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INTER-STATE DISPARITY IN INDIA AND DEVELOPMENT STRATEGIES FOR BACKWARD STATES

During the last six decades since independence, the long term growthrate of the Indian economy has been at least moderate at around 5 percent. Even more comfortable is the fact that, during the last two decades, the economy has come out of the shell of 'Hindu' rate of growth of barely 3-4 percent to reach a decent growthrate of above 7 percent. The last two decades has also seen an appreciable reduction in demographic growthrate, leading to a speedier growth of Per Capita Income. But this positive description of the aggregate Indian economy is somewhat misleading, as the equity outcomes of this growth process has been very skewed. What possibly has contributed most to such (in) equity outcomes is the sectoral composition of the overall growth; during the entire post-independence period, the agricultural sector in India has grown at less than half of the growthrate of the non-agricultural economy. This sectoral disparity would not have mattered if the growth was accompanied by substantial shift of population from the low productivity agricultural sector to the rapidly growing industrial economy. But that was not the case; over the last fifty year (1951-2001), the share of rural population has decreased by just 16 percentage points. Consequently, the source of livelihood of close to two-thirds of the country’s population even now continues to be agriculture. As an obvious consequence, the sectoral disparity between agricultural and non-agricultural sector has got translated into rural-urban disparity and secondly, depending on the relative size of the agricultural or rural sector in different states, the growth process has also widened regional disparity. The regions with relatively larger agricultural sector have fallen behind, others with some industrial base have marched ahead, frustrating one of the 'stated' objectives of Indian planning, viz., reduction in regional disparity. This negative trend is in complete contrast to India's development experience in any other field where the progress might have been of varying magnitude, but nowhere the trend has been in 'opposite' directions.

The present study is an attempt to analyse this issue of regional disparity in India from a number of relevant perspectives. First, the study reviews the existing studies on the issue to characterize the long term trends in regional disparity, covering both the periods of planning and liberalization (Section 1). Towards looking at the causes behind the trend, the study presents a critique of the India's overall development strategy and the critical role of the asymmetric federalism in India towards widening of regional disparities, a phenomenon inherited from the colonial period (Section 2). In the next step, the focus of the study is the state of Bihar which lies at the bottom of the development ladder among all the Indian states. Taking the twenty-five year period since the early eighties, the growth process in Bihar is analysed in terms of both its economic and social disadvantages (Section 3). In view of the discussion in Section 2, holding national development strategies and asymmetric federalism as the prime factors behind regional disparities, one would expect reversal of the trend of widening regional disparities only through a change in those policies. Unfortunately, such a change is least likely in the present political configurations. That leaves the disadvantaged states with the only option of rethinking their own development strategies to improve their conditions, within the scope of 'limited autonomy' that the states enjoy. The main components of such an alternative development strategy, with special reference to Bihar, are suggested next (Section 4). The paper finally ends with a concluding section, collecting the main conclusion of the study (Section 5).

1. Trends in Regional Disparity

Besides economic stagnation, the Indian economy was also characterised by wide regional disparity at the time of independence. The regions that had undergone significant economic transformation at the time of independence were all around the three seats of colonial power – Calcutta, Bombay and Madras. Outside these, there were only a few regions where because of reasons other than trade (for example, location of military establishments) or some highly specific conditions leading to the development of a local capitalist class (for example, the textile industry in Ahmedabad), some significant economic transformation had taken place. On the one hand, the British administrative machinery had limited economic development of India by separating the link between economic and political power. This meant that at the turn of the century, emerging Indian capital could develop only in and around the 'capitalist enclaves', the rest of the country still dominated by pre-capitalist social relations. On the other hand, the Indian commercial classes were protected from the wrath and struggles of the exploited and the oppressed through the “rule of law” enforced uniformly by an elaborate police force and judicial structure. The same administrative-judicial institutions, later combined with a discriminatory electoral franchise, provided a convenient means of depriving the peasantry of their crops, resources, customary security and personal protection. That the existing regional disparities like social inequalities and sectoral disparities at the time of independence were the consequences of economic policies and were almost wholly unrelated to the resource endowments of different regions is apparent from the fact that the central Indian plateau where the mineral resources of the country are concentrated was one of the poorest regions of the country. So was the Gangetic plain which is endowed with extremely fertile agricultural land along with rich biodiversity, except certain parts of Bengal, the seat of colonial establishment till 1912.

It was, therefore, not surprising that within the realm of economic policy, right from the First Five-Year Plan, the goal of a 'balanced regional growth' was considered politically as important as the goal of aggregate growth (Kumari 2006). Up to the Fourth Five-Year Plan, towards this goal, three basic strategies were undertaken – (a) according priority to agriculture, irrigation, and community development, which all related to the rural sector where development deficits were most stark, (b) providing equitable infrastructural facilities (power, roads, communications, educational and health institutions) in all regions, and (c) locating new enterprises, whether public or private, based on the need to address regional disparity. It must be noted that these strategies did yield results, leading to a reduction of regional disparities in the early period of planning, although the long-term trend in regional disparity in India has been one of widening. Taking the period from the 1950s to the 1980s and using a weighted coefficient of variation, Mathur (1994) concluded that regional disparity in India had lessened during the 1950s and up to the mid-1960s, but had thereafter widened steadily. Because of the reorganisation of the states in 1956, other studies on long-run trends in regional disparity refer to periods, starting from 1960-61 or a year later. In one such study (Chaudhuri 2000), regional disparity is measured as the coefficient of variation (CV) of per capita state domestic product (PCSDP) indices, taking the all-India per capita gross domestic product (GDP) as 100. Starting with 1961-62, the CVs of PCSDP indices are computed at five-year intervals, again showing that it steadily increased from 18.2 in 1961-62 to 35.4 in 1997-98. In another exhaustive study (Dasgupta et al 2000), covering the period 1970-71 to 1995-96 and using the CV of PCSDP as the measure of interstate disparity, it was concluded that “Indian states have diverged in terms of per capita real state domestic product (SDP) over the 25 years under consideration”. Apart from establishing the widening of regional disparity, the study also showed that it is the low-income states that have exhibited lower growth rates in SDP, another important aspect of the dynamics of regional disparity in India. Since liberalisation has meant a major paradigm shift in the source of economic growth, some authors have compared the growth performance of different state economies during the 1980s and 1990s, that is, in the immediate pre- and post-reform decades. Based on the coefficient of variation of growth rates of SDP, it is observed that regional disparities were wider in the 1990s than in the 1980s; these disparities are even wider in terms of growth rates of per capita SDP, since low-income states are also at the lower end of the demographic transition (Bhattacharya et al 2004). That the process of liberalisation has accentuated the trend in widening of regional disparity in India is also corroborated by two other studies (Nagraj et al 1998; Ahluwalia 2002), both showing that the Gini coefficient of per capita SDP was 0.152 in the beginning of the 1980s, rose to 0.171 in the beginning of the 1990s, and increased faster thereafter to reach 0.239 in 2003-04. The existing literature thus brings out the following conclusions about the pattern and trend of regional inequalities in India.

