Are BIMARU States Still *Bimaru*?

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Ashish Bose coined the acronym BIMARU in the early 1980s to describe the backwardness of Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh relative to the best-performing states in terms of demographic indicators. This article extends Bose's analysis to recent years to ascertain if the proposition is still valid. To retain the integrity of the original exercise, the same indicators examined by Bose have been analysed, as far as possible. It finds that the BIMARU states have made a lot of progress, yet they continue to be *bimaru* as the gap between them and the national average persists in a majority of indicators.

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1 Introduction

India is a vast country, with inherent differences in geography and history, leading to disparities in development. Owing to differences in resource endowment, levels of infrastructure, and socio-economic parameters, states have grown at different rates. Removal of regional disparity, therefore, has always remained a major policy objective. The policy instruments used include plan and non-plan transfer of resources from the centre to the states (favouring less-developed states), establishment of public sector units, tax incentives for the private sector in backward regions, and so forth. Despite all these, disparities have substantially remained the same.

The term BIMARU was coined by demographer Ashish Bose in the early 1980s while commenting on India's demographic diversity. With states as the unit of analysis, Bose analysed selected demographic indicators to find that Bihar, Madhya Pradesh (MP), Rajasthan, and Uttar Pradesh (UP), which accounted for nearly 40% of the population of the country in 1981, lagged behind other states.[1] These states had a very poor record on birth and death rates and also the infant mortality rate (IMR)—the three most important indicators for resolving the problem of high population growth.[2] Bose coined the acronym to draw the attention of policymakers to the need of bridging the gap between the demographically sick (BIMARU) states and the better-performing states (Kerala, Tamil Nadu, Andhra Pradesh, and Karnataka). Later on, Bose even said that if the gap was not bridged, it may "cause social turbulence and may even pose a threat to political stability" (1996). Of late, some scholars have expanded BIMARU to BOMARU or BIMAROU to include Odisha as well (Chaudhuri and Ray 2010). But, Bose had deliberately left Odisha out, which was also a demographically sick state, because its population was below 5% of the total population of the country. In other words, he was only focusing on the major states.

Two decades later, a series of studies have re-examined regional disparities. Prominent among them are Ahluwalia (2000); Kurian (2000); Dholakia (2003); Singh et al (2003); and Chaudhuri and Ray (2010). These studies examine regional disparities in a socio-economic context, but do not adequately account for regional imbalances in demographic indicators. Thus, they digress from Bose's original idea of demographic disparity. Moreover, these studies do not give us a complete picture of trends in regional disparities in demographic indicators over a sufficiently long period of time. Though based on limited analysis, some of them have arrived at far-reaching conclusions on regional disparities. Dholakia (2003), analysing the data on socio-economic indicators for the 1980s and 1990s, concludes that while per capita state domestic product (SDP) does not show any significant trend in regional disparity, human development indicators display a marked decline. He also argues that central institutions such as the Finance Commission and Planning Commission need not be unduly concerned about regional imbalances in human or economic development as prioritising economic growth is likely to address disparities in income and human development in the shortest time. Ahluwalia (2000), analysing SDP growth rates for 14 major states, argues that the popular characterisation of the so-called BIMARU states as a homogeneous group of poor performers does not hold as far as their economic performance, particularly in the post-reform period of 1991–92 to 1997–98, is concerned.

The media has also pronounced that the BIMARU states are no longer BIMARU because of their high economic growth rates. Bihar recorded a growth rate of 12.11% in the Eleventh Five Year Plan period (2007–12). MP, Rajasthan, and UP recorded growth rates of 7% or more. The average growth rate of the five

poorest states (Bihar, Rajasthan, MP, UP, and Odisha) exceeded the national average for the first time in the Eleventh Plan period, which even made the then Prime Minister Manmohan Singh say, "I think we may be reaching the stage when the term 'BIMARU states' can be relegated to history."[3] This was in the National Development Council, the highest level policymaking body, underlining the significance of the BIMARU states among policymakers and politicians.

