

## ***BIHAR : THE HEART OF DARKNESS FOR HEALTH AND EDUCATION IN INDIA***

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### **Introduction -**

In the mid 1980s, economic analyst Ashish Bose coined an acronym *BIMARU*, in a paper submitted to then Prime Minister Rajiv Gandhi. *BIMARU* has a resemblance to a Hindi word "Bimar" which means sick. This was used to describe the bad state of economy in backward states Bihar, Madhya Pradesh, Rajasthan and Uttarpradesh. Later Orissa was included in the list resulting in **BIMAROU**. Several studies, including those by the UN, showed that the performance of the BIMAROU states affected the GDP growth rate of India. These states are the poorest and most deprived states in India with reference to food, shelter, health and knowledge or education. The BIMAROU states have some of the highest fertility rates but lowest development rate in India. The life expectancy in BIMAROU states is lower than other Indian states. In fact, it is lower than the average life expectancy of India as a whole. The average literacy rates in these states according to the 2011 census is 68.3% against a national average of 74.04% which indicates lower educational level in these backward states. The differences in economic and population growth rates between the BIMAROU states and other Indian states sharpened over the 1990s. The economy of the four BIMAROU states grew at an average of 4.6% per year in the 1990s, compared to 6.5% per year for India as a whole. I have selected Bihar as my study area as Bihar is the most deprived and poorest state in India. I have chosen Health and Education as the two factors or aspects of deprivation in my study area as these are among the basic factors or components for the development of any state or region. The present paper provides a situational analysis of Bihar with respect to health scenario and level of education in the various districts. The level of socio-economic development is relatively poor in this state when compared to other parts of the country. The population growth is higher than the national average.

### **Objectives –**

- 1) To depict the backwardness of Bihar in Education
- 2) To examine backwardness of Bihar in Health
- 3) To search the most backward district of Bihar
- 4) To find out the reasons for the backwardness in Bihar
- 5) To establish the relation between education and health in case of backwardness
- 6) To suggest measures or means to uplift education and health status in Bihar

