

# Poverty and Human Development Index

## A Comparative Analysis of Bihar and Maharashtra

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### Abstract

*There are several limitations to Human Development Index. This paper focuses on one such limitation i.e. protection against violent activities. HDI does not account for protection against violent activities. In this paper incidence of crimes is used as a proxy for protection against violent activities. The main rationale behind choosing incidence of crimes is the strong positive correlation between crimes and Human Development index. Hence this paper attempts to calculate a violence adjusted Human Development for Bihar and Maharashtra. This paper also aims to prove that incidence of crimes doesn't decrease as socio economic indicators improve.*

### Introduction

India is the land of diversity. This diversity ranges from cultural, religious and linguistic diversities to geographical diversity. From snow clad mountains in the north to the vast coastline in the south. From a relatively less fertile peninsular region to highly fertile Indo Gangetic plains. Unfortunately, the states in India suffer from the Dutch disease. The states located in the fertile Indo Gangetic Plains are economically and socially backward. Hence in order to analyse the effects of geographical disparities on economic and social indicators, this study has chosen the economically fast-paced peninsular state of Maharashtra and economically backward hinterland state of Bihar. Violence and crimes are often kept out of the purview of economic and social development. Income, health and education indicators play an important role in economic development. Health, longevity, education, etc. improve with the increase in Income, but there is no guarantee that crimes and violent activities would reduce as income increases. According to Amartya Sen, Freedom from Violence should also be regarded as one of the capabilities which increases the quality of life.

### Review of Literature

Voluminous studies have been conducted on Bihar and Maharashtra on poverty, growth, human development and inequality. A study conducted by the World Bank in 2017 found that Maharashtra's economic growth has been above the national average. This growth was mainly driven by the growth of the service sector. It was also found that there was a marginal increase in the consumption inequality in Maharashtra. This increasing inequality can be attributed to the city centric government policies that

deny the poor of their fundamental rights (Gangan, 2016). Similar studies were conducted in Bihar by the World Bank. In a study conducted by World bank in 2016, it was found that Bihar was one of the fastest growing low-income state in India. Despite being the fastest growing low-income state, a large part of Bihar remains poor. It was also found that consumption inequality in Bihar is one of the lowest in India.

A study conducted by Khairnar and Sen in 2013 on inter-district inequalities in Maharashtra reveals that the inequality indices has been rising sharply in Maharashtra. M.H. Suryanarayana in 2009 conducted a study on Intra state Economic disparities in Karnataka and Maharashtra. This study revealed that four of the urban districts of Mumbai, Thane, Pune, and Nashik accounts for half of the state income while the remaining half is shared by 31 districts. In another study by Mishra and Panda (2005) points out to the fact that although Maharashtra is one of the Fastest growing state in India, the incidence of poverty in the state remains close to the national averages.

A study by Thakur, Bose, Hossain and Janaih (2000) examined rural poverty and income distributions in 8 villages in Bihar. They found that rural poverty was much lesser in “technologically” developed villages as compared to less developed villages. Recent study by Reena Kumari on the rural urban divide in Bihar pointed out that within the state of Bihar there is high degree of disparity. It also revealed that backwardness of a poor region leads to social tension and political disturbances in the state. Another recent study conducted by Saha (2016) in Bihar found that Bihar is one of the worst states to be born as women. It was found that women in Bihar are most likely to be aborted as children.

## Objective of the Study

- To analyse the performance of Bihar and Maharashtra in terms of Poverty elimination.
- To examine the performance of Bihar and Maharashtra in terms of Human Development index.
- To examine the performance of Bihar and Maharashtra in terms of Violence adjusted Human Development Index

## Research Methodology

A formula for Violence adjusted Human Development Index was obtained from the paper named “Training Material for Producing National Human Development reports” published by UNDP in 2015. In 2003 Columbia introduced a new index “the violence adjusted Human Development index” which sought to demonstrate the effects of crimes, homicides, etc. The violence adjusted HDI used the same indices and weights used in calculation of Old Human Development Index. In addition to the standard health, education and income indices a new index was added which focussed on homicide. This additional index adjusted Human development index for violence. The homicide index was given by

$$\text{Homicide Index} = 1 - \left( \frac{th - th_{min}}{th_{max} - th_{min}} \right) \left( \frac{th - th_{min}}{th_{max} - th_{min}} \right)$$

Where “th” is the homicide per 100,000 inhabitants. For international comparison the Minimum value of “th” is 0 while the maximum value of “th” is 85.

