

Bihar

Economic Reality and Policy Imperatives

A Perspective

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Preface

The main objective behind this work is to provide an overview of the economy of Bihar for an informed discussion. Poverty is writ large, especially so, in the rural areas where the income levels are very low. Equally obvious is the issue of ‘unemployment’ amongst the youth in both rural and urban areas. An attempt has been made here to take account of the existing reality and explore the prospects of development in the state based on the previous works of academicians, senior bureaucrats, journalists and organisations like the World Bank.

I have also made use of the ‘Bihar Economic Survey (2024–25)’ brought out by the Finance Department, Government of Bihar. In a way, this volume is a summary of the main points emerging from all these books and reports. The different areas of concern have been dealt successively under the chapters on ‘land reforms’, ‘agriculture’, ‘industry’, ‘infrastructure’ and ‘urban development’. While chapter one provides an overview of the period of macro-economic derailment in Bihar, chapter two dwells on the subsequent turnaround of the state. Finally, the concluding chapter on ‘Low Hanging Fruits’, summarises the main recommendations for higher growth.

An issue often heard in public discourse is that of corruption. In Plato’s ‘Protagoras’, Socrates, the protagonist of the book, asks Protagoras “why it is not as easy to find teachers of virtue as it is easy to find teachers of any art?”¹ Protagoras’ answer is that there are no special teachers of ‘virtue’ because ‘virtue’ is taught by the whole community. The upshot of the dialogue was that ‘public education’ should be one of the foremost duties of the state for inculcating virtue in the citizens.

A community may also be looked at as comprising families. Children from early age in Bihar are taught invariably by their parents to be truthful, to be humble and to be helpful. How do we then explain the issue of corruption in the state? According to an old adage, ‘*as is the king, so are the people*’ (यथा राजा, तथा प्रजा). This appears to be closest to the reality today in the state.

The subordinate staff could be forced to obey even though the orders are unethical and illegal; otherwise he/she might stand penalised. In other situations, the subordinate staff may be made a partner in the wrongdoing. In a democratically elected government, ‘the executive’ comprising the elected

¹ Ellis, A.M. (2021), *The Politics by Aristotle*, Fingerprint Classics, New Delhi.

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members of the majority party in the legislature is at the helm of affairs. If they go corrupt, then people below them also emulate them and it becomes a very difficult and unhappy situation for the general public.

The voting public has removed such governments time and again through the democratic process of periodic elections, but corruption still persists. It cannot be denied, at the same time, that the political parties who form the government and those who constitute the opposition in the legislature are very much the pillars of democracy. The political parties need to run their party, but there is no satisfactory policy in place to address the issue of funding of these political parties. Unless a solution to this issue is provided, it would be difficult to rid the government from corruption.

CHAPTER 1

Call for Social Justice Goes Haywire

In his book ‘Bihar Breakthrough: The Turnaround of a Beleaguered State’ (2013), Rajesh Chakravarti observes that “for the first two decades after independence, power was in the hands of upper caste Chief Ministers, with the first switch coming with the election of Karpoori Thakur for two short stints first in 1970 and then in 1977’. What escapes the author, however, are the tectonic changes on India’s landscape arising from the election results of the fourth Lok Sabha and of the State assemblies that were held simultaneously in 1967.

The socialist parties had performed very well both in the Lok Sabha as well as in the State Assemblies. In great measure, such a good performance was the result of Ram Manohar Lohia, the Socialist leader who made a determined effort to unseat the Congress Party from power. The Sanyukta Socialist Party (SSP) led by Karpoori Thakur in Bihar won 68 seats and was the second largest party in the State Assembly after Congress. Together with the Communist Party of India and other minor parties, they formed the government where Karpoori Thakur was the Deputy Chief minister.

The government in Bihar lasted for merely one year as defections took place and the Congress in Bihar returned to power. However, Karpoori Thakur became Chief Minister again in 1970 - for a very short period of six months and subsequently in 1977 for a period of two years. The most controversial decision taken by Thakur during his second term as Chief Minister was that of reservation of jobs in the government for the backward castes, in the year 1978.

The whole state was divided on this issue as the people belonging to the upper castes felt threatened about losing further vis-a-vis job opportunities in the government. This decision, however, did not go through because of opposition within the ruling party and Karpoori Thakur had soon to relinquish his Chief Ministership in 1979. Henceforth, however, the socialist ideology in the state acquired more of a casteist tinge and has made “caste” entrenched in the realm of politics in Bihar.

Notwithstanding the above, the Janata Dal Government (1977-79) led by Karpoori Thakur launched a project called Kosi Kranti. ‘The objective of this project was first to update land records, including recording of the rights of sharecroppers; and only then implement rural development programs. This laudable intention was subsequently watered down out of fear that it would

become a mini survey operation and lead to disturbance of agrarian peace' (Prasad, Shankar, 2001).

Fast forward, Lalu Prasad Yadav became the Chief Minister of Bihar in 1990; Karpoori Thakur was no more on the scene as he had passed away in 1988. Ten years later in 2000, Lalu Prasad's wife Rabri Devi became the Chief Minister. Together with her Chief Ministership, Lalu Prasad held sway over the government for fifteen years until 2005. This period of Lalu-Rabri rule became notorious as "jungle raj" on account of the failure of 'law and order' in the state.

As alleged, this failure of governance was the result of criminals, willy nilly, enjoying the protection of the state. It was, nonetheless, observed that 'Lalu accomplished something that decades of socialist speeches had failed to do in Bihar. He made being a backward caste an acceptable and respectable identity construction' (Chakravarti, 2013). According to others, however, this was the result of the changes that were taking place in the land ownership in the state. 'A majority of those who benefited where the Yadavs, Kurmis, and Koeris.... Much of the Lalu phenomenon was rooted in the celebration of the shift in the land ownership pattern' (Sinha, 2020).

Regarding the stand of the Communist Parties on 'reservation in jobs based on caste', it may be said that their support for the same was far from enthusiastic. They had earlier criticized Ambedkar for raising the issue of castes as it was not in line with their emphasis on class struggle. According to them, it was yet another ploy of the British to 'divide and rule'. In later years, however, they gave their support for "job reservations" arguing that there was a need 'for affirmative action' for social justice.

Difficult Years (1990 to 2005)

In his book titled 'Broken Promises: Caste, Crime and Politics in Bihar' (2024), the author Mrityunjay Sharma laments of this period of Lalu regime in the following words, "The 10th of March 1990, that is, the day Lalu took oath was one of hope for millions in the state battered by poverty, caste atrocities and inequality." The political triumph of a *vociferous champion* of the marginalised, a reaction to centuries of oppression, ushered in the hope of upliftment and inclusion. Ironically, the Lalu Yadav years worsened the socio-economic disparities".

Very much a detailed account of this period may be had from reading of the working paper titled 'State Incapacity by Design: Understanding the Bihar Story' by Santosh Mathew and Mick More (May 2011). Santosh Mathew belongs to the Indian Administrative Service (IAS) and was very much part of the Government of Bihar during this period. Regarding the management of the State finances, he focusses on points such as a) Record Keeping, b) Centralization, c) Unspent Spending and on d) Vacancies in government

against sanctioned positions. About record keeping in the government, the authors observe:

‘The routine conduct of government business in India is often parodied for being excessive bureaucratic and overly shaped by an inheritance of colonial concerns to maintain control by high level officials and limit discretion at middle and lower levels of public service. Whatever the validity of those charges, it is clear that good record-keeping is important. This matters for, among other things, the employment histories of public servants, whose pension claims are dependent on records going back decades.

In the period after 1990, the standard of record keeping in the Bihar state government deteriorated noticeably. This particularly affected the public service: one important target against which the ruling coalition continually mobilized its electoral base. Finding records relating to public sector employment, provident fund contributions and insurance accounts became a major challenge. No systemic efforts were made to computerize this information. In 2005 the state government faced over 5,500 contempt applications in the High Court’.

Regarding “Centralization” in the functioning of the government, it was observed:

‘In India, any new public spending scheme undergoes departmental scrutiny and has to receive the approval of the minister concerned. In Bihar under Lalu Prasad Yadav, new proposals had additionally to be screened by a committee of civil servants and then sent for the approval of the Chief Minister in his capacity as Planning Minister.

Most central grants to states are released in two or more instalments.... All money received by the state government is credited to the consolidated fund of the state. There are prescribed procedures for spending money from the consolidated fund.

In Bihar under Lalu Prasad Yadav, unlike in other states, the state cabinet had to sanction all expenditures from the consolidated fund of more than 2.5 million rupees (US\$ 55,000), even for schemes that it had already approved. Consequently, actual spending of the first instalment from Delhi could not even begin until well into the financial year’.

As high as seventy per cent of the revenue receipt of the State government comprises fiscal transfers from the Centre to the state. Additionally, plan assistance for development projects and plan expenditures on Centrally Sponsored Schemes (CSS) are also provided to the State government in the form of grant and loan from the Government of India. Since all the State plans were finalized earlier in the Planning Commission, the meetings in the Planning Commission between the Dy. Chairman, Planning Commission and

the Chief Minister provided an opportunity to review the expenditures on planned development.

If it was found that the State government had been unable to spend the allocated amount, the amount so allocated was diverted to other competing uses. The next year's allocation of plan expenditure also got reduced in the light of the inability of the State government to spend the allocated amount. Table 1. below shows that the approved plan expenditure for Bihar declined continuously from 1998-99 (Rs. 3.7 billion) to 2003-04 (Rs. 3.3 billion). Even the lower plan expenditure in those years remained unspent, due to mismanagement of state finances during this period (Table 1, column 4).

Table 1.1: Plan Expenditure (in billion Rupees), 1997-98 to 2004-05

<i>Year</i>	<i>Approved plan expenditure</i>	<i>Actual expenditure</i>	<i>Column (3) as % of column (2)</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1997-98	2.3	1.7	73
1998-99	3.7	2.6	69
1999-00	3.6	2.7	74
2000-01	3.2	1.6	52
2001-02	2.6	1.5	56
2002-03	3.0	2.2	74
2003-04	3.3	2.6	79
2004-05	4.0	3.2	80

Source: Finance Department, Government of Bihar.