More than six decades of planned development have gone by, as have programmes and policies to alleviate the backwardness of the BIMARU states. Moreover, between 1981 and 2008, India's gross domestic product (GDP) and per capita income grew annually at 5.9% and 3.8%, respectively (Nagaraj 2008). Since around the mid-1970s, absolute poverty, measured in terms of consumption, has fallen to 21.9% of the population. Thus, there is merit in carefully re-examining the current status of BIMARU states to discern the distributional impact these positive developments have had. The objective of this article, therefore, is to revisit Bose's analysis by examining the trends in regional disparity (in demographic indicators) from the early 1980s to late 2010. More specifically, the article asks whether the BIMARU states have moved out of the BIMARU category. If not, has any of the BIMARU states been consistently performing better than the other BIMARU states on all or most of the indicators?

The rest of the article is organised as follows. Section 2 explains Bose's methodology and summarises his major findings. Section 3 updates Bose's analysis, and Section 4 concludes by summarising the main findings.

2 Bose's Procedure and Findings

The article uses, as far as possible, the same indicators analysed by Bose and updates them for recent years. To maintain consistency, the new states—Jharkhand, Chhattisgarh, and Uttarakhand—are clubbed with Bihar, MP, and UP, respectively, by making suitable adjustments. For lack of data, the following changes have been made in the choice of indicators. Instead of the

percentage of girls attending school in the 10–14 age group, it is figures for the 11–14 age group that have been used.[4] For population, Bose computed both decadal growth rate and annual average exponential growth rate. But this study has computed only annual average exponential growth rate of population to avoid duplication of indicators.

Table 1 from Bose (1988) summarises his findings, highlighting the demographic diversity across the major states in the early 1980s. The birth rate ranged from 24.9 per 1,000 in Kerala to 40 per 1,000

in Rajasthan, and the death rate from 6.7 per 1,000 in Kerala to 15.7 per 1,000 in UP. The female literacy rate was the highest in Kerala (65.7%) and the lowest in Rajasthan (11.4%). The mean age of females at marriage (16.1 years) and the practice of family planning (13.1%) were the lowest in Rajasthan and UP, respectively. The decadal growth rate of population during 1971–81 was the lowest in Tamil Nadu (17.5%) and the highest in Rajasthan (33%). The level of urbanisation was the highest in Maharashtra (35%) and the lowest in Odisha (11.8%).

Table 1: Selected Demographic Indicators

No	States	Birth Rate (1983) Per 1,000	Death Rate (1983) Per 1,000	Female Literacy Rate (1981) Percentage	Mean Age at Marriage (1981) Years	Female Literacy Rate (1981) (Percentage)	Per Cent of Couples Effectively Protected by Family Planning Methods (1983)	Decadal Growth Rate of Population (Percentage) (1971–81)	Annual Average Exponential Growth Rate (Percentage) (1971–81)	Per Cent of Urban Population (1981)	Growth Rate of Urban Population (1971–81) (Percentage)
1	Kerala	24.9	6.7	65.7	21.9	65.7	33.5	19.2	1.8	18.7	37.6
2	Tamil Nadu	27.8	11.6	35.0	20.2	35.0	28.4	17.5	1.6	33.0	28.0
3	Karnataka	28.7	9.2	27.7	19.2	27.7	26.7	26.8	2.4	28.9	50.7
4	Maharashtra	29.6	9.1	34.8	18.8	34.8	40.0	24.5	2.2	35.0	40.0
5	Punjab	30.2	9.5	33.7	21.0	33.7	34.5	23.9	2.2	27.7	44.5
6	Andhra Pradesh	30.7	10.3	20.4	17.3	20.4	28.4	23.1	2.1	23.3	48.6
7	West Bengal	31.9	10.2	30.3	19.3	30.3	25.7	23.2	2.1	26.5	31.7
8	Odisha	33.3	12.1	21.1	19.0	21.1	27.5	20.2	1.9	11.8	68.5
9	Gujarat	34.0	11.5	32.3	19.5	32.3	36.9	27.7	2.5	31.1	41.4
10	Haryana	35.9	9.0	22.3	17.9	22.3	31.5	28.8	2.6	21.9	59.5
11	Bihar	37.2	13.0	13.6	16.5	13.6	13.7	24.1	2.2	12.5	54.8
12	Uttar Padesh	38.4	15.7	14.0	17.8	14.0	13.1	25.5	2.3	18.0	60.6
13	Madhya Pradesh	38.5	14.5	15.5	16.5	15.5	23.6	25.3	2.3	20.3	56.0
14	Rajasthan	40.0	13.5	11.4	16.1	11.4	15.7	33.0	2.9	21.1	58.7
	Average of BIMARU	38.5	14.2	13.6	16.7	13.6	16.5	27.0	2.4	18.0	57.5
	India	33.6	11.9	24.8	18.3	24.8	25.9	25.0	2.3	23.3	46.4

