

## Examining Well-Being in Bihar: A District Level Study

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### ABSTRACT

The concept of well-being differs from the concept of Development in that the former includes a subjective condition, whereas the latter is objective. Well-being refers to long and healthy life, knowledge, education, and a decent standard of living. This paper attempts to examine well-being in Bihar using a quantitative and qualitative approach. The paper's findings reveal that the northern region lags significantly, while southern Bihar performs fairly better in terms of Well-Being. Factors such as education, income, and health play a vital role in shaping well-being in Bihar.

**Keywords:** Well-Being, Spatial Pattern, Bihar

### INTRODUCTION

Bihar is one of the least developed states in the country. Bihar's development indicators have always been at the margins. The concept of development itself has been changed. Initially, it was the measures of economy considered as the sole suitable indicator of development. Later measures of social, political aspects were included. Well-being measures the condition of how a society is wealthy enough to live a healthy and happy life with satisfaction. Amratya Sen's Capability approach provides a strong conceptual basis for defining a better living condition of a given society. Health, Education, and Income measures are important variables *vis-à-vis* social security, political participation, and social cohesiveness have been considered integral to the Well Being concept. Well-being concept encompasses that each person is different, her needs are different, talent, aspiration, conception of her own good, all differ from others (Mehrotra, 2006). Well-being may be considered as an extended discourse on human development having a distinctive purpose of measuring the wellness of the individual/ society.

With this background, this paper attempts to measure well-being in Bihar and analyze its spatial distribution in

the state.

### Literature Review:

#### *Well Being: A Historical Background*

The concept of Well Being is a relatively new discourse in the Human Development debate. The first genuine attempt to study Well Being was initiated by W.M. Smith in the year 1973. The concept of Well Being started emphasizing the role of social indicators in human life. New dimensions were added by considering indicators representing democratic process, equality, living conditions, and human welfare. The major focus was on understanding the normative and subjective aspects of human life. Well-being has been broadly classified into two types: Subjective well-being and Objective Well-being. Objective Well Being is associated with "non-feeling" attributes, and Subjective Well Being is associated with feeling attributes. Health measures play an important role in defining a better state of physical, mental, and social well-being (WHO). Welfare and freedom are important factors in the concept of Well Being (Dasgupta, 1973). Well-being can be defined as a state of human life in which people are capable of deliberation, having the potential capacity to do things. It details agency, choice, independence, and self-determination (Dasgupta, 1973).

It is a state of mind where desires are fulfilled by activities that are undertaken and the relationships that are enjoyed.

### ***Well Being: The Contemporary Debate:***

It is argued that all humans have similar needs for food, care and shelter, for friendship and love, and a communal life, and for freedom to develop our talents and to pursue our ends (Dasgupta, 1973). Nutrition, shelter, sanitation, and health care are necessary for sheer survival. The constituents of personal well-being are quantitatively elusive. Besides income, health, and education status, utility, freedom, and rights are key components (Summers *et al.*, 2017). Individual choice and autonomy have been assigned as integral features of well-being. It is often found that happiness and subjective well-being are used interchangeably, but that is not the case. It will be wrong to equate subjective well-being with happiness; it is more about what people value in their lives (Camfield, 2006). Currently, each and every year, the World Happiness Report is prepared by the United Nations' Sustainable Development Solution Network. Social conditions and progress have been the key interests in well-being rather than economic measures. It can be justified when Bangladesh stands in a better position than India despite having half the per capita GDP of India (Sachs, 2018).

There is no specific research concerning the well-being aspects of Bihar. However, Human development reports have been carried out at the state level. Further, study at the district level is absent. According to the Human Development Report 2007, Bihar acquired 21st position among all states in India. Bihar has always been at the margins of socio-economic indicators. World Bank finds that after 2005, all low-income states (Bihar, Chhattisgarh, Jharkhand, Odisha, Madhya Pradesh, Rajasthan, and Uttar Pradesh), except Bihar and Rajasthan, grew at a slower pace than other states. After having moderate growth, Bihar remains at the bottom (Radhakrishna, 2015). On the measurement aspect, it is argued that the failure of capturing non-market income, that is non-monetary part of real income, has proved a distorting element in underdeveloped countries. This statement may be truly applicable in the case of Bihar. Bihar is one of the least urbanized states in India.