In the matter of understaffing in the government, the authors observe the following:

'Block Development Officers and Circle Officers are senior officers in charge of development and land/revenue administration respectively at the sub-district level. They work at the frontline of government, touching the lives of citizens on a day-to-day basis. If a District Magistrate is the government representative at the district level, the Block Development Officers and Circle Officers are the equivalent at lower level. Yet over a third of these positions did not have a full-time incumbent.

There has been an acute shortage of technical personnel at all levels in the Road Construction Department and Rural Engineering Organization. There has not been any significant recruitment at entry levels and promotions have not materialized. The Quality Control Organization in the Road Construction Department is non-functional for wants of equipment, chemicals and personnel.

Advance Planning Wing is also nonfunctional. There has been a total collapse of technical administration. This is a serious constraint not only for implementation of works but also for preparing project proposals for getting more funds from the Central Government or other sources.

No less do the authors lament about the failure of ‘law and order’ in the state. As they observe:

‘The state remained relatively lawless. The business of kidnapping for ransom thrived. It was inevitably aimed mainly at the higher castes and was believed to receive high level political support and protection, if not direct sponsorship. The state government did not generally exercise discipline over the police, but retained sufficient control that the service could be used for politically crucial tasks.

Respectable people of the state such as Ranchor Prasad, through letters and various other means, tried reminding the Chief Minister that since he enjoyed his position to the Constitution of India, he should protect the Constitution rather than undermine it. Such sane voices went unheard, and things did not happen that way during this period from 1990 to 2005.

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CHAPTER 2

Back on the Rails: Restoration of Rule of Law

The Assembly Elections of October-November 2005 in Bihar led to the defeat of the RJD alliance. Nitish Kumar became the new Chief Minister (CM), and he successfully reversed the trend into which the state had been pushed.

Law and Order

One might assume that the state finances were gradually fixed, and budgets began to be presented at regular intervals under the new government in Patna. The new CMs first initiative was to restore law and order. This was done with a well thought out strategy articulated by the senior bureaucracy who were backed by the new CM. It was decided, at first, to focus on the illegal possession of firearms under the Arms Act (1959) and conduct speedy trials of those in illegal possession of arms. The form of 'the charge sheet' for investigating a criminal case was simplified and the target period of four months was fixed for speedy trials, for convicting the criminals.

Amongst other measures, the State Auxiliary Police (SAP) force was raised from amongst the retirees from the lower ranks of the armed forces, that is, those army men who had retired at the age of 45, were able bodied and were willing to join the police force at a monthly remuneration of Rs. 10,000/-. A force of 25,000 SAP force was thus raised in a short period of two years. With arrests, speedy trials and convictions by the Judiciary, the Bihar police were successful in restoring 'law and order' in the state.

Roads and Bridges

The second initiative taken by the new CM was in the direction of building roads and highways in the state. Once again distinguished officers were given charge for the development of building infrastructure development in the state. The existing rules for registration of contracts and contractors were simplified, and registration was required only after the award of the contract. The standard bidding document now included both 'incentives' and 'fines'. Consequently, the length of roads built had increased almost tenfold in Bihar. In 2004-05, 385 kilometers of roads were built and in 2009-10, the length was 3, 474 km' (Chakrabarti, 2013).

Similar achievements were made in building bridges across the state. The new CM gave a target of building 500 bridges on the different rivers and rivulets

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in the state to his officers within the next five years. The Bihar State Bridge Building Corporation (BRPNN), *a state PSU that was running into losses soon became profitable*. The PSU introduced a charge called “Centage” on the model of the UP-Bridge Construction Corporation. BRPNN thus charged 13.5 % “Centage” for a project completed below the value of ₹100 crores and at 12.5 % “Centage” above the value of ₹100 crores (*from the State Government?*). Such earnings by the PSU enabled it to make timely payments to its staff, and they were motivated to give their best to the company (Chakrabarti, 2013).

Rural Health Mission

The launch of the National Rural Health Mission by the Government of India in November 2005 coincided with the change of government in Bihar. As high as 85 per cent of the expenditure under this mission was met by the Central Government.

‘The NRHM focused on the Community Health Centers (CHC) serving a population of 80,000 to 1,20,000 people at the block level below. Below each CHC, there were about four Primary Health Centres (PHC) catering to a population of about 30,000. The next level would be the sub centres (SCS) - about 6 per PHC serving a population of 5000 each.... Beyond SCS, there would be the village level touch points in the form of health workers with specialized training - the Asha (Accredited Social Workers) and the AWW (Anganwadi Workers)’ (Chakravarti, 2013).

The State government, furthermore, introduced “free provision” of standard medicines. This invigorated the confidence of the rural population and “the foot falls” at these health centers increased substantially for seeking health services.

Universal Child Education

The Government of India had earlier introduced the *Serva Shiksha Abhiyan* in 2001. ‘The program sought to open new schools in habitations with no schooling facilities and provide existing schools with additional classrooms, toilets, drinking water, maintenance grants and school improvement grants’ (Chakravarti, 2013). Bulk of the expenditure allocated and sanctioned to the State by the Government of India on the program had, however, remained mostly unspent until 2005. The new government of Bihar was successful in fully implementing the program. It, furthermore, expanded the same with “free provision of textbooks” to all the students.

Gender Justice

In the realm of ‘women emancipation’, the new CM was perhaps “ahead of the curve”. He was instrumental in introducing ‘35% reservation for women in

government jobs and 50% reservation in the Panchayats' (Ranjan et al 2020). In the matter of girl education, it was noticed that the dropout rate of girl students substantially increased in class IX. The State government, therefore, introduced the 'Mukhyamantri Balika Cycle Yojana' providing cash to every girl child who enrolled in class IX.

With a view to check female feticide the government, furthermore, introduced the Mukhyamantri Kanya Suraksha Yojana in 2007 under which ₹2000 is paid to every girl child born on or after 22nd November 2007. 'Under the Kanya Uttam Yojana, introduced by the government, a life cycle approach is used to encourage girls' education and delay the age of marriage by providing enhanced incentives for birth registration. Furthermore, every unmarried girl who completes her intermediate course receives ₹10,000 and any girl married or unmarried who completes her graduation receives ₹25,000 (Rajan et al, 2000).

In his third term as CM, Nitish Kumar brought the controversial Bihar Excise Amendment Act 2016, which prohibits manufacturing, bottling, distribution, transportation, accumulation, possession, purchase, sale or consumption of any type of liquor, intoxicating substance including bhang and medicines with alcoholic substance. 'A study conducted by the Asian Development Research Institute (Patna) found that the liquor ban has had a significant impact on the household economy' (Rajan et al, 2020).

'The study... found a substantial increase in the purchase of milk products and various other items such as expensive sarees, processed food, furniture and vehicles in the first six months after prohibition... In an interview with women from Samastipur district, these women affirmed that the law has brought tranquility and improved their quality of living' (Rajan et al, 2020).

Population and Family Planning

The decadal population growth in Bihar between 2001 to 2011 was 25.4%. In comparison, the population growth rate for all-India for the same period stood at 17.7%. In the case of the best performing state of Kerala, it was merely 4.9%. On a population figure of around 10 crore people in Bihar in 2011, a 25% increase meant an addition of 2.5 crore people in the next 10 years. Broadly, *this amounts to adding one Australia every ten years in terms of population in the state*. The strain of this big increase of population on the limited natural resources and on public services is easily understandable.

The Union Government has been running the Family Planning program since 1951. It did succeed in reducing the decadal growth of population in the country, which came down further, for all-India, from 21.5% in 1991-2001 to 17.7% in 2001-11. In the case of Bihar, the growth rate declined from 28.6% to 25.4% for the same period; the big difference between the all-India figure and

for Bihar is very revealing. The growth rate of population in Bihar continues to remain higher than the neighboring state of West Bengal (and even Bangladesh).

Higher decadal growth rate in population may be explained in terms of fertility rate per woman, that is, the number of children born per woman. The Total Fertility Rate (TFR) for Bihar has been the highest amongst all the states. While the average TFR for all-India stood at 2.7 in 2005-06, it was 4.0 for Bihar. The TFR declined to 3.4 in 2015-16 and further declined to 3.0 in 2019-20, coinciding with the tenure of Nitish Kumar as CM.

Significantly, there is a big difference between the TFR in urban and in rural areas of Bihar. While the TFR in urban areas stood at 2.4 in 2019-20, it was 3.1 for rural areas. Furthermore, there is a big disparity in the TFR of different districts; the TFR in the border districts of West Champaran, East Champaran, Kishanganj, Purnia and Araria are much higher than the other districts.

The main factors responsible for higher TFR in the state are stated to be a) early marriages, b) illiteracy, c) lack of awareness and d) low coverage of methods of family planning. *‘Bihar has the highest rate of child marriages in India at 60 per cent as opposed to the national average of 47 per cent. The high TFR highlights the perils of early marriages as seen in early pregnancies and lack of spacing between births’* (Rajan et al, 2020). That the incidence of maternal mortality is highest in this age group cannot be ruled out. This is very much a sociological problem and urgent attention needs to be paid by everyone in the interest of the girl child.

The family planning program faces a huge challenge because of illiteracy in the state. According to National Health Family Survey (NHFS, 2019-20), the overall illiteracy for women in Bihar in 2019-20 stood at around 40 per cent. Similar figures for men stood at around 20 per cent. It is this cohort of men and women that lacks awareness of adopting family planning methods. Once again, there is a big disparity between the urban and rural areas, with their respective shares in literacy being 48 per cent and 25 per cent. Illiteracy level in rural areas (75%) is much higher than the urban areas (52%).

The use of modern methods of family planning amongst currently married women aged 15-49 years, which was 24.1 per cent in 2015-16 has gone up to 44.4 per cent in 2019-20. It was 47 per cent in urban areas and 43.9 per cent in rural areas. One of the laudable initiatives taken by the State government in this connection has been home delivery of contraceptives using the services of ASHA volunteers/workers.

Consequent to the Islamic Revolution in Iran in 1979, the family planning program was dismantled, and early marriages were encouraged. This resulted in skyrocketing population growth rate. This policy was reversed officially in 1989, and the Family Planning Bill was ratified by the Iranian Parliament in 1993. As it has been observed, ‘With a contraceptive prevalence rate of 74 per

cent and a TFR of 2.1 per woman, the efforts made by the Iranian government in promoting family planning after the Islamic revolution is considered the most commendable' (Karim, 2010).

