Development and Intra-State Disparities in Bihar

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Although Nitish Kumar's victory in the Bihar assembly elections reflects a positive response to the development track record and the restoration of law and order in the last five years, the uneven distribution of benefits from public investment and development initiatives at the village level flows from the existing socio-economic disparities at the grass root level. A field survey in 80 villages during 2008-09 brought out the extent of intra-state disparities.

The recent assembly elections in Bihar have given Nitish Kumar a second term. The voters' verdict on his development track record and the restoration of law and order in the last five years seem to be very positive. This article aims to address one of the important challenges in Bihar, accelerating development and redressing intra-state disparity in terms of economic and social development.

Bihar, with the latest estimated population of 94.5 million, is considered to be one of the more underdeveloped states in India. Per capita net state domestic product (NSDP) is the lowest among the major states, only one-third of the national level. As Figure 1 shows, Bihar continues to lag further behind other states in terms of per capita income. Estimates based on the National Sample Survey in 2004-05 show that the incidence of poverty, defined as the percentage of the population below the poverty line in terms of monthly per capita expenditure, is 42.1% in rural Bihar, which is far higher than the 28.3% in rural India as a whole. Similarly, the progress of social development, such as education and health, is slower than in other states. The socio-economic backwardness of the state is rooted in the semi-feudalistic structure originating from the colonial period in which the upper castes held dominant economic and political powers. After independence, the rise of the upper middle castes in the economic and political spheres, and the military mobilisation of the poor peasantry low castes in the recent past have gradually altered the caste-based hierarchical society in the rural areas. Nevertheless, it is still clear that there is a division between the caste-based haves and have-nots in terms of landholding (Table 1, p 14).

Recently, it has been reported that economic growth in Bihar has improved, particularly in sectors such as construction, hotels, restaurants, communication and trade. This, however, implies that growth largely comes from the non-agricultural sector and the urban areas rather than from the agricultural sector, where approximately 70% of the state's workforce are engaged or from the rural areas, where 90% of the state population resides. Worse, Bihar is suffering from growing intra-state disparity. The per capita gross district domestic product (GDDP) for Patna district is by far the highest among the state's 38 districts. The difference has increased in recent years with the ratio of per capita GDDP in Patna district to that of Sheohar district, which has the lowest income in Bihar, increasing sharply from 3.3 in 1998-99 to 8.6 in 2006-07 (GOB 2007, 2010). Social inequalities stemming from caste, religion and gender tend to be reflected in lower health and education indicators among the lower castes, Muslims and girls. More importantly, the allocation of public expenditures to social and economic development has been extremely skewed to only one district, i e, Patna district (GOB 2010). So, how has higher economic growth and growing intra-state disparity

Figure 1: Correlate of Per Capita NSDPs in 1980-81 and 2007-08
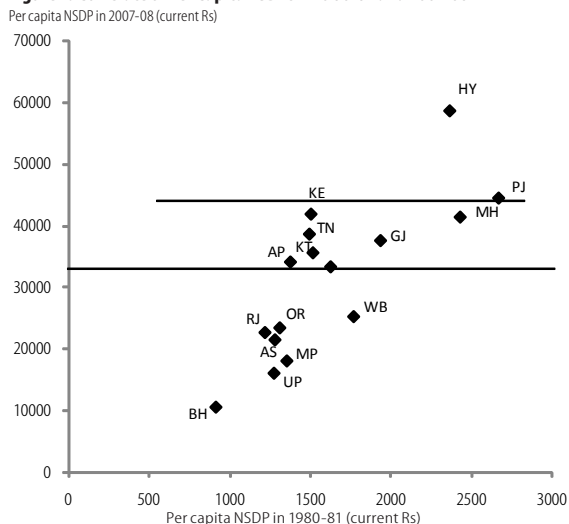
Figures are based on current per capita NSDP of 15 major states; Andhra Pradesh (AP), Assam (AS), Bihar (BH), Gujarat (GJ), Haryana (HY), Karnataka (KT), Kerala (KE), Madhya Pradesh (MP), Maharashtra (MH), Orissa (OR), Punjab (PJ), Rajasthan (RJ), Tamil Nadu (TN), Uttar Pradesh (UP), and West Bengal (WB). The vertical and horizontal lines indicate all-India's average. Per capita NSDPs of Gujrat and Maharashtra are those in 2006-07.
Source: Government of India, Ministry of Finance, *Economic Survey 1999-2000 and 2009-10*.