Source: Bose (1988: 18).

Table 2: Indicators of Hope

No	State	Percentage of Girls Attending School 10–14 Age Group (1981)	Percentage of Married Girls in Age Group 15–19 (1981)	Average Number of Children Born per Woman by Age Group 20–24 (1981)	Infant Mortality Rate (per 1,000) (1981)	Per Capita Net Domestic Product at Current Prices (1981–82)
1	Kerala	84	14	0.7	37	1,447
2	Punjab	55.6	14.1	0.8	81	3,164
3	Maharashtra	51.2	38.1	1.1	79	2,496
4	Gujarat	49.7	26.9	1	116	2,192
5	West Bengal	45.1	37.3	1.2	91	1,595
6	Tamil Nadu	44.6	22.8	1	91	1,373
7	Karnataka	37.8	36.2	1.2	69	1,541
8	Haryana	36.2	47.4	1.2	101	2,581
9	Odisha	30.4	30.9	1.2	135	1,308
10	Andhra Pradesh	30	56.3	1.3	86	1,536
11	Madhya Pradesh	25.3	62.7	1.4	142	1,241
12	Uttar Pradesh	25.1	60.5	1.2	150	1,313
13	Bihar	24.7	64.1	1.2	118	995
14	Rajasthan	18.7	64.3	1.3	108	1,441
	Average of BIMARU	23.5	62.9	1.3	130	1,248
	India	37.5	43.5	1.1	110	1,758

Source: Bose (1988: 20).

Thus, Bose pointed out glaring regional disparities across India, and concluded that Bihar, MP, Rajasthan, and UP were demographically the most backward states.

Bose also analysed the following five additional indicators, which he called "indicators of hope" (Table 2, p 59). (1) Proportion of girls in the age group 10–14 years going to school. (2) Proportion of girls married in the age group 15–19 years. (3) Average number of children born per woman in the age group 20–24 years. (4) IMR. (5) Per capita income.

The first three indicators refer to young women, and, according to him, improvement in these indicators would help to reduce disparities in the nine indicators listed in Table 1. He chose infant mortality as an indicator because it portrays the true picture of delivery of health services. Similarly, he justified the use of per capita income as being the simplest indicator of economic growth.

The data for these indicators also portrayed immense regional disparities. In Kerala, 84% of girls in the age group 10–14 years went to school in 1981, whereas for Rajasthan the figure was as low as 18.7%. In Kerala, only 14% of girls in the age group 15–19 were married, compared to 64.3% in Rajasthan. The average number of children born per woman in the 20–24 age group was 0.7 for Kerala, whereas it was double this in MP at 1.4. Here too, Bihar, MP, Rajasthan, and UP were found to be the most backward and there appeared little hope for improvement unless they were given special attention.

