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## Punjab, Bihar, and the Paradox of Uneven Development

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### ABSTRACT

If one browses through a school textbook of Social Science, they can find a comparative analysis to study uneven developmental processes in post-colonial India. Almost all textbooks compare Bihar and Punjab, portraying them on two ends of the developmental spectrum. This paper tries to analyse the reasons behind the same and how Bihar was disadvantaged *vis-à-vis* Punjab. For explanation, many factors are considered, starting with discriminatory colonial policies followed by natural detriments like land, population, and its impact on the economy. Then, the positive effects of the green revolution are analysed followed by administrative and infrastructural inefficiencies of Bihar. Finally, after trying to give an explanation why the states are still depicted to be on the polar ends of the developmental path, the paper proceeds to an open-ended section, "is the comparison still relevant?". Here, the current developments of Bihar, starting from a formidable agricultural growth rate to economic growth. Punjab, once the richest State in India, now has a negative GDP growth rate. The question remains- is the comparison still relevant? And are our textbooks outdated?

Keywords: Punjab, Bihar, economy, development, agriculture, green revolution, infrastructure

### 1. Introduction

"*Mere deshkidharti, sonaagle, uglehramoti*". Punjab experienced a great agricultural leap in the late 1960s following the era of the green revolution that added to a fertiliser boom, use of pesticides and HYV seeds, mechanisation of agriculture, and expansion of irrigation that joined hands with effective policies, leading to record productivity levels. It spearheaded the movement for India's self-sufficiency in food grains for over a decade, resulting in a gigantic *hramoti* (diamond, pearl) boom in the economy of Punjab. The increase in agricultural productivity was followed by massive infrastructural development, advancements in tourism, investment in Human Development and quest for a better life, *inter alia*. On the other hand, Bihar, the mineral queen blessed with a plethora of natural resources, forest and minerals, located in the Gangetic plains with fertile alluvial soil, bearing 40% of India's coal, 59% copper, 80% silver, 17% iron ore and 60% mica, is deemed to be a '*bimaru*' (sick) state. The dilemma of the population with increased dependency on agriculture is pulling its leg, and now, the GDP (PPP) of Punjab is 3.6 times more than that of Bihar. Some sources suggest that the current economic status of Bihar is similar to that of Punjab of the 1970s. What might be the reasons behind such an uneven developmental process?

### 2. The Role of Colonial Policies

Punjab was the agricultural heartland of India *ab initio*, owing to the extensive granaries recovered from the Indus valley sites. In 1885, the British converted 6 million acres of barren wasteland into cultivable agricultural land in Punjab. Canal colonies were built, and the irrigated area increased from three to 14 million acres from 1885 to 1947. The colonial administration introduced cash crops and established an Agricultural College in Faisalabad. The per capita agricultural output increased by 45% between 1891 and 1921. Also, the Punjab Land Alienation Act of 1900 prevented urban commercial classes from acquiring the land of cultivators.

On the other hand, while 20% of people in Bihar were involved in spinning and allied activities in the early 19th century, it reduced to 8.5% by the mid-century. Permanent settlement was introduced, and the *zamindars* were recognised as the owners of the land. It joined hands with the indigo cultivation, only to ruin the entire agricultural ecosystem of Bihar. In 2002-03, 1/3<sup>rd</sup> of rural households in Bihar were landless. The colonial policies, *ipso facto*, played a significant role in the current developmental disparity between both states.

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### 3. Population, Land, and Economy

The population of Bihar is 3.5 times more than that of Punjab. A balance between the population and economic growth is quintessential to absorb the growing human resources into productive sectors. However, in Bihar, the population growth is not supplemented by a *pro rata* growth in employment opportunities, both inside and outside agriculture.