Table 1: Landholding by Caste Category in 80 Villages

Category of Castes	Estimated Population (%)	No of Surveyed Households	Proportion of Households (%)	No of Landless Households	Proportion of Landless in Each Caste Category	Total Land Owned by Castes (Acre)	Proportion of Land Ownned in the Total Land (%)	Average Landholding (Acre)
General	13.0	3,844	10.64	580	15.09	7,142.13	23.79	1.86
OBC	19.3	8,032	22.24	2,766	34.44	13,885.26	46.25	1.73
EBC	32.0	6,443	17.84	4,311	66.91	2,832.67	9.43	0.44
SC/ST	23.5	5,351	14.81	3,982	74.42	1,386.00	4.62	0.26
Muslim	12.5	12,453	34.47	8,675	69.66	4,778.81	15.92	0.38
Total	100.0	36,123	100	20,314	56.24	30,024.87	100.00	0.83

The caste category-wise population, provided by the Government of Bihar, was estimated before the bifurcation of the state.
Source: IDE-ADRI Village Survey 2008-09.

Table 2: Evaluation of Change over Time by Mukhiya or Village Leaders in Bihar

Name of District	Per Capita GDDP (Rs)	Rank of Livelihood Potential Index (Out of 38 Districts)	No of Surveyed Villages	No of f Better-of Villages	Most Important Reasons (Up To Three) for Being Better-off in the Last Ten Years					
					Outside Jobs	Access to Education	Access to Roads	Agricultural Productivity	Wage Rates	Social Conditions
Bhagalpur	8,059	21	16	16	7	12	9	2	4	6
Rohtas	7,056	2	16	15	5	11	8	6	3	2
East Champaran	6,784	34	16	14	9	4	6	7	8	3
Madhubani	5,639	31	16	16	11	8	9	7	3	4
Kishanganj	5,355	10	16	16	14	8	2	11	3	2
Total	7,168	-	80	77	46	43	34	33	21	17

The per capita GDDP is an average of GDDP 2003-04 and 2004-05 at 1999-2000 prices. The GDDP total is the state average. Other reasons receiving few responses, such as access to electricity (7), private irrigation (6), political conditions (6), public irrigation (5), access to health (5), and so on, were excluded from the table.
Source: IDE-ADRI Village Survey 2008-09 and Government of Bihar (2009).

in recent years been translated into the rural areas?

Recent Developments

In a survey conducted in a four-staged randomly selected 80 villages in five districts in Bihar in 2008-09, in which *mukhiyas* (village head), the heads of gram panchayat and village leaders assessed changes in their villages in the last decade, 77 out of 80 of the respondents concluded that their villages were relatively better off than 10 years ago.[1] The main reasons given for this assessment were increased employment opportunities outside the village, followed by access to education and access to roads (Table 2). It is reported that all villages supplied seasonal labour to prosperous urban and rural areas outside the state, and that approximately two-thirds of the villages served as a source of domestic and international long-term labour migration. As outmigration is not a recent phenomenon in Bihar, it is presumed that those who traditionally did not leave the villages, particularly those in relatively underdeveloped areas, might have gained access to the labour market outside the state. The standard of living in rural Bihar seems to have improved largely with employment opportunities in other states.

Since 2006 when the Nitish Kumar government was sworn in, it seems that physical and social infrastructure have progressed

rapidly with new investments being made in electricity, schools, and to some extent, in roads (Table 3, p 15). Among numerous development programmes in the rural areas, educational opportunities in the last decade have improved more than others from a village leader point of view. This can be attributable to the establishment of new schools and the appointment of new teachers by panchayats. In a survey of 80 government primary and upper primary schools in the same villages, the provision of cooked mid-day meals (MDM) in government schools, which began in Bihar in 2005, much later than in the majority of other states, has ever been implemented in 73 of the surveyed schools, even though

they are not regularly served in most of the schools. It is reported that school attendance, particularly of the lower castes, tends to have increased in these MDM implementing schools.

Public Investment and Disparity

Although public investment has increased and assisted in the development of the rural physical and social infrastructure, disparities across districts, blocks, gram panchayats and revenue villages within the state, still remain. For example, all 80 surveyed villages are accessible in the dry season to the main hamlet by road. However, only 26 villages are connected by pukka (paved or non-pitched) road, and 38 villages are inaccessible by vehicles during the monsoon months. Needless to say, accessibility to the main hamlet does not mean accessibility to the periphery of the villages, where the hamlets of lower caste groups tend to be located. Furthermore, as for electrification, differences in terms of the number of household connections and the available hours of electricity are observed across districts, villages and seasons (Oda and Tsujita 2010).

