



RIPUDAMAN SINGH<sup>1</sup>

## Regional disparities in the post reform India

### ABSTRACT

Regional disparities in the levels of development have once again ignited the debate on the existing inequalities between the developed and underdeveloped countries in general and between different regions within these countries in particular. In case of a developing country like India, it becomes more important to study these disparities as the new economic policies have further widened the gap between the rich and the poor states. The present study intends to analyse the patterns of the regional disparities in the levels of development in India. Considering this, four indicators have been selected to identify the spatial patterns of regional disparities in India. The Human Development Report technique is used to work out the deprivations score of each district and to convert it into a development score. The development scores of each district on four indicators have been summed up to arrive at the district's composite development index.

*Keywords: India, districts, new economic policy, regional disparities*

### INTRODUCTION

It is a proven fact that in a large economy, different regions with varying resource bases and endowments support dissimilar growth paths over time (Williamson, J. G. 1965). India, not being any exception, is facing and resolving the issue of regional disparities. Centralized planning was advocated and adopted after Independence to manage the problem. However, despite several efforts, the situation remained unresolved. The emergence of the maoist affected 'red corridor' in poverty stricken areas of the country is a manifestation of consequences which tend to flow from persistent backwardness experienced in parts of the country.

The New Economic Policy, which was implemented in the early 1990's and gave a broad based boost to the Indian economy, is being questioned now for the deepening inequalities in different spheres. A number of recent studies (Kant, S. 1999; Nagaraj, R.A. et al., 1998; Rao, M.G. et al.,

---

<sup>1</sup> Lovely Professional University, Department of Geography, School of Social Sciences, Phagwara, Punjab, India.  
E-mail: ripudaman.17178@lpu.co.in and ripudaman1@hotmail.com

1999; Shand, R. and Bhide, S. 2000; Ahluwalia, M.S. 2000 and 2002; Krishan, G. 2001; Deaton, A. and Dreze, J. 2002; Singh, N. et al., 2003; Dholakia, R. H. 2003; Ghosh, P.P. and Narayana, N.S.S. 2005; Kumar, N. 2005; Mazumdar, T. 2005; Nayyar, G. 2005; Ghosh, M. 2006; Balakrishnan, P. and Parmeswaran, M. 2007; Jayadev, A. et al. 2007; Kar, S. and Sakthivel, S. 2007 among others.) brought forth the observation that regional disparity in India widened during the 1990's, causing serious concern. The States like Maharashtra, Gujarat, Tamil Nadu, West Bengal, Karnataka and Delhi, having better infrastructure, received higher investments and the regional disparities situation aggravated further (Kant, S. 1999). The prime objective of the present research exercise is to test the above observation.

Looking into the trends of the Indian economy, one finds that the growth rate of gross domestic product (GDP) has accelerated since the 1980s. From the 1950s to the 1980s the average annual GDP growth rate was only 3.6 per cent, which increased to 5.6 per cent in the 1980s. After the initiation of economic reforms in the 1990s, it accelerated to 6.0 per cent and more (Bhattacharya, B.B. and Sakthivel, S. 2004). The Foreign Direct Investment which was merely US dollars 155 million in 1991 increased to US dollars 4.3 billion by the year 2003 (Kumar, N. 2005). On the other hand, public sector investment witnessed a sharp decline due to fiscal constraints.

Before examining the patterns of regional disparity, as revealed by an analysis of district level data, it is imperative to draw a sketch of the new economic policy adopted by India in the early 1990's.

### NEW ECONOMIC POLICY

The fact that 1991 was a critical year in India's recent economic history is well known. In this turbulent year of monsoon failure, chaotic politics and a severe balance of payments crisis, the Indian government introduced the "*New Economic Policy*" (NEP) that signaled a break away from the past (Sengupta, A. et al., 2008). It marked a major turning point for the Indian economy. Not only did it affect the economy in terms of output but also brought structural changes to various macroeconomic relationships (Ghosh, P.P. and Narayana, N.S.S. 2005). It carried the promise of a systemic and multi-arena approach to liberalization, privatization and globalization.

Prior to economic reforms, the main thrust of the government policies was to make provisions for social services, subsidization of basic and essential items and to regulate the economy through various administrative controls. The provision of social services and subsidization of basic and essential items ended up in the siphoning off of public funds into the hands of a few well-off people.

Two broad components of the New Economic Policy included stabilization programmes and structural adjustments (*Table 1*). These were initiated to amend failures of the past. The main features of stabilization were the curtailment of public expenditure, reduction in subsidies and free convertibility of the rupee. On the other hand, structural adjustments covered trade policy, industrial policy, agricultural policy, human resource and energy issues. Herein involved are the policies of liberalization, privatization and globalization.

With the passage of time, these reforms have provoked a debate wherein its proponents complained that its pace was slow (Ahluwalia, M.S. 2002); others were worried over its role in increasing poverty

and inequalities (Jha, P. and Negre, M. 2007). It will be pertinent here to review the studies on regional disparities published since 2000.

Tendulkar, S.D. and Bhavani, T.A. (2007) observed that economic reforms strengthened the Indian economy. They improved growth rates without adversely affecting the trends in reduction of poverty (Nagaraj, R. 2000) and comparatively Dasgupta, D. (2000) found some divergences during the reference period. Jha, R. (2000) suggested that examining the dynamics of growth, inequality and poverty from an aggregate of perspectives can be misleading because there is divergence in some cases and convergence in others. Ahluwalia, M.S. (2000), while investigating the economic performance of states in the post-reform period, found that Punjab was five times better off than Bihar, on the parameter of per capita income.

Kant, S. (1999) believed that with the impact of the new sectoral policies, increased economic growth would polarize towards a few favorable locations, having the advantage of economies of agglomeration. The spatial structure of the Indian economy may retreat to the colonial pattern wherein port cities flourished at the cost of their hinterlands. The suction process would increase and regional and urban-rural inequalities would be accentuated. He confirmed the widening regional disparities in the post-reform period. Coastal states, along with high income states, have benefited more from the flow of foreign direct investments (FDI) as compared to states having a peripheral location, disturbed law and order situation and poor economic and social infrastructure.

Dev, M.S. and Mooij, J. (2002) found that during the 1990's India's social sector expenditure was lower than that in the 1980's and also less than that of most of the developing countries. Particularly in the three states of Bihar, Uttar Pradesh and West Bengal, the expenditure in the social sector is the least and these were gradually drifting away from the high income states. Kurian, N.J. (2001) observed that bigger investments in rich states would further aggravate the problem of disparities. He added that the stabilization of population in the BIMARU (Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh) states was important for their sustained economic growth.

Mukhopadhyay, H. and Das, K.K. (2003) found fiscal mismanagement resulting in horizontal imbalances which could have been reduced with the development of the poor states. Sundram, K. and Tendulkar, S.D. (2003) noted that amongst the 15 major states, 12 recorded improvement in the poverty ratio while Assam, Madhya Pradesh and Orissa stagnated. Noorbakhsh, F. (2003) found evidence of increased regional disparities in India at the state level. Debroy, B. and Bhandari, L. (2003) identified 69 of the most backward districts of India, a majority of which were concentrated in Bihar (including Jharkhand), Uttar Pradesh, Madhya Pradesh (including Chhattisgarh), Orissa and West Bengal. On the other hand, convergence was found in some variables of economic growth at the state level during the 1976-77 to 2000-01 period, including the post-reform era (Adabar, K. 2004).

Bhattacharya, B.B. and Sakthivel, S. (2004), while attempting a comparative picture of the pre and post-reforms period, observed that growth of the agricultural sector was outpaced by the service sector during the nineties. It enabled urban areas and advanced states to get ahead of the rural and backward states. Kar, S. and Sakthivel, S. (2007) found that in the Indian context, there was no fixed relationship between the high growth rates and trends in regional inequality. While the high growth

rates during the eighties, led to a diminishing inequality between the industrial and service sectors, the reverse took place after the reforms.

Table 1. Spatial implications of new economic policy

| Component             | Policy parameters                       | Spatial implications  |
|-----------------------|---|---|
| Stabilisation         | Curtailment of public expenditure       | Will have an adverse effect on social expenditure, employment generation and poverty alleviation in hill, tribal, drought prone and other backward areas.   |
|                       | Reduction in subsidies                  | Will affect negatively the agricultural development in Bihar, Orissa, Madhya Pradesh, West Bengal and Uttar Pradesh and disparities in agricultural development would widen.  |
|                       | Devaluation and convertibility of rupee | Will benefit states like Punjab, Kerala, Gujarat, Tamil Nadu and Goa, where the flow of remittances is large.   |
| Structural adjustment | Trade policy                            | Will enhance investment attraction of big urban industrial centres; cause acceleration in rural-urban migration; and sharpen core-periphery contrast.   |
|                       | Industrial policy                       | Mineral rich backward states, such as Bihar, Orissa and Madhya Pradesh, to benefit from abolition of freight equalization policy and foreign direct investment in mines and minerals.   |
|                       | Agricultural policy                     | Export orientation in agriculture to benefit the rice and cotton producing states of eastern and southern India; sugarcane producing states of Uttar Pradesh, Bihar, and Maharashtra and oilseeds producing states of Rajasthan, Karnataka, and Madhya Pradesh will be the losers due to competition in imports; cropping pattern likely to change in favour of export crops and may cause damage to ecology. |
|                       | Human resource                          | Rural-urban and regional disparities in social development and infrastructural facilities will increase; privatization policy in education and health care to hit rural and backward areas harder.  |
|                       | Energy policy                           | Higher electricity tariff rates in the wake of privatization to hit small-scale industry, particularly in states like Punjab and Haryana; and tube-well irrigation to suffer especially in poor states like Orissa, Bihar and Madhya Pradesh.   |

Source: Kant, S. 1999. Spatial Implications of India's New Economic Policy. *Tijdschrift voor Economische en Sociale Geografie* 90. (1): 80-96.

Ghosh, P.P. and Narayana, N.S.S (2005) found that economic reforms have affected the Indian economy in a big way. The private final consumption expenditure (PFCE), investment (GCF) and all the GDP variables, except that of services, were found to be substantially higher during the post-reforms period than what they would have been in the absence of reforms. While, in contrast, reforms made a marginal impact on investment in the agricultural sector, which has led to the widening of

gap between urban and rural areas. Deaton, A. and Kozel, V. (2004) found evidence that the official estimates of poverty reduction during the 1990's were too optimistic, particularly for rural India. Nair, K.R.G. (2004) found increased regional disparities in socio-economic development after the reforms. Nayyar, G. (2005), while analyzing growth and poverty in rural India, observed that high growth was associated with significant poverty reduction in Maharashtra, Tamil Nadu, Karnataka and Haryana. In comparison, the slow growth was responsible for persistent poverty in Assam, Bihar, Orissa, Madhya Pradesh and Uttar Pradesh.