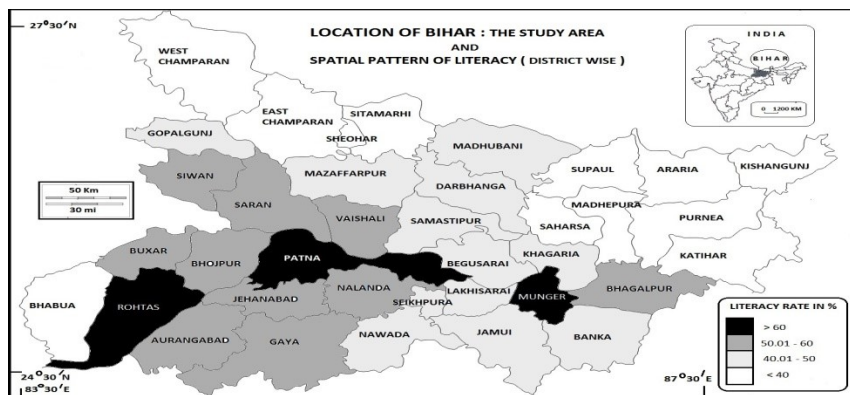
### Study Area in brief -

I have selected Bihar as my study area as Bihar is the most deprived and poorest state in India. Bihar has a diverse climate. Its temperature is subtropical in general, with hot summers and cool winters. Bihar is a vast stretch of fertile plain. It is drained by the Ganges River, including its northern tributaries Gandak and Koshi, originating in the Nepal Himalayas and the Bagmati originating in the Kathmandu Valley that regularly flood parts of the Bihar plains. The total area covered by the state of Bihar is 94,163 km<sup>2</sup>. Its average elevation above sea level is 53 m. The Ganges divides Bihar into two unequal halves and flows through the middle from west to east. Other Ganges tributaries are the Son, Budhi Gandak, Chandan, Orhani and Phalgu. It is the 12th largest state in terms of geographical size (98,940 km<sup>2</sup>), 3rd largest by population (103,804,637) and 1st in population density (1,100/km<sup>2</sup>) as per 2011 census. Almost 58% of Biharis are below the age of 25 which is the highest proportion in India and nearly 85% of Bihar's population lived in rural areas. The sex ratio was 919 females per 1000 males ( 2011 census ). I have chosen Health and Education as the two factors or aspects of deprivation in my study area. The most backward districts in Bihar are Araria, Darbhanga, Katihar, Madhepura, Madhubani, Muzaffarpur, Paschim Champaran, Purba Champaran, Purnea, Sheohar, Sitamarhi, Supaul. For many years, Bihar has been lagging behind other Indian states in social and economic development terms. Economists and social scientists claimed that this is a direct result of the skewed policies of the central government, such as the freight equalization policy, its apathy towards Bihar, lack of Bihari sub-nationalism (resulting in no spokesperson for the state), and the Permanent Settlement of 1793 by the British East India Company. The state government has however made significant strides in improving governance. Corruption is an import hurdle for the government to overcome according to Transparency International India, which highlighted Bihar as the union's most corrupt state in a 2005 report. Despite the recent economic gains, significant challenges remain and the government has also stated that combating corruption is now the biggest challenge the administration is faced with.

### Backwardness in Education –

Historically, Bihar has been a major centre of learning, home to the ancient universities of Nalanda (established in 450 BC), Odantapurā (established in 550 BC) and Vikramshila (established in 783 AD). But that tradition of learning had disappeared. The current state of education and research is not satisfactory though the current state government claims big

achievements in school education. Education in Bihar is still a long road ahead. The literacy rates in these states according to the 2011 census are Bihar 63.8% where national average is 74.04%. After independence Bihar lost the pace in terms of establishing a centre of education. Modern Bihar has a grossly inadequate educational infrastructure creating a huge mismatch between demand and supply. This problem further gets compounded by the growing aspirations of the people and an increase in population. The craving for higher education among the general population of Bihar has led to a massive migration of the student community from the state. It is true that literacy rate in Bihar has been increasing after independence till now but the rate of increase is very less and not satisfactory ( Fig. No. 1 ). The teacher-student ratio in primary education is 1:63 and average ratio of classroom and students is 1:80 in schools. It implies unsatisfactory educational status in Bihar (Table No. 1). It is



**Map No. 1 : Location of Bihar as well as Pattern of Literacy ( District wise )**

noticed that female literacy is almost 20% less than that of male showing backwardness of specially women in education in Bihar. Education in Bihar is improving but for real gains, the state needs to provide drinking water facilities to everyone, separate toilets for girls in schools, and more teachers and classrooms per student. A lot of villages are without any school. There are many inter colleges which look like primary school due to lack of proper infrastructure. The state has a remarkable disparity of level of education in terms of literacy rate among its districts (Map No. 1). It is true many students of Bihar are becoming doctors, engineers, I.A.S. officers etc. but they study in other states or go abroad because in Bihar the facilities of education specially higher education is very poor. One thing that economists agree on development is the importance of education. If development is to be sustainable, people

need to be better educated. Just looking at economic output, education contributes to growth by increasing the level of human capital of the workforce—as India has discovered in the IT sector. Looking beyond the statistics, education can equip people with the tools for a more fulfilling and enjoyable life.

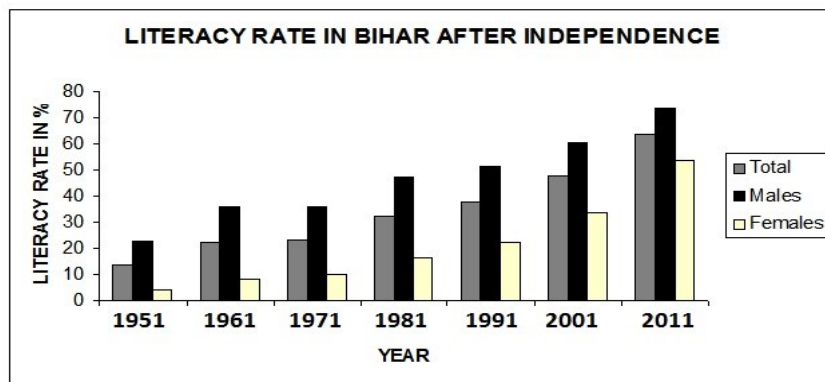


Figure No. 1 : Literacy Rate in Bihar ( Based on Census data )