Measurement of well-being is a tough task using secondary sources. Most of the studies dealing with well-being have opted for primary surveys and qualitative methods. There is a dearth of research dealing with well-

being and poverty at the local level (Tiwari, 2008).

### ***Determinants of Well-Being:***

***Education:*** Education is the most influential and deciding factor in well-being. Adult literacy rate has been considered the most appropriate measure. Education influences each and every component in Well Being, whether it is income or health or utility, or freedom. Bihar state lies at the bottom when we consider the literacy rate. It is a known fact that a lack of educational infrastructure can negatively affect the educational resources.

***Health:*** The health aspect has received relatively more attention in the discourse of Well Being. Health measures have crucial implications for the physical, mental, and social well-being of an individual. Infant mortality rate and life expectancy are important deciding factors for a health condition for an individual. Malnutrition can affect the growth of the fetus, and severe malnutrition can affect brain growth and development. A healthy food can result in a productive one. People need food and care to be able to produce food and care.

***Income:*** Health, education, and income are not independent of each other. Income has an essential impact on health and education. In a country like India, access to quality health and education facilities is highly determined by the income strength of an individual. In India, there is a concept of a poverty line, which is marked by a specific amount of earnings. The population whose income is below this poverty level will be considered poor. Head count ratio is an ideal measure for determining the percentage of the poor population. There has been an argument of acute disparity in income levels. Income has not trickled down to the poorest in society. It has also been argued that the estimates of household income are typically wrong and possibly biased downwards. Household data on clothing, bedding, furniture, and kitchen utensils can explain more about the level of income conditions.

***Utility*** is seen as a mental state reflecting satisfaction, pleasure, or desire fulfillment. *Rights* are usually seen as providing a basis for protecting a certain class of human interests, such as agency, independence, choice, and self-determination. *Liberty, choice, freedom,* and *autonomy* play an essential role in achieving overall Well-being. Community participation is an important aspect for a person to live a happy and satisfied life.

Political and civil liberties of a person will ensure her freedom to determine who governs and what the laws will be. *Social poverty* refers to discrimination and social exclusion. Lack of social support is the main feature of Social Exclusion. Freedom from these kinds of social illness is required in achieving Well-being.

#### Objectives of the study:

- To conceptualize and analyze Well-being in Bihar
- To examine the spatial distribution of Well-being in Bihar

#### Research questions:

This paper attempts to ask two questions: (1) What is the condition of Well Being indicators in different districts of Bihar? (2) What is the spatial pattern of Well Being in Bihar across different districts?

## METHODOLOGY

The method of the study is largely quantitative in nature. Textual readings have been important for the understanding of the concept of well-being. Qualitative and quantitative methods (which are also called mixed method) have been opted for understanding the problem. Well-being index has been formed using the HDI method for standardization purpose.

Standardization method =  $(\text{Actual value} - \text{Minimum value}) / (\text{Maximum value} - \text{Minimum value})$ .

A total of sixteen indicators have been chosen to form a final composite index for Well Being. The equal weight method has been opted for calculating the Well Being Index.

#### Limitations of the Study:

Indicators for subjective well-being are qualitative in nature, and it is not easy to quantify them through secondary sources of data. This study limits its data to only secondary sources. The study might undermine the true measurement of subjective Well-Being. The limitation of finding data for appropriate indicators is a major drawback. Mismatch in the time period of different indicators can undermine the quality of results. Few indicators have been formed using old data, so these are some of the drawbacks in the study.

#### Data Sources:

For qualitative studies, textbooks, Research Papers,

and Reports are important sources of information, whereas for quantitative studies, multiple data publishing bodies have been accessed. The main secondary data sources are:

- Census of India, 2011
- Directorate of Economics and Statistics, Department of Planning and Development, Patna, Bihar, 2014
- United Nations Development Programme, 2011
- National Family Health Survey, Ministry of Family and Health Welfare, Government of India, 2015-16

#### List of Indicators and Justifications for selecting these indicators:

A total of sixteen indicators have been analyzed for the formation of the Well-Being Index. Six variables have been chosen under which these sixteen indicators fall. Well-being is a positive concept; therefore, it has been ensured that all indicators stand in a positive direction.