Reddy, G.P. (2006), while criticizing the recommendations of the Twelfth Finance Commission, remarked that fixing borrowing limits based on capacity to service debts and uniform targets for fiscal deficit reduction went against the interests of backward states and further accentuated regional imbalances. Bhaduri, A. (2008) stated that the much hyped story of India's economic growth hid the truth about heightened inequality and blatant biases against the poor.

A two way nexus between economic growth and human development was noted by Ghosh, M. (2006). Evidence of regional convergence in human development despite considerable divergence in real per capita income was seen. It signified that poor states failed to catch up with the rich states, in terms of per capita income, did manage to come closer in terms of human development. Singh, R.D. (2005, 2009), in a district level study of regional disparities in the post-reforms period found that western India was relatively more developed than eastern India.

Pal, P. and Ghosh, J. (2007) analyzed the survey of recent trends in inequality in India, especially after the adoption of the New Economic Policy. They found diverging trends in the levels of development. Dev, S.M. and Ravi, C. (2007) found that inspite of higher overall growth, the extent of decline in poverty in the post-reform period was slow, increasing inequality significantly in the post-reform period. Jayadev, A. et al. (2007) examined the patterns of wealth disparities in India and found an increase in wealth levels in the country across all sections of society, accompanied by a small yet perceptible rise in the level of interpersonal wealth inequality. There was a sharp difference in the growth rate of wealth holdings in the middle income/upper income states vis-à-vis poor states. The faster growing states were noted for a greater increase in wealth inequality.

Nayyar, G. (2008), in a panel study for 16 major states for the period from 1978-79 to 2002-03, found that states were not converging to identical levels of per capita income in the steady-state. He added, however, that once factors which affected steady-state levels of income were controlled, the poorer states showed a faster growth rate than the richer ones. None, the less, inter-state disparities widened due to differing levels of private and public investment and negligible equalizing impact of central financial assistance. The Planning Commission (of India) (2008), while examining the disparity in per capita GSDP found, the gini coefficient between lowest and highest per capita GSDP states have increased from 0.1917 in 1993-94 to 0.2771 in 2002-03 period.

Rangrajan, C. and Srivastava, D.K. (2008) reviewed the fiscal transfer arrangements in India in the context of resolving vertical and horizontal imbalances. In respect of the vertical dimension, it may be considered desirable to continue maintaining stability in the share of the centre and states in combined tax revenues of the system after tax devolution, as long as there were no basic changes in the division of responsibilities between the two. With respect to the horizontal dimension of transfers,



the equalisation approach to transfers, followed by some of the important federal systems like Canada and Australia, is found suitable for India.

Literature on regional disparities in India in the post-reforms period is diverse and written from different perspectives with economists producing more treatise than geographers. Most of the studies found widening disparity during the period (Kant, S. 1999; Krishan, G. 2001; Kar, S. and Sakthivel, S. 2007). Others noticed a converging trend in some parameters. Ghosh, M. (2006) found strong evidence of regional convergence in human development despite considerable divergence in real per capita income. Nagaraj, R. (2000) and Tendulkar, S.D. and Bhavani, T.A. (2007) observed that economic reforms had improved growth rates and strengthened the Indian economy.

The present study is an attempt to look into the emerging patterns of regional disparities in the post-reforms period of India, beginning with the adoption of the New Economic Policy in July 1991. New contours on the development map of India could be attributed to the processes of liberalization, privatization and globalization.

### INDICATORS

To represent various dimensions of development encompassing the economic, social and other parameters, it was essential to make a judicious and appropriate selection of indicators. These indicators should capture the spirit of the theme under study in a comprehensive manner. They should be quantifiable, and not overlap. Considering these, the present study selected four indicators to identify spatial patterns and trends of regional disparities in India. These are population above poverty line, female literacy rate, population of non-agricultural rural workers, and degree of urbanization. While data on percentage of population above the poverty line was worked out by reversing the data on the population below poverty line, as given in the book, District Level Deprivation in the New Millennium (Debroy, B. and Bhandari, L. 2003), for the other three indicators, the data was taken from the Census of India.

Population above poverty line represents the economic well being of the people. Female literacy reflects the status of women in society and its level of social development. The proportion of rural non-agricultural workers represents the diversification of rural economy and indicates the level of rural development. Percentage of urban population is a proxy for the modernization of a society. These indicators were selected to represent the economic, social, rural as well as modernization dimensions of development in India at the district level.

#### Population above poverty line

The World Bank and other agencies of the UN system define the 'poor' as *'those who do not have access to clean drinking water, easy access to facilities for curative and preventive health care and suffer, therefore, from various epidemic diseases. Furthermore, they are ignorant and illiterate for lack of access to or unwillingness to use facilities for education of their children and literacy for adults'*. In India, the poor are *'those who do not get enough calories from cereals, cookery oil, sugar and other foods to maintain themselves in health'*. There is an official poverty line. It is essentially the cost of a basket of commodities (in which share of expenditure on food items is over 80 per cent and

the remaining 20 per cent goes to other essential items like housing and clothing) that could provide 2400 calories to an individual in the rural areas and 2100 calories in an urban place. In 1979, the Planning Commission of India worked this out as Rs. 49.09 per person per day for the rural population and Rs. 56.64 for the urban population, at 1973-74 prices.

The indicator of *population below poverty line* represents the backwardness of a region. Thus, *population above poverty line* can be taken as an indicator of development. In 2001, 342 districts of the 593 districts in India recorded at least 74.01 per cent (national average) of their population to be above the poverty line. *Figure 1* shows the distribution of these districts. Most of these are located in the Northwest India, the Western Coastal region, parts of Eastern Coastal region, the Ganga delta, and parts of the Northeastern region.

Comparatively most districts located in the Ganga plain, North-eastern peninsula and Assam recorded the figure below the national average. About 48 per cent of India's poor are concentrated in three states i.e Uttar Pradesh (including Uttaranchal), Bihar (including Jharkhand) and Madhya Pradesh (including Chhattisgarh). Maharashtra, West Bengal and Orissa account for another 22.5 per cent. Collectively, more than 70 per cent of India's poor belong to these six states (Mehta, A.K. and Shah, A. 2004).

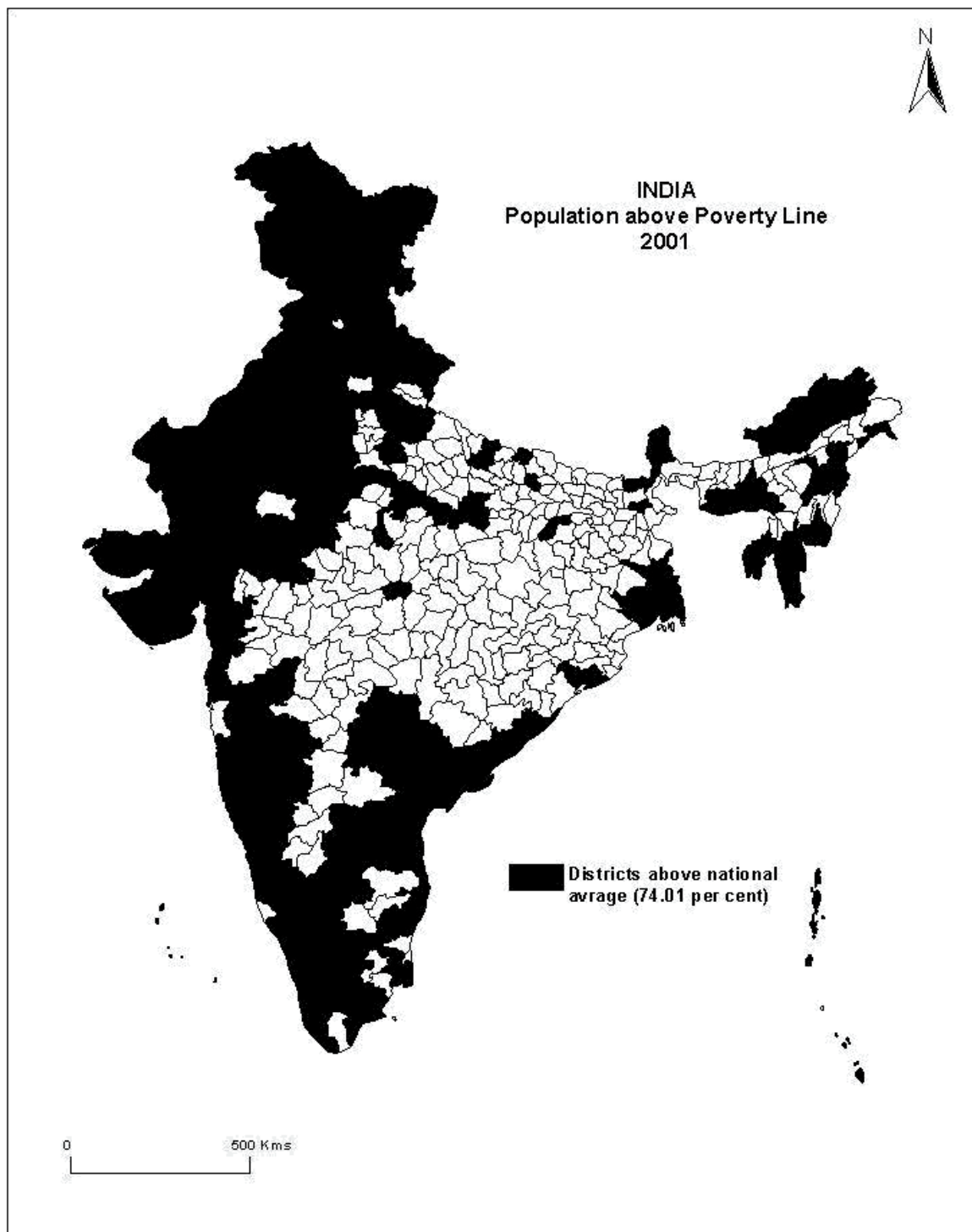
Some districts in Nagaland, Andaman & Nicobar Islands and Jammu & Kashmir have their entire populations above the poverty line. By contrast Koraput, Bolangir and Kalahandi (KBK) districts of Orissa recorded not even one fifth of their population to be above the poverty line. Majority of the districts in the eastern states of Orissa, Bihar, Jharkhand, Chhattisgarh, West Bengal and Assam as also in the Central states of Uttar Pradesh and Madhya Pradesh are placed below the national average on this count.

