 1.25 | HP | 1.50 |

| 20 | Maharashtra | | 1.76 | Goa | | 1.51 | Goa | | 1.52 |
| 21 | Goa | | 1.90 | Kerala | | 1.51 | Kerala | | 1.58 |

Source: Computed by the authors

The subsequent analysis shows that these eight states are also characterized by a low level of urbanization and deceleration in the rate of urban growth in the past couple of decades. These have been highly out-migrating in the years after Independence, but the rate of out-migration has declined in the last few decades. These states also have a highly lopsided urban structure with a large percentage of urban population being concentrated in a few large cities. Further, there has been significant deceleration in the economic and demographic growth in their small and medium towns, many of these getting declassified from the urban category while several others face serious threat on this account.

Many of the state governments have taken initiatives for creating the necessary policy framework and supporting infrastructural environment to attract private capital from within and outside the country. This has created an unhealthy competition among states wherein the lagging states stand at a disadvantage. The challenge of establishing a system of governance in these states which can maintain law and order, provide quick and effective dispute resolution mechanism through an adjudication system, and attract industrial and infrastructural investment, would now have to be taken up. The states must also mobilize internal resources to meet the infrastructure deficiency in critical areas and empower the general mass of the population socially to partake in the development process. As provision of basic amenities and social development fall largely within the purview of the states and their capabilities to tackle the problem is very low due to their levels of development, serious development deficits have persisted over the years. The international NGOs can play an effective role in addressing these problems.

The paradigm shift in the formulation and implementation of the Eleventh Plan is reflected in the greater role being assigned to the state and local governments, along with civil society organizations. Detailed guidelines have been issued to the

states for preparing district plans and sub-plans through the district/block level committees and other Constitutional bodies created for this purpose. In fact, these plans are a pre-requisite for accessing funds in many of the new central sector schemes. This shift would hopefully provide 'an institutional basis for the regular and systematic study of intra-state disparities as part of the Annual Plan and Five Year Plan processes' (Planning Commission: 2008) and help in addressing the root causes responsible for accentuation of inequity and perpetuation of poverty. The new paradigm of participatory governance, backed up by area and social group targeting, can help these lagging states in preparing and implementing a comprehensive plan for infrastructure, basic amenities and social development in collaboration with the major national and international partners.

## References

Ahluwalia, M. S. (2000), 'Economic Performance of States in Post Reform Era', *Economic and Political Weekly*, Vol 35, No. 19, pp 1638-48, May 2000

Ahmad, Ahsan and Ashish Narain (2008), 'Towards Understanding Development in Lagging Regions of India', paper presented at the Conference on Growth and Development in the Lagging Regions of India, Administrative Staff College of India, Hyderabad

Bhattacharya, B.B. and S. Sakthivel (2004): 'Regional Growth and Disparity in India: Comparison of Pre- and Post-Reform Decades', *Economic and Political Weekly,* Vol 39, No. 10, pp. 1071-7, March 2004

Datt, G. and M. Ravallion (2002), 'Is India's Economic Growth Leaving the Poor Behind?' *Policy Research Working Paper 2846*, The World Bank, Washington DC

Devarajan, S. and I. Nabi (2006), *Economic Growth in South Asia,* World Bank, South Asia Region, Washington DC.

International Institute of Population Sciences (2007) *National Family Health Survey (NFHS-3) vol I*, International Institute of Population Sciences, Mumbai

Kundu, A. (2006), 'Globalization and the Emerging Urban Structure: Regional Inequality and Population Mobility', *India: Social Development Report*, Oxford, New Delhi

Kundu, A. and N. Sarangi (2010), ''Inclusive Growth' and Income Inequality in India under Globalisation: Causes, Consequences and Policy Responses', *Proceedings of the Conference of Regional Disparities in Asia,* UNDP, Colombo

Kundu, A. and N. Sarangi (2007), 'Migration, Employment Status and Poverty: An Analysis Across Urban Centres in India', *Economic and Political Weekly*, Vol 42, No. 04, pp 301-6, January, 2007

Planning Commission (2008), *Eleventh Five Year Plan 2007-2012, Vol. I*, Government of India, New Delhi

Sivaramakrishna, K. C., A. Kundu, and B. N. Singh (2005), *Handbook of Urbanisation,* Oxford University Press, New Delhi

World Bank (2009), *World Development Report 2009: Reshaping Economic Geography*, Oxford University Press, New York