#### Variables:

Education, Health, Income, Household assets and facilities, Gender empowerment, security, and Family Planning are the variables.

#### Indicators:

Under Education, Literacy rate, Percentage of Graduates in total population, Percentage of females aged 6 years and above who have ever attended school, Percentage of women with 10 or more years of Schooling.

*Literacy rate:* It is a very common measure of Education. It shows the percentage of the literate population of the total population. Without knowledge and education, human beings cannot achieve mental well-being. It is assumed that more the literacy rate, more stronger the Well Being. The percentage of graduates in the total population shows the level of education, which is an important indicator of education. Similarly Percentage of females aged 6 years and above who have ever attended school, the Percentage of women with 10 or more years of Schooling shows the educational strength considering the female population. Our society often undermines the importance of women's education. Woman contributes to half of the total population. Ignoring this substantial number would be a blunder for the overall well-being.

*Health:* Health measures have crucial implications

for the physical, mental, and social well-being of an individual. Four indicators have been selected to show the health condition. Percentage of women who had full antenatal care, Percentage of births assisted by Doctors/nurses, Percentage of children fully immunized, and improved sanitation facilities.

**Income, Household assets and facilities:** It has also been argued that the estimates of household income are typically wrong and possibly biased downwards. Household data on clothing, bedding, furniture, and kitchen utensils can explain more about the level of income conditions. For this purpose, again four indicators have been selected: Net domestic Product per capita income, percentage of concrete houses, percentage of households having improved drinking water source, and Percentage of households having electricity.

**Gender empowerment:** Females are an underdeveloped population in relation to the male population. For the overall well-being of human life, we cannot ignore the female population. Gender empowerment is an integral part of social progress in Human well-being. Two indicators have been chosen: child sex ratio and percentage of women literate in the 15-49 year age group

**Security:** ensuring human life with health insurance is an important security measure in life. It will provide financial support to the family when a person receives a threat to her life. The percentage of households having health insurance is considered an important indicator of health security.

**Family planning:** India is among the most populous countries in the world so is Bihar when we look at the state level in the country. Keeping a balance between resources and population planning is required, which can result in providing better resources for human development. A happy and healthy life can only be achieved when we consider family planning. The percentage of women aged 15-49 who use any method of family planning has been considered an indicator of family planning.

#### Listing of indicators:

**Education:** Literacy rate, Percentage of Graduates in total population, Percentage of females aged 6 years and above who have ever attended school, Percentage of women with 10 or more years of Schooling.

**Health:** Percentage of women who had full antenatal care, Percentage of births assisted by Doctors/

nurses, Percentage of children fully immunized, and Percentage of households having improved sanitation facilities.

**Income, Household assets and facilities:** Net domestic Product per capita income, percentage of concrete houses, percentage of households having improved drinking water source, and Percentage of households having electricity.

**Gender Empowerment:** Child sex ratio and percentage of women literate in the 15-49 year age group.

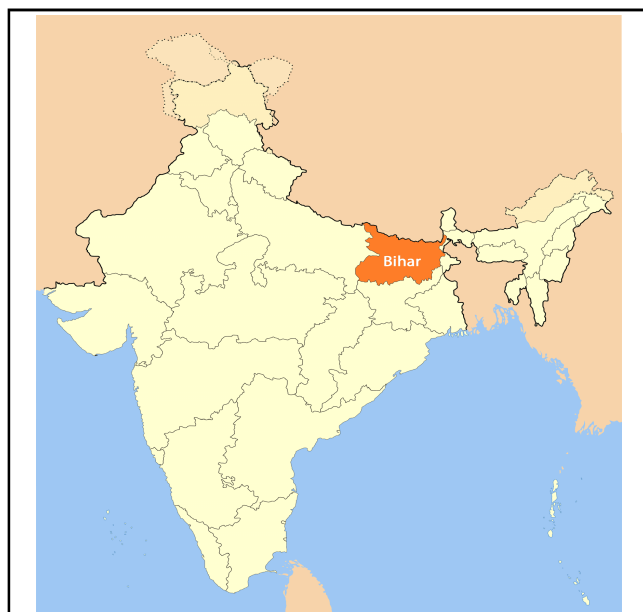
**Security:** Percentage of households having health insurance