### **Female literacy**

The role of education in the development process is an established fact. Classical economists like Adam Smith, Alfred Marshall, Engles, John Stuart Mills and Karl Marx, highlighted this association. Many of the modern scholars, including Dreze, J. and Sen, A. (1995) reconfirmed this relationship. Apart from the economic and social benefits of education, female literacy, in particular, greatly improved the ability of a household to manage basic child care, regulate nutrition, and ensure health care. According to a Chinese proverb, "*If you plan for a few years, earn money; for ten years, then plant trees; but if you plan for a hundred years, educate the women*".

Fields, J. (1980), Psachropoulous, G. and Woodhall, M. (1985), and Tilak, J.B.G. (1989) have empirically validated the role of education in reducing absolute poverty. Kerala is a case in point showing how female literacy was impacting on poverty reduction while states like Bihar, low on female literacy, stagnated in poverty.

Fig. 1. India: Population above poverty line in 2001. The national average for Population above poverty line= 74.01%



A close link between female education and family planning is also observed and it is being considered as a positive population management indicator (Government of India, 1993). *Female literacy* is indeed a reliable indicator of the social development of any region.

The Census of India 2001 recorded 65.40 per cent of the country's population in the 7+ age group as literate. A wide gap (about 20 % points) between the male literacy rate (75.65 per cent) and female literacy rate (54.16 per cent) was observed. This pattern is typical of all societies having a strong patriarchal base where progress of the female is a more sensitive index of social change.



At the state level, female literacy rates were recorded as the highest in the coastal regions of Gujarat, Maharashtra, Goa, Kerala and Tamil Nadu and North-Eastern India. On the other hand, Jammu & Kashmir, Rajasthan, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar and Jharkhand were noted for low female literacy rates.

At the district level, Nainital (91 per cent) in Uttaranchal recorded the highest female literacy rate while the lowest rate was recorded in Kishanganj district (15 per cent) of Bihar.

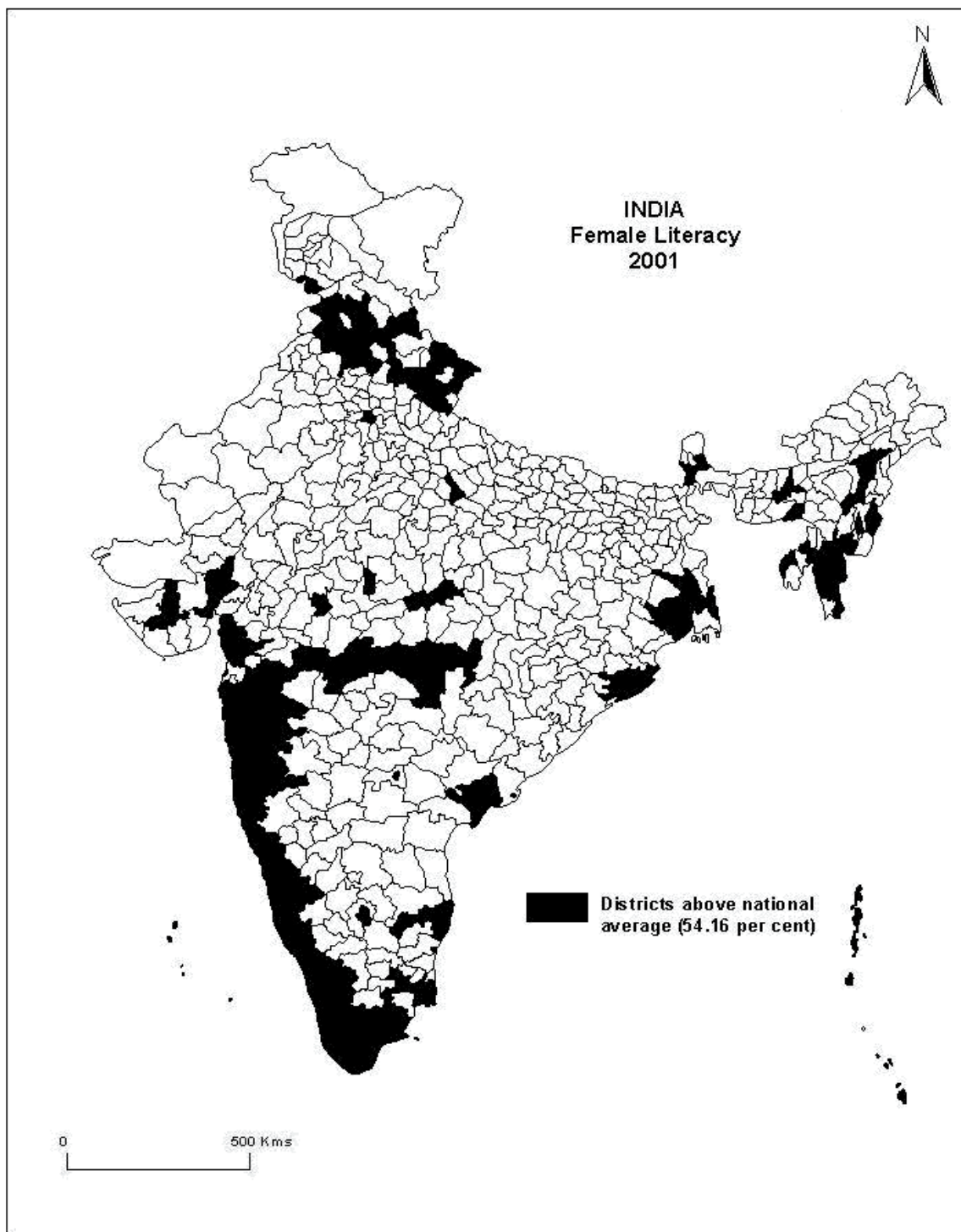
*Figure 2* shows that only 159 out of 593 districts of the country recorded a female literacy rate higher than the national average. Such districts find a concentration in the coastal belt, Northwest and Northeast India, besides the major urban concentrations of Kolkata, Delhi, Kanpur and Chennai. The centrally administered union territories of Pondicherry, Chandigarh, Daman and Diu, Andaman and Nicobar Islands and Lakshadweep noted relatively higher female literacy rates.

All districts along the western coast, covering large parts of Gujarat, Maharashtra, Goa, Karnataka and Kerala, and its extension in Tamil Nadu make a compact zone of high female literacy rates. These were areas of early progress of female education (Gosal, G.S. 1979). In North India, Himachal Pradesh, Punjab, Eastern Haryana, Upper Ganga-Yamuna Doab and Uttaranchal make for another contiguous zone of high female literacy rate. These were the areas where a tradition of army service and the Green Revolution based agricultural development led to higher levels of general literacy, including female literacy.

High female literacy rate is also observed in the Christian majority states of Mizoram, Nagaland, and Meghalaya in the North-East Region. In the East, Calcutta (Kolkata) conurbation and the Orissa Coastal plain also display high female literacy rates.

In contrast, the whole of Bihar, Jharkhand, Chattisgarh, Andhra Pradesh, Eastern Uttar Pradesh, Western Rajasthan, Jammu & Kashmir (except Jammu district), Arunachal Pradesh and Assam recorded low levels of female literacy. Extreme poverty, non-Christian tribal concentrations, desert conditions or hilly terrain were constraints to the progress of literacy, especially of the female. Most of these areas are commonly identified as lagging behind the rest of the country in terms of demographic transition, are low on economic development, and slow on diversification of rural economy (Singh, N. 1998). Central India noted for low female literacy rates, has some relatively urbanized districts like Bhopal, Indore, Ujjain, Jabalpur, and Hoshangabad display comparatively high literacy rates.

Fig. 2. India: Female literacy in 2001. The national average for female literacy=54.16%



### Rural non-agricultural workers

In a developing country like India, rural areas and agriculture are synonymous to each other. Agricultural development, promotes diversification of the rural economy toward secondary and tertiary sectors. Further, diversification of the rural economy leads to an overall rural development, economically and socially. It is for this reason that the percentage of rural non-agricultural workers, which represents diversification of rural economy, has been taken as an indicator of rural development in the present research.

In 2001, 28.76 per cent of India's rural workforce was engaged in non-agricultural pursuits. There were, of course, vast variations in this proportion, from cent per cent in the case of Lakshdweep to zero in entirely urban districts.

In all, 272 districts among 593 recorded a percentage of rural non-agricultural workers higher than the national average. *Figure 3* depicts the distribution of such districts. Most of these districts are located in Northwest India, Western Uttar Pradesh and Uttaranchal. The districts along the Delhi-Jaipur-Mumbai National highway (NH 8) display high levels of diversification of rural economy.

This belt moves further along the entire Western Coastal Region, and extends to the Tamil Nadu coastal plain. In the North-East, Sikkim, Darjeeling Duars, Lower Brahmaputra Valley, Tripura, and hill districts of Manipur, Mizoram, Nagaland, Meghalaya and Arunachal Pradesh are also marked for high percentage of non-agricultural workers owing to the hilly terrain and large scale flooding. The same holds good for the Ganga delta in West Bengal.