(a) Independent India inherited an economy which had wide regional disparities because of colonial interests; its few relatively developed regions consisted of industrial and trading enclaves mainly around the port cities. Removal of regional disparity has been constantly underlined in all plan documents. But, except during the early years of planning, inter-state disparity in India has steadily widened. One should emphasise here that this is the only aspect of India’s development experience where actual 'progress' has been in the 'opposite' direction.

(b) The phenomenon of widening regional disparity has been a feature of the Indian economy since the 1960s, but the process of economic liberalisation has certainly accentuated it. This intensification of regional disparity is also accompanied by wider sectoral disparities, particularly between agriculture and non-agriculture, in different regions, along with wider rural-urban disparities (Krishna 2004).

(c) Apart from widening over the years, regional disparity in India also shows that the relative ranks of different states in terms of their per capita income levels have remained practically unchanged in the last three decades, with very moderate changes in the ranks of middle- or high-income states within their respective groups. In other words, the regions that were poor (rich) earlier are the ones that continue to be poor (rich) now. Such a secular homogeneity among the poorer and richer regions of India probably signifies a close relation between the overall national growth strategy in the pre- and post-liberalisation periods and its regional outcomes.

(d) The division of the major states in India into the three broad groups of high- middle- and low-income states since the 1970s interestingly generates three almost contiguous zones. At the top, one finds four states (Punjab, Haryana, Gujarat and Maharashtra) which, but for the location of Rajasthan, would mean a contiguous zone of relative prosperity, all in the western half of the country. The middle-income states (Tamil Nadu, Kerala, Karnataka, Andhra Pradesh and West Bengal) again form a contiguous zone in the southern part of the peninsula, except for West Bengal. That leaves four Hindi heartland states (Rajasthan, Madhya Pradesh, Uttar Pradesh and Bihar) to form a contiguous zone of poor states, with one of its remaining members (Orissa) just bordering the Hindi heartland and another (Assam) located at a distance. This geographical pattern of prosperity has no association with the natural endowment of the different states.

2. Development Strategy, Asymmetric Federalism and Regional Disparities

The Indian economy has grown at a long term rate of 4.39 percent, covering the entire post-independence period of 1950-2000 (Sivasubramoniom, 2004). This might be a moderate pace, but the estimated growth rates of earlier and later sub-periods clearly indicate the generation of a growth momentum since the eighties when it had grown at 5.71 percent, compared to only 4.06 percent in the 'strong' planning era (1951-65) and still lower at 3.12 percent during the 'weak' planning era (1965-80). However, although the growthrate had increased substantially during the last two decades when the direct role of the state in promoting growth has indeed been declining, it would be erroneous to conclude that the state had all along been an obstacle to growth in previous years.

Within the framework of Indian planning and the federal structure of its constitution, the developmental role of the state had clear impacts not only on the expansion of the overall economy, but also on the composition of growth in two major sectors — agriculture and non-agriculture. As mentioned before, the latter had grown at twice the rate for the former. For the entire post-independence period (1950-2000) non-agricultural sector had grown at 5.8 percent, compared to only 2.6 percent for agriculture. For both these sectors, the core of the development strategy had included substantial state interventions through public investment in a number of highly capital intensive basic industries, apart from the investments in irrigation, roads and power. In addition, the state intervention also included administered prices for a number of basic inputs, often through subsidies. All these were obviously 'promotive' interventions. It was only in the large industrial sector where the state had a 'regulatory' intervention in the realm of geographical or sectoral destination of investments.

For the non-agricultural sector, the most important component of state intervention was the public investment in infrastructure and basic industries. Starting with a share of around one-fourth during the early fifties, the contribution of public sector in the total Gross Capital Formation in India has risen to nearly half by the middle of eighties; thereafter, of course, it has started decreasing because of the economic reforms (Chaudhury, 1998). The huge investments that infrastructure and basic industries usually demand were beyond the capacity of the private sector in the initial years after independence and the strategy of the public investment in these sectors was to 'crowd in' private investment in remaining sectors of the non-agricultural economy. Together with this investment support, the state had also followed a policy of administered prices which amounted to subsidizing many of the industrial inputs like steel and energy. Thus, along with the ropes of regulation, restricting the free play of private capital to enter sector or regions of their choice, the state had indeed provided the industrial sector, non-too-strong at the time of independences, with considerable patronage through huge public investment.

The core element of state's development strategy for the agricultural sector was the Green Revolution. Unlike the strategy of industrialisation which had remained unaltered throughout the planning period, the state had to change its policy of agricultural development during the mid-sixties when a serious food shortage in the urban areas (a wage goods bottleneck) has started unsettling its growing industrial sector. At this point, the agricultural development strategy had changed to 'concentrate' only in those areas where, thanks to earlier investment in agriculture, facilities for assured irrigation were substantial. Such areas covered barely one-fifth of the cultivated area in the country, mostly in the north-western region. And the outcome of the water-seed-fertiliser technology, all of them subsidised, was the Green Revolution enabling the Indian economy to attain self-sufficiency in food grains. This self-sufficiency was, however, a limited phenomenon. It did not imply adequate food for all; instead, it only meant adequate food for only those who had the purchasing power for the same, leaving a large majority of hungry households without purchasing power. Thereafter, the agricultural production levels in India has been sufficient to meet the entire urban food demands and also help to create a large food stock, the two together ensuring that the industrial economy does not suffer from any food supply constraint (as it did during the sixties) even in the face of serious crop failures.

Both these core elements of India's development strategy are 'sector specific' and hence expected to be 'region-neutral', more so the strategy of industrialisation. But, much to the disadvantage of Hindi heartland states, this neutrality was only apparent, not real. Both the strategies of industrialisation and agricultural growth had displayed asymmetric geographical distribution of resources in favour of states that were already better off because of historical reasons. To consider the strategy of industrialisation first, one may note that at least initially it had implied favourable investment patterns in at least two Hindi heartland states of Bihar and Madhya Pradesh, because of their rich mineral resources. But this initial advantage was more than offset by the policy of 'freight equalisation' which ensured availability of basic industrial inputs like coal and steel at same prices throughout India. This promoted the growth of industries in those regions where the industrial economy was already relatively large (to take advantage of the external economies) and deprived remaining regions of India, including even those areas of Hindi heartland which had natural 'comparative advantage' for industrialisation. In case of Green Revolution, it might be noted that the 'economic motive' behind the strategy was not agricultural growth as such, but only ensuring adequate supply of food grains to the urban market to meet the food demands of industrial workers. Failure to do so causes wages to rise, threatening the profit levels of the industrialist. For this limited objective to be met, it was not at all necessary to promote agricultural growth throughout India; a coverage of barely one-fifth of the cultivated area in the country under the Green Revolution was sufficient to attain the goal. Apparently, it could be argued that once a region (initially uncovered by the new technology) could manage to erect an adequate irrigation infrastructure, the benefits of the substantially subsidised new technology was as much within its access as for the areas already covered. But, unfortunately once the limited objectives of meeting the food demand of the industrial sector was already served, public investment in agriculture had started declining even in absolute size since the late seventies (Rao, 2006); consequently, the spread of Green Revolution after its initial success in selected areas was very slow elsewhere in the country.

It is very rational to treat the above notes on the overall national development pattern, particularly its agricultural part, as the reference point for an analysis of the regional development patterns. A striking feature of India's development experience since independence is the continued duality of its economy. This problem of duality (coexistence of large labour-surplus subsistent agricultural sector along with a much smaller but modern industrial sector) was first analysed by Lewis (1958) and his model had also visualised that, with an emphasis on agricultural growth, a substantial transfer of labour from agriculture to industry will fuel a sustained expansion of modern sector to absorb productively the surplus labour in agriculture. This is obviously an agenda for a 'structural transformation' of the economy and all that Lewis had done was to indicate a pathway for that transformation. One could possibly identify an alternative pathway for the same development agenda (not easy at all, as the literature on dual economies clearly indicate), but any development of a largely subsistence economy is unlikely (nay, impossible) without 'breaking' this duality. Quite surprisingly, the development pattern of the overall Indian economy has not been analysed much along this framework of duality. A notable exception to this trend is a study by Patnaik and Chandrashekhar (1998) which underlines how, after the initial success of Green Revolution, the Indian economy is made to miss Lewis pathway of transformation of subsistence agricultural sector, because of the following three paradoxical trends :

(i) The real net domestic product per head of rural population has remained nearly constant and the current per capita food production in India is barely 10-15 percent higher than it was in early fifties. If one takes out the Green Revolution areas (less than one-fifth of country's total cultivated area), then it is very likely that per capita food production is indeed declining. This is exactly the opposite of what Lewis model envisages as a necessary condition for breaking the sectoral duality.

(ii) Irrespective of the growth rates of aggregate output in different regions, the shift of labour from agriculture to non-agriculture is extremely slow. In about fifty years since independence, the urbanisation has gone up by barely 16 percentage points; not only the absolute size of rural population today is larger, but rural workers per acre of gross (not just net) cultivated area is also higher, taxing the carrying capacity of land. The expected sectoral shift of workers/ population would have been in any case slow in backward regions; but even in the fast-growing regions of the country, the shift was only marginally higher.

(iii) Because of sluggish domestic demand, a phase of deceleration in the industrial growth has gripped the Indian economy after the Green Revolution which indeed had freed the industrial sector of the critical problem of inadequate supply of food for its workers. The industrial sector had later revived after liberalisation when the export market had tried to supplement the domestic demand; but, as was noted earlier, the pace of widening of regional disparities had also increased during this later period.

These three observations, taken together, indeed present a most comprehensive description of the development 'pattern' of the Indian economy, seen from the perspective of either structural change or its distributive outcomes. For one, the first observation clearly indicates how, after it had ensured a steady supply of food for the urban workers, the rural economy was made to remain insulated from its urban counterpart. In the face of much higher growth rates of urban economy, this insulation only meant further dualisation of the Indian economy which was already a dual one to start with. This in a sense is a structural retrogression. This insulation would not have mattered much if the insulated subsistence economy was becoming steadily smaller. But, as the second observation indicates, this was certainly not the case. With its low productivity, the rural economy had to support a large and growing population, thereby allowing an acute problem of distribution — both within rural economy and between rural and urban areas, the regional disparities being the reflection of the same phenomena. Finally, the third observation underlines that the growth of agricultural/ rural economy is not merely an issue of inequality and poverty; it is also a critical condition for aggregate economic growth per se through its immediate implication for sustained domestic demand.

Along with this agricultural growth pattern, the economy has also witnessed geographical distribution of industrial investment favouring the states that already had a sizeable industrial sector for historical reasons. The resulting regional economic disparities can be best expressed when per capita SDP (State Domestic Product) of different states are expressed as percentages of per capita GDP (Gross Domestic Product) at national level (Das Gupta, 2007) for different years. Two conclusions easily emerge from the comparison of these income figures. First, the relative income rankings of the different states have remained largely unchanged, specially for the richer states. Secondly, except for the decade of sixties, the overall inequality among the states has been steadily increasing, an denoted by the substantial increase in the ratio of per capita SDP of the richest and the poorest states, from 1.9 in the beginning of sixties to 3.6 at the end of nineties. It is not difficult to realize that this widening of the regional disparities was an 'inherent' component of the development strategy of the state at the central level. For one, the state at the regional levels had no participation in the investment decisions of the state at the central level either for the policy of industrialization or for the policy of agricultural development pursued during the entire post-independence period. However, because of varying natural endowment in different regions and their growth pattern in earlier (colonial) period, the 'sector selectivity' of the development strategy of the state at the central level was certain to be translated into 'region selectivity', causing regional disparities to widen over the decades.

At this point, one is certain to wonder how, in spite a federal constitution, the state at the central level in India is endowed with so much political and economic power. This asymmetric nature of India's federal structure has received some attention in recent years in the context of fiscal dimension of the structure (Rao and Singh, 2004). The fiscal directives allow the central government to mobilize far more resources than it spends directly and this automatically puts it in a vantage position vis-à-vis policy formulation. In addition, the Constitution also divides the economic affairs of the state in such a manner that, in crucial sectors like industrial development, the central government is allowed to act as the primary authority. Further, the scope of discretion is indeed very large in both fiscal and economic matters and thus asymmetry rises both out of 'provisions' and 'practices' in federal issues. Much of the wide regional disparities in India could be attributed to such unforeseen practices of federalism. In analyzing the relative powers of the central and state governments, one should make a distinction between unequal arrangements or asymmetry that are transparent and rule based and those that are opaque and discretionary. The first may be "'built into the constitutional arrangement itself (and)……… this type of asymmetry is transparent and rule based and play an important role in building the nation. In contrast, the second type of asymmetry can simply be the result of administrative and political power play in a federation (which)… can have serious repercussions for the future of Federalism" (Rao and Singh, 2004).

The inequity impact of the strategies of industrialization and Green Revolution, both of which seem to rest on discretionary privileges of the state at the center, was not limited to only some loss of resources for the deprived regions; it also meant loss of certain development opportunity for them. As regards industrialization, it must be remembered that it was an easier challenge during the early decades after independence when the support of public investment was substantial and the competitive forces were relatively less. For the other major development agenda, viz., transformation of the agrarian economies, the loss is probably even larger for the poorer states. As the experience would show, structural transformation of traditional agrarian economics has generally been possible when it had received an 'external' impetus for growth, like the role of urban food demand for agricultural growth in Green Resolution areas. With that objective already met, the said external impetus has also disappeared in remaining areas of the country. Thus, just as Green Revolution has helped transform the agrarian economy of certain regions, by so doing, it has also caused 'detachment' of the rest of the agrarian economies from the industrial sector, the only source of an external impetus. It is in this sense that the national strategies of development have strong negative structural implications for the disadvantaged regions.

Analysis of long term trends in inter-state disparity in per capita income shows that it has all along been widening since the sixties; but during the nineties, the process has been faster (Ahluwalia, 2002). This is apparently paradoxical — for, if the earlier regional disparities were indeed caused by the development strategies of the state; its much smaller role during the nineties should have at least arrested that trend of widening regional disparities. That it did not happen is because poor states, when left to the forces of the market, were bypassed even more than when the development was state-sponsored. By the beginning of nineties, the poorer states in India were not only so vis-à-vis their income levels, but they also had inadequate infrastructure, poorer social development and their governments much incapacitated because of weak financial base, all leading to structural deteriorations of their economies.

3. Growth of Bihar Economy

Notwithstanding the constitutional provisions of the federalism in India allocating the different social and economic sectors between the central and state governments, the 'core' of the development strategies in India, as shown above, has always been decided at the central level, mainly through the sectoral allocation of resources, the regional allocations being only a by-product of that exercise. This is so because, within the existing structure of fiscal federalism, the central (state) government mobilises more (less) resources than it needs for its direct needs, leaving the central government with a surplus, a substantial part of which is spent/distributed using its own ‘discretions’. In this framework, the regional level state governments have only 'limited autonomy’. If the state-level governments had indeed any autonomy, at least some of the poorer states would have exercised it to their advantage to break away from the historical trend.

<u>Aggregate and Sectoral Growth Rates</u>

It is very rational to treat the above observation on overall national development pattern as the point of departure for an analysis of the regional developments in Bihar. Taking the last two and a half decades into account, it might be observed that the composition of the group of high, medium and low income states in India has remained unaltered during the beginning of eighties through the middle of the current decade, with Bihar being at the bottom (Table 1) like Kerala and Rajasthan. Bihar, however, has remained at the bottom of this ranking throughout the period under consideration. If one compares the growthrate of the national and Bihar economy separately for the eighties (1980-81 to 1989-90) and the period since the nineties (1993-94 to 2003-04), it first emerges that the latter has been growing at a slower rate during both the periods. The most distressing part of this trend is that, during the post-reform era since the nineties, the economic growthrate of Bihar has been barely 3.42 percent, just above the population growthrate, resulting in a growthrate of barely 0.92 percent of Per Capita Income. In the previous decade, it had broadly followed the national trend — a moderate growthrate of the non-agricultural sector, accompanied by an agricultural growthrate of 2.21 percent, the two together resulting in an overall growth performance which was inferior to the national average, but not strikingly so. While the difference between the growth rates of Bihar and national economy was a only 0.92 percentage points during the pre-reform period of the eighties, it had become 2.92 percentage points during the post-reform period. Indeed, the growthrate of the Bihar economy during the post-reform era was the lowest of any of the states of India in any of the decades. Clearly, the sharp deterioration was caused by the performance of the non-agricultural sector and this is very likely the consequence of the strategy of liberalisation. A substantial part of the industries in erstwhile Bihar were located in the mineral rich Jharkhand region which now forms a separate state. Thus, in the present state of Bihar, the industrial sector is very small and the non-agricultural sector

Table 1 : Per Capita GSDP of Major Indian States

States	Annual average for 1980-81 to 1982-83		Annual average for 1990-91 to 1992-93		Annual average for 2003-04 to 2005-06	
	Amount (Rs.)	Percentage of India	Amount (Rs.)	Percentage of India	Amount (Rs.)	Percentage of India
Punjab	3174 (1)	178.7	4286 (1)	179.1	33022 (3)	142.3
Haryana	2705 (2)	152.3	3843 (3)	160.6	35128 (1)	151.4
Maharashtra	2695 (3)	151.7	3931 (2)	164.3	33277 (2)	143.4
Gujarat	2280 (4)	128.4	3118 (4)	130.3	30182 (4)	130.1
West Bengal	1871 (5)	105.3	2448 (9)	102.3	22850 (9)	98.5
Tamil Nadu	1743 (6)	98.1	2579 (5)	107.8	27027 (6)	116.7
Karnataka	1739 (7)	97.9	2462 (7)	102.9	24002 (7)	103.5
Kerala	1683 (8)	94.8	2158 (6)	90.2	28059 (5)	120.9
Andhra Pradesh	1673 (9)	94.2	2312 (8)	96.6	23994 (8)	103.4
Madhya Pradesh	1529 (10)	86.1	1882 (11)	78.6	14829 (13)	63.9
Assam	1485 (11)	83.6	1719 (12)	71.8	17037 (11)	73.4
Uttar Pradesh	1449 (12)	81.6	1833 (13)	76.6	12151 (14)	52.4
Rajasthan	1416 (13)	79.7	2129 (10)	89.0	17122 (10)	73.8
Orissa	1371 (14)	77.2	1639 (14)	68.5	15952 (12)	68.8
Bihar	1080 (15)	60.8	1291 (15)	53.9	7418 (15)	32.0
India	1776	100.0	2393	100.0	23199	100.0

Note : Figures for (1980-81 to 1982-83) and (1990-91 to 1992-93) are in 1980-81 prices. The figures for (2003-04 to 2005-06) are in current prices.

Source : EPW Research Foundation (2009)

comprises mostly the tertiary activities. The growthrate of this non-agricultural economy of Bihar had been halved during the post-reform period; for the national economy, the rate had indeed increased, albeit marginally.

From the perspective of structural change, the duality of the Indian economy between its agricultural and non-agricultural sector stands out as very critical both in the context of growth and structural change. During the entire post-independence period, this duality has indeed been reinforced for two reasons — first, during this period, the agricultural economy had grown at a much slower rate and, secondly, the transfer of population from the agricultural to non-agricultural sector during this long period has been only marginal. Such slower growth of output of the agricultural sector, unaccompanied by any migration of workers from the rural areas, obviously weakens the 'natural' distributive mechanism in the economy and thereby deepens its structural weakness. We have computed a simple 'Index of Duality' for the national and Bihar economy for three years — 1980-81, 1990-91, and 2000-01 — to identify the trend in this structural weakness (Table 2). It clearly emerges from these computations that Bihar economy, in spite of being the poorest, is more dual than the national economy. Secondly, although the intensification of economic duality has proceeded all along in the entire Indian economy, the process was a little faster in Bihar. During the eighties, the process was faster in Bihar because of a larger difference between its agricultural and non-agricultural growth rates than in India as whole; during the post-reform period, however, it was basically because of a shift of part of the agricultural workforce to the non-agricultural sector for India as a whole, with no such shift being observed in Bihar. Whatever might be the trend, it is quite well known that, without breaking its duality, a steady

Table 2 : Index of Duality of Economy of Bihar and India

State/Year	Agriculture Percentage Share in		Non-Agriculture Percentage share in		Index of Duality
	Output	Workforce	Output	Workforce	
Bihar					
1980-81	48.0	79.1	52.0	20.9	4.09
1990-91	40.6	78.0	59.4	22.0	4.86
2000-01	37.5	77.0	62.5	23.0	5.58
India					
1980-81	35.7	66.5	64.3	33.5	3.58
1990-91	32.1	67.0	67.9	33.0	4.30
2000-01	24.3	61.4	75.7	38.6	4.95

Source : EPW Research Foundation (2009), Government of India (2003) and Census Report of 1981, 1991 and 2001.

Note : Index = (Share in total output of non-agr. / Share in total workforce of non-agr.) / (Share in total output of agr. / Share in total workforce of agr.)

growth for an overwhelmingly agricultural economy is not possible. The economic distance between the agricultural and non-agricultural sectors gets easily translated into 'social' distance between the rural and urban people and, as shown later in this paper, this social distance is large in India and still larger in Bihar.

Human Development

In conformity with its ranking with respect to Per Capita Income (Table 1), Bihar also ranks at the bottom with respect to its Human Development Index (HDI) in 1981, 1991 and 2001 (Table 3). It is, however, a little pleasing to note that, although economic growth in Bihar has far lagged behind

Table 3 : Human Development Index of Major Indian States (1981, 1991 and 2001)

States	1981		1991		2001
	Rural	Urban	Rural	Urban	Combined
Punjab	0.386 (2)	0.494 (2)	0.447 (2)	0.566 (2)	0.537 (2)
Haryana	0.332 (3)	0.465 (5)	0.409 (4)	0.562 (3)	0.509 (5)
Maharashtra	0.306 (5)	0.489 (3)	0.403 (5)	0.548 (6)	0.523 (4)
Gujarat	0.315 (4)	0.458 (6)	0.380 (6)	0.532 (7)	0.479 (6)
West Bengal	0.264 (8)	0.427 (9)	0.370 (7)	0.511 (9)	0.472 (8)
Tamil Nadu	0.289 (7)	0.445 (7)	0.421 (3)	0.560 (4)	0.531 (3)
Karnataka	0.295 (6)	0.489 (4)	0.367 (8)	0.523 (8)	0.478 (7)
Kerala	0.491 (1)	0.544 (1)	0.576 (1)	0.628 (1)	0.638 (1)
Andhra Pradesh	0.262 (9)	0.425 (9)	0.344 (9)	0.473 (12)	0.416 (10)
Madhya Pradesh	0.209 (15)	0.395 (11)	0.282 (14)	0.491 (11)	0.394 (12)
Assam	0.261 (10)	0.380 (14)	0.326 (11)	0.555 (5)	0.386 (14)
Uttar Pradesh	0.227 (12)	0.398 (10)	0.284 (15)	0.444 (5)	0.388 (13)
Rajasthan	0.216 (14)	0.386 (12)	0.298 (12)	0.492 (10)	0.242 (9)
Orissa	0.252 (11)	0.368 (15)	0.328 (10)	0.469 (13)	0.404 (11)
Bihar	0.220 (13)	0.378 (14)	0.286 (13)	0.460 (14)	0.367 (15)
India	0.263	0.442	0.340	0.511	0.472

Source : National Human Development Report, 2001 Planning Commission, New Delhi.

Note : The figures in bracket denote the ranking of the states.

the national average, its HDI and that of India for both rural and urban population have increased at nearly the same pace during the two decades. Throughout this period, the HDI for Bihar has been about 20 percent lower than the national HDI. Of the eight indicators that are used to compute the HDI, the situation in Bihar is comparatively better with respect to 'availability of safe drinking water' and 'life expectancy'. In 2001, 86.6 percent of Bihar's population had the provision for safe drinking water, compared to 78.0 percent for India; as regards life expectancy, it was nearly the same in Bihar and India (62.8 and 62.9 years). Bihar's position, however, was much worse with regard to 'per capita expenditure' and 'poverty ratios'. A second important feature of HDI for Bihar emerges when one considers the rural and urban indices separately. Interestingly, the HDI for rural Bihar enjoys a rank of 13 among the 15 major states of India, ahead of both Uttar Pradesh and Madhya Pradesh, for both 1981 and 1991 (separate estimates for rural and urban areas are not available for 2001).

Poverty Ratios

Taking the poverty ratios in the rural areas first, it is noticed that the latest estimate (2004-05), shows this to be 42.2 percent in Bihar, compared to 28.7 percent for India as a whole (Table 4). The level of rural poverty in Bihar is only the third highest in the country, the state of Jharkhand and Orissa reporting still higher ratios. This is of course no comfort to Bihar because, being a part of the Gangetic plains, its soil fertility and water resources are much higher than those of Jharkhand and Orissa, a substantial part of whose areas fall in the relatively infertile plateau region of the country. In absolute terms, the above poverty ratios imply about 35 million people living below the poverty line in rural Bihar, out of a total of about 230 million poverty-stricken people in rural India. However, it is comforting to note that the poverty ratio has decreased here from 64.7 percent in 1983 to 42.2 percent in 2004-05, a substantial drop of 22.5 percentage points. The decrease in rural poverty ratio in India during the same period was 17.8 percentage points — from 46.5 percent in 1983 to 28.7 percent in 2004-05. This reduction in rural poverty was a steady process in India as a whole, but somewhat paradoxically, the rural poverty ratio in Bihar had increased between 1987-88 (54.2 percent) and 1993-94 (56.6 percent). In the absence of such an atypical phenomenon, the rural poverty ratio would have probably registered a steeper fall in Bihar between 1983 and 2004-05. Indeed, between 1993-94 (56.6 percent) and 2004-05 (42.2 percent), the fall in rural poverty ratio was as much as 14.4 percentage points, the highest in the country. If one prepares an estimate of 'annual reduction of poverty' from those four estimates of rural poverty, it will observed that this speed of reduction has been lower in Bihar than in India as a whole during the eighties; however, between 1993-94 and 2004-05, this pace has been much higher in Bihar. Thus, the overall rural poverty situation in Bihar can be described by two major observations — first, it is still the worst in the country leaving Jharkhand and Orissa; and second, a redeeming one, that the poverty ratio is dropping at a faster rate in Bihar in the recent years.

Table 4 : Poverty Ratios in Bihar and India

Sector	Years	Poverty Ratios	
		Bihar	India
Rural	1983	64.7	46.5
	1987-88	54.2	39.0
	1993-94	56.6	37.2
	2004-05	42.2	28.7
Urban	1983	61.6	43.6
	1987-88	63.8	38.7
	1993-94	40.7	32.6
	2004-05	38.1	25.9

Source : Reports of NSSO Surveys of relevant Rounds

As regards the urban areas in Bihar, the poverty ratio there in 2004-05 was 38.1 percent, compared to 25.9 percent for India. The difference between Bihar and India with respect to urban poverty ratio, one may note, is smaller than observed for the rural poverty ratio. This is primarily because urban economies are relatively more homogeneous and hence inter-regional differences are comparatively less. Apart from the expected fact that urban poverty ratio is higher in Bihar, one may also note that the pace of reduction in Bihar's urban poverty during the nineties is much slower than in India as a whole. Between 1993-94 and 2004-05, the urban poverty ratio in Bihar has decreased by only 2.6 percentage points (from 40.7 to 38.1 percent); for the national economy, this reduction is 6.7 percentage points (from 32.6 to 25.9 percent). This is again expected as liberalisation has entailed a larger difference between Bihar and India in terms of the growth rates of their non-agricultural sectors.

Literacy and Education

With respect to most of the development indicators, Bihar ranks at the lowest among all the states of India. But one indicator that hinders most its development prospects is probably its lowest literacy level. As per 2001 census, Bihar had a literacy rate of 47.0 percent, only a little higher than the national literacy rate in 1981 (Table 5). In other words, the state is nearly two decades behind the nation vis-à-vis its literacy status. Between 1991 and 2001, the literacy rate had increased in Bihar by 9.3 percentage points (37.7 to 47.0 percent) and, at this pace, the total literacy in Bihar is more than half a century away.

Table 5 : Literacy Rates in Bihar and India

	Male			Female			Overall		
	1981	1991	2001	1981	1991	2001	1981	1991	2001
Literacy Rates									
Bihar	46.6	52.5	60.3	16.5	22.9	33.6	31.6	37.7	47.0
India	56.4	64.1	75.9	29.8	39.3	54.2	43.6	52.2	65.4
Decadal Increase									
Bihar	—	5.9	7.8	—	6.4	10.7	—	6.1	9.3
India	—	7.7	11.8	—	9.5	14.9	—	8.6	13.2

Source : Census of India, 1981, 1999 and 2001.

The only redeeming feature of this otherwise dismal literacy scenario in Bihar is a reduction in gender disparity in literacy rates, both during the eighties and nineties. In 1981, the female literacy rate of 16.5 percent was 65 percent lower than the male literacy rate of 46.6 percent; in 1991, this ratio has come down to 57 percent; and, in 2001, to a still lower level of 45 percent. In addition, although the spread of literacy in Bihar has always lagged behind the national rate, the nineties have observed a faster spread of literacy here than during the eighties.

The most immediate reason for slower spread of literacy in Bihar is probably its poor educational infrastructure. At the present low level of income, a rapid increase in literacy rates is unlikely in the absence of adequate public expenditure on education. The rapid increase in literacy rates in some of the Indian states has generally been a consequence of supply impetus, like in Rajasthan in recent decades. But unfortunately, such supply impetus has indeed been weakening in Bihar, since the eighties. For example, for the most important stage of elementary education, the number of primary and middle schools per 10,000 population in Bihar has recorded a negative growthrate both during the eighties and nineties, the fall being sharper in the earlier decade (Panchmukhi 2004). Interestingly, such a negative trend is visible even at the national level, but fortunately, the pace of decline is a little slower. The manpower base of these educational infrastructures, as indicated by the number of teachers per institution, had also experienced a negative growth in Bihar at least during the nineties, though not during the preceding decade. These trends clearly show that the withdrawal of the state from the all important sector of primary education had started even before the introduction of economic reforms during the nineties. This is primarily because of the incapacitation of the state resulting from the weakening of public finances that had started from the early eighties in Bihar.

Fortunately, in recent years, the central government has been financing an ambitious elementary education programme (Sarva Shiksha Abhiyan) which might improve the literacy scenario, specially in rural areas, across the country including Bihar. One has to wait till the next census in 2011 to know the impact of the programme.

Health Status

For an overwhelmingly large section of the Indian population, the health needs are indeed more immediate than their educational needs. The absence of literacy and formal education may restrict a person's choice with respect to livelihood and other life-supporting activities, but in the absence of good health, it will not be possible to utilise even the limited choices that a person may have. Secondly, without strengthening human life as a biological phenomenon, efforts to enrich its other dimensions, social or cultural, are probably meaningless.

Earlier, one had already noted an absence of a strong relationship between growth performance and trends in poverty ratios. In the context of health status, one can again notice that there could be factors, other than economic growth, substantially influencing human development. As regards Infant Mortality Rate (IMR) for rural areas, presently 59 for Bihar, it is only slightly worse than the national average at 61. The figure for early eighties and nineties further indicate that this relatively better status of Bihar vis-a-vis IMR has existed in the past also. However, in case of IMR for urban areas, it is 37 for India as whole, compared to a much higher figure of 44 for Bihar. Interesting, the urban IMR in Bihar was indeed a little lower than the national average in the eighties and early nineties; that advantages, however, no longer exists. From the overall trend in IMR in Bihar and India during the eighties and nineties, it also emerges that the improvements have been much slower in the nineties, a phenomenon particularly lamented by the UNDP Report (UNDP, 2006).

Table 6 : Infant Mortality Rate and Expectation of Life in Bihar and India

		1981-83	1991-93	2001-06	Improvement during	
					Eighties	Nineties
Infant Mortality Rate (per 1000 Live Births)						
Bihar	Rural	114	74	59	40	15
	Urban	61	47	44	14	2
India	Rural	116	86	61	30	25
	Urban	65	52	37	13	15
Expectation of Life (Yrs.)						
Bihar	Male	55.2	60.8	65.7	5.6	4.9
	Female	52.9	60.1	64.8	7.2	3.7
India	Male	55.6	60.6	63.9	5.0	3.3
	Female	56.4	61.7	66.9	5.3	5.2

Source : Government of India (2007)

That Bihar enjoys a health status relatively better than what its income levels would indicate is also apparent when one notes that, according to the most recent estimate, the expectation of life in Bihar is 61.4 years for males and 59.5 years for females; for India as a while, the corresponding estimates are — 61.6 years (males) and 63.3 years (females). However, one should note here that the gender disparities in health status, as indicated by the estimates of expectancy of life, is much wider in Bihar where average female life is much shorter; according to the usual demographic pattern, it is males who generally have a shorter life, as observed in India as a whole. From a comparison of the estimates of life expectancy in 1981-83, 1991-93 and 2001-03, it clearly emerges that Bihar and India had experienced a similar upward trend during the eighties. Indeed, during this decade, the pace of improvement was faster in Bihar. The nineties, however, have witnessed a clear deceleration in improvement in health standards, more so in Bihar. Quite alarmingly, the expectation of life for females has indeed decreased during this decade in Bihar.

4. Towards an Alternative Development Strategy

To begin with, one may first note that the prospects of an alternative development strategy in India, to address particularly the problems of regional inequality, are brighter now than ever before. There are at least two clear indicators of such enhanced prospects taking the nation as a whole. The first of these indicators is a realisation on the part of the national planners that the accelerated growth of the national economy during the period of liberalisation has been highly selective in terms of its sectoral, regional and social coverage, and the welfare consequences of this growth process has been far less than expected. As a response to this lapse, the national planning exercise now underlines 'inclusive growth' as one of its key goal, along with the earlier goal of 'accelerated growth'. This major change is widely reflected in the Thirteenth Five Year Plan document of the country.

The second important phenomenon which is likely to make this inclusive growth possible through an alternative development strategy is the threatened food security of the country, as experienced during last two years. Thanks to the Green Revolution, India had reached a comfortable situation where it was not only able to meet the effective demand for food to avert any shortage of food in urban market or the emergence of a famine like situation. Unfortunately, that comfort level is now low and a wage goods bottleneck has reappeared in the economy (similar to the one in early sixties) as evidenced through the soaring food prices in recent times. The situation clearly demands a response where the agricultural sector receives a much higher priority, covering the entire country, particularly the fertile regions like Bihar.

In the specific case of Bihar, there is also a third factor enhancing the prospects of an alternative development strategy — an exceptionally strong urge for development, a consequence of the radical changes in the social base of governance in the state. Until the eighties, the political power at the state level was largely at the hands of traditional elites, comprising the land-rich households and the upper castes. But the nineties saw the emergence of the middle layers of the population in the political arena to pursue the twin political goal of 'social justice' and 'economic development'. For a number of socio-political reasons, it was the agenda of social justice that had got precedence over the other agenda during the nineties; but the continued neglect of the agenda of economic development could not be tolerated by the people and the present government had got elected almost solely on the basis of its promised development initiatives.

The above triad of forces — a policy of inclusive growth announced by the central government, a threatened food security in the Indian economy and the emergence of a political leadership in Bihar for which development is the single most important agenda — obviously calls for a new thrust for development in the state which, in turn, demands an alternative development strategy. Four crucial points need to be kept in mind in outlining this alternative strategy. The starting point is to recognise that, given the breadth of poverty, action would need to focus on creating and expanding income opportunities for the rural poor, the majority of them residing in rural areas and primarily engaged in agriculture. The urban poverty in Bihar, as often underlined, is a spillover of the rural poverty. A second point is to recognise that improved human capabilities and their wider spread are crucial for raising the productivity and hence income of the poor. Improvements in education, health and nutrition are not simply definitions of welfare status, but also crucial human capital for sustaining this status through growth. Finally, access by the poor to productive capital assets is fundamental to engagement in productive activities. Given the dominance of agriculture in the provision of livelihood to the poor, access to land is pivotal. This calls for reforms in the tenural system and simultaneously creation of non-land assets for the poor. In view of the foregoing considerations, one can delineate the following four major action areas as part of an alternative growth strategy in Bihar:

(a) Primary Attention to Agricultural Growth : Remembering that nearly nine-tenths of the Bihar's population live in rural areas, earning their livelihood mainly from agriculture, one cannot visualise an accelerated and inclusive growth process where agriculture is not accorded the centre stage. Since the agricultural production process is labour-intensive, the growth of the sector is automatically inclusive. Indeed, a faster reduction of rural poverty in recent years in Bihar, as noted before, is precisely because of a higher growthrate of its agricultural sector. Additionally, one may also note here that the problem of threatened food security in India can also be met only through a higher resource allocation for the agricultural sector. By virtue of being a part of the Gangetic plains, the water resources in Bihar are abundant and the required level of agricultural investment to enhance agricultural growth is much less here, compared to most other regions of India.

Pursuit of productivity growth in agriculture requires four critical interventions. The first is to create conducive conditions to promote long-term investments in the sector to improve its productivity; in the context of Bihar, this implies investment in irrigation infrastructure so that the entire cultivated area enjoys the benefits of assured irrigation. Second is to build and strengthen the credit markets for financing both investment as well as agricultural operations. The bulk of the rural economy depends to a large extent on informal credit arrangements. The strengthening of credit system is not just a matter of mobilising financial resources, but more important is the knowhow which will ensure minimum default of payments. The third area is that of facilitating the adoption of technological innovations for raising both land and labour productivity. Finally, to unleash the full potential of the rural economy, at least the tenural system should be reformed, if not a redistribution of land, to free the rural economy from its persistent feudal social relations.

(b) Strengthening of Human Development : Investment for a healthy and educated workforce holds an important key not only to the overall growth of the economy, but also enhances the capacity of the poor to earn a decent income. In spite of the emergence of private players in this sector, the government still has a pivotal role to play in strengthening the supply of these services. The rationale for the continued pivotal role of governments in health and education services is based on at least two considerations. First is the limited income of the large sections of the needy population who cannot afford to buy these services from the private players. Thus, the private health and education services remain restricted to only a small segment of the population with adequate income. The second reason is the existence of significant externalities from health and education expenditures. The social return from such expenditures include higher awareness about causes and remedies for different diseases, rise in social and political interaction through literacy and numeracy, and skills that have higher social than private returns.

The main adjustments to current policy practices include the restructuring of budgets in favour of education (primary and secondary) and health; improving the flow of health information; and raising the quality of education by providing more inputs in the form of textbook and other learning devices. The recent trend towards decentralisation of management of these services augurs well not only for enhanced accountability and hence cost-effectiveness, but also for encouraging local initiatives.

(c) Improving Infrastructure for Market Integration : Long periods of neglect in maintenance and curtailment of development budgets to achieve fiscal balance has led to a serious deterioration of transport networks in Bihar. The poor mobility, in turn, has hampered efficiency in production, supply responsiveness and market integration. The state interventions can play the most effective role in promoting growth and alleviate poverty through improvement in road infrastructure, first through building major roads connecting the smaller towns (urban centres) with the major consuming centres, and then developing feeder or arterial roads to reach the interiors of the rural areas which are also production points. The second important area of infrastructure is communications. The value of information flow for raising productivity and improving education and health status is well known. Finally, the improvement of infrastructure includes the availability of power through rural electrification and other forms of energy.

(d) Improving the Efficiency of Poverty Alleviation Programmes : The poverty alleviation programmes have been a major component of government expenditure, both at central and state levels, since the seventies. Indeed, over the years, there have not only been newer programmes under this head, but their resource base has also increased continuously. Of particular importance among these programmes are Public Distribution System (PDS), National Rural Employment Guarantee Programme (NREGP), Indira Awas Yojana (IAY), Integrated Child Development Scheme (ICDS), etc., for each of which the budgetary provisions are very substantial. Many of these programmes are also seen to be at least moderately effective in some other states of India, but their working has been rather poor in Bihar. Since the government is already spending a substantial part of its scarce resources on these programmes, it needs to pay special attention to improve the implementation of these schemes.

The two major interventions required for improving the efficiency of poverty alleviation programmes are encouraging people's participation in them through Panchayati Raj Institutions and secondly, designing effective information and monitoring system, encompassing the working of the schemes right up to the village level.

5. Conclusion

The phenomenon of substantial regional inequality has been a part of the overall Indian economy for long and it has been widening in the recent decades. It is indeed a reflection of the national strategy of growth where the regions that were better off to start with have continued to grow faster, leaving the disadvantaged regions even more disadvantaged. It is, therefore, not surprising that the relative ranking of the different states in India have remained nearly unaltered since the seventies. Bihar just happens to be bottom of this ranking.

On the issue of why Bihar's economy has been continuously experiencing low growth, specially since the nineties, it is relevant to remember the expected roles of the state and the market in the development initiatives. Before liberalisation, Bihar's economy has suffered, first because of the policy of freight equalisation and then because of being left out of the scope of Green Revolution. The second part of discrimination was of course related to the abandoning of the agenda for structural change in the agrarian sector, a case of willful default of the local agrarian polity and a convenient default of the national industrial polity. In any case, all these discriminations had occurred because of the state, either directly or indirectly. During the nineties, when the market was expected to replace the state as the main initiator of growth impulses, Bihar's disadvantage was indeed deepened. In this strategy, Bihar with its small industrial sector was unable to exploit the opportunities of market-led growth.

Fortunately, the prospects of an alternative development strategy to address particularly the problems of regional inequality in India are brighter today than ever before for at least three reasons. First, the national planning exercise now underlines inclusive growth as one of its key goal, along with the earlier goal of accelerated growth. The second important indicator, a boon in disguise, is the threatened food security of the nation which should force the planners to pay higher attention to agricultural growth, benefiting states like Bihar. Finally, the present government of Bihar has got elected on the basis of its promised development initiatives, providing a strong political base for its development agenda.

The above triad of forces obviously calls for a new thrust for development in Bihar which\, in turn, demands an alternative strategy. The study underlines four pillars of this development strategy in terms of high priority for agricultural growth, increasing human capabilities, improving infrastructure for market integration and, finally, improving the efficiency of all poverty alleviation programmes. Except for the last pillar, viz., more efficient poverty alleviation programmes, all others require resources of the state government. Thus, even in an era of liberalisation, the states of the poorer regions have a substantial developmental responsibility. Once the development process takes off and gains momentum through appropriate state interventions, the strong market forces are almost certain to emerge, providing the fillip for a sustained growth process of the presently disadvantaged regions like Bihar.

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