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CHAPTER 3

Land Reforms

The Different Aspects

Concentration of land in few hands has been one of the major reasons of inequality in most societies. The land ownership, especially so, in agriculture in Bihar has been also very skewed. Legislations were introduced soon after Independence to address this issue. ‘The Bihar Land Reforms Act (1950) abolished the zamindari system. It provided for the transference to the State the right of zamindars for rent collection from agriculture as well as any interest in trees, forests, fisheries, falkars, ferries, hats and bazaars, mines, and minerals’¹ (Prasad 2001).

The erstwhile zamindars, therefore, ceased to have proprietary ownership of land and became tenants of the state as any other occupancy tenant. These ex-zamindars were, however, allowed to retain their ‘homestead land.’ ‘Homestead’, in turn, was defined very liberally and meant ‘dwelling house used by the ex-zamindars for purposes of his/her own residence or for the purpose of letting out on rent together with any courtyard, compound and included any-outbuildings used for purposes connected with agriculture or horticulture and any tank, library and place of worship’ (Januzi, 1974).

This was perhaps the weakest point of the Bihar Land Reforms Act (1950). Land ownership in Bihar continued to remain skewed. This broad-based definition of ‘homestead land’ enabled the ex-zamindars/ talukdars to retain possession of land as large as five hundred acres. As late as 1970, the state government could not help publishing ‘the names of 125 largest land holders in the state. Among the major estates named were those of Darbhanga Raj in Darbhanga, Dumraon Raj in Shahabad, Hathua Raj in Saran, Kursaila estate in Purnia and Ramgarh Raj in Hazaribagh’ (Januzi, 1974).

Earlier in 1961, the Bihar government had enacted the Bihar Land Reforms (Fixation of Ceiling area and Acquisition of Surplus Land Act. It was once again aimed to address the skewed distribution of land holdings. ‘The Act stipulated

¹ The Bihar Land Reforms Act (1950), however, exempted zamindari land being used for “industrial undertakings”. The Tata Zamindari was later abolished by the Bihar Land Reforms Amendment Bill, 1970.

that “a person” would be permitted to retain possession of no more than (a) 20 acres of Class I land; (b) 30 acres of Class II land; (c) 40 acres of Class III land; (d) 50 acres of Class IV land; or (e) 60 acres of Class V land’ (Januzi, 1974).

In anticipation of such a legislation, the ex-zamindars, by this time, had divided their landed property amongst the family members with each “person” holding land below the land ceiling. This Act could not be implemented also due to legal wrangling arising from different interpretations of “a person” and “the category of land.”

No less embarrassing for the state government has been to come to know that big landowners/ex-zamindars had been encroaching on government or common lands. This was at the core of the ‘Land Grab Movement’ of 1970 launched collectively by the Praja Socialist Party, the Sanyukta Socialist Party, and the Communist Party of India. Consequently, the state government introduced the Bihar Public Land Enforcement Amendment Ordinance, 1970.

It gave extensive powers to the District Collectors to initiate proceedings and issue orders/ injunctions to restrain such encroachment in their respective districts. However, the government’s dilemma was that it did not have up-to-date land records. It was, therefore, unable to ascertain ‘how much of its land had been encroached’!

Bihar Special Survey and Settlement Act, 2011

The last Survey and Settlement exercise in Bihar for the different districts was undertaken between 1907 and 1938. These Survey and Settlement records have now become outdated because a) the original owners have passed away and land ownership has been passed on to their successors whose names do not get mentioned in these records, b) land ownership has changed on account of sale and purchase of land, c) the owners did not maintain the records and d) the erstwhile zamindars did not pass on these records to the government on the abolition of the Zamindari in 1950.

As a result of transfer of land to the next generation through succession between the years (1907, 1938 to 2015-16), 58 per cent of land holdings belong to the size class of less than one acre of land, that is, equal to 20-30 kathas. As high as ninety per cent of the cultivators are marginal farmers with cultivable parcel of land equal to less than a hectare. Such a small landholding cannot provide enough for a reasonable standard of living for a family.

The remaining 42 per cent of land holdings would also get reduced over time. It is worth mentioning that the largest number of conflicts in rural areas arise from land disputes. A proper land records would go a long way in minimising land disputes arising from the counter claims to land ownership. The ongoing Bihar Special Survey and Settlement would also help the state government in identifying the encroachments on government land.

Sharecroppers and Tenancy Legislations

Leasing out of cultivable land by big landowners to sharecroppers is a reality in Bihar. The landowners have been leasing out their lands to sharecroppers for cultivating their land. Agricultural tenancy is a reality in Bihar. The reasons for this form of cultivation arises from a) skewed distribution of land holdings, b) the existing taboo amongst the higher caste Hindus such as the Brahmins, the Rajput's, the Bhumihars and the Kayasths not to do manual labour and c) fragmented agricultural landholdings which are difficult for the owner to manage as the different parcels of land are situated in locations far away from each other.

As per the Bihar Tenancy Act (1885), share cropping is legal. It provides the following protection to the tenant farmer (sharecropper) namely a) the rent paid by the share cropper when paid in kind was not to exceed 35% or 7/20 of the gross produce, b) if the rent is paid in cash under regularised agreement with the owner, then the rent was not to exceed 1.5 times the land revenue paid by the owner to the government and c) the sharecropper/ under raiyat would acquire right of occupancy overland if he/she possessed the land continuously for 12 years.

This law remained on paper as almost all leasing out of land by the owner to the sharecropper is done based on “oral lease agreement” and no record of agreement is maintained in practise. The sharecroppers therefore become “tenants-at-will.” Various research studies have shown that in practise, the sharecroppers in Bihar have been parting with 60% of the gross produce after harvests.

‘During 1977-78, the Janata Dal government in Bihar led by Karpoori Thakur launched a project called the ‘Kosi Kranti’, The objective of this project was to first update land records including recording of the rights of sharecroppers and only then implement rural development programmes. The laudable intention was subsequently watered down out of fear that it would... lead to disturbances of agrarian peace’ (Prasad, 2001).

Fast forward, Nitish Kumar as the CM of Bihar, set up the Land Reforms Commission in 2006 with D. Bandyopadhyay as its chairperson. Mr. Bandyopadhyay has had the reputation of conducting successfully the “Operation Barga” in West Bengal. The Land Reforms Commission submitted its report in 2008. Although the government did not table the report of the Commission in the state legislature, it was given wide circulation.

The main recommendations of the report were the followings: (a) a five year contract between the owner and the sharecropper with no heritable security of tenure, (b) the contract to be considered as the proof of land possession for the tiller/sharecropper to qualify him/her for credit subsidy and incentives, (c) 40% share of produce to the land owner if he/she bore the cost of non-labour inputs,

and (d) 25% share of produce to the land owner if he did not bear any cost of cultivation (Sinha, 2020).

Around ten crore farmers with small holdings in India benefit from the *PM Kisan Samman Nidhi* that was started in the year 2019. Accordingly, Rs.6000 is transferred in their accounts annually in three instalments. However, this does not include the sharecroppers and agricultural labourers who are also farmers.

‘Under the *Kisan Credit Card (KCC)* scheme farmers receive short-term loans. In the case of Bihar, the total disbursement of KCC loan in 2019-20 was Rs. 3,205 crores which more than doubled in 2023-24 to Rs. 7,080 crore (Bihar Economic Survey, 2023-24). Once again, it is not clear if the sharecroppers can take advantage of this scheme.

Agricultural Labourers and Wage Rates

Out of the 10.38 crore people living in Bihar in 2011, that is, as per the last Population Census, around four crore people were engaged in productive activities. Around one crore people, out of this total, were ‘cultivators. Assuming further that out of this one crore cultivators, fifty per cent were sharecroppers who had leased-in land from the owners of land for cultivation. This meant around fifty lakh people were sharecropper cultivators.

Against this number, the number of agricultural labourers in Bihar was two crore people in 2011, that is, four times the number of sharecroppers. Since land is not elastic, distribution of land cannot be the solution of addressing rural distress amongst the rising numbers of agricultural labourers. The number of days of employment in a year and the wage rates decide their income in a year.

The legislation to ensure ‘minimum agricultural wages,’ more or less, remains on paper in the absence of commensurate agricultural development. It is mainly the market forces of demand and supply in agriculture that decide the wages rates in agriculture. Overall development, both in agricultural and non-agricultural activities in rural areas, hold the key to improving both the number of days of employment and the wage rates for agriculture labour.

Agriculture includes live stocks besides crop husbandry. It is worthwhile mentioning that ‘for agricultural labourers ...live stocks are an important supplementary source of livelihood. Small farmers (owning one to two hectares) also rear different species of animals to supplement their incomethe landless usually keep small ruminants like goat, poultry, and sheep, while the small and marginal farmers keep cows and buffaloes’ (Sinha, 2020).

‘The supplementary income from livestock products helps the poor rural families ward off extreme penury and starvation, which could be the reason why despite low wages, unstable harvests, high expenditure on social occasions such as weddings, indebtedness and frequent crisis, farmers in Bihar do not commit suicide’ (Sinha, 2020).

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CHAPTER 4

Development of Agriculture over the Years

Food grains production in Bihar increased from fifty-six lakh tonnes in 1952-53 to 75 lakh tonnes in 1964-65. The rate of growth of food grain production in Bihar compared very well with the national average during this period. The state, however, lagged behind other states post-1964.

The significant increase in food grain production in Punjab and elsewhere happened due to spread of 'green revolution' arising from: a) greater use of high yielding variety seeds, b) higher fertiliser consumption and c) increase in irrigation. In the absence of sufficient power, tube well irrigation on a large scale was very much unthinkable in Bihar, in the earlier years.

Neither did the state have dams such as the Bhakra and the Nangal dams that supplied water in the canals from reservoirs after the rainy season. The Sone canal, the Gandak canal and the Kosi canal do not have 'reservoirs' upstream for storing and releasing water during the lean monsoon seasons. All these major irrigation systems are 'anicutts' that merely divert the flow of the river to its right or left banks.