**Family Planning:** Percentage of women aged 15-49 who use any method of family planning

## FINDING AND INTERPRETATION

### Study Area: Bihar

Bihar is located in the eastern part of the country. It is an entirely landlocked state, although the outlet to the sea through the port of Kolkata is not far away. Bihar lies midway between the humid West Bengal in the east and the sub-humid Uttar Pradesh in the west, which provides it with a transitional position in respect of climate, economy, and culture. It is bounded by Nepal in the north and by Jharkhand in the south. The Bihar plain is divided into two unequal halves by the river Ganga, which flows through the middle from west to east (Fig. 1).



Source: <http://mapsof.net/chennai/location-map-of-bihar>

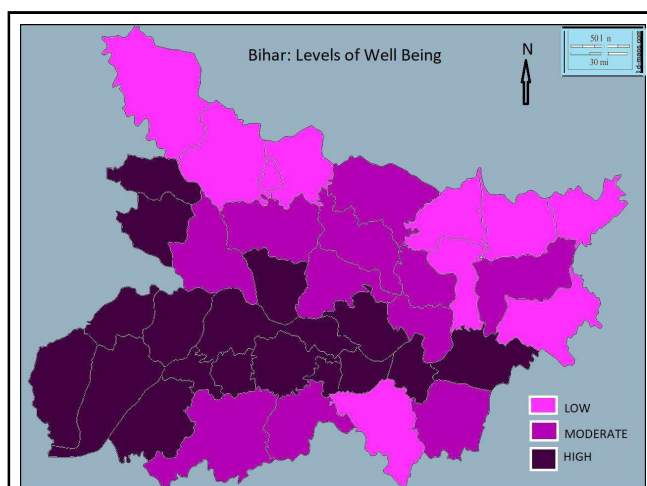
Fig. 1 : Study Area Locating Bihar

### Demographic Picture of Bihar:

According to the census 2011, Bihar's total population is 104099452, which is 8.58% of the national population. Sex ratio in Bihar is 916, while the national figure is 940. According to the Human Development Report 2007-08, Bihar holds 21st position among all states. The population density of Bihar is 1106 persons per square kilometer, whereas the national figure is 382 persons per square kilometer. Bihar's Population decadal growth rate for the year 2001-2011 was 25.42% while the nation's population growth rate was 17.64%.

### Well-being in Bihar:

There are a total of 38 districts in Bihar. Out of 38 districts, 10 districts are coming under the category of low levels of well-being. Districts falling in low levels of Well Being are: Supaul, Sitamarhi, Katiहार, Sheohar, Jamui, Araria, Madhepura, Pashchim Champaran, Purbi Champaran, and Kishanganj. All these districts are located in the northern part of the state, except Jamui, which is in the south. These northern districts face frequent floods every single year, which results in creating an unfavorable environment for the establishment of any kind of industry and infrastructure for local development.



Source: Author, 2018

**Fig. 2 : Distribution of Well-Being in Bihar**

Connectivity is very poor in these regions. Agriculture practices are self-sufficient in nature. The traditional method of agriculture is being practiced in Bihar.

Districts having moderate Well Being are: Nawada, Gaya, Saran, Muzaffarpur, Khagaria, Samastipur,

Darbhanga, Saharsa, Banka, Madhubani, and Purnia. A total of 11 districts fall in this category.

Districts falling under a High level of Well Being are: Patna, Munger, Rohtas, Aurangabad, Buxar, Bhagalpur, Jehanabad, Siwan, Bhojpur, Vaishali, Sheikhpura, Kaimur, Begusari, Lakhisarai, Arwal, Nalanda, and Gopalganj. A total of 17 districts fall in this category. Most of these districts are located either in the central or in the southern part of the state (Fig. 2). Patna is at the top in the list of well-being index. Patna is the capital city, majority of the population is urban. Gopalganj and Siwan are known for their income generation from Middle East countries. Various previous studies find the same. South Bihar is relatively more developed than North Bihar.