3 Updating or Extending Bose's Findings

Health and Demographic Indicators

The share of the BIMARU states in the national population increased from 40% in 1981 to 42% in 2011, implying a faster growth of population in these states. The crude birth rate (CBR) consistently declined in all the BIMARU states between 1981 and 2011, but it still remains higher than the all-India figure

(Table 3). The average CBR for the BIMARU states declined from 38.4 per 1,000 in 1981 to 26.8 per 1,000 in 2011. But, the gap with the all-India rate is rising and there is no sign of convergence. All the BIMARU states achieved a nearly 30% decrease in CBR by 2011 compared to 1981—which is very low.

Table 3: Crude Birth Rate, 1981–2011

	1981	1991	2001	2011
UP	39.6	35.7	31.4	27.4
Rajasthan	37.1	35	31.1	26.2
All-India	33.9	29.5	25.4	21.8
Average of BIMARU	38.4	34.3	30.6	26.8
Percentage difference from all-India	13.1	16.3	20.4	22.7

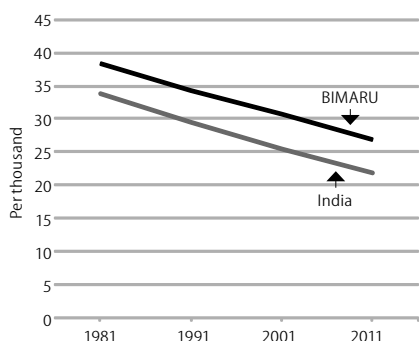Source: Sample Registration System.

The crude death rate (CDR) registered a decline in all the BIMARU states between 1981 and 2011, but it still remains higher than the national average. The average CDR for the BIMARU states declined from 15.3 per 1,000 in 1981 to 7.3 per 1,000 in 2011 (Table 4). The difference with the all-India figure is declining, and the BIMARU states appear to be converging to the all-India level. For 2011, Bihar and Rajasthan had lower CDRs than the all-India rate. Among the BIMARU states, Rajasthan achieved the highest reduction in CDR from 14.3 in 1981 to 6.7 in 2011 (nearly

Table 4: Crude Death Rate, 1981–2011

	1981	1991	2001	2011
Rajasthan	14.3	10.1	8.0	6.7
MP	16.6	13.8	9.8	8.1
All-India	12.5	9.8	8.4	7.1
Average of BIMARU	15.3	11.3	9.0	7.3
Percentage difference from all-India	22.2	14.8	7.4	3.5

Source: Sample Registration System.

Figure 1: Crude Birth Rate, 1981–2011

Bihar, MP, and UP include Jharkhand, Chhattisgarh, and Uttarakhand respectively. A weighted average based on population figures has been used to compute the figures to account for bifurcation.
Source: Sample Registration System.

53%), while MP had the lowest, from 16.6 in 1981 to 8.1 in 2011 (nearly 51%).

As for the IMR, the average of the BIMARU states declined from 129.5 per 1,000 live births in 1981 to 51.7 per 1,000 live births in 2011 (Table 5), but it was still higher than the national average. The gap from the all-India level remains nearly the same even after three decades, and little improvement has been made in terms of catching up with the national average. Among the BIMARU states, Rajasthan was the worst performer. In 1981, the IMR for Rajasthan was 108, which declined to 52 in 2011 (nearly 52%). Bihar achieved the highest reduction from 118 in 1981 to 43 in 2011 (nearly 64%). It recorded a lower than all-India IMR for 1991, 2001, and 2011.

Table 5: Infant Mortality Rate, 1981–2011

	1981	1991	2001	2011
Bihar	118	69	62	43
Rajasthan	108	79	80	52
All-India	110.0	80.0	66.0	44.0
Average of BIMARU	129.5	90.5	76.7	51.7
Percentage difference from all-India	17.7	13.1	16.3	17.6

Source: Sample Registration System.