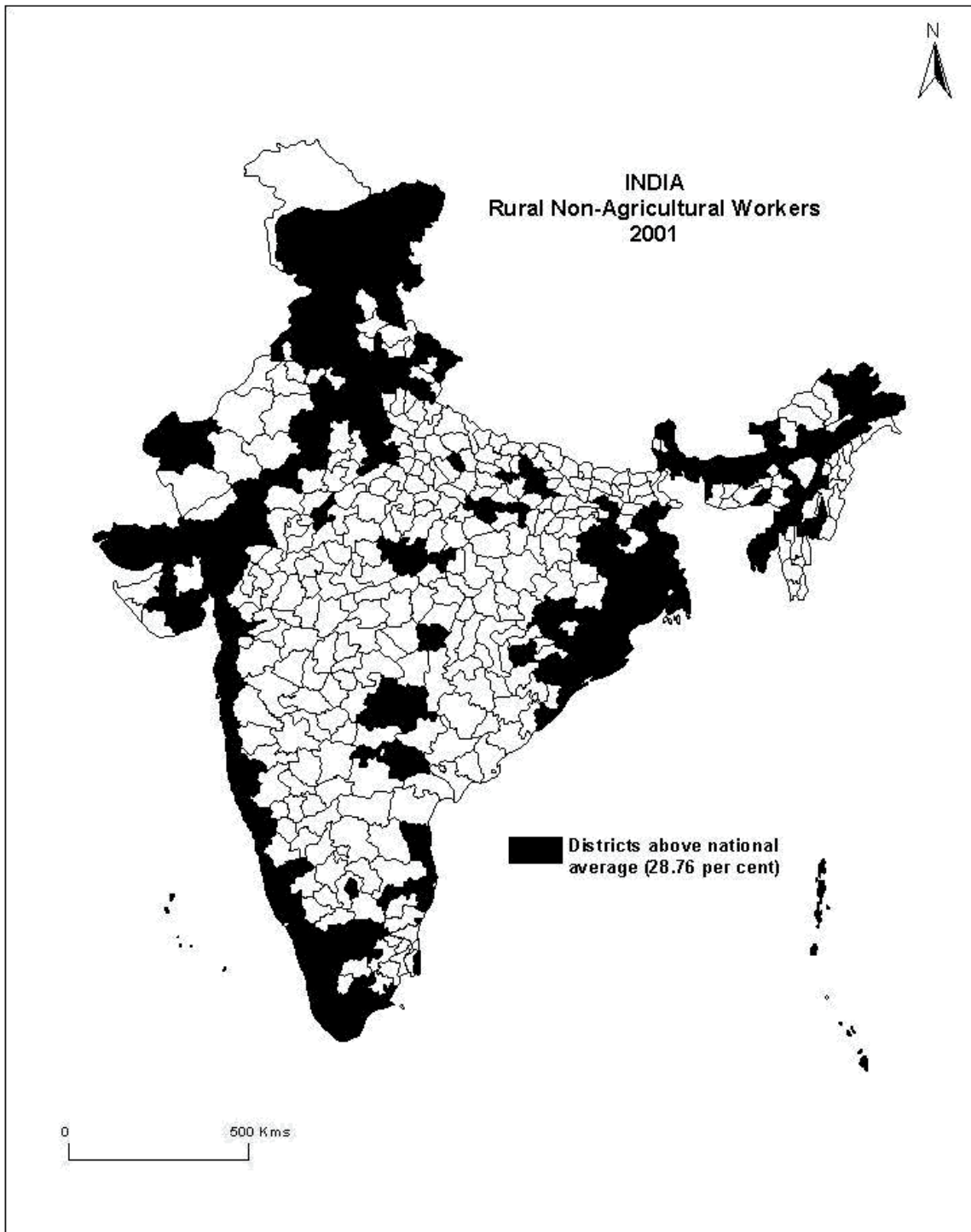
Rural economy persists through subsistence agriculture, with a degree of diversification. Most extensive areas defining this feature include the Middle Ganga Plain, large parts of Central India, Rajasthan desert and interior peninsula. Most represent difficult terrain or arid conditions or concentration of tribal population, and in the case of favorable physical conditions, there is dense concentration of rural slums.

### **Urbanization**

Among different indicators of modernization and socio-economic change, urbanization holds a prime position. It represents the transformation of a society from agricultural to an industrial and a service one. Practically every developed country, like as United States, United Kingdom, Germany, and Japan have shown more than 80 per cent of their population as urban.

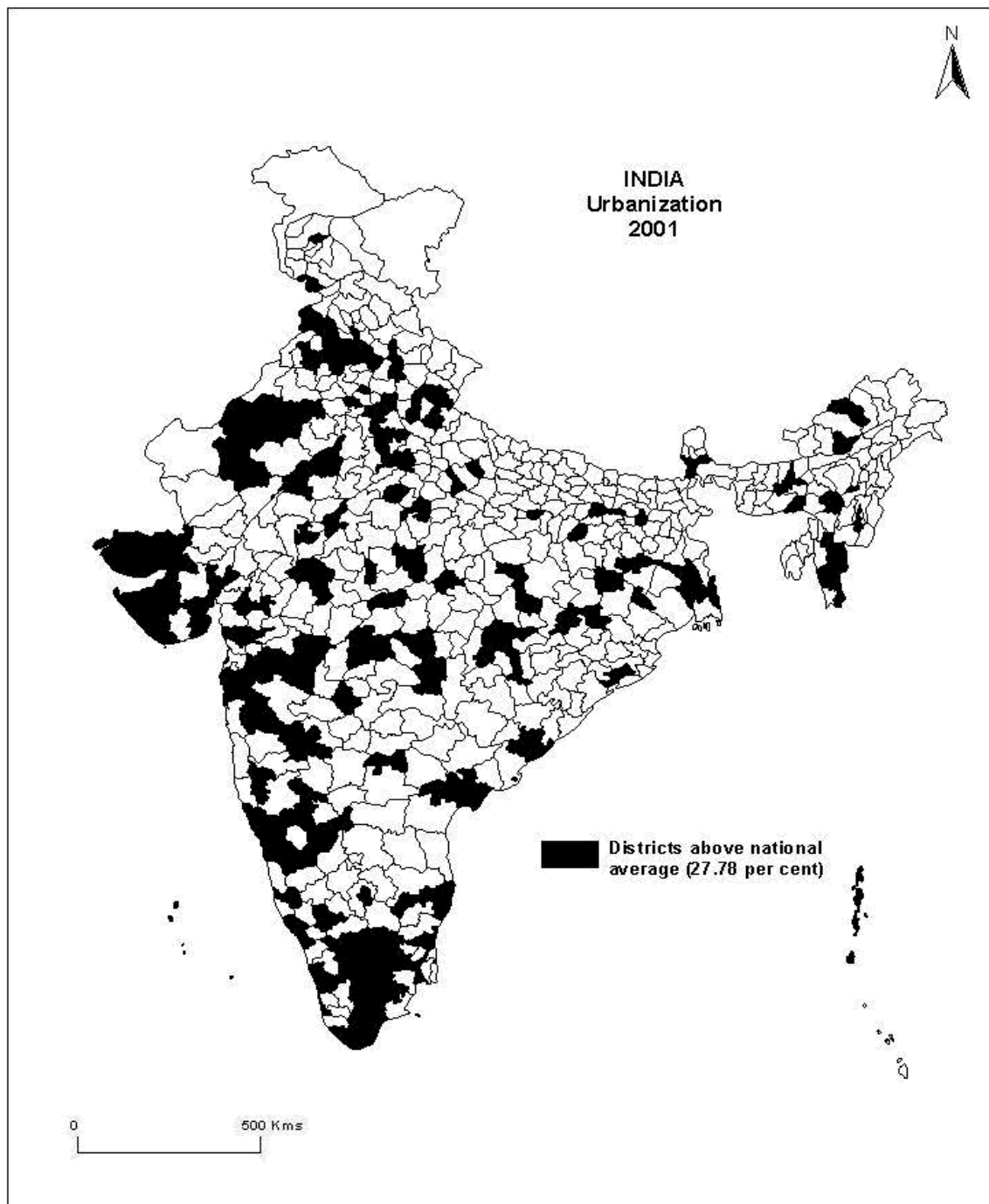
The Census of India designates any settlement having a municipal status, such as municipal committee, municipal corporation or the cantonment board as a town. In addition any settlement, without such a statutory status, is also defined as town if it has a population of at least 5000, carries a population density of at least 400 persons per square kilometer, and has at least 75 per cent of male work force outside agriculture.

Fig. 3. India: Rural non-agricultural workers in 2001. The national average for Rural non-agricultural workers=28.76%



As per the Census of India 2001, 27.78 per cent of India's population is urban, distributed among 5161 urban settlements. This gives an absolute figure of no less than 286 million. Over two-thirds of urban population is concentrated in 393 cities, each with a population of at least 100,000. Among these, 35 are metropolitan cities, having a population of at least one million each.

Fig. 4. India: Urbanization in 2001. The national average for Urbanization=27.68%



There are wide variations in the urbanization level of different parts of India. The districts of Delhi, Kolkatta, Mumbai, Hyderabad, Chennai, Yanam and Mahe are entirely urban while the districts of Lahaul & Spiti, Kinnaur, Upper Siang, Senapati, Tamenglong, Churachandpur, Ukhrul, Lawangtlai, The Dangs and Nicobars are entirely rural.

Goa is the most urbanized state, with virtually one half of its population living in towns. Himachal Pradesh is least urbanized at 9.79 per cent only. A large segment of the urban population is concentrated in six of the most urbanized states of Maharashtra, Gujarat, Tamil Nadu, Karnataka, Punjab and West Bengal.



Only 170 districts among 593 are noted for an urbanization level higher than national average (*Figure 4*). There is a distinct West-East divide on the urbanization map of India. If a rough line is drawn straight from the Coromandal Coast joining up to the eastern border of Uttaranchal, a large majority of such districts find a location to the west of it.

Two corridors of urbanization can be observed along the western coastal districts of Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu and the other along the national highways joining Ahmadabad and Mumbai with Kolkata. Apart from these, million city districts of Kanpur, Lucknow, Patna, Hyderabad, Vishakhapatnam and other regional centres also represent high levels of urbanization. Most districts of Mizoram, the Imphal valley in Manipur, Kamrup and North Cachar Hills districts of Assam, Papum pare and Upper Subansari districts of Arunachal Pradesh and the East Khasi Hills district of Meghalaya in the Northeastern hill states are also relatively urbanized.

### TECHNIQUE

Using the four indicators of population above poverty line, female literacy rate, population of non-agricultural rural workers, and degree of urbanization, the development level of each district was identified. Following the style of the Human Development Report, the technique used was a two step exercise: first, to workout the deprivations score of each district and secondly to convert it into a development score. The development scores of each district on four indicators were summed up to arrive at the district's composite development index.

Deprivation score of a district on a specific indicator was computed by using the following formula:

$$\text{Deprivation score} = \frac{\text{Statistic for the first ranking district} - \text{Statistic for the specific district}}{\text{Statistic for the first ranking district} - \text{Statistic for the district at the bottom}}$$

$$\text{Development score} = 1 - \text{Deprivation score}$$

Composite index = Summation of development scores on the four indicators divided by four

The case of Chandigarh illustrates the working of the technique:

For the indicator of population above poverty line, deprivation and development scores were:

$$\text{Deprivation score} = \frac{100 - 97.1}{100 - 19.9} = 0.036$$

Here 100 is the highest statistic for first ranking district of India (Anantnag), 19.9 per cent for bottom ranking district (Malkangiri) and 97.1 per cent for Chandigarh.

$$\text{Development score} = 1 - 0.036 = 0.96$$

For the indicator of female literacy, deprivation and development scores were:

$$\text{Deprivation score} = \frac{90.57 - 66.18}{90.57 - 14.47} = 0.320$$

Here 90.57 is the highest statistic for first ranking district of India (Nainital), 14.47 per cent for bottom ranking district (Kishanganj) and 66.18 per cent for Chandigarh.

$$\text{Development score} = 1 - 0.320 = 0.68$$

For the indicator of rural non-agricultural workers, deprivation and development scores were:

$$\text{Deprivation score} = \frac{100 - 96.27}{100 - 0} = 0.036$$

Here 100 is the highest statistic for first ranking district of India (Lakshdweep), Zero per cent for bottom ranking district (Yanam) and 96.27 per cent for Chandigarh.

$$\text{Development score} = 1 - 0.036 = 0.96$$

For the indicator of Urbanization, deprivation and development scores were:

$$\text{Deprivation score} = \frac{100 - 89.77}{100 - 0} = 0.102$$

Here 100 is the highest statistic for first ranking district of India (New Delhi), Zero per cent for bottom ranking district (Tamenglong) and 89.77 per cent for Chandigarh.

$$\text{Development score} = 1 - 0.102 = 0.89$$

Composite index = Summation of 0.96, 0.68, 0.96 and 0.89 divided by 4 = 0.87

The composite index for Chandigarh is 0.87, the second highest for any district in India. The district of East Delhi has the highest composite score of 0.90 and Malkangiri the lowest of 0.06 only. The figure for India was 0.46. To afford comparability of the districts all the districts were normalized with the national average as 100. The composite index of India (0.46) was given the score of 100 and all other districts were normalized with respect to this figure. Thus, final scores for East Delhi and Malkangiri were worked out as 180 and 12 respectively. For Chandigarh this score is 175.