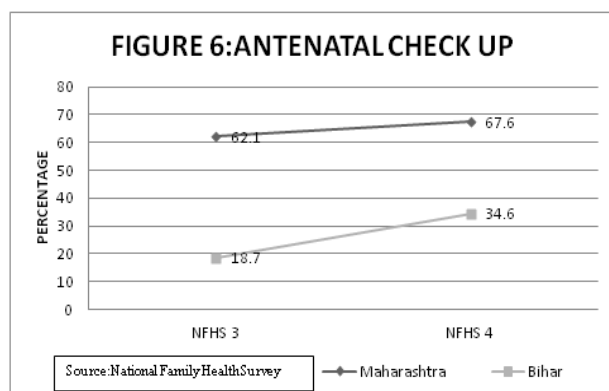
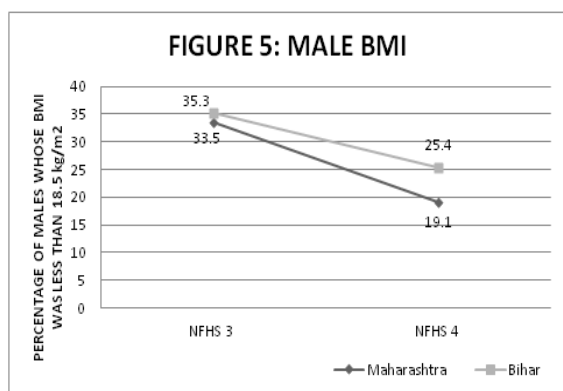
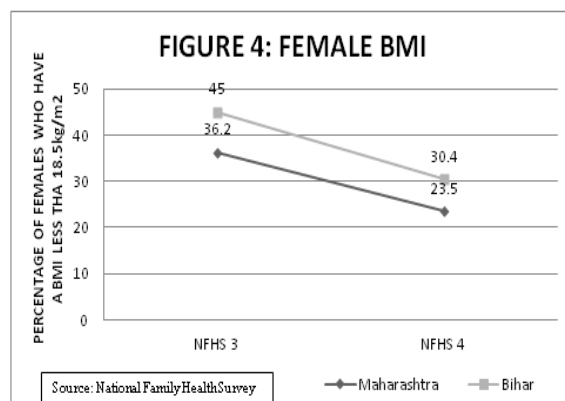
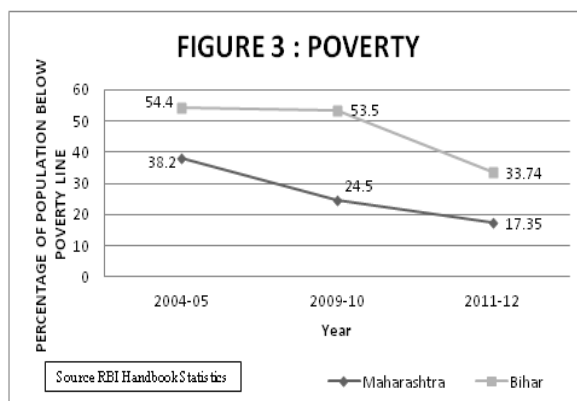
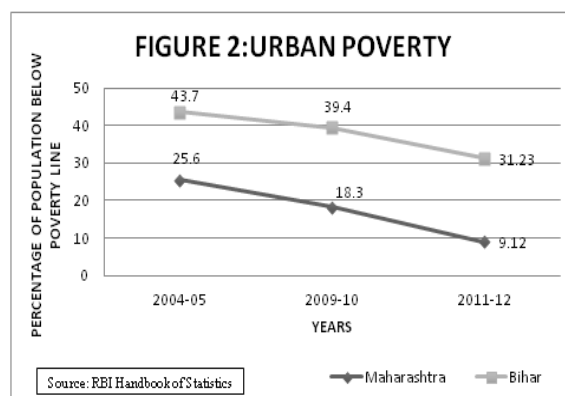
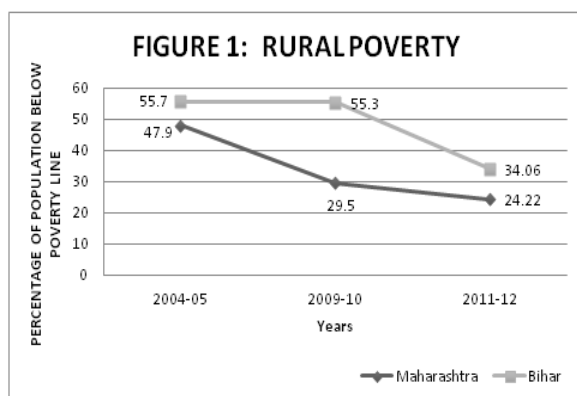
$$\text{Income Index} + \text{Education Index} + \text{Health Index} + \text{Homicide Index}$$