With regard to the percentage of currently married women using any family planning method, the average of the BIMARU states increased from 16.6% in 1983 to 45.4% in 2005–06 (Table 6). The gap with the all-India figure fell, indicating convergence. Among the BIMARU states, UP performed the best—an increase to 44.7% in 2005–06 (nearly 240%) from 13.1% in 1983. MP fared the worst by registering an increase to 55.2% in 2005–06 (nearly 134%) from 23.6% in 1983.

Table 6: Percentage of Currently Married Women Using Any Family Planning Method, 1983–2005

	1983	1992–93	1998–99	2005–06
UP	13.1	19.8	28.82	44.7
MP	23.6	36.5	44.48	55.2
All-India	25.9	40.6	48.2	56.0
Average of BIMARU	16.6	27.8	34.7	45.4
Percentage difference from all-India	−36.2	−31.5	−27.9	−19.0

Source: Col 1 is from Bose (1988), cols 2, 3, and 4 are from the National Family Health Service (NFHS).

The dismal performance of the BIMARU states on IMR and CBR is reflected in their high population growth rate (annual average exponential), which was 2.4% during 1971–81 and 2% during

2001–11 (Table 7). Significant divergence can be observed from the all-India rate. Bihar fared the worst by being the only state to register an increase in annual average exponential growth rate from 2.17 (1971–81) to 2.21 (2001–11). All the other BIMARU states recorded a decline.

Table 7: Annual Average Exponential Growth Rate (Percentage)

	1971–81	1981–91	1991–2001	2001–11
Rajasthan	2.87	2.5	2.50	1.93
Bihar	2.17	2.11	2.42	2.21
All-India	2.3	2.2	1.97	1.63
Average of BIMARU	2.40	2.32	2.31	1.97
Difference from all-India	6.67	7.67	17.13	20.87

Source: Calculated using population data from various census reports.

Figure 2: Annual Average Exponential Growth Rate of Population
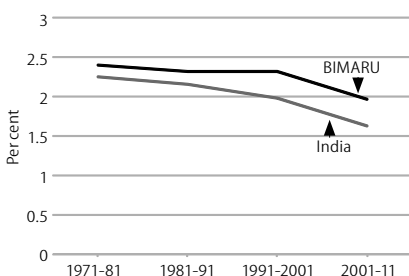
Bihar, MP, and UP include Jharkhand, Chhattisgarh, and Uttarakhand. Actual population figures have been used to account for bifurcation.
Source: Census reports.

Fertility in the 20–24 age group is an important indicator of population growth because it is considered the most fertile. This indicator continues to be much higher for the BIMARU states than the all-India figure.[5] Their average declined slightly from 0.26 in 1992–93 to 0.25 in 2005–06. The all-India figures were 0.23 in 1992–93 and 0.21 in 2005–06 (Table 8). Thus, the BIMARU states appear to be diverging from the all-India trend. Bihar was the worst performer, registering an increase from 0.24 in 1992–93 to 0.26 in 2005–06, while all the other states showed at least some decline.

The percentage of women in the age group 15–19 who are currently married declined in all the BIMARU states but was

Table 8: Fertility in 20-24 Age Group

	1992–93	1996–98	2005–06
MP	0.255	0.216	0.235
Bihar	0.241	0.215	0.261
All-India	0.23	0.21	0.21
Average of BIMARU	0.26	0.24	0.25
Percentage of difference from all-India	10.61	12.88	20.23

Source: NFHS reports.

still higher than the all-India figure. From 62.9% in 1981, the average of the BIMARU states declined to 25.27% in 2007–08 (Table 9). The reduction in the gap from the all-India figure indicates some convergence. Among the BIMARU states, UP fared the best by achieving a decline to 21.1% in 2007–08 from 60.5% in 1981 (nearly 65%). Bihar did the worst by registering a decline to 33.3% in 2007–08 from 64.1% in 1981 (nearly 48%).