In Bihar, the contribution of the agricultural sector to the GDP fell from 63% in the 1970s to 34% in 2011 (20% in 2021). Similarly, in Punjab, it decreased from 57% in the 1970s to 36% in 2011 (25% in 2021). However, while the agricultural labourers decreased from 63% in 1971 to 36% in 2011 in Punjab, it decreased from 82% in 1971 to only 71% in 2011 in Bihar. In other words, a 29% decline in GDP share was accompanied by only an 11% decrease in the labour force in Bihar. That is, the agricultural labourers are unable to keep pace with the rapid decline of agriculture's share in GDP. The limited capacity to absorb additional labour force in the agricultural sector leads to disguised unemployment and increased pressure on limited land resources.

In 2015-16, the average landholding in Punjab was seven times that of Bihar. While the average landholding decreased from 1.64 ha in 1970 to 0.5 ha in 2015 in Bihar, it increased from 2.89 ha to 3.62 ha in Punjab in the same period. Smaller landholdings in Bihar often left the farmers devoid of the central government price support. Already minuscule land holdings are being fragmented after each inheritance, and marginal landholders of Bihar find it more profitable to work as labourers. This marginalisation of the agricultural workforce forced labourers in Bihar to migrate outside the state for seasonal or long-term employment.

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### 4. The Miracle of Green Revolution

While Punjab started growing *sona*(gold), *hira* (diamond) and *moti*(pearl) after the advent of the Green Revolution, Bihar was left with subpar mechanisation, traditional cultivation methods, fewer HYVs and fertilisers. In 1970, Punjab supplied 70% of India's foodgrains and witnessed a 70% rise in the income of farmers. Also, Punjab had the highest GDP (PPP) in 1981, the lowest incidence of poverty (8%) in 2012, and the lowest level of hunger in 2008. On the other hand, Bihar has the lowest GDP (PPP) among the Indian states and the fifth-highest percentage of the population living below the poverty line (33.74%).

The Net Sown Area in Bihar decreased from 8,261.3 ha in 1971-73 to 6,696.6 ha in 2012-14. However, it increased from 4,071.5 ha to 4,143 ha in Punjab during the same period. The cropping intensity of Bihar was always low *vis à vis* Punjab. In Bihar, the cropping intensity showed a marginal increase from 129.47 in 1971-73 to 138.82 in 2012-14. On the other hand, in Punjab, it substantially increased from 141.9 to 189.9 during the same time. Also, even though fertiliser use per hectare in Bihar increased from 9.16 kg/ha (1971-73) to 166.23 kg/ha (2012-14), it's far behind Punjab that raised its per hectare fertiliser consumption from 37.51 kg/ha (1971-73) to 229.16 kg/ha (2012-14).

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### 5. Infrastructure and Administration

Per hectare capital expenditure in Bihar is less than a quarter of Punjab and less than half of the national average. In contrast to Punjab, physical and economic infrastructure is abysmally developed in Bihar. While the percentage of irrigated farmland increased from 25.58% (1971-73) to 58.87% (2012-14) in Bihar, it increased from 75.96% (1971-73) to 98.54% (2012-14) in Punjab. The current percentage of irrigated farmland in Bihar is less than 1.2 times that of Punjab of the 1970s. In the 1980s, Bihar started using groundwater for irrigation, only to be foiled by poor electricity supply and an increase in diesel prices. While the governments of Punjab, Haryana, Gujrat, Maharashtra, and Karnataka subsidised electricity and diesel prices to maintain the agricultural input-output ratio, Bihar couldn't do so owing to the constraints on Budget.

Bihar was ranked as the most poorly governed state in India by the World Bank in 2005. The politics of the state, intertwined with caste, saw more than 20 governments in power between 1961 and 1990, with none of them able to complete a full term in power. This fog of uncertainty wrapped in the politics of the state added to the increasing inability of the parade of governments to implement developmental projects and develop physical and economic infrastructure.