To assess the impact of the New Economic Policy on regional disparities in India, composite development indices were computed for each district for 2001, following the same technique. The following paragraphs are devoted to a detailed description and interpretation of patterns of development in India in 2001.

### **PATTERNS OF REGIONAL DISPARITIES IN INDIA, 2001**

The spatial contours of regional disparities can be discerned from Map 5.5, representing the composite index of development level. The number of districts having values above the national average was 159 for female literacy, 170 for urbanization, 272 for rural non-agricultural workers and 342 for population above poverty line (*Table 2*). It signifies that the distribution of the female literacy rate is most skewed, followed by degree of urbanization, among the four indicators of development.

At the district level, the highest development index of 180 is noted for East Delhi, followed by Chandigarh and West Delhi at 175 each. Against this, Malkangiri district of Orissa records the lowest score of 12 only with Nabarangpur (14) and Rayagada (22) positioned at second and third from the bottom. These three districts were carved out from Koraput district, which in itself is a part of the most backward KBK (Koraput, Balangir and Kalahandi) region of Orissa (Singh, R.D. 2009).

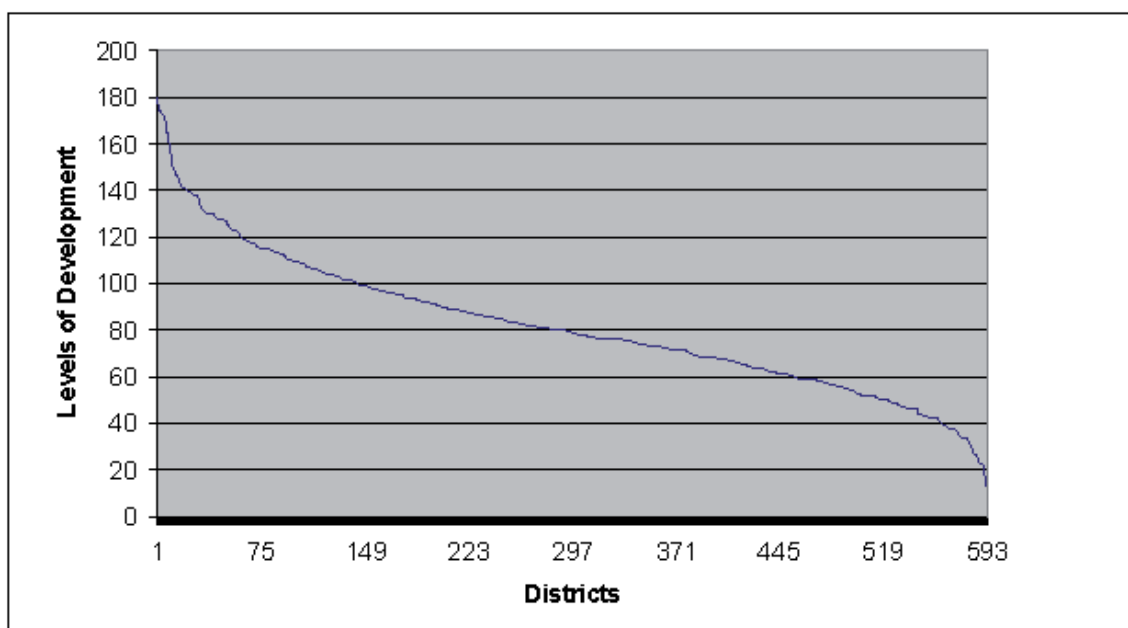
Table 2. India: districts above national average on select indicators, 2001

| Indicator                      | National average (per cent) | Districts above national average | Per cent in total |
|--------------------------------|-----------------------------|----------------------------------|-------------------|
| Female literacy                | 54.16                       | 159                              | 26.81             |
| Urbanization                   | 27.78                       | 170                              | 28.67             |
| Rural non-agricultural workers | 28.76                       | 272                              | 45.87             |
| Population above poverty line  | 74.01                       | 342                              | 57.67             |

Source: Census of India, 2001.

Figure 5 depicts the distribution of all the districts with reference to their development level. The concavo-convex shape (S shape) of the graph shows a rapid fall in the development level of districts at the top, a gentle gradient in the middle, and again a quick descent in the development scores of the most backward districts. Such a scenario represents a sharp contrast between the few highly developed districts and the grim poverty of districts at the bottom.

Figure 5. India: distribution of districts by level of development, 2001



On the development map of India, 151 districts are noted for a high level of development, with a composite score of 100 or more in each case (Table 3). These districts form clusters in four corners

of India (*Figure 6*; Singh, R.D. 2009). In the North-west, most of the districts of Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir, and Uttaranchal, along with the union territories of Delhi and Chandigarh, have development levels significantly above the national average. This part of India is noted for its agricultural and agro-industrial advancement. The Southern cluster covers Kerala and Tamil Nadu, with their offshoots in the adjoining state of Karnataka. Social indicators of development are strong in this case. In the West, coastal Gujarat and Maharashtra emerge prominently, due to an extensive industrial base. In the East, the Calcutta (Kolkata) conurbation takes place of pride. This apart, Mizoram and other Christian majority areas in the North-East attract attention for their social development.

The North-West cluster of districts is the most extensive zone of development in India. Among the top ten districts on level of development, eight are found here. The union territories of Delhi and Chandigarh; the Amritsar-Ambala corridor in Punjab; the eastern belt of districts in Haryana; districts of Srinagar, Jammu and Leh (Ladakh) in Jammu & Kashmir; Shimla, Solan and Kangra in Himachal Pradesh and Dehradun, Haridwar and Nainital in Uttaranchal are the most developed in this zone. Delhi and Chandigarh are predominantly urban, Punjab benefited from the Green Revolution and its agro-based industry, Haryana reaped the spread effects of Delhi, and Himachal Pradesh, Uttaranchal and Jammu & Kashmir made strides in power generation, horticulture and tourism respectively (Krishan, G. 1999). Irrigation, electrification, tourism and road connectivity are markedly prominent features of this cluster.

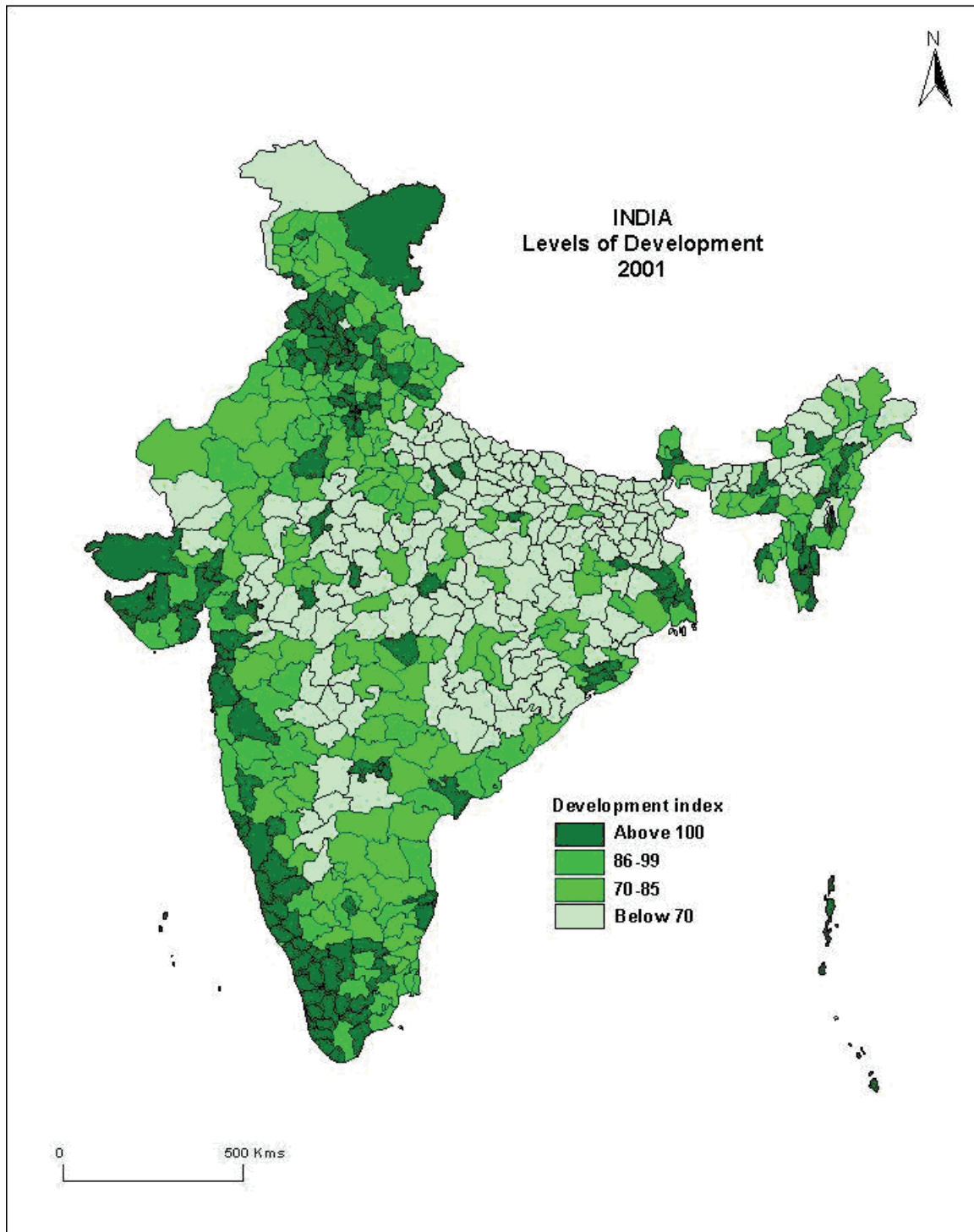
The Western cluster comprises the coastal districts of Gujarat, Maharashtra and the union territory of Daman & Diu. A high level of industrialization and urbanization is a marked feature of this belt. The entire Gujarat sector had trade relations with the Arab, East African and Mediterranean countries for centuries and the Maharashtra sector came into prominence in international trade during the colonial days (Government of India, 1973). Under the British, the Gujarat plain and Maharashtra coastal region were part of the same Bombay province, and contributed to each other's trade and industry. The process of overall development gained momentum after Independence (Rothermund, D. and Saha, S.K. 1993). Emigration was another notable feature of this area.