Table 9: Percentage of Women in 15–19 Age Group Who Are Currently Married

	1981	1992–93	2002–04	2007–08
UP	60.5	39.6	24.7	21.1
Bihar	64.1	50.3	NA	33.3
All-India	43.5	38.4	23.8	19.1
Average of BIMARU	62.90	47.53	29.73	25.27
Percentage of difference from all-India	44.60	23.76	24.94	32.29

Source: Col 1 is from Bose (1988), col 2 is from NFHS-1, and cols 3 and 4 are from district-level household surveys (DLHS) 3 and 4, respectively.

The mean age at marriage has been increasing in the BIMARU states, but it remains dismal compared to the national average. In 1981, their mean age at marriage was 16.7 years, which increased to 18.1 years in 2007–08 (Table 10). The percentage gap from the all-India level remains nearly constant all through. Among the BIMARU states,

Table 10: Mean Age of Females at Marriage (Years)

	1981	1998–99	2002–04	2007–08
MP	16.5	18.1	18.4	18.5
UP	17.8	17.7	18.2	18.5
All-India	18.3	19.2	19.5	19.8
Average of BIMARU	16.7	17.7	17.9	18.1
Percentage of difference from all-India	–8.6	–7.9	–8.3	–8.4

Source: Col 1 is from Bose (1988), cols 2, 3, and 4 are from the DLHS.

Figure 3: Mean Age at Marriage
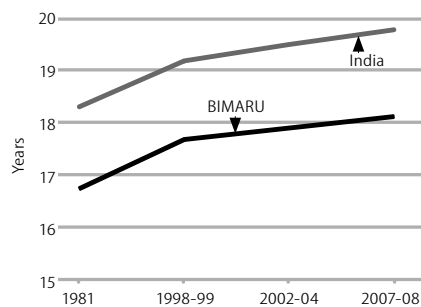
Bihar, MP, and UP include Jharkhand, Chhattisgarh, and Uttarakhand, respectively. A weighted average (using total population) has been used to compute the figures to account for bifurcation.
Source: Figures for 1981 from Bose (1988) and the rest from DLHS reports.

MP was the best performer as it has achieved the highest increase in mean age at marriage, to 18.5 years in 2007–08 from 16.5 years in 1981 (nearly 12%). UP fared the worst by recording an increase to 18.5 years in 2007–08 from 17.8 years in 1981 (nearly 4%).

Educational Attainment

The effective female literacy rate has consistently gone up in all the BIMARU states, but it has remained below the all-India level all through.[6] Effective female literacy rate for the BIMARU states went up from nearly 20% in 1991 to 57% in 2011 (Table 11). Thus, with a declining percentage gap, the BIMARU states appear to be converging to the all–India level. Among the BIMARU states, Rajasthan did best by achieving an increase to 52.7% in 2011 from 16.6% in 1991 (nearly 217%). MP lagged behind with an increase to 60.2% in 2011 from 23.2% in 1991 (nearly 160%).

Table 11: Effective Female Literacy Rate (Percentage)

	1991	2001	2011
Rajasthan	16.59	43.85	52.66
MP	23.17	50.71	60.17
All-India	32.41	53.67	65.46
Average of BIMARU	19.87	43.20	56.72
Percentage of difference from all-India	–38.71	–19.51	–13.35

Source: Census reports and calculations.

The percentage of girls in the age group 11–14 attending school went up in all the BIMARU states. For 1981, their average was 23.5%, which increased to 63.4% in 2005–06 (Table 12, p 62).[7] The decline in the gap from the all-India figure indicates convergence. Rajasthan performed the best

by achieving an increase to 57.2% in 2005–06 from 18.7% in 1981 (nearly 206%). Bihar brought up the rear with an increase to 57.7% in 2005–06 from 24.7% in 1981 (nearly 133%). It is important to note that Rajasthan outperformed all the other BIMARU states in female education.