The Index of Infrastructure by the Planning Commission ranked Bihar the lowest in terms of physical infrastructure. While developmental expenditures in Bihar were Rs. 3,206 Cr. (2002-05), it was Rs. 9,467.9 Cr. in Punjab, i.e. almost three times more than that of Bihar. Also, when coming to the grants by the central government, until the 7th Five-Year Plan, Bihar received less than half of the national average. However, the utilisation of funds remained less than 50% due to inferior administrative capacity, and the unused funds were transferred to more efficient states. This led to poor infrastructure growth in Bihar, and in the post-LPG era, IT-based companies and MNCs started investing in locations with already developed infrastructure, pushing Bihar further. From 1991-98, Bihar received less than 0.1% of national FDI. In 2007, while the per capita FDI was Rs. 2438 in Punjab, it was merely Rs. 89 in Bihar.

## 6. Is the Comparison Still Relevant?

Punjab was the wealthiest state in India at one point in time. Except in 2019, the economic growth rate of Punjab was always below that of the national average. The growth rate was higher, i.e. 5.3% in Punjab *vis à vis* the national average of 5%, only in the first eight quarters after the incidence of the pandemic. From 1993-94 to 2005-06, the overall economic growth rate of India was 6.8% and that of Bihar was 5.3%. However, from 2004-05 to 2011-12, the economic growth rate of India was 8.3% and that of Bihar was 11.7%. Also, from 2010-11 to 2018-19, the overall growth of the country was at 7.5%, while that of Bihar was 13.3%, which is 1.7 times more than the national average. On the other hand, the Punjab economy is drastically depleting with a growth rate of -2.8% (2019-20). Punjab ranked first in terms of GDP (PPP) in 1981 and fourth in 2004. Now, it stands at 19th with \$8,470, just above the national average of \$7,333. Punjab dropped 15 places in just 16 years. Now, is Punjab a good comparison to Bihar, whose economy is growing faster than the economy of the country?

The agricultural growth rate of Bihar is also greater than many green revolution states. The agricultural growth rate of India from 2005-06 to 2014-15 was 3.6%, and that of Bihar was 4.7%, 1.3 times more than the national average. If we see the last five years, the agricultural growth rate of Bihar is 7% *vis à vis* the national average of 2%. Now, Bihar is the 4th largest producer of vegetables and the 8th largest producer of fruits. Furthermore, the World Bank, in 2009, designated Patna as the best city to start a business in India after Delhi. Coming to Punjab, from 1971-72 to 1985-86, the agricultural growth rate of Punjab was 5.7% *vis à vis* 2.3% of India, i.e. 2.4 times more than the national average. From 1986-87 to 2004-05, the agricultural growth rate of Punjab was 3% *vis à vis* the national average of 2.94%. Now, from 2005-06 to 2014-15, the agricultural growth rate of Punjab was 1.61% (Bihar- 4.7%) *vis à vis* the national average of 3.5%, i.e. 2.17 times less than the national average, which is quite unbecoming of a green revolution state.

Between 2000-01 and 2010-11, once the richest state in India now has the second-slowest economic growth rate among all states and UTs, behind only Manipur. The GDP (PPP) of Punjab is just a third of Goa. Uttar Pradesh (31.35%) and Madhya Pradesh (18.18%) now overtook the breadbasket of India in wheat production. Punjab is now trapped in the vortex of paddy-wheat monoculture. About 4,500 litres of water is required to produce one kilogram of rice, and 1,500 litres is required to produce a kilogram of wheat. Sticking to the paddy-wheat monoculture will only contribute to decreasing the rapidly depleting water table in Punjab, which is ecologically disastrous in the long run. Also, excessive fertiliser use is poisoning the water table to unprecedented levels. A series of political turmoil that followed the Anandpur Sahib resolution have forced the industrial class to migrate to nearby cities, and Punjab couldn't catch up with the benefits of LPG and have been trailing since then.

Is the comparison between Punjab and Bihar to study uneven development still relevant? Punjab started with a gigantic agricultural base, whereas Bihar started its journey from scratch. If this trend continues, it won't be surprising to see Punjab as a hare that is doomed to lose the race.

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