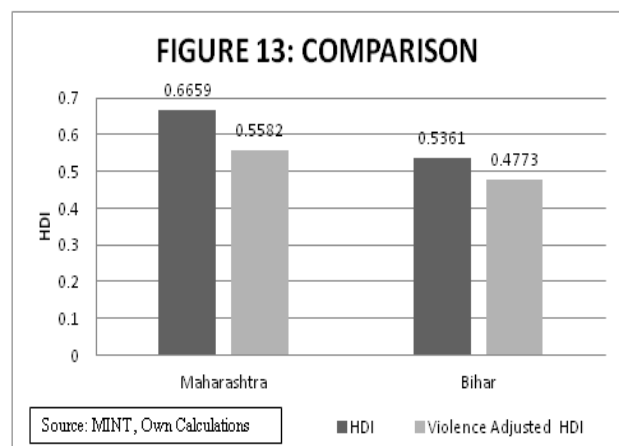
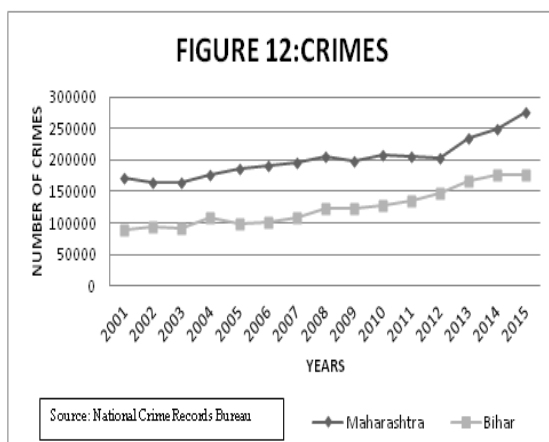
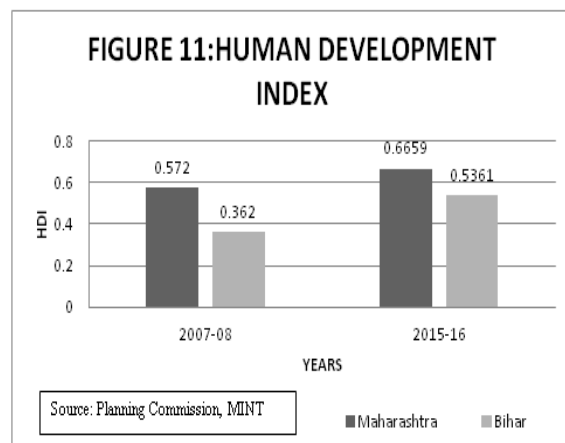
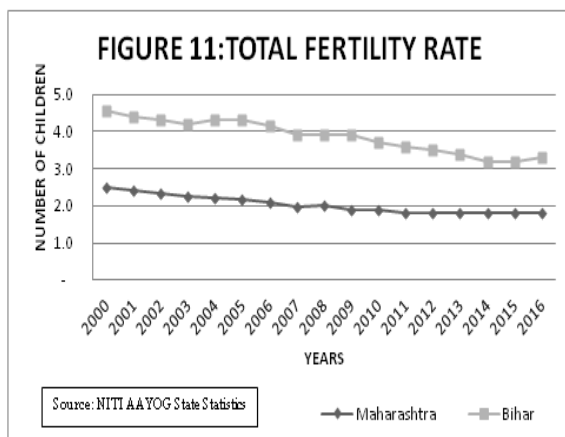
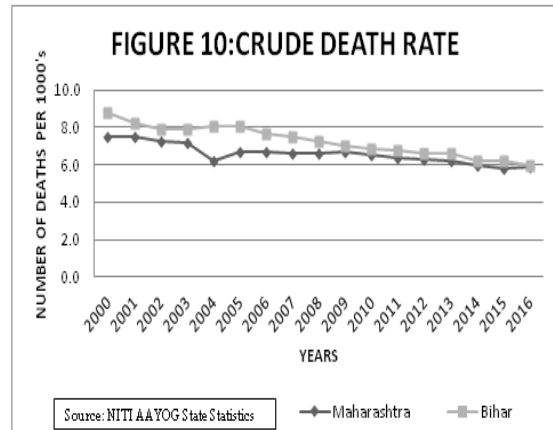
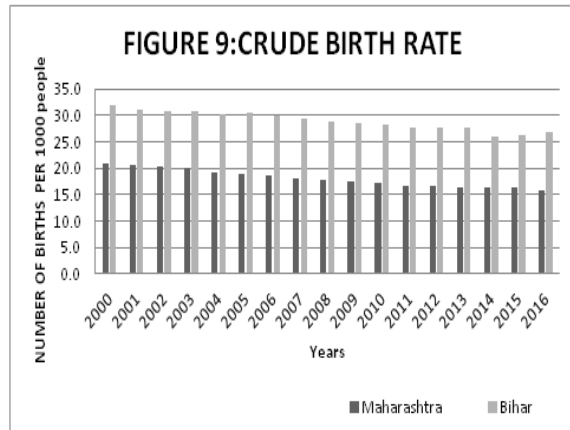
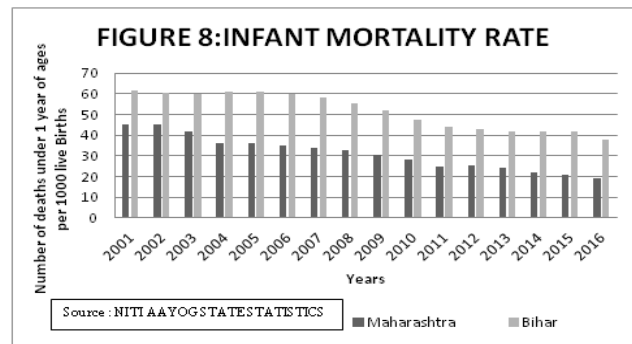
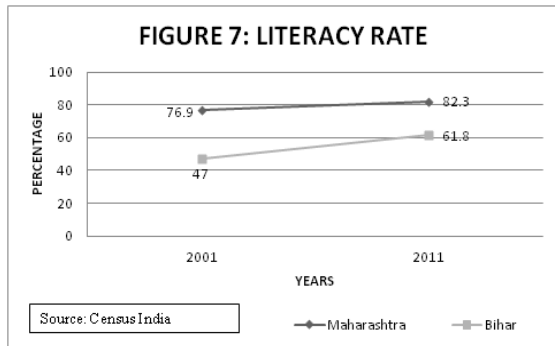
$$\text{Violence Adjusted HDI} = \frac{\quad}{4}$$