Table 12: Percentage of Girls Attending School in 11–14 Age Group

	1981	1998–99	2005–06
Rajasthan	18.7	55.6	57.2
Bihar	24.7	50.5	57.7
All-India	55.3	67	70.4
Average of BIMARU	23.5	57.6	63.4
Percentage of difference from all-India	-57.6	-14.1	-10.0

Source: NFHS reports.

Figure 4: Percentage of Girls Attending School in 11–14 Age Group
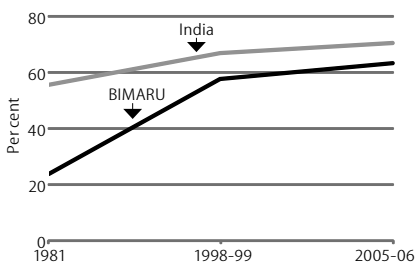
Bihar, MP, and UP include Jharkhand, Chhattisgarh, and Uttarakhand, respectively. A weighted mean (based on total population) has been used to compute the figures to account for bifurcation.
Source: NFHS reports.

Urbanisation

Urbanisation is lower in all the BIMARU states compared to the national average. Their average on this indicator went up to 22.1% in 2011 from 17.9% in 1981 (Table 13). An increase in the percentage gap from the all-India trend indicates a divergence. Urbanisation has been the lowest in Bihar with very little change over the past three decades. The state's urban population only increased from 12.5% in 1981 to 14.4% in 2011 (nearly 15%). Urbanisation was the highest in MP, which recorded an increase to 26.5% in 2011 from 20.3% in 1981 (nearly 31%).

Table 13: Urban Population as a Percentage of Total Population

|	1981	1991	2001	2011
MP	20.29	23.21	24.82	26.49
Bihar	12.47	13.17	13.35	14.36
All-India	23.34	25.72	27.78	31.15
Average of BIMARU	17.94	19.79	20.64	22.09
Percentage of difference from all-India	−23.14	−23.07	−25.69	−29.08

Source: Census reports.

The average growth rate of the urban population in the BIMARU states was nearly 57% between 1971 and 1981. This fell to nearly 30% between 2001 and 2011 (Table 14). In the past two decades, 1991–2001 and 2001–11, the growth rate of urban population in the BIMARU states was below the all-India level, which further points to the growing divergence of urbanisation in these states from the national average.

Table 14: Decadal Growth Rate of Urban Population (Percentage)

	1971–81	1981–91	1991–2001	2001–11
All-India		46.4	36.19	31.76	31.80
Average of BIMARU		57.53	38.40	31.09	30.43
Percentage of difference from all-India		23.98	6.09	−2.08	−4.31

Source: Census reports.

Figure 5: Urbanisation
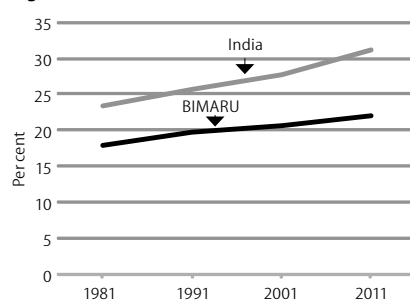
Bihar, MP, and UP include Jharkhand, Chhattisgarh, and Uttarakhand, respectively. Actual figures on urban population have been used to compute the figures to account for bifurcation.
Source: Census reports.

Income Disparities

Per capita income has been lower than the all-India figure in all the BIMARU states all through. In 1980–81, their average per capita income was 74% of the all-India figure, but in 2010–11 it declined to 59% of it—a big divergence (Table 15). This assumes that rates of inflation in both groups have been the same for both 1980–81 and 2010–11. Thus, even in terms of the simplest measure of economic performance, the BIMARU states have diverged from the national average. Contrary to Singh's and Ahluwalia's optimistic conclusions,

Table 15: Per Capita Net State Domestic Product, 1980–81 to 2010–11 (Rs at current price)

	1980–81	1990–91	1999–2000	2010–11
All-India	1,852	5,621	15,881	52,900
Average of BIMARU	1,364	4,146	10,736	31,360
Percentage of difference from all-India	−26.34	−26.24	−32.40	−40.72

Source: Data from Open Government Data Platform India.

the economic performance of the BIMARU states has worsened compared to the rest of the country.