Table No. 1 : Infrastructure of Education in Bihar

Category	Total Number	Total Enrolment	Number of Teachers	Teacher - Student Ratio
Primary School	53697	10473252	115486	63
Elementary School	13761	2548580	99181	49
Secondary School	4146	1092237	39356	43
Senior Secondary School	227	34842	6135	41
Pre Degree /Junior College	537	365708		
Board of Intermediate / Secondary Education	2	-	-	-
Degree College	815 (Arts/Sc./Com.)	689057 (BA/BSc.BCom.)	-	-
Engg. College	10	7474 (B.E./B.Sc./B.Arch.)	-	-
Medical College	23	15328 (M.B.B.S)	-	-
All University	15 ( Including 2 Open Universities )	35006 (MA/MSc/MCom.) 961 (Ph.D/D.Phil/D.Sc)	-	-
Research Institution	15	-	-	-
Teacher Training College	15	2735 (B.Ed. /B.T.)	-	-
Teacher Training School	195	1529	-	-
Polytechnic Institutes	15	2833	-	-
Technical/Industrial/Arts & Craft School	51	7049	-	-

Source : Department of Education, Govt. of Bihar

### **Backwardness in Health –**

Health is a multi-dimensional question and its presence or absence is largely a matter of personal judgment (Gupta, 1998). The health status depends on many dimensions of health such as health facilities given by the Govt using, life expectancy at birth, crude death rate, infant mortality rate, prenatal death rate expectation of life at 60 years etc. Inadequacies in nutritional intake or under-nutrition can be considered a major source of many adverse effects on the growth and health of individuals (Gordon *et al.*, 1968). Knowledge of the nutritional status of a community or a region is necessary to have a comprehensive idea about health status. The Infant mortality rate (IMR) continues to be higher in Bihar and it is negatively correlated with Human development index (HDI). The infant mortality rate is 56 against a national average of 53 and maternal mortality ratio is 312 while national average is 254. Bihar has the high fertility rate which is 3.7 per cent affecting health adversely. Presence of primary health centres is only 70% with respect to the requirement. It depicts evil health condition in Bihar. Specially the women are deprived of health so much in Bihar. The no of really good doctors, hospitals, nurses, ambulances is remarkably very poor in this state. There are some areas where people still have to die for some fatal diseases like T.B., Leprosy, Pneumonia, Jaundice, Cholera etc. due to lack of treatment. The situation of health after flood becomes so disastrous in Bihar. Children are still suffering from malnutrition due to huge population growth and excessive poverty. It is suggested that the overall socio-economic development should be accelerated and infant mortality controlled in order to improve the health and nutritional status of the people.

### **Health Scenario of Bihar :**

- a) Hepatitis B cases have generally not been recorded in Bihar in 2009 and 2010. But two noticeable outbreaks occurred in 2011.
- b) First outbreak was reported from Araria from place Bhargama on 1st Aug 2011 when 16 cases and 7 deaths were recorded.
- c) Second outbreak was reported from Kishanganj from village Chakla on 10th Sept 2011 when 13 cases and 2 deaths were reported due to this disease. All age groups and both sexes were equally affected.
- d) In both the outbreaks, contaminated and infected needles were the potential risk factors for disease transmission.
- e) Total number of clients undergoing HIV test in Bihar has increased significantly in last 3 years. In 2009, it was 194856, in 2010, 199371 which increased to 210599 in 2011. Of remarkable significance is increase in sero positive cases over the years which was 7413 in 2009, in 2010 it was 8758 which slightly decreased to 8482 in 2011.

- f) Out of all possible & recorded routes of transmission, route by Heterosexual means was the most prominent among all others contributing to 90% while other prominent means was through parent to child transmission contributing to 6%.
- g) The incidence of sexually transmitted illness (STI) has significantly increased since last two years. In 2009, number of Syndromic cases of STI was 28442, in 2010; it was 64335 which have increased to 103024 in 2011.
- h) Of all the Syndromic cases of STI, vaginal/cervical discharge constituted 45%, while genital warts constituted 24%.