### What Key Indicators Reveal? :

**Literacy rate:** Bihar's average literacy rate is 50% whereas the national average literacy rate is 74%. Literacy rate varies from 61% to 40% in different districts of Bihar. Rohtas district has the highest literacy rate, which is 61%, followed by Patna, Munger, Bhojpur, and Buxar. The lowest literacy rate has been found in the Purnia district, which is 40%. Five districts having the lowest literacy rate are Katiहार, Madhepura, Sitamarhi, Saharsa, and Araria.

**Income:** Bihar's average Net Domestic Per capita income is 19591, whereas the national figure is 33731. Five districts having the highest net domestic per capita income are Patna, Munger, Begusarai, Bhagalpur, and Muzaffarpur. Five districts having the lowest net domestic per capita income are Araria, Arwal, Supaul, Nawada, and Sheohar.

**Health:** On average 63% of children are fully immunized in Bihar; however, this varies from 78% to 29% in the districts of Bihar. Saharsa, Aurangabad, Begusarai, Rohtas, and Arwal districts are at the top. While Araria, Darbhanga, Purbi Champara, Madhubani, and Pashchim Champaran districts are at the bottom based on these particular health indicators.

The child sex ratio can reveal the status of women in society. It can also expose the attitude toward women in society. It is considered a key indicator for women's empowerment. The average child sex ratio for the state is 929. However, it is not similar in every district. Significant variation has been found at the District level. Child sex ratio ranges from 766 (Banka) to 1049 (Samastipur). Samastipur, Gopalganj, Patna, Seikhpura,

and Sitamarhi lie at the top while Katihar, Nalanda, Jehanabad, Vaishali, and Banda lie at the bottom in terms of child Sex ratio.

### Conclusion:

Spatial picture of Well Being in the districts of Bihar follows a particular pattern, where in northern region shows a poor status, while the southern region shows a relatively better status. Districts with the lowest Well Being are mainly located in the northern part of the state. Districts of the southern and central parts resemble the highest well-being. Development assistance, especially to districts located in the northern part, is required. This northern part is also a highly flood-prone region in India, and flood affects all aspects of life. Out-migration from these regions is another major issue. Due to migration, loved ones are left alone, which negatively affects their lives. Considering all these concerns, an adequate plan should be launched to address the problem in the region.

### REFERENCES

- Basu, S. (1961). Measurement of Well Being", *The Economic Weekly*, Sept.21, 1961.
- Camfield, L. (2006). The why and how of understanding 'subjective' wellbeing, Exploratory work by the WeD group in four developing countries
- Dasgupta, P. (1993). An inquiry into Well-Being and Destitution, Oxford University Press.
- Gaspar, D. (2005). Subjective and objective well-being in relation to economic inputs: Puzzles and responses. *Review of Social Economy*, **63**(2): 177-206.
- Mehrotra, S. (2006). Well Being and cast in Uttar Pradesh- why UP is not Like Tamilnadu? *Economic & Political Weekly*, Oct. 7, 2006, 4261-4271.
- Radhakrishna, R. (2015). Well Being, Inequality, Poverty and Pathways Out of Poverty In India. *Economic & Political Weekly*, Vol.1. No. 41.
- Sachs, J.D., Layard, R. and Helliwell, J.F. (2018). World happiness report 2018 (No. id: 12761).
- Sengupta, A., 2016. Gender Inequality in Well-Being in India, *Economic & Political Weekly*, VOL LI NO 13
- Smith, D.M. (1973). The Geography of Social Well Being in the United States, McGraw-Hill, New York
- Summers, J. K., Smith, L.M., Harwell, L.C. and Buck, K.D. (2017). The development of Human Well Being Index For the United State. INTECH, accessed from <https://www.intechopen.com/books/quality-of-life-and-quality-of-working-life/the-development-of-a-human-well-being-index-for-the-united-states>
- Tiwari, M. (2008). Poverty and Well Being at the 'Grassroot'- How much Visible to Researchers?, Springer, 12 Sept. 2008.

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