The Damodar Valley Project, with its different reservoirs on different rivers, built in the Chota Nagpur plateau of erstwhile Bihar, supplies irrigation water downstream in the districts of Burdwan, Bankura and Hooghly in West Bengal.

Bihar is, moreover, ravaged by floods year after year. 'Out of the total geographical area of 94,163 square kms of Bihar, the area prone to floods is 68,800 square kms. The flood problem is more acute in north Bihar where particularly the entire area is flood prone. ... After the 1954 floods, embankments were constructed along most of the rivers. So far, about 3,700 kms embankments have been constructed along rivers and an area of 36,920 square kms (around nine lakh acres of agricultural land) has been provided protection' (Bibhash Kumar, 2020).

The critics, however, point out that these embankments have led to inundation of cultivable land falling between the embankments, which has been lost for cultivation purposes. Furthermore, due to the water table in the riverbed being higher than the area next to embankments, especially so during the rainy seasons, springs of water emerge just outside the embankments creating swamps and marshes.

It means additional land, besides the riverbed between the embankments, has been lost for cultivation due to the Kosi River project. The plight of the people who lost their land and ‘homestead’ due to the Kosi River project can be understood by going on the link on the YouTube mentioned below:

https://www.youtube.com/watch?v=ajI_bn9Nhrk

Paradoxically, the class difference between the landowners whose lands have been submerged and the landless labourers who do not have enough work for sustenance gets blurred as both these groups are victims of the Kosi River project. Nothing less than a second Rehabilitation (or relief) for these displaced people is called for. A central scheme on the pattern of the draught prone Kalahandi, Bolangeer and Koraput (KBK) districts of Odisha may be considered for the (Kosi) flood prone districts of Supaul, Madhepura and Saharsa.

Around twenty lakh acres of land in Bihar is stated to be waterlogged due to recurrent floods and poor conceptualization of rail and road infrastructure in the state. The National Water Development Agency has produced a number of plans *to link various rivers of Bihar*. Hopefully, this would help mitigate the fury of floods in the state.

It was, furthermore, recommended by one expert committee that *a battery of tubewells and pump sets may be installed, by a public sector company, in identified “white” and “grey” blocks of groundwater reservoirs in north Bihar to serve the twin objectives of irrigation during the lean seasons and drainage of excess water after the floods*. Both the Asian Development Bank (ADB) and the World Bank could be approached for necessary funding of such a scheme.

Output in Agriculture

Despite the limited tenancy reforms and faulty infrastructure development in the state, the food grains production went up from 75,000 tonnes in 1964-65 to 208 lakh tonnes in 2023-24, which includes 79 lakh tonnes of rice, 72 lakh tonnes of wheat and 57 lakh tonnes of maize and 10 lakh tonnes of coarse cereals. That there is ample scope to double this production may be seen from the difference in the productivity of wheat and paddy between Punjab and Bihar (Table 4.1).

Table 4.1: Yield per hectare in Kg. (TE-2019 to 2023-24)

Bihar	Paddy	2380
	Wheat	2853
Punjab	Paddy	4293
	Wheat	4776

Source: Unified Portal of Agricultural Statistics, Department of Agriculture and Farmer’s Welfare Ministry of Agriculture, Government of India (29.8.2015)

It is worth mentioning that the yield of paddy in the district of Rohtas was recorded as equal to 4659 kg. per hectare and the yield of wheat in Begusarai was recorded as equal to 4012 kg. per hectare. The yield of maize in the state has been at par with the all-India average. The state is, moreover, the largest producer of rabi maize in the country. Rabi maize is harvested in abundance in June-July, especially so in Khagaria and Purnea districts, when it is not available anywhere else in India. Bihar is also the second largest producer of jute in the country.

Decentralized Foodgrains Procurement (DCP)

Commodities that include agricultural products are subject to price fluctuations because of the forces of demand and supply. In situations of supply exceeding demand, the market price of these products may fall below the cost of production, leading to heavy losses. To protect the farmers, the governments across the world have been intervening in the market through purchases by the government, in particular of food grains, at minimum support price (MSP).

In the case of India, it is the Food Corporation of India (FCI) that intervenes in the market on behalf of the government. The MSP, furthermore, removes the uncertainty arising from price fluctuation in the market. This has incentivized farmers to produce more. The FCI has generally been confined, however, to Punjab and Haryana as these were the few states producing surplus food grains.

As Bihar was not covered for long by the FCI regarding food grains procurement, the farmers in the state did not benefit from MSP and continued to sell their products during the harvest season below the MSP. It is worth mentioning that the FCI beside procuring food grains is also responsible for Public Distribution System, under which food grains are sold to the target (poor) population at very low 'issue prices'.

A large section of the target group resides in Bihar. The FCI has been transporting the food grains procured in Punjab and Haryana to Bihar. It was later realized that the FCI could procure food grains in Bihar itself and save on the transportation cost. This responsibility has now been delegated to the State government.

However, since it is the Central government that pays for the procured food grains, 'how much to procure' in the state is decided by the Government of India. Against the requirement of 55 lakh tons of food grains in the state annually under the Public Distribution System, the Central government's direction for procurement in the state has been far too low – much less than the requirement of 55 lakh tonnes.

A fixed target of say 30 lakh tonnes of rice and 25 lakh tonnes of wheat annually should be fixed for procurement of food grains by the FCI in Bihar.

As in Punjab and Haryana, this would incentivize the farmers in Bihar for higher production.

Dairies and Fisheries

There has been substantial progress in the areas of ‘dairy,’ ‘poultry’ and ‘fisheries’ in the state over the years. ‘Bihar’s livestock and dairy system is rooted in smallholder farming, with cattle and buffalo rearing forming an integral part of rural livelihoods. Milk is widely consumed across the state and serves as a key source of affordable animal protein, especially for low-income households’ (World Food India, 2025). Milk production went up from 98.18 lakh tonnes in 2018-19 to 128.83 lakh tons in 2023-24.

Fish output likewise went up from 6.02 lakh tonnes in 2018-19 to 8.73 lakh tonnes in 2023-24 (Bihar Economic Survey, 2024- 25). ‘Bihar’s aquatic food system is characterized by small-scale inland fisheries and community pond farming. Fish is widely sold in village and district markets, and its affordability makes it an important protein source for many households’ (World Food India, 2025). The number of eggs produced in a year also went up from 176 crores in 2018-19 to 344 crores in 2023-24.

Fruits and Vegetables

In the area of fruits and vegetables, Bihar ranks among the top fruit and vegetable producing states in India. The state is the largest producer of ‘makhana’/foxnuts (80 to 90%) and ‘litchi’ (75 to 80%) in the country. It is the fourth largest producer in mangos and the third largest producer in potatoes in the country. Table 4.2 below provides the area under different fruits and vegetables in Bihar in 2023-24.

Table 4.2: Area under Fruits and Vegetables in Bihar, 2023-24.

<i>Fruits</i>	<i>Area (‘000 ha)</i>	<i>% of Total area</i>	<i>Vegetables</i>	<i>Area (‘000 ha)</i>	<i>% of Total area</i>
Makhana	27.8	7.5	Potato	394.46	36.85
Litchi	39.2	10.6	Onion	58.87	6.58
Mango	164.6	44.3	Cabbage	42.51	4.75
Guava	29.4	7.9	Cauliflower	69.50	7.77
Banana	42.7	11.5	Tomatoes	64.54	7.22
Lemon	19.6	5.7	Ladyfinger (Okra)	60.76	6.79
Total area	371.4	-	Total area	894.0	-

Source: Bihar Economy (2024-25), Finance Department, Government of Bihar.

The Government of India (Ministry of Food Processing) accorded Geographical Indication (GI) Tags to the following agricultural products: 1) Bhagalpuri Zardalu Mango, 2) Katarni Rice, 3) Magahi Paan, 4) Shahi Litchi, 5) Silao Khaja, 6) Mithila Makhana, 7) Marcha Rice. GI tags protect and promote traditional knowledge, cultural heritage, and regional diversity. Registered users enjoy the right to use the GI tag with the product.

In order to provide agricultural extension services to farmers, the Indian Council of Research (ICAR) started the 'Krishi Vigyan Kendra' in the different parts of the country. Although, Bihar today has forty-four 'Krishi Vigyan Kendra,' these are not able to cover all the villages in the state. 'Bihar government in collaboration of Bihar Agricultural University (Bhagalpur) has produced an app called '*Bihar Krishi app*'.

This app is expected to help the farmers in crop management, expert advice, horticulture development, weather related information, opportunities in agricultural sector and in analysing the soil type' (Rajan et al, 2020). The app can be easily be downloaded on the mobile. The penetration of mobile telephones in Bihar went up from almost zero figure per one hundred persons in 2020 to 60 mobiles for one hundred persons in 2017. Hopefully, this could be a game changer for Bihar's agriculture.

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CHAPTER 5

Poor Industrial Development

Industries play a significant role in the economy. Industrial development has a direct influence on ‘urbanization.’ It also sets the direction of migration of labour, that is, into the state or out of the state. Table 5.1 below provides the current status of industrial development in Bihar and in other major states. The data is based on the Annual Survey of Industries and is with reference to ‘registered factories’ during 2023-24.

Table 5.1: Status of Industries (registered factories) in Bihar and all-India (2023-24)

<i>Characteristics</i>	<i>All India (in number)</i>	<i>Bihar (%)</i>	<i>Tamil Nadu (%)</i>	<i>Gujarat (%)</i>	<i>Maharashtra (%)</i>	<i>Punjab (%)</i>	<i>West Bengal (%)</i>
Number Of Factories	2,60,061	1.30	15.43	12.81	10.20	5.06	3.89
Net Fixed Capital Formation (in Rs. Lakhs)	3,34,79,623	1.00	9.45	20.19	14.94	1.35	2.10
Total Persons Engaged (in number)	1,95,89,131	0.71	15.24	13.07	12.95	3.98	3.95

Source: Annual Survey of Industries (2023-24), Government of India.

As evident from the table above, the per cent share of Bihar in respect to all-India vis-à-vis number of factories, net fixed capital formation and employment is between 1 to 1.5 per cent. Punjab comes close to Bihar, in terms of net fixed capital formation (investment) in industries at 1.35 per cent. However, Bihar is way behind Tamil Nadu (9.45%), Maharashtra (14.94%), and Gujarat (20.19%).