The Southern cluster covers Kerala, Tamil Nadu and Goa. It also includes the coastal districts of Karnataka, and union territories of Lakshadweep, Pondicherry and Andaman & Nicobar Islands. These are again coastal territories noted for higher level of social development, in particular. Kerala has the distinction of being the most literate state in respect of female literacy in particular. Tamil Nadu has a decentralized pattern of industrialization and urbanization. Goa is famous for tourism. The entire cluster displays an urban-rural continuum. Lakshadweep is also strong in indicators of social development and tourism is emerging as a lucrative industry of these islands. Andaman & Nicobar Islands, located in the heart of the Bay of Bengal, enjoy a strategic location. The Government of India is investing heavily for the development of these islands (National Institute of Public Finance and Policy, 2006).

The developed districts in the East and North-East do not make a contiguous cluster. These are rather scattered group formations of districts. Kolkata conurbation is the most prominent and massive sprawl of urbanization (Dutt, A.K. 1989). Aizawl and its adjoining districts also rank high on development

in association with urbanization, literacy and income level (Gogoi, J.K. 1976). The Imphal valley of Manipur, Kohima-Dimapur tract of Nagaland, Shillong area of Meghalaya and Agartala tract of Tripura are also among the developed parts of the North-East (Singh, N.D. 1988). None of the districts of Assam, however, belong to this category.

Fig. 6. India, Levels of development in 2001. High level of development with above 100 index value; low level with below 70 index value; relatively high level with 86-99 index value and relatively low level of development with 70-85 index value



In addition to the four clusters discussed above, some districts containing million cities also find a place among the developed areas. These include, for instance, the districts of Lucknow, Kanpur and



Allahabad in Uttar Pradesh; Bhopal, Indore and Jabalpur in Madhya Pradesh; Nagpur in Maharashtra; and Hyderabad-Rangareddy in Andhra Pradesh. These are located amidst areas of extensive rural backwardness all around.

Table 3. India: districts at high level of development, 2001

| State                     | Districts   |
|---------------------------|---|
| Andaman & Nicobar Islands | Andamans, Nicobar   |
| Andhra Pradesh            | Hydrabad, Rangareddy, Krishna,  |
| Arunachal Pradesh         | Papum Pare,   |
| Chandigarh                | Chandigarh  |
| Daman & Diu               | Daman, Diu  |
| Delhi                     | East Delhi, West Delhi, South Delhi, North Delhi, North East Delhi, North West Delhi, South West Delhi, New Delhi, Central Delhi,                         |
| Goa                       | North Goa, South Goa  |
| Gujarat                   | Ahmadabad, Surat, Rajkot, Porbandar, Navsari, Gandhinagar, Valsad, Bhavnagar, Jamnagar, Mahesana, Vadodara, Kachchh                                       |
| Haryana                   | Panchkula, Ambala, Yamunanagar, Faridabad, Rohtak, Panipat, Kurukshetra, Gurgaon, Sonapat   |
| Himachal Pradesh          | Solan, Una, Hamirpur, Shimla, Kangra  |
| Jammu & Kashmir           | Srinagar, Jammu, Leh (Ladakh)   |
| Karnataka                 | Bangalore, Dakshina Kannada, Kodagu, Udupi, Uttara Kannada, Chikmagalur, Shimoga, dharwad   |
| Kerala                    | Ernakulam, Thiruvananthapuram, Kozhikode, Thrissur, Kottayam, Kannur, Kollam, Alappuzha, Pathanamthitta, Kasaragod, Malappuram, Idukki, Palakkad, Wayanad |
| Lakshadweep               | Lakshadweep   |
| Madhya Pradesh            | Indore, Bhopal, Jabalpur  |
| Maharashtra               | Mumbai, Mumbai (Suburban), Thane, Pune, Nagpur, Kolhapur  |
| Manipur                   | Imphal West, Imphal East, Bishnupur, Thoubal  |
| Meghalaya                 | East Khasi Hills  |
| Mizoram                   | Aizawl, Kolasib, Serchhip, Champhai, Lunglei, Saiha   |
| Nagaland                  | Dimapur, Mokokchung, Wokha, Kohima  |
| Orissa                    | Khordha, Cuttack  |
| Pondicherry               | Mahe, Pondicherry, Karaikal, Karaikal, Yanam  |
| Punjab                    | Ludhiana, Jalandhar, Rupnagar, Kapurthala, Hoshiarpur, Gurdaspur, Fatehgarh Sahib, Nawanshahr, Patiala, Amritsar, Faridkot, Sangrur, Bathinda,            |
| Rajasthan                 | Jaipur, Kota  |
| Sikkim                    | East Sikkim   |
| Tamil Nadu                | Kaniyakumari, The Nilgiris, Coimbatore, Chennai, Thiruvallur, Thoothukkudi, Kancheepuram, Madurai, Virudhunagar, Erode, Theni, Tiruchirappalli, Salem     |
| Tripura                   | West Tripura  |
| Uttar Pradesh             | Ghaziabad, Ghaziabad, Meerut, Kanpur Nagar, Lucknow, Varanasi   |
| Uttaranchal               | Dehradun, Hardwar, Nainital, Garhwal  |
| West Bengal               | Haora, Kolkata, North Twenty Four Parganas, Darjeeling, Dhanbad, Hugli, Barddhaman,   |

One in every six districts in India is at a relatively high level of development. These are on the immediate periphery of the developed districts. The districts in this category make an extensive zone in the northwest, are in elongated belts along the eastern coastal region and are adjacent to the western coastal region. These emerge as a transition between the modern, developed, high-speed India and the traditional, backward, low-speed India (Chapman, G. 1992). *Table 4* lists the districts at relatively high levels of development.

Table 4. India: districts at relatively high level of development, 2001

| State                | Districts   |
|----------------------|---|
| Andhra Pradesh       | West Godavari, Visakhapatnam, Guntur, Nellore, East Godavari, Karimnagar  |
| Arunachal Pradesh    | West Kameng, East Siang   |
| Assam                | Jorhat, Dibrugarh, Golaghat, Cachar, Tinsukia,  |
| Chhattisgarh         | Raigarh   |
| Dadra & Nagar Haveli | Dadra & Nagar Haveli  |
| Haryana              | Karnal, Hisar, Rewari, Jhajjar, Kaithal, Sirsa, Mahendragarh, Bhiwani, Jind   |
| Himachal Pradesh     | Mandi, Lahul & Spiti, Kinnaur, Sirmour  |
| Jammu & Kashmir      | Kargil, Kathua, Baramula, Badgam, Anantnag, Pulwama   |
| Jharkhand            | Purbi Singhbhum   |
| Karnataka            | Mysore, Hassan, Bangalore Rural, Gadag  |
| Madhya Pradesh       | Gwalior   |
| Maharashtra          | Sindhudurg, Ratnagiri, Sangli, Solapur, Ahmadnagar, Aurangabad, Satara  |
| Gujarat              | Bharuch, Junagadh, Anand, Amreli, Surendranagar, Kheda  |
| Manipur              | Churachandpur   |
| Meghalaya            | East Khasi Hills, Ri Bhoi   |
| Mizoram              | Mamit   |
| Nagaland             | Zunheboto, Phek   |
| Orissa               | Jagatsinghapur, Jharsuguda, Puri  |
| Punjab               | Moga, Muktsar, Firozpur, Mansa  |
| Rajasthan            | Ajmer, Jhunjhunum, Sikar, Ganganagar, Jodhpur   |
| Sikkim               | East Sikkim, North Sikkim, South Sikkim   |
| Tamil Nadu           | Thanjavur, Nagapattinam, Dindigul, Namakkal, Ramanathapuram, Thiruvarur, Tirunelveli, Karur, Tiruvannamalai, Vellore, Sivaganga |
| Tripura              | North Tripura   |
| Uttar Pradesh        | Gautam Buddha Nagar, Baghpat, Saharanpur, Firozabad, Jhansi   |
| Uttaranchal          | Udham Singh Nagar, Chamoli, Pithoragarh   |
| West Bengal          | South Twenty Four Parganas, Nadia, Medinipur,   |

Among 593 districts in the country, 140 are at a relatively low level of development (*Table 5*). The frequency of such districts is higher in the Indian states of Andhra Pradesh, Karnataka, Uttar Pradesh, Madhya Pradesh, Rajasthan and Maharashtra. All these states are large in size and their peripheral areas have been victims of administrative neglect in development (Krishan, G. 1999).

Table 5. India: districts at relatively low level of development, 2001

| State             | District  |
|-------------------|---|
| Andhra Pradesh    | Cuddapah, Khammam, Prakasam, Nalgonda, Srikakulam, Adilabad, Nizamabad, Medak, Warangal, Anantapur, Vizianagaram, Kurnool, Chittoor   |
| Arunachal Pradesh | Dibang Valley, West Siang, Tawang, Changlang  |
| Assam             | Karimganj, North Cachar Hills, Nalbari, Hailakandi, Lakhimpur   |
| Bihar             | Patna, Munger   |
| Chhattisgarh      | Durg, Raipur, Dhamtari, Koriya  |
| Gujarat           | Patan, Sabar Kantha, Narmada, The Dangs   |
| Haryana           | Fatehabad   |
| Himachal Pradesh  | Kullu, Chamba   |
| Jammu & Kashmir   | Rajauri, Udhampur, Kupwara, Punch, Doda   |
| Jharkhand         | Bokaro, Ranchi, Hazaribagh  |
| Karnataka         | Tumkur, Kolar, Haveri, Bagalkot, Chamarajanagar, Belgaum, Mandya, Davanagere, Bidar, Bijapur  |
| Madhya Pradesh    | Bhind, Ujjain, Neemuch, Mandsaur, Katni, Ratlam, Satna, Hoshangabad, Sagar, Shajapur, Datia, Morena   |
| Maharashtra       | Chandrapur, Jalgaon, Akola, Osmanabad, Amravati, Wardha, Nashik, Latur, Bhandara, Gondiya, Dhule, Yavatmal  |
| Manipur           | Chandel, Ukhrul   |
| Meghalaya         | Jaintia Hills, West Khasi Hills, East Garo Hills, West Garo Hills, South Garo Hills   |
| Mizoram           | Lawngtlai   |
| Nagaland          | Tuensang, Mon   |
| Orissa            | Jajapur, Sambalpur, Nayagarh, Kendrapara, Sundargarh, Anugul  |
| Rajasthan         | Bikaner, Churu, Pali, Hanumangarh, Jaisalmer, Sirohi, Dausa, Rajsamand, Udaipur, Nagaur, Alwar, Bharatpur, Dhaulpur, Tonk   |
| Sikkim            | West (Sikkim)   |
| Tamil Nadu        | Cuddalore, Pudukkottai, Perambalur, Viluppuram,   |
| Tripura           | South Tripura, Dhalai   |
| Uttar Pradesh     | Agra, Bijnor, Chandauli, Sant Ravidas Nagar Bhadohi, Allahabad, Mathura, Hamirpur, Jalaun, Moradabad, Bareilly, Etawah, Bulandshahar, Muzaffarnagar, Hathras, Aligarh, Auraiya, Deoria, Jyotiba Phule Nagar |
| Uttaranchal       | Tehri Garhwal, Rudraprayag, Champawat, Almora, Uttarkashi, Bageshwar  |
| West Bengal       | Jalpaiguri, Dakshin Dinajpur, Koch Bihar  |



About 200 districts, that is, no less than one in every three in India, are at a distinctly low level of development (*Table 6*). These make an extensive compact zone in Eastern Uttar Pradesh (45 districts), Bihar (36 districts out of 37 districts), Jharkhand (12 districts out of 18 districts), Chhattisgarh (12 districts out of 16 districts), and Orissa (19 districts).