**Table No. 2 : Health Infrastructure in Bihar**

Item	Required	In position	Shortfall
Sub-centre	14959	8858	6101
Primary Health Centre ( PHC )	2489	1776	713
Community Health Centre ( CHC )	622	70	552
Multipurpose worker (Female)/ANM	10634	9127	1507
Health Worker (Male) MPW(M) at Sub Centres	8858	1074	7784
Health Assistant (Female)/LHV at PHCs	1776	479	1297
Health Assistant (Male) at PHCs	1776	634	1142
Doctor at PHCs	1776	1565	211
Obstetricians & Gynaecologists at CHCs	70	21	49
Physicians at CHCs	70	38	32
Paediatricians at CHCs	70	17	53
Total specialists at CHCs	280	104	176
Radiographers	70	15	55
Pharmacist	1846	439	1407
Laboratory Technicians	1846	135	1711
Nurse/Midwife	2266	1425	841

Source: RHS Bulletin, March 2008, M/O Health & F.W., GOI

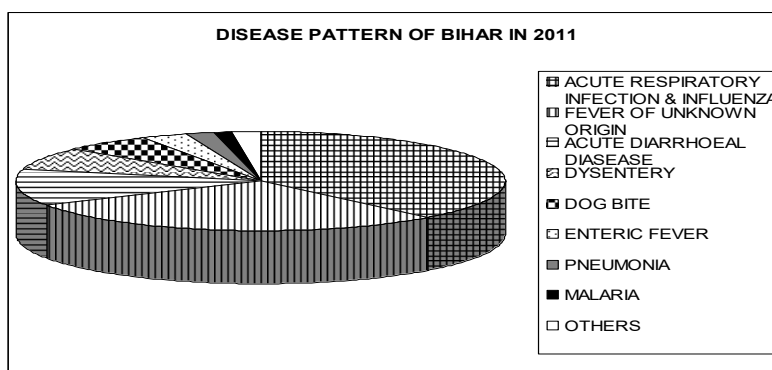
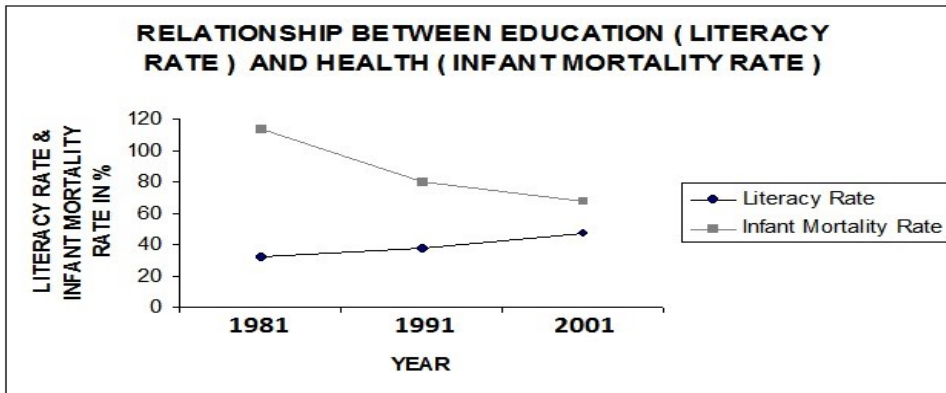


Figure no. 2 : Pattern of Disease in Bihar ( Based on data given by Ministry of Health and Family Welfare, Govt of India )

### Findings –

Health and Education are two important factors of human development in any region. If these two factors become so weak the region automatically

becomes backward as those are correlated. If level education increases status of health also will increase. In Bihar it has been seen during last few years that with the increase of literacy rate infant mortality rate has decreased indicating good health condition ( Fig No. 3). But that rate of betterment is not so remarkable. Still Bihar is backward. In Bihar Kishangunj is the most backward district with respect to health and education.



**Figure No. 3 : Relationship between Education and Health ( Based on Census data )**

The following reasons may be traced out for the backwardness in Education and Health in Bihar ----

- Bihari people are highly superstitious.
- They are so conservative with caste, religion, ethnicity.
- Women don't get proper respect and importance in Bihar.
- This state is so poor in economic status.
- They don't feel the value and need of education and health.
- Educated and conscious people become self centered and try to settle in cities leaving their rural houses. They don't make others aware of education and health specially in rural areas.
- Children are compelled to be labourers.
- Women are deprived of education.
- Population is increasing exponentially ( Maximum dense state in population in India as per 2011 census ).
- Bihari people are averagely less ambitious.
- Many areas have huge lack of schools, colleges, health centres and hospitals.
- Bihar is suffering from the scarcity of efficient teachers and doctors.
- No of sufficient teachers, doctors and nurses is also not satisfactory in Bihar.