Gujarat has become the leading state in the country in terms of ‘investment.’ The state (Gujarat) today is also the leading state in installed power capacity at 64 GW, ahead of Maharashtra (53 GW) and Tamil Nadu (44 GW). The total installed power capacity of Bihar stands at around 9 GW. With new power plants coming up in the state, the situation would further improve; this pace will have to be maintained. It is difficult to think of any industry (other than handlooms and handicrafts) that run without power.

The overall governance, 'ease of doing business,' concessions and allurements play their own vital role in the industrial development. Broadly, technology is within easy reach and there is no dearth of skilled workforce (technical and managerial) in Bihar. Nether capital is so scarce, anymore. Capital (savings) can be borrowed (from the domestic market and from abroad) or raised from the capital market. What is most decisive, however, is the credibility to pay back the money raised through sales of the manufactured product in the domestic or the international market.

The state played its promotional role in diverse ways in the years soon after independence. Public sector companies with large investments were made in the state. It is, however, never a steady state as prices of both inputs and outputs might fluctuate, and if there is corruption the situation becomes all the more difficult.

Supply of electricity has always been erratic in the state. It pushed up the cost of production in the past because of greater dependence on 'generators' reducing the competitiveness of different enterprises. Often the bills of the suppliers were not paid in time. Debt piled up vis-a-vis payment to the mills, payment to the farmers, and payment to the power companies jeopardising their businesses.

(a) Large, Medium and Small-Scale Scale Enterprises

Large-scale industries in the public sector enterprises such as the Barauni Oil Refinery Ltd., the Barauni Fertilizer Ltd. and the Barauni Thermal Power Plants were set up in the early 1960s in the state. The fertiliser plant at Barauni in the Begusarai district had closed down a decade ago due to prohibitive cost of feedstock.

It has, however, been revived through its takeover by Hindustan Urvarak and Rasayan Ltd. (HURL), which is a joint venture company comprising Coal India Ltd (CIL), NTPC, IOCL and HFCL. The new plant operates on state-of-the-art technology and has begun commercial production from 2022.

Nearing these large enterprises, there are several private sector enterprises (large and medium scale) in the state producing cement, sugar, cotton textiles, jute textiles, apparel and garments, plastic and rubber goods, leather goods and processed food products. 'Agro-based and Food processing' industry is the largest sector of them all in terms of number.

Cement Industry

The cement plant at Banjari on the banks of Sone river in Rohtas district is claimed to be the largest cement producing unit in the state. It has been in existence since 1937. As the ownership of the company changed hands, the name of the company also got changed from 'Kalyanpur Cement' to 'Dalmia

Cement’ to ‘ACC Cements.’ Aurangabad has been yet another centre of cement production run by the Shree Cement Ltd.

A few mega cement manufacturing plants ranging from 3 to 6 million tonnes capacity of output per annum are coming up at Buxar (JK Cements), Madhubani (UltraTech Cements) and Warsaliganj (Ambuja Cements). Improvement in road connectivity through construction of new roads, bridges and highways and growing demand have given impetus to businesses coming to the state in the cement manufacturing sector.

Sugar Industries

Sugar industry has a long history in Bihar. The first sugar mill was established in the Champaran district in 1820. The number of sugar mills multiplied at the start of the 20th century. New sugar mills were set up in Darbhanga, Samastipur, Sivan and Patna districts. The Great Depression of the 1930s affected adversely the sugar industry of India, including those in Bihar.

The British government in India subsequently extended support to sugar mills. This led to increase in the acreage under sugarcane production. Due to typical turn of events, however, complete ban on export of sugar was imposed from India around 1937 under the influence of the (international) sugar cartel and this naturally affected adversely all the sugar mills in this country.

Box One. The Case of Rega Sugar Mills

An important case in point is the Rega Sugar Mill in the Sitamarhi district, it is spread over 104 acres of land at with a workforce of eight hundred employees and catering to five thousand farmers supplying sugar cane to the mill. It closed operations in 2019 because of heavy debt burden. The insolvency proceedings were initiated for the debt-ridden company. In the liquidation process held on 2/9/2024 through e- **auction**, the Nirani Sugars of Karnataka was successful in acquiring the company (along with ‘liabilities’ and ‘assets’) with the highest bid of Rs. 86.5 crores.

The assets acquired by Nirani Sugars include the sugar plant having the crushing capacity of five thousand tonnes cane per day, a distillery capacity of forty-five kilolitres per day and a co- generation power plant with an installed capacity of 11 MW. The company restarted his operation in December 2024. The Nirani Sugars have furthermore announced that they will invest Rs. 1000 crore in the mill increasing the sugar cane crushing capacity from five thousand tons to 10,000 tons and increase the capacity of ethanol distillery by over 15 times. The power generation capacity likewise would be also increased from the current level of 11 MW to 50 MW.

Much later in 1972, the Sugar Monitoring Committee (Government of India) recommended for acquisition of sugar mills by the government. Consequently, the Bihar government took over fifteen sugar mills from the private sector, which were brought under the Bihar State Sugar Development Corporation

Ltd. Because of increasing competition from sugar mills of Maharashtra and Uttar Pradesh and continuous fall in price of sugar, the sugar mills in Bihar started incurring losses one after another. In order to revive these mills, the State government resorted to privatization of these mills.

At present, there are ten sugar mills in operation producing 6.8 lakh tonnes of sugar per annum and 530 klpd of ethanol. The demand for ethanol as a renewable energy source has improved the viability of these mills. The sugar mills also generate power through burning of bagasse, which is the fibrous residue of sugarcane. Currently, the sugar mills put together produce 88.5 MW of electricity in the state.

Textiles

Cotton spinning mills are located at Sivan, Pandal (Darbhanga), Bhagalpur and Gaya. There are large jute mills located at Katihar and Samastipur. Bhagalpur, Gaya, Madhubani, and Bihar Sharif are big centres of cloth production using handlooms and power looms. There are 11,000 power looms in the state, concentrated mainly in Bhagalpur, Gaya and Banka districts and their main products are staple chadar, furnishing clothes.

As high as 1.32 lakh weavers are dependent on the handloom sector for their livelihood operating nearly forty thousand looms. Nath Nagar, Champa Nagar, and Hussainabad in the district of Bhagalpur are well known production centres of 'Tussar' silk, which is used to make high quality sarees and kurtas. The district of Katihar produces Mulberry, Tussar and Castor variety of silk. There are apparel and hosiery units in Patna, Bihta and Begusarai.

Leather Industry

The well-known Bata Shoe factory was opened at Danapur in the Patna district way back in 1942. It continues to operate from there. However, due to irregular supply of power the company has reduced the production of footwear from here. The state has a sizeable share of cattle population in the country with a share of nearly 8 per cent of cattle, 5 per cent of buffalo and 12 per cent of goats. The production of hides of cattle and buffalo and goat skin is also quite high. While the Bata shoe company has a tannery unit at Mokammah, there are other tannery factories at Muzaffarpur. Truckloads of 700 to 800 pieces of goat skins and 2000 to 3000 cow hides are transported from these centres to various destinations such as Chennai, Kanpur, and Kolkata. The leather industry has shown a growth of 7 per cent per annum. The share of Bihar in the total value of leather products in the country was, however, very minimal at 0.20 per cent.

Rice Mills

There are around seven hundred rice mills in the state. Most of these mills are situated in Patna, Muzaffarpur, Purnia, Lukhisarai and Bhojpur districts.

These rice mills are generally ‘single owner operations’ and are ‘medium scale’ enterprises. It has, however, been pointed out that against an annual production of 60 to 70 million tonnes of paddy, only ten million tonnes of paddy is milled in the state. Comparable situation could be said to exist in regard to wheat and maize processing.

Dairy Industry

There are around ten dairy cooperative societies in the state; they collect milk from members of their cooperative societies, pasteurise them and then sell milk through their own market outlets. Based on the pattern of Anand in Gujarat, these milk cooperatives have a three-tier pattern of management, under which there is milk producers’ cooperative society at the village level, milk union at the district level, and milk federation at the state level. Each of these milk cooperatives have their manufacturing plants that convert surplus milk into powder and convert the milk powder back into liquid milk on demand. The milk plant of COMFID at Patna in the public sector has the capacity of producing 120 metric tonnes of milk powder and 1060 metric tonnes of cattle feed per day. COMFID, which is the largest milk cooperative in the state sells its milk with the brand name ‘Sudha.’

Food Processing Industry

Food processing constitutes of the three stages of primary, secondary and tertiary. Primary processing involves simple sorting out the product by shape, size, and colour. The second stage involves cleaning, processing, and packaging the product to make it fit for sale. The secondary stage may thus involve, for instance, de-husking the paddy to convert it into rice. The tertiary stage involves making the natural produce into ‘ready-to-eat’ items such as manufacture of toffees and chocolates from sugar, biscuits out of wheat flour etc.

Since Bihar is the third largest producer of vegetables and the fourth largest producer of fruits in the country, there is enormous potential for developing the food processing industry in the state. Opportunities in dairy processing, fish, and meat processing as well as in poultry processing also exist. The Ministry of Food Processing, Government of India in partnership with Ernst and Young has identified opportunities of food processing in the state in the areas of fruits and vegetables, dairy processing, fish processing, meat processing, and poultry processing.

Khadi and Village Industries

The Khadi and Village Industries (KVI) belong to the cottage industry. According to the latest Economic Census (2013-14), the KVI industries provided employment to 140.38 lakh persons (10.98 lakh in Khadi and 129.40

lakh in village industries) in 2013-14, as against 124.76 lakh persons (10.71 lakh persons in Khadi and 114.05 lakh in village industries) in the previous year.

The Survey also reported that 'there were a total of 17.15 lakh establishments in the state, of which around 71 per cent were in rural areas. Again, of the total, 27.20 per cent were located outside the households with fixed structures, 14.70 per cent outside the household without fixed structures, and 28.10 per cent were inside the households. The handloom/handicraft constituted 3.39 per cent of the total establishments with more proportion (3.64 per cent) reporting from rural areas compared to the urban areas (2.80 per cent).'