Table 6. India: districts at low level of development, 2001

| State             | Districts   |
|-------------------|---|
| Andhra Pradesh    | Mahbubnagar   |
| Arunachal Pradesh | Upper Siang, Upper Subansiri, Lohit, Lower Subansiri, East Kameng, Tirap  |
| Assam             | Sonitpur, Goalpara, Nagaon, Bongaigaon, Darrang, Barpeta, Dhemaji, Karbi Anglong, Dhubri, Kokrajhar, Marigaon   |
| Bihar             | Aurangabad, Bhagalpur, Jehanabad, Siwan, Rohtas, Buxar, Gopalganj, Gaya, Vaishali, Pashchimi Singhbhum, Bhojpur, Saran, Katihar, Lakhisarai, Kishanganj, Jamui, Kaimur (Bhabua), Araria, Sheikhpura, Nawada, Purba Champaran, Begusarai, Banka, Madhubani, Darbhanga, Muzaffarpur, Saharsa, Nalanda, Purnia, Pashchim, Champaran, Khagaria, Supaul, Samastipur, Sitamarhi, Madhepura, Sheohar   |
| Chhattisgarh      | Raigarh, Bilaspur, Rajnandgaon, Mahasamund, Korba, Jashpur, Kanker, Surguja, Janjgir – Champa, Kawardha, Bastar, Dantewada  |
| Gujarat           | Banas Kantha, Panch Mahals, Dohad   |
| Jharkhand         | Kodarma, Deoghar, Chatra, Sahibganj, Gumla, Giridih, Lohardaga, Dumka, Pakaur, Godda, Palamu, Garhwa  |
| Karnataka         | Chitradurga, Bellary, Gulbarga, Koppal, Raichur   |
| Madhya Pradesh    | Dewas, Raisen, Shahdol, Damoh, Rewa, Harda, Umaria, Narsimhapur, Guna, Rajgarh, Chhindwara, Vidisha, Sehore, East Nimar, Shivpuri, Betul, West Nimar, Sheopur, Panna, Chhatarpur, Sidhi, Balaghat, Tikamgarh, Seoni, Dhar, Jhabua, Barwani, Mandla, Dindori   |
| Maharashtra       | Parbhani, Bid, Buldana, Nanded, Jalna, Gadchiroli, Washim, Hingoli, Nandurbar   |
| Manipur           | Senapati (Excl. 3 sub-divisions), Tamenglong  |
| Orissa            | Bhadrak, Dhenkanal, Baleshwar, Ganjam, Bargarh, Debagarh, Balangir, Sonapur, Kendujhar, Gajapati, Mayurbhanj, Kandhamal, Baudh, Kalahandi, Koraput, Nuapada, Rayagada, Nabarangapur, Malkangiri   |
| Rajasthan         | Karauli, Bundi, Baran, Chittaurgarh, Bhilwara, Barmer, Dungarpur, Sawai Madhopur, Jhalawar, Jalor, Banswara   |
| Tamil Nadu        | Ariyalur, Dharmapuri  |
| Uttar Pradesh     | Pilibhit, Shahjahanpur, Mainpuri, Gorakhpur, Chitrakoot, Kaushambi, Pratapgarh, Rampur, Ambedkar Nagar, Etah, Farrukhabad, Mirzapur, Faizabad, Banda, Ballia, Mau, Kanpur Dehat, Sonbhadra, Azamgarh, Budaun, Ghazipur, Lalitpur, Kannauj, Jaunpur, Sultanpur, Mahoba, Fatehpur, Unnao, Kheri, Mahrajganj, Hardoi, Sant Kabir Nagar, Gonda, Basti, Sitapur, Barabanki, Balrampur, Rae Bareli, Bahraich, Kushinagar, Siddharthnagar, Shravasti |
| West Bengal       | Uttar Dinajpur, Birbhum, Murshidabad, Maldah, Bankura, Puruliya   |

The middle Ganga plain and the northeastern parts of the Peninsular Plateau together constitute the most backward part of the country (Singh, R. L. 1971). Among the 100 most backward districts of India, 80 are located herein. In detail, these two zones mark a contrast to each other.

For example, the Middle Ganga plain is a highly densely populated region, with overwhelmingly rural and agricultural population, and marked by a gross resource-population imbalance. Historically it suffered not only because of the feudalistic system of revenue realization imposed on it, but also because of the backwash effects of Calcutta metropolis during the colonial rule (Dubey, K.N. 1992).

A fate of underdevelopment was a natural corollary of the migration of its youthful workers, skill and capital to Calcutta for at least two centuries.

By comparison, the northeastern segment of the Indian Peninsula owes its backwardness to other factors. Comprising Chhota Nagpur Plateau and Rajmahal hills in the North, Maikala range and Mahadeo hills in the Northwest and the West, Eastern Ghats in the East and Dandkarnaya in the South, this region spreads over the whole or parts of states of Jharkhand, Chhattisgarh, Orissa and Madhya Pradesh and has a significant proportion of its population as tribal. Ironically, this is one of the richest parts of India in natural resource base, but grossly lacks in human resource. Literacy rates are very low, urbanization is sporadic, and infrastructure lacking in most cases. In many districts (KBK region), more than 80 per cent of the population is below the poverty line. Administrative capacity in the provision of basic services and maintenance of law and order leaves much to be desired. No wonder that the naxalite movement was successful in spreading its tentacles here.

Among other backward regions are included firstly the chronic drought prone areas of the Thar desert in Rajasthan, Marathwada in Maharashtra, Talengana plateau in Andhra Pradesh; secondly, the remote, isolated tribal areas in the North-East; thirdly, the rugged topography tracts of Vindhyachal and Satpura hills; and finally the flood prone areas of Assam. The role of inhospitable physical conditions comes to the forefront in all these areas (Krishan, G. 1992).

It follows that the development map of India is characterized by some developed districts and many backward ones. The developed districts form clusters in the Northwest, West, deep South and certain pockets in the East of the country. Relatively developed districts are on the immediate periphery of the highly developed ones. A large part of the mainland, in particular, the Middle Ganga plain, Northeastern peninsula, the interior of the Deccan and the Rajasthan desert are low on the development level.

Backward districts suffer either resource population imbalance or physical constraints of topography, climate and isolation or administrative neglect. At the national level, the development levels found their strongest association with female literacy (0.823), followed by population above poverty line (0.729), urbanization (0.712) and rural non-agricultural workers (0.688). This relationship, however, differs from region to region. Female literacy in the case of South India, urbanization in Western India and economic well being in Northwestern India are dominant factors influencing the development levels. Most of central and Eastern India is low on all the indicators of development with few exceptions.

### SUMMARY

The development map of India in 2001 shows a persistence of backward mainland and developed periphery, contrary to expectations. The peripheral location of developed districts is manifest in development clusters occupying various corners of India. The North-western cluster covers districts of Punjab, Haryana, Delhi, Chandigarh, and also some parts of Himachal Pradesh and Jammu and Kashmir. Agricultural development after the success of Green Revolution in this part has raised the overall level of development in this region. Irrigation, electrification, road connectivity and tourism development are the main planks of higher development. The Southern cluster of developed districts



includes the states of Kerala and Tamil Nadu and their offshoots in the adjoining state of Karnataka, where the social indicators of development are very strong. The Western cluster has Gujarat and Maharashtra in its ambit, where industrialization diffused its spread effect. Kolkata-Haora conurbation and the Christianity dominated districts of Mizoram form the Eastern cluster of the higher level of development in India. Colonial legacy of Kolkata and the spread of literacy in the Christian belts lead to the high level of education and development in these pockets.

In brief, widening of regional disparities and declining intra-state disparities, concurrent with a low development level in general are the noticeable features of the development map of India. An emerging concern here is that the already developed areas, favoured by their locational advantages, favourable infrastructure and better law and order situation are attracting large private investments at the cost of backward areas. This is likely to generate social and political areas which have been left behind. The emergence of red corridor in the eastern half of India is a manifestation of such upcoming problems.

The state governments seem to be aware of this. A reduction in the intra-state disparity in every case is a testimony to this. The less developed states are, however, constrained in terms of resources in acquiring a fast pace of development. They require a bigger dose of financial support from the Central government, in addition to improving the quality of their governance. The 73<sup>rd</sup> and 74<sup>th</sup> Constitutional amendments, giving birth to a statutory third tier of administration and ensuring decentralization of power to Panchayati Raj Institutions and urban local bodies, is likely to help this process. Ultimately, it all depends upon how the different states, particularly the backward ones, strengthen the local bodies.

Even though the present research has tried to analyze the patterns of regional disparities in India, still there are many questions which have remained unanswered and needs more expanded statistics to be investigated and scrutinized to draw the more real development map of India.

## REFERENCES

- Adabar, K. 2004. *Convergence of Standards of Living across Indian States*. Working Paper No. 153. Bangalore, Institute of Social and Economic Change.
- Ahluwalia, M. S. 2000. Economic Reforms: A policy agenda for the future. *Economic Development in India* 25. pp. 19-40.
- Ahluwalia, M. S. 2000a. Economic Performance of States in Post-Reforms Period. *Economic and Political Weekly* XXXV. (19):1637-1648.
- Ahluwalia, M. S. 2002. Economic Reforms in India since 1991: Has graduation worked? *Journal of Economic Perspectives* 16. (3): 67-88.
- Ahluwalia, M. S. 2002a. State Level Performance under Economic Reforms in-India. In *Economic Policy Reforms and the Indian Economy* Ed. Krueger, A. O. New Delhi, Oxford University Press, 191-215.
- Balakrishnan, P. and Parameswaran, M. 2007. Understanding Economic Growth in India: A Prerequisite. *Economic and Political Weekly* XLII. (27): 2915-2922.