- Many Govt and Non-Govt sectors have been corrupted heavily.
- There is a lack and negligence in investing sufficient money in education and health sectors.
- There is huge infrastructural lack in education and health in Bihar.

All the regions of Bihar have relatively high levels of poverty. However, Kishanganj in Northern Bihar is additionally one of the 7 districts with the most multidimensional deprivation. While poverty incidence at 62 per cent is higher in Jharkhand compared with 58 per cent in Northern Bihar, rural areas of both are included among the seven regions that have the highest levels of income poverty. The female literacy rate in Kishanganj is 10 per cent and infant mortality close to the highest in Bihar at 113. Low literacy, especially female literacy and high infant mortality are major factors in case of multidimensional deprivation causing backwardness. Identification of districts that reflect chronic deprivation in multidimensional parameters is the first step in determining strategies to correct such imbalances. While it is true that some districts get averaged out in the regional and state level analysis, the fact that districts in MP, Bihar, Orissa and UP are among the most deprived is no surprise. The backwardness of health and education are affecting the socio-economic environment of Bihar in the following manners -----

- ❖ Poor level in higher education
- ❖ Below standard of research work
- ❖ Mal-nutrition, Child diseases, infectious diseases
- ❖ Lack in civic sense and manners
- ❖ Brain drain to other states and abroad due to lack of infrastructure in higher education
- ❖ Increasing gap between rich and poor
- ❖ Lack of environmental consciousness
- ❖ Proneness to fatal diseases like HIV, TB, INFLUENZA etc.
- ❖ Low standard of living
- ❖ Lack of modernity and out knowledge
- ❖ Decrease in cultural innovation and creativity
- ❖ Slow and almost null development
- ❖ Misuse of human resource

### **Suggestions -**

The state of Bihar immediately needs upliftment in health and education for holistic development of socio-economic environment. For this purpose the state requires good and proper plans and projects driven by state and central Govt. Camps for mass consciousness is essential. International cooperation



may be opted. Many N.G.O. s may be welcomed. New practical and scientific policies should be introduced. Moreover scientists and researchers can bring revolution in this deprived and poor state of India as the state Bihar has huge and great human resource. The following suggestions may be considered to minimize the backwardness of Bihar in health -----

- To identify and control widely dispersed outbreaks
- To improve outbreak prevention
- To assess the impacts of outbreaks and set priorities
- To evaluate prevention strategies
- To improve investigation methods
- To introduce public health training
- To develop understanding of emerging diseases
- To meet international reporting requirements
- To provide sufficient infrastructure in health centres and hospitals
- To establish health centre atleast one in a block
- To set up more medical colleges and hospitals
- To stop corruption in health sector
- To arrange effective and good medical researches
- To allot more grants for health sector
- To appoint the doctors and nurses who really can devote their life for health service

And to reduce educational backwardness we can follow -----

- Special training programme for teachers and resource persons to deal with issues of diversity and discrimination within the classroom.
- Improve decentralized planning process to identify needs and strategies for disadvantaged groups at block and district level.
- Promoting researches for identifying strategies aimed at equity that has had a favorable impact. Also dissemination and sharing of identified good practices.
- Utilization of innovation funds or any other untied allocation preferably for promoting education of disadvantaged groups.
- Establishment of more new schools so that atleast one block must have one secondary school and each gram panchayat must have a primary school atleast.
- Teacher-student ratio must be satisfactory ( maximum 1:30 ).
- Computer classes should be introduced in all secondary schools.
- English language must be given more importance.

- Parents must be made aware first by Govt and Non Govt camps and rallies.
- Teachers should be trained to teach specially the backward students.
- More infrastructure is essential in higher education to stop brain drain.
- To create more attractions like mid day meal, sports, cultural activities etc. in schools

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