Lac bangles manufacturing is a cottage activity. The districts of Muzaffarpur, Darbhanga and Khagaria have several units producing lac bangles, which have a growing demand within the state and outside. Gemstones processing units are concentrated in the Patna City. 'These units are engaged in processing of Gomed, cats eye, Garnet and White Topaz. These gemstones are available in Chatra, Hazaribagh, Jhajha, Koderma and Chaibasa' (Prasad, 2001).

(b) Broad Structure of Industries in Bihar

According to the latest Economic Census (2013-14), the registered manufacturing industries in Bihar may be divided into 'agro-based' and 'non-agro based'. The shares of 'agro-based' and 'non-agro based' manufacturing industries in the total value of manufactured products in the state stood at 16.86% and 83.14% respectively in 2011-12. Bihar's share of 'agro-based' products in all-India regarding the total value of production stood at 2.28 per cent. Its share regarding 'non-agro based' products stood at 11.2 per cent.

The respective shares of the sub-groups under each of these two broad groups - as percentage of total value of production - in Bihar and at the all-India level may be seen at Appendix 1.

Assuming a 3:1 ratio between registered and unregistered industries, there were around 10,000 (3380 * 3) unregistered small scale industries in the state. A good number of these units have an investment of Rs.15 to 20 lakhs. The Bihar Industrial Area Development Authority (BIADA), Government of Bihar has been adopting the 'cluster approach' for developing small scale enterprises.

There are seventy-five industrial areas/ mega industrial parks under nine 'clusters' namely Patna, Begusarai, Hajipur, Muzaffarpur, Motipur, Bhagalpur, Purnia, Saharsa, Darbhanga, Gaya and Bihta. Under the 'plug and play' scheme of the government, industrial sheds are provided to new investors with all facilities to set up the industrial unit and start commercial production. In August 2025, the State government announced provision of ten acres of land in earmarked areas 'free of cost' if the investor made an investment of Rs. one hundred crores.

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Appendix 1.**Table 5.2:** Structure of manufacturing industries in Bihar (2011-12)

	<i>Value of output, as % of the total value (Bihar)</i>	<i>Value of output, as % of the total value (all-India)</i>
I. Agro-based Industries		
Food Products	15.67	1.24
Textiles/Apparel	0.26	0.04
Leather & Leather Products	0.12	0.20
Wood & Wood Products	0.21	0.46
Paper & paper products	0.60	0.34
Total (I)	16.86	2.28
II. non-agro based		
Refined Petroleum Products	46.08	3.06
Chemical & chemical products	0.14	0.02
Basic Pharmaceuticals	0.12	0.04
Rubber & Plastic products	0.16	0.03
Non-metallic Products	2.2	0.75
Metal/Fabricated Metal Products (except machinery)	2.03	0.12
Electrical Equipment/Machinery/ Repair & Installation	1.22	0.16
Motor Vehicles/Other Transport Equipment	0.07	0.01
Others/Misc.	31.14	6.93
Total (II)	83.14	11.12
Total (I+II)	100.0	13.4

Source: Annual Survey of Industries.

CHAPTER 6

Infrastructure Development and Investment Climate

The World Bank report titled ‘Bihar: Towards the Development Strategy’ (2005) stated that “investment climate” refers to ‘institutional, economic, political, and infrastructural environment that shapes the manufacturing sectors operations and expectations. Besides mentioning the then prevailing ‘law and order’ situation in the state, it identified poor infrastructure relating to power supply, road connectivity, and low telephone density.

It observed, ‘In the poor climate states 73 per cent of small and medium enterprises (SMEs) have captive (self-owned) power generators whereas, in the best climate states the figure is 31 per cent. For SMEs, the cost of own power generation is twice that of power from the public grid.’ The report further lamented, ‘Bihar has relatively low road penetration despite its high population density, with only 77 km. road length per 100 sq. km. compared with 169 km. in Orissa, 118 km. in Tamil Nadu and 97 km. in Uttar Pradesh’. Regarding telecommunications, the report observed, ‘Bihar has the lowest telephone density in India with 0.93 telephones per one hundred persons.

There is a big improvement on all these parameters today in 2025. The ‘law and order’ situation in the state has significantly improved. Because of the advent of mobile telephones and low call charges, the telephone density in the state has gone up to 60 phones per 100 persons. Telecommunication does away with the need to be physically present to communicate a message whether concerning an order, or supply or advice. This has reduced costs and increased productivity. Regarding road connectivity, the state now boasts of having the 3rd highest road density in the country!

Power Supply

The Barauni Thermal Power plant was set up in the 1960s in the district of Begusarai. The capacity of Barauni Thermal plant was raised over the years and stands today at 720 MW. Besides the Barauni Thermal Power Plant, there are three other major thermal power plants operating in the state such as (a) the Barh Super Thermal Power Plant (3,300 MW) in Patna district, (b) the Kahalgaon Super Thermal Power Plant (2,640 MW) in the Bhagalpur district, (c) the Kanti Thermal Power Plant (220 MW) in the Muzaffarpur district. All

the power plants operate under the overall management of NTPC, which is a central public sector enterprise.

The Indian Railways have a captive power plant (BRBCL) at Nabinagar in Aurangabad district having a generating capacity of 1980 MW to meet the demand for power supply for its electric trains.

A few more thermal power plants are coming up in the districts of Buxar and Bhagalpur. The peak consumption demand of electricity in 2025 is stated to be 8,752 MW. The State government has a Power Purchase Agreement (PPA) with the NTPC. The state did not earlier have the capacity to properly evacuate the power made available to it in the absence transmission lines in the rural areas and because of burnt transformers.

All these challenges were overcome with necessary investments through purchase of new transformers and changes made in the structure of the public sector Bihar Electricity Board, which has been converted into Bihar State Power Holding Company Ltd ((BSPHCL) with separate companies looking after power generation and distribution under it. As a result of all these efforts by the State government (political leadership, bureaucrats, and engineers), the state is able to fulfil its promise of “Har Ghar Bijlee” – with uninterrupted supply - to the citizens residing in near and remote areas.

The per capita consumption of energy in the state tripled from 134 kwh in 2012 to 363 kwh in 2024. This is bound to help the SME sector in a big way. The recent announcement of the Chief Minister to give free electricity to households up to 125 units has, however, made things difficult as the demand has shot up leading to power outages raising its head once again (Kumar, 2025).

Road, Rail and Water ways

Roadways

The state today has the third highest road density in the country. As per the Basic Road Statistics, Government of India (2025), the state had 5,387 km. of National Highways, 3,714 km. of State Highways and 2,230 km. Project Roads during 2020. In addition, there are District roads (13,475 km), Rural roads (2,60,171 km.), and Urban roads (14,599 km.). As high as 76% of rural roads and 70% of urban roads are surfaced. The total length of all the roads put together in the state during 2020 was equal to 2,99,376 km. The road density in the state stood at 3,181 km. per 1000 square km.

Several four to six lane Green and Brown Express Highways with an investment of more than one lakh crore are under implementation and are expected to be ready by the next two years. All these investments would reduce the travel time and are bound to bring about a noteworthy improvement in road connectivity within the state and with rest of India.

Railways

There has been a significant improvement in relation to rail infrastructure as well in the state. New railway lines have been laid, and rail connectivity in the state has been improved both in terms freight and passenger traffic. Five railway stations at Gaya, Patna, Muzaffarpur, Begusarai and Singrauli are proposed to be developed as world class stations through the PPP mode.

Forty-nine other stations are already being renovated under the Amrit Bharat Yojana for greater convenience of passengers. More number of coaches are also being added on busy routes.

Waterways

The Ganga River bifurcates the state into north Bihar and South Bihar. The river flows for about 405 km. in the state. The main cities on its bank are Buxar, Chapra, Patna, Munger and Bhagalpur. Three rail-cum- road bridges join the two regions of Bihar namely (a) Mokama Bridge (Rajendra Setu), (b) Digha Sonpur Bridge (JP Setu) and (c) Munger Ganga Bridge (Srikrishna Setu). In addition, there are road bridges across the Ganga such as the Mahatma Gandhi Setu, connecting Patna to Hajipur and the six-lane Mokama Ganga bridge built by the National Highway Authority connecting Mokama to Begusarai. Between 2012-13 to 2023-24, moreover, 1,112 new bridges were constructed on several other rivers that traverse the state.

The state is often considered to be ‘landlocked’ as it does not have any coast, and therefore not having direct access to sea. It was not so in the past as large boats could go up to the riverine ports in the Bay of Bengal through sailing on the Ganga. There are still evidences today of ‘docks’ on the bank of river Ganga at Pataliputra (Patna) from where (international) trade took place.

Since the rivers constitute an alternative mode of transportation, the bridges built across the Ganga come in conflict with the objective of smooth transportation through the river waterway. The “bascul” bridge built such as the *Pamban bridge* linking Rameshwaram to the mainland India is worth emulating for overcoming the conflictive objectives of road and water ways as means of transportation. None of the bridges built across the Ganga in Bihar appear to be of this type. The link below of video is in relation to the newly constructed vertical lift bridge by the Indian railways at Pamban in Tamil Nadu.

https://www.youtube.com/watch?v=ajI_bn9Nhrk

Currently, the natural flow of water in Ganga River is affected adversely during the lean seasons due to canals having been built upstream as well as the construction of Farakka barrage downstream, which has denied the possibility of uninterrupted navigation through the river to the Bay of Bengal. Needless to say, waterways are recognised the world over as the cheapest means of transportation.

Single Window Clearance

The World Bank report ‘Bihar: Towards a Development Strategy’ (2005) also observed that ‘the regulatory burden appears higher in poor climate states... the efficacy of the regulatory framework related to the issues of entry or starting a business, labour relations and flexibility in labour use, efficiency and transparency of financing and taxation, and efficiency of regulations concerning the environmental safety, health and other legitimate public interests shape the investors’ expectations’.

This calls for a transformation in outlook; only then the investment climate in the state will improve. Some positive steps have indeed been taken in this regard. According to Bihar Economic Survey (2024-25), ‘the State Investment Promotion Board (SIPB) completes the application process in an online mode, adopts a transparent, accountable, and reliable method for selecting investment proposals in the state’.

Moreover, besides adopting the ‘single window clearance’ approach for approving investment proposals in the state, the State government has come out with the following offers to the investors: (a) provision of 25 to 30 acres of land free of cost, (b) bear the interest cost incurred on loan for investment, if any (c) take advantage of ‘plug and play’ scheme through establishing their manufacturing units in the earmarked ‘industrial parks’.

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CHAPTER 7

Issues in Urban Development

Whereas the population living in urban centres went up from 17.29% in 1951 to 31.16% in 2011 for all-India, it went up from 6.46% in 1951 to 11.3% in the case of Bihar. The level of urbanization in the state has thus been far below the country as a whole. Major states with much higher level of urban population have been Tamil Nadu (48.4%), Maharashtra (45.22%) and Gujarat (42.6%). These states are more industrialised as well. It shows a close relationship between the level of industrialisation and urbanization.

In their book ‘Centralised Decentralisation in Urban Bihar’, Gangadhar Jha and Yogendra Tripathi observe that the state government has attempted recently to enhance the level of urbanization through administrative fiat! According to the authors, the Bihar Municipal Act (2007) was amended in 2020 and the requirement of 75% of the population to be engaged in non-agricultural activities *as necessary* for qualifying any area as ‘urban’ was reduced to 50%. Consequently, many of the erstwhile Gram panchayats were elevated to Nagar panchayats.

With all the three tiers of urban local bodies (ULBs) comprising the Municipal Corporations (Nagar Nigam), Municipal Councils (Nagar Parishad) and Town/Nagar Panchayats, there are all together 216 ULBs in Bihar today. Currently, there are 19 municipal corporations, 89 municipal councils and 154 town panchayats. Broadly, the classification of ULBs is based on the magnitude of population as shown in Table 7.1.

Table 7.1: Classification and Number of ULBs in Bihar

	<i>Grade</i>	<i>Population</i>	<i>No.</i>
Municipal Corporation	Larger urban area	> 2 lakh	19
	Class ‘A’	1.5 to 2 lakh	
Municipal Council	Class ‘B’	1 to 1.5 lakh	89
	Class ‘C’	0.4 to 1 lakh	
Nagar Panchayat	Transitional small urban area	0.12 to 0.4 lakh	154

Core Functions and Performance of ULBs

The Seventy-fourth Constitution Amendment of 1992 mentions eighteen (18) responsibilities of ULBs as provided under the 12th Schedule of the

Constitution. The functions that affect the citizens more frequently in urban areas are: a) registration of births and deaths, b) water supply and drainage, c) sanitation (waste management), d) regulation of land use (markets) and construction of buildings, e) management of burial and cremation grounds and f) provision of roads and bridges.

Regarding these functions of ULBs in Bihar, it was pointed out ‘only about 60% of the total urban population is covered with water supply. Many transmission lines of water run through open drains containing sewage and are therefore prone to contamination. Barring a few large urban centres, water supply system is largely based on hand pumps. Piped water supply wherever it exists is generally unreliable due to erratic power supply. Uncertainty of piped water supply and rudimentary scheme of hand pumps in the urban areas of the state makes the official number of 60% coverage largely irrelevant’ (Jha, 2020).

It was furthermore mentioned, ‘Whereas water supply and sanitation is provided by the State government’s Public Health Department (except in the cities of Patna, Bhagalpur and Muzaffarpur), weak institutional capacity of the ULBs presently makes the prospect of augmentation of services quite daunting. Drainage system, yet another basic service for making urban areas liveable is equally at a low level. Existing drainage system is inadequate to cater to the current needs and is subject to frequent blockages. Water logging after heavy downpour, therefore, is a common site in all the urban centres irrespective of their size’ (Jha, 2020).

Regarding waste management, it was pointed out, ‘As regards solid waste management, trash scattered in almost every part of the cities and towns in the state becomes visible even to a casual visitor. The ULBs in the State are able to collect hardly half of urban waste generated in the urban areas and most of the towns have no landfill sites. Solid waste collected from roads and streets is, therefore, dumped on roadsides and in low lying areas. Even the city of Patna is not an exception to it’ (Jha, 2020).

Governance of ULBs in Bihar

Article 243 W of the Seventy-fourth Constitution Amendment Act (1992) mentions that ‘the Legislature of a state by law endow the municipalities with such powers and authority as may be necessary to enable them to function as institutions of self-government’. The state governments thus have the final say in the devolution of power to ULBs.

The Government of Bihar enacted the Bihar Municipality Act in 2007, which has been amended over the years. The State government subsequently enacted the Bihar Urban Planning and Development Act (2012) for the planned growth and development of ULBs. Both these Acts essentially ensure that the decision-making powers remains with the State government, although elections

to ULBs are held regularly as mandated by the Seventy-fourth Amendment to the Constitution. Broadly, the administration of ULBs in Bihar comes under a) the elected executives and b) the appointed executives of the State government.

The appointed Executives

Since the subject matter of ULBs comes under the Department of Urban Development and Housing headed by the Minister and below him by the Principal Secretary of the Department, they are responsible for the appointments of the official (appointed) executives of ULBs. There are thus Municipal Commissioners (chief executive officers) for each of the 19 Municipal Corporations and Executive Officers heading the Municipal Councils and Town Panchayats. All the employees of the ULBs function under the respective (appointed) chief executive officers.

The elected Executives

Each of the three tiers of the municipalities in Bihar have an Empowered Standing Committee (ESE) presided over by the Mayor in the case of Municipal Corporation, by the Chairperson in the case of Municipal Council and by the Municipal President in the case of Town Panchayat.

As per the original Bihar Municipal Act (2007), the Mayor/ Chairperson/ Municipal President was *to be elected indirectly* by the other elected councillors to these ULBs. This was, however, changed by the Amendment Ordinance brought in 2022. Under the amended Act, the chief counsellor (executive) and the Deputy Chief counsellor are to be *elected directly* by the people. Since we do not have the background to this change, we cannot comment on the same. It has, nevertheless, been pointed out that this has hardly improved the situation.

It was, furthermore, observed, 'it is curious that though the chief counsellor is the political head of the municipality, he or she constitutes the Empowered Standing Committee (ESC), nominates members to it, convenes meetings of the Committee, presides over their meetings and conducts the business, yet he does not enjoy the executive powers' (Jha et al, 2023).

Notwithstanding the merits of the elected versus the non-elected chief executives of the ULBs, one of the glaring problems of the ULBs in Bihar has been *shortage of personnel*. Very often, the whole division stands closed on retirement of the personnel. In the absence of the desired number of personnel, the required functions cannot be performed. Some of these ULBs have a shortage of as high as 50% of personnel!

Sources of Funds for ULBs

Revenue from 'own sources' and 'external sources' are the two avenues of raising resources by the ULBs. Since the revenue from 'own sources' in Bihar

is a miniscule, the ULBs in Bihar depend greatly on ‘external sources’. Based on the recommendations of the Central Finance Commission and the State Finance Commission, the ULBs in Bihar receive ‘grants’, which are the major sources of revenue. It was, however, observed ‘the higher the dependence on external sources of revenue, the lower is supposed to be the extent of autonomy’ (Jha et al, 2023).

Table 7.2 provides a comparative picture of Bihar and other states in respect to share of ‘Own Revenue’ as per cent of Total Municipal Revenue.

Table 7.2: Share of ‘Own Revenue’ as % of Total Municipal Revenue

	<i>Bihar</i>	<i>Gujarat</i>	<i>Maharashtra</i>	<i>Tamil Nadu</i>
2015-16	4.0	36.1	80.8	31.0
2016-17	4.8	34.5	75.3	29.6
2017-18	6.2	42.2	65.3	29.8

Patna Model of Property Taxes

‘Property tax’ constitutes the main item of revenue under ‘own sources’ for the ULBs. The Patna Municipal Corporation introduced ‘the unit area method’ (UAM) method in 1993 for calculating the property tax. This method removes the discretion of tax authorities for determining the “annual rental value” of any property upon which the property tax is assessed. The assesses can now calculate his/her tax liability himself/herself.

The main deciding parameters under ‘the unit area method’ are a) the location of the property, b) the plinth area of the property, c) the use of the property, that is, whether for residential, commercial or any other purpose. This Patna model was endorsed by the Supreme Court of India, and the UAM model has been adopted by most municipalities in the country.

Tax collection through Property tax

Tax collection through property tax in Bihar continues to be negligible compared to ‘external sources’ as evident from the Table 7.3.

Table 7.3: Share of ‘Internal’ & ‘External’ sources in Total Revenue of ULBs in Bihar (in%)

	<i>Property Tax</i>	<i>Other Tax</i>	<i>Non -tax Sources</i>	<i>Grants under the Finance Commissions</i>
2015-16	0.70	2.36	0.92	96.02
2016-17	0.90	2.80	1.06	97.29
2017-18	2.82	2.23	1.20	93.75

External Transfers

As per the recommendations of the Fourteenth Finance Commission (Government of India), financial transfers amounting to Rs. 2,87,436 crore was indicated for all the local bodies in India for the period from 2015 to 2020. It had two components namely a) the basic grant and b) the performance grant. While the purpose of the former was to supplement the finances of the ULBs for meeting the basic facilities in urban areas, the other grant component was dependent on the performance of ULBs; designed to encourage improved service delivery by the urban local bodies.

Bihar thus received around Rs. 2000 crores for the ULBs for the period 2015-16 to 2019-20. Yet another amount of transfer amounting to roughly ₹5000 crore was made by the state government to ULBs based on the recommendations of the State Finance Commission for the same period.

Other means of raising resources

The sources of funds for the ULBs, so far, have been: a) property tax, b) tax on use of water, c) tax on vehicles, trade and advertisement, d) surcharge on electricity, e) entertainment tax, f) rent received on leasing of retail outlets owned by municipality, g) stamp duties on transfer of land and buildings and common spaces and h) grants received, based on the recommendations of the Finance Commission.

Pollution or Eco-tax

An untouched area, so far, in India has been 'environment tax' or 'eco-tax'. Eco-tax is very much an important component of raising resources in advanced countries. Taxes on 'water effluents', 'waste materials' and 'construction waste' belong to the category of 'eco-taxes'. All these items of pollution in ULBs whether created by industry, hotels and restaurants or individuals are taxed in proportion to the pollution caused. Tax on 'air pollution' caused by industry or vehicles is also payable under 'eco-tax'.

Since older vehicles generally pollute more, the owners are required to pay a 'green tax' on ownership/operation of these vehicles. Eco-taxes are like a '*double-edged sword*' as it helps ULBs in raising revenue for the ULBs and also reducing pollution in the city by penalising the polluters. Eco-taxes are, moreover, considered a tax on the rich because it is they who consume more and also pollute the environment more.

Municipal Bonds

The municipalities in the different parts of the world have been taking recourse to raising resources through 'municipal bonds' from the capital market. They succeed in raising resources provided they have a good financial record.

Investors would be willing to invest in municipal bonds if they see a continuous increase in tax and non-tax revenue of the ULB every year. They are then assured of the expected return from investing in municipal bonds.

Public-Private-Partnership

Public-Private-Partnership (PPP) is yet another means of financing capital projects in the ULBs. PPP model provides different options for financing capital projects, namely a) Build-Operate-Transfer (BOT), b) Build-Own-Operate (BOO), c) Lease Contract and d) 'Annuity' model, whereby the government pays 'an annuity' for the asset created for a given period enabling the investor to recover fully the cost of the project with a reasonable profit. The ULBs in Bihar ought to consider these avenues as well for raising resources.

Urban Planning in Bihar

The unplanned, haphazard growth of different ULBs is a reality in Bihar. That the level of urbanization is the lowest in Bihar, compared to other states, is a blessing in disguise. As it was observed, 'Bihar is presently in a better situation to strategize and put in place the required and appropriate systems, mechanisms and tools for reinventing urban governance largely because of subdued urbanization' (Jha et al, 2023).

The state enacted the Bihar Urban Planning and Development Act in 2012. The act provides for constituting the Bihar Urban Planning and Development Board, which has 30 members, which includes all the principal secretaries of the major departments such as agriculture, industry, water resource, transport, education, health and revenue, with the Development Commissioner, Government of Bihar as its Chairperson.

The Act, furthermore, requires the State government to declare any area as the 'Planning Area'. Once a 'Planning Area' has been delineated, a Planning Authority has to be constituted. The State government may declare any ULB also as the Planning Authority. It has, nonetheless, been pointed out that 'a range of functions required to be performed by the Planning Authority makes it abundantly clear that urban local bodies must have robust organisational and institutional capacity in terms of sufficient and qualified as well as skilled staff especially planners, surveyors, experts in information and communication technology, cartographers and engineers' (Jha et al, 2023).

As things stand today the State government does not have a Town Planning Department, which could assist the ULBs in the last resort if they are declared a Planning Authority. Currently, 'the Department of Urban Development and Housing has designated 82 Assistant Town Planning Supervisors to assist in the preparation of GIS-based mapping and the development of GIS-based master plan' (Bihar Economic Survey, 2023-24).

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CHAPTER 8

Policy Imperatives for Higher Growth

Recommendations

In terms of growth in Gross Domestic Product (GDP), Bihar outperformed India during the years 2018-19, 2019-20, 2022-23 and 2023-24. The Gross Fixed Capital Formation (GFCF), at current price, which is same as ‘investment’ in the economy was much higher in Bihar during 2021-22, 2022-23 and 2023-24 compared to earlier years; the amount of investment in each of these years being Rs.21,609 crores, 26,797 crores and 38,986 crores respectively.

Economic performance of any economy depends on the interaction of increase in capital stock, increase in human capital, increase in labour force, technology and institutions. With the introduction of mobile telephones and other technological progress, things are indeed looking up. The telephone density in the state has gone up from nearly zero earlier to 60 phones per 100 persons in recent years. In terms of human capital as well, the state is well endowed.

Increase in capital stock or increase in GFCF has, however, been absmally low for Bihar compared to the all-India average. While the GFCF for all-India ranged from 27.3 to 30.7 as per cent to GDP, it ranged from 1.6 to 3.6 as per cent to GSDP in the case of Bihar, for the years 2019-20 to 2022-23 (Table 8.1). More or less, a similar large gap may be noticed for other years.

Table 8.1: Gross Fixed Capital Formation (GFCF) as % of GDP/GSDP (at current price)

	2019-20	2020 -21	2021-22	2022-23
Bihar	1.6	3.1	3.3	3.6
All- India	28.5	27.3	29.6	30.7

Source: Economic Survey (2024-25), Government of India and Bihar Economic Survey, Government of Bihar (2024-25).

The credit-deposit ratio in the state has been also notoriously low in the range of 30 to 35 per cent. This only implies that investment (I) is less than savings (S), that is, $I < S$. It has been the other way in the case of all-India

average where $I > S$, for most of the years. In could therefore be argued that it is not only 'labour' but 'capital' is also migrating from Bihar to other states!

The recent years of upsurge in investment has been due to increase in investment in infrastructure. But, this cannot be always the case. More and more of investment should, therefore, happen in agriculture, industry and services. As a first step, this would require examining the factors that are inhibiting investment in these sectors.

Needless to say, the state is faced with numerous challenges such extensive damage to standing crops and livestock due to the annual floods, inadequate supply of electricity, low prices of agricultural output and high population growth etc. In the light of the above, we discuss some of the policy imperatives worth considering.

(i) Consolidate the gains

As already mentioned, institutions play an important role in economic development. The institution of foremost importance is none other than the government comprising the Executive, the Judiciary and the Legislature. Bihar is a very good example to illustrate this where the institution of the State government (the Executive) played an eminent role in putting the economy back on rails. Bihar recorded the highest growth rate in the country for a number of years. The state would need to further consolidate these gains in the future.

(ii) Raise awareness about the cost of corruption

There should be a serious campaign to eradicate corruption. Corruption has made Bihar a 'high-cost economy'. Goods produced in the state lose out in competition from goods produced elsewhere. As prices are higher, they do not sell in the national/ international market; neither do they sell within the state as there are cheaper products available. Due to higher costs, the profits of the entrepreneurs are also low, and this deters them to come to Bihar. Lack of industries in Bihar has led to large scale migration out of the state.

(iii) Recognize the cost of delays

One of the corrupt practices in the government has been to sit on the file. In the absence of the required approval of the authorities/regulatory body, the matters get delayed. Delays cost the economy heavily. It lowers down output per year and reduces the growth rate. This may be illustrated mathematically:

Illustration I

If an output worth Rs. 5000/- is produced in 5 years, the annual increase is that of Rs. 1000 per year.

If, however, the same amount is produced in 10 years, the increase is equal to Rs. 500 per year only.

Illustration II

Assuming a base year production of Rs. 3000, if the same level of production equal to Rs. 5000 is achieved in 5 years and in 10 years, these yield the growth rate of 11 per cent in the first case and the growth rate of 5 per cent in the second case as shown below.

$$\text{a) Growth Rate (CAGR)} = [\text{Final Year Value / Base Year Value}]^{1/5} - 1 * 100 = 10.75\%$$

$$\text{b) Growth Rate (CAGR)} = [\text{Final Year Value / Base Year Value}]^{1/10} - 1 * 100 = 5.25\%$$

The delays may happen also because of disputes pending in courts for years. Here the problem is not that of corrupt practice rather the shortage of judges. There is a pressing need to increase the number of judges in the light of the growing population in the country. Quite often, the poor drafting of laws and agreements lead to different interpretation and unnecessary disputes.

(iv) Double the Power Generation Capacity

Availability of power in the state has significantly improved. The state is, however, far behind most of the other major states. The power generation in the states of Gujarat (64, 00 MW), Maharashtra (54, 000 MW) and Rajasthan (53,000MW) are way ahead of Bihar. These states also have a significant share in the production from the renewable energy sector. The state should double the level of power generation from the current level of around 9,000 MW to 18,000 MW, at the earliest, for higher growth.

(v) Remove obstacles to agricultural development

Although the share of agriculture in the State Gross Domestic Product (SGDP) is a mere 20 per cent, it provides livelihood to more than 80 per cent of the population in the state. There is scope for increasing the output and employment in agriculture comprising crop husbandry, animal husbandry and fisheries. The current level of output per hectare in both rice and wheat -in most of the districts in the state- is below other states. There is thus scope for improvement. Investment in agriculture will have to go up for higher output.

In order to augment irrigation through groundwater resources and to address simultaneously the problem of waterlogging in low lying areas, the State government may try implementing the recommendation of the Expert Committee by putting up battery of tubewells in the 'grey' and 'white' areas of the state that would drain out water from the waterlogged areas soon after the floods and provide irrigation during the lean seasons.

In order to provide succour to the most severely flood affected people of the Kosi project in the state, a central scheme on the pattern of the draught prone

Kalahandi, Bolangeer and Koraput (KBK) districts of Odisha may be considered for the (Kosi) flood prone districts of Supaul, Madhepura and Saharsa.

The State government may, furthermore, consider the recommendations of the Land Reforms Commission (2006). Accordingly, appropriate legislation may be introduced in regard to the recommendations of the Commission namely: (a) a five year contract between the owner and the sharecropper with no heritable security of tenure; (b) the contract to be considered as the proof of land possession for the tiller/sharecropper to qualify him/her for credit subsidy and incentives; (c) 40% share of produce to the land owner if he/she bore the cost of non-labour inputs and (d) 25% share of produce to the land owner if he did not bear any cost of cultivation.

As mentioned under the proposed Model Agricultural Land Leasing Act (NITI Aayog, 2016), the expected value of output from the leased-in land could be used as collateral by the banks/credit institutions for advancing loans to the lessee cultivators. Since the overall output will go up with higher investment due to easier availability of bank credit to the sharecroppers, the owners of land may not lose in absolute terms despite a reduced share in output from the existing levels.

The current level of procuring food grains at 'minimum support price' (MSP) in Bihar, under the 'Decentralized Procurement of Food Grains', should be raised to 30 lakh tonnes of rice and 25 lakh tonnes of wheat.

(vi) Register migrating labour at the district level

Migration of labour from Bihar to different states in search of job is a reality. These labourers are mostly working in the unorganized sector and do not have