## Limitation of the study

- The time period considered in this paper is very small. It ranges from 2000 to 2016 as Bihar was divided into Jharkhand in 2000.
- The frequency of data on socioeconomic indicators is also limited. Poverty and Human Development Index is not estimated on a yearly basis.

## Empirical Evidence





From the above figures it is evident that Maharashtra is a better performing state as compared to Bihar in terms of poverty alleviation, human development indicators viz education and health indicators. At the same time Bihar has registered the greatest improvement in human development indicators after the introduction of Jeevika: State Rural Livelihood Mission and other centrally sponsored schemes. Although health indicators education indicators and income indicators are performing well in both Bihar and Maharashtra, there has been a substantial rise in the number of crimes committed in both Bihar and Maharashtra.

From figure 13, it is revealed that, Maharashtra has a higher incidence of crimes as compared to Bihar even when all the socioeconomic indicators of Maharashtra are better than Bihar. Figure 14 shows the comparison between Human development Index and Violence adjusted Human Development Index. The value of Violence Adjusted Human Development Index is lesser than Human Development Index in both Bihar and Maharashtra. Bihar falls back into the Low Human Development category from medium Human Development category when incidence of crimes is accounted in the HDI.

## Conclusion

Poverty declined in Maharashtra and Bihar at a massive rate. Still poverty rates in Bihar continues to lie above the national average. The introduction of Centrally sponsored schemes viz. Pradhan Mantri Grameen Awaz Yojana, Mahatma Gandhi National Rural Employment Guarantee Scheme, Public Distribution System, etc. and state sponsored schemes viz Jeevika: State Rural Livelihood Mission, etc. has led to the decline in poverty in Bihar and Maharashtra. As poverty declined rapidly, health indicators in both Bihar and Maharashtra improved drastically. Human Development Index has increased in both Bihar and Maharashtra in the recent years. But both Maharashtra and Bihar lie in the Middle Human Development Category. Although there was an improvement in income, health and education indicators there has been a dramatic rise in the Crime Rate in both Bihar and Maharashtra. This is mainly due to the failure of Health and Education indicators to depicts the true picture. Crime rates have increased at a faster rate in Bihar as compared to Maharashtra.

## Policy Suggestions

The great philosopher Aristotle quotes "Poverty is the parent of Crime and Revolution.". Thus, Governments of Bihar and Maharashtra must introduce several schemes to eradicate poverty. Crimes are always considered as a Home Affairs Issue. Policymakers believe that increase in enforcement and punishment leads to reduction in incidence of crimes. They fail to recognize the economic underpinnings of Crimes. Hence, policymakers must account for the impacts of economic policies on Crimes.

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