- Bhaduri, A. 2008. Development or Developmental Terrorism? *Economic and Political Weekly* XLII. (7): 552-553.
- Bhattacharya, B. B. and Sakthivel, S. 2004. *Regional Growth and Disparity in India. A comparison of Pre and Post Reform Decades*. New Delhi, Institute of Economic Growth.
- Bose, A. 1978. *India's Urbanization: 1901-2001*. New Delhi, Tata McGraw-Hill.
- Census of India, 2001. *Census of India 2001* (Handbooks). New Delhi, Government of India.
- Census of India. 1995. *Census of India Atlas, 1991*. New Delhi, Government of India.
- Chapman, G. 1992. Change in South Asian Core: Patterns of Growth and Stagnation in India. In *The Changing Geography of Asia*. Eds. Chapman, G. and Baker, K. M. London, Routledge, 10-43.
- Dasgupta, D. 2000. Growth and Inter-state Disparities in India. *Economic and Political Weekly* XXXV. (27): 2413-2422.
- Deaton, A. and Dreze, J. 2002. Poverty and Inequality in India: A Re-examination. *Economic and Political Weekly* XXXVII. (36): 3729-3748.
- Deaton, A. and Kozel, V. 2004. *Data and Dogma: The Great Indian Poverty Debate*. The World Bank Research Paper. Washington DC, World Bank.
- Debroy, B. and Bhandari, L. 2003. *District-Level Deprivation in the New Millenium*. New Delhi, Konark Publishers.
- Dev, M. S. and Mooij, J. 2002. Social Sector Expenditures in the 1990's: Analysis of Central and State Budgets. *Economic and Political Weekly* XXXVII. (2): 853-866.
- Dev, S. M. and Ravi, C. 2007. Poverty and Inequality: All-India and States, 1983–2005. *Economic and Political Weekly* XLII. (6): 509–521.
- Dholakia, R. H. 2003. Regional Disparity in Economic and Human Development in India. *Economic and Political Weekly* XXXVIII. (39): 4146-4172.
- Dreze, J. and Sen, A. 1995. *India: Economic Development and Social Oppurtunity*. New Delhi, Oxford University Press.
- Dubey, K. N. 1992. *Process of Socio Economic Development*. Jaipur, Rawat Publications.
- Dutt, A. K. 1989. Factorial Ecology of Calcutta (1981) Revisited. *Geo Journal* 18. (2): 151-162.
- Fields, G. 1980. Education and income distribution in developing countries: a review of literature. In *Education and Income* Ed. King, T. World Bank Staff Working Paper No. 402. Washington DC, World Bank.
- Ghosh, M. 2006. Economic Growth and Human Development in Indian States. *Economic and Political Weekly* XLI. (30): 3321-3329.
- Ghosh, P. P. and Narayana, N. S. S. 2005. Impact of Economic Reforms and Macroeconomic Forecasts: Pulses, Levels and Trends. *Economic and Political Weekly* XL. (22): 2330–2339.
- Gogoi, J. K. 1976. *Identification of Backward Districts of Assam, Meghalaya and Mizoram: An Inter-Temporal Analysis*. M.Phil. Dissertation. New Delhi, Jawaharlal Nehru University.
- Gosal, G. S. 1979. Spatial Perspective on Literacy in India. *Population Geography* 1. (2): 41-67.

- Government of India. 1973. *The Gazetteer of India*. Ministry of Information and Social welfare. New Delhi, Government of India Press.
- Government of India. 1993. *Education for All: The India Scene*. New Delhi, Ministry of Human Resource and Development.
- Jayadev, A. et al. 2007. Patterns of Wealth Disparities in India during the Liberalization Era. *Economic and Political Weekly* XLIII. (38): 3853-3863.
- Jha, P. and Negre, M. 2007. *Indian Economy in the Era of Contemporary Globalization: Some Core Elements of the Balance Sheet*. <http://www.macrosan.org/anl/may07/pdf/indianeconomy/>.
- Jha, R. 2000. Growth, Inequality and Poverty in India: Spatial and Temporal Characteristics. *Economic Political Weekly* XXXV. (11): 921-928.
- Kant, S. 1999. Spatial Implications of India's New Economic Policy. *Tijdschrift, Voor Economische en Sociale Geografie* 90. (1): 80-96.
- Kar, S. and Sakthivel, S. 2007. Reforms and Regional Inequality in India. *Economic and Political Weekly* XLII. (47): 69-77.
- Krishan, G. 1992. Regions of India. In *Geography of India* Eds. Tirtha, R. and Krishan, G. Jaipur, Rawat Publications, 343-428.
- Krishan, G. 1997. Spatial Contrasts in Socio-Demographic Profiles of India. *Population Geography* 19. (1&2): 75-89.
- Krishan, G. 1999. From Centralized Planning to Liberalized Economy: The Development Experience of India since Independence. *Annals NAGI* 19. (1-2): 29-45.
- Krishan, G. 2001. Presidential Address: Development, Environment and Decentralized planning. *Annals NAGI* 21. (1): 3-14.
- Kumar, N. 2005. Liberalisation, Foreign Direct Investment Flows and Development: Indian Experience in the 1990s. *Economic and Political Weekly* XL. (15): 1459-1469.
- Kurian, N. J. 2000. Widening Regional Disparities in India: Some Indicators. *Economic and Political Weekly* XXXV. (7): 736-743.
- Mazumdar, T. 2005. Capital Flows into India: Implication for its Economic Growth. *Economic and Political Weekly* XL. (21): 2183-2189.
- Mehta, A. K. and Shah, A. 2004. *Chronic Poverty in India: An Overview*. CPRC-IIPA Working Paper No. 2. New Delhi, Chronic Poverty Research Centre and Indian Institute of Public Administration.
- Mukhopadhyay, H. and Das, K. K. 2003. Horizontal Imbalances in India. *Economic and Political Weekly* XXXVIII. (14): 1416-1420.
- Nagaraj, R. 2000. Indian Economy since 1980: Virtuous Growth or Polarization. *Economic and Political Weekly* XXXV. (32): 2831-2838.
- Nagaraj, R., Varouadakis, A. and Veganzones, M. 1998. *Long Run Growth Trends and Convergence across Indian States*. OECD Technical Papers, No.131. <http://www.oecd.org/dev/technics>.
- Nair, K. R. G. 2004. *Economic Reforms and Regional Disparities in Economic and Social Development in India*. Project Report: CPR. New Delhi, Centre for Policy Research.

- National Institute of Public Finance and Policy. 2006. *State Development Report of Andaman & Nicobar Islands*. New Delhi, National Institute of Public Finance and Policy.
- Nayyar, G. 2005. Growth and Poverty in Rural India: An Analysis of Inter-State Differences. *Economic and Political Weekly* XL. (16): 1631-1639.
- Nayyar, G. 2008. Economic Growth and Regional Inequality in India. *Economic and Political Weekly* XLIII. (6): 58-67.
- Noorbakhash, F. 2003. *Human Development and Regional Disparities in India*. Working Paper No. 12, Department of Economics. Glasgow, Glasgow University Press.
- Pal, P. and Ghosh, J. 2007. *Inequality in India: A survey of recent trends*. DESA Working Paper No. 45. July 2007. Department of Economic and Social Affairs. New York, United Nations.
- Planning Commission. 2008. Spatial Development and Regional Imbalances. In *Eleventh Five Year Plan: Inclusive Growth*, Planning Commission. New Delhi, Government of India, 137-164.
- Psacharopoulos, G. and Woodhall, M. 1985. *Education for Development: An Analysis of Investment Choices*. Washington DC, World Bank.
- Rangarajan, C. and Srivastava, D. K. 2008. Reforming India's Fiscal Transfer System: Resolving Vertical and Horizontal Imbalances. *Economic and Political Weekly* XLIII. (23): 47-60.
- Rao, M. G., Shand, R. T. and Kalirajan, K. P. 1999. Convergence of Incomes across Indian States-A Divergent View. *Economic and Political Weekly* XXXIV. (12): 769-778.
- Reddy, G. P. 2006. Twelfth Finance Commission and Backward States. *Economic and Political Weekly* XLI. (32): 3513-3520.
- Rothermund, D. and Saha, S. K. Eds. 1993. *Regional Disparities in India: Rural and Industrial Dimensions*. New Delhi, Manohar.
- Schultz, T. 1964. *Transforming Traditional Agriculture*. New Haven, Yale University Press.
- Sengupta, A., Kannan, K. P. and Ravenndran, G. 2008. India's Common People: Who Are They, How Many Are They and How Do They Live? *Economic and Political Weekly* XLIII. (11): 49-63.
- Shand, R. and Bhide, S. 2000. Sources of Economic Growth: Regional Dimensions of Reforms. *Economic and Political Weekly* XXXV. (42): 3747-3757.
- Singh, R. D. 2005. Regional Disparities in India in Levels of Socio-Economic Development in Post Reforms Period: A District Level Analysis. *Annals NAGI* 26. (2): 87-94.
- Singh, R. D. 2009. *Trends in Regional Disparities in India since Independence A Geographical Analysis*, PhD Thesis. Chandigarh, Panjab University.
- Singh, R. L. Ed. 1971. *India: A Regional Geography*. Varanasi, National Geographical Society of India.
- Singh, N. 1998. *Administration and Development in Indian States: Impact of Area Reorganization on Development Process*. New Delhi, Anmol Publications.
- Singh, N. D. 1988. Natural Resources and Disparities in Manipur. *The Deccan Geographer* XXVI. (1): 291-306.
- Singh, N., Bhandari, L., Chen, A. and Khare, A. 2003. Regional Inequality in India: A Fresh Look. *Economic and Political Weekly* XXXVIII. (11): 1069-1073.

- Sundaram, K. and Tendulkar, S. D. 2003. Poverty in India in the 1990s: Revised Estimates. *Economic and Political Weekly* XXXVII. (46): 4865-4872.
- Tendulkar, S. D. and Bhavani, T. A. 2007. *Understanding Reforms: Post 1991 India*. New Delhi, Oxford University Press.
- Tilak, J. B. G. 1989. *Education and its Relation to Economic Growth, Poverty, and Income Distribution: Past Evidence and Further Analysis*. World Bank Discussion Paper No. 46. Washington DC, World Bank.
- Williamson, J. G. 1965. Regional Inequality and the Process of National Development: A Description of the Patterns. *Economic Development and Cultural Change* 13. (4): 3-45.