4 Summary and Conclusions

Many studies on regional disparities have followed Bose (1988), but most of them have focused on socio-economic indicators without adequately accounting for demographic indicators while discussing the BIMARU states. Kurian (2000) points out that regional disparities have aggravated across all indicators (demographic, social, and economic) and a marked dichotomy between forward and backward groups of states is emerging. On the other hand, Dholakia (2003) concludes that regional disparity in human development is continuously decreasing and Ahluwalia (2000) claims that BIMARU as a metaphor has lost its relevance as far as economic performance is concerned. This article tries to ascertain whether the BIMARU states still remain *Bimaru* by analysing, as far as possible, the same indicators examined by Bose more than three decades earlier.

Our analysis shows that the BIMARU states have not converged to the national average. For all the demographic indicators considered, the BIMARU states as a whole continue to remain backward relative to the national average. However, this is not to say that these states have made no progress. All of them have individually improved along most of the demographic indicators, and, as a whole, they appear to be converging to the all-India level in five out of the 13 indicators considered. The pace of this convergence has been slow. For the mean age at marriage and IMR, the percentage gap remains nearly the same. In the remaining indicators, the BIMARU states have diverged from the all-India level with an increasing percentage gap over the years. Thus, speculations based on limited analyses claiming that BIMARU is no longer a valid metaphor for backwardness are simply not true.

A comparison among the BIMARU states brings out that none of them has performed consistently well along all or most of the indicators considered. UP's performance has been the best on

indicators such as CBR, couple protection rate, and married women in the 15–19 age group. For indicators such as CDR, annual average exponential growth rate of population, effective female literacy rate, and percentage of girls attending school in the 11–14 age group, Rajasthan performed better than the other BIMARU states. The indicators on which MP has outperformed the rest include mean age at marriage, urban population, and fertility rate. None of the BIMARU states has been able to move out of the grouping. Rajasthan, MP, and UP show a greater degree of improvement than Bihar, which continues to be the most backward, lagging significantly in many indicators.

So, nearly three decades of sustained economic growth has been unsuccessful in even making a dent on regional imbalances. Even after six decades of development planning, balanced regional development remains largely policy rhetoric. Every five year plan has tried to reduce regional imbalances in a different fashion. The reality is that regional disparities persist because policymakers have failed to implement the right policies to eliminate them. In general, India is very progressive in formulating plans and programmes, but the will to implement them is missing. Good governance has an important role to play in this area.

NOTES

1 The indicators included birth rate, death rate, female literacy rate, mean age of marriage of female years, percentage of couples effectively protected by family planning methods, decadal growth rate of population, annual average exponential growth rate, percentage of urban population, and growth rate of urban population.

2 The birth rate gives the number of live births during a year per 1,000 people in the population at mid-year; also known as crude birth rate. Crude death rate gives the number of deaths during a year per 1,000 persons in the population at mid-year. Infant mortality rate gives the number of infant deaths during a year per 1,000 live births during the year.

3 Singh's opening remarks at the 57th meeting of the NDC on 27 December 2012, http://pib.nic.in/newsite/erelease.aspx?relid=91191

4 We have made this change due to the non-availability of time series data for it. We have tried to use as close a proxy to the original indicator as possible.

5 Fertility in age-group 20–24 can be defined as the number of live births in the age group 20–24 per 1,000 female population of the same age-group.

6 The effective literacy rate is calculated by excluding the sub-population in the age group of 0–6 years from the total population.

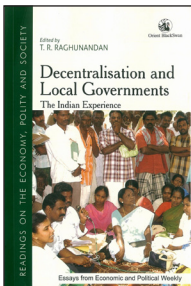7 Data has been obtained from the first three rounds of the NFHS.

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