Similarly, the extent of implementation of development programmes, which is critically important for the poor, differs in villages. Table 4 (p 15) shows what factors determine the implementation of the five main rural development programmes in the surveyed villages, namely, the National Rural Employment Guarantee Scheme (public works), the Backward Regions Grant Fund (the provision of financial

Table 3: Chronology of Physical and Social Infrastructure Development in 80 Villages in Bihar

Year	Public Primary/Upper Primary Schools Year Established	Electrified Villages* Year Electrified	Accessibility to the Main Hamlet by Road in Dry Season Length of Accessible Years	
Before 1947	9 (11.3)	0 (0.0)		
1948-59	24 (30.0)	2 (4.2)		
1960-69	19 (23.8)	4 (8.3)		
1970-79	9 (11.3)	7 (14.6)		
1980-89	3 (3.8)	5 (10.4)	More than 5 years	56 (70.9)
1990-2005	3 (3.8)	11 (22.9)	1 to 5 years	19 (24.1)
2006-	13 (16.3)	19 (39.6)	Less than 1 year	4 (5.1)
Total	80	48**	Total	80***

* If any household is electrified as per the government's old definition, the village is defined as an electrified village.
** If one of the government's new definition of an electrified village "more than 10% of households are electrified" is adopted, the number of electrified villages falls to 44. *** The year of accessibility for one village is missing. Parentheses indicate the percentage of the total.
Source: IDE-ADRI Village Survey 2008-09.

resources for supplementing and covering existing development programmes to redress regional imbalances), the Twelfth Finance Commission Grant (mainly the installation of solar lights), Indira Awas Yojana (housing) and the Total Sanitation Campaign (toilet construction).[2] The dependent variable has a value from zero to five, depending upon how many rural development programmes have been carried out in 2008-09 by scoring one for each programme. The difference at district and village levels is clear. At the village level, those with a hospital nearby or electrified villages tend to carry out rural development programmes. This implies that rural development programmes are run in places that are more easily accessible by road or are closer to a town. The significance of the ratio of households with tractors indicates that the overall wealth of villages play a significant role in programme

Table 4: Ordered Logit Estimation of the Implementation of Five Rural Development Programmes at the Village Level

Variables	Dependent Variable Value: Minimum 0 to Maximum 5 (Score 1 If Each Programme Has Been Implemented in the Fiscal Year 2008-09)	
	Coefficient	Robust Standard Errors
Bhagalpur district dummy	-2.167***	0.593
Madhubani district dummy	-2.734***	0.640
Hospital dummy	4.103***	1.555
Electrified village dummy	0.873*	0.464
Ratio of household with holding tractors	22.134**	9.720
Mukhiya SC dummy	2.211**	0.821
Mukhiya village resident dummy	1.028*	0.512
Cut 1	-4.832	1.113
Cut 2	-3.639	0.906
Cut 3	-1.430	0.681
Cut 4	1.118	0.621
Cut 5	4.549	0.862
No of observations	80	
Log likelihood	-84.49	
LR Chi-square	60.61	
Pseudo R^2	0.21	

***, ** and * indicate significance at 1%, 5% and 10%, respectively. The explanatory variables are selected using the forward stepwise method. See footnote 2 for the examined variables. The dependent variable's mean is 3.29 (Std Dev is 0.97).
Source: Authors' calculation.

implementation. On the whole, it is clear that relatively more **accessible and developed** villages tend to carry out rural development programmes.

At the same time, it is intriguing that the role of the mukhiya is not negligible when it comes to programme implementation. The programmes tend to have been executed in villages where the mukhiya himself/herself is a resident of the village and is from a scheduled caste (sc). The development programmes often intend to target the poor, who often overlaps the scs. The sc mukhiya's own initiatives seem to be more important than the proportion of sc beneficiaries in the villages. The central and state governments, with a series of legal provision **of decentralisation and of re**served seats for the lower castes at panchayat levels, **have tried to improve pro**gramme implementation for the poor, such as by creating new institutions for new programmes, introducing bank transfers for a variety of beneficiaries, and other innovations, but they cannot necessarily provide a panacea for a wide range of problems facing people at the grass root level.

The uneven distribution of benefits from public investment and development initiatives at the village level seems generally to reflect the existing socio-economic structure at the grass root level. This implies that public investment, paradoxically, reinforces the existing rural socio-economic structure, if state's development strategies cannot adequately address inequality. In fact, deep-rooted fundamental problems of inequality, such as the distribution of landholdings

and the empowerment of lower castes, have not rigorously been dealt within the state's policies. It is certain that Nitish Kumar's second term **will see a long list of develop**ment challenges. The insufficient attention to **how development and poverty allevia**tion programmes can be implemented adequately, efficiently, accountably and transparently at the village level may leave Bihar as a mere source of labour supply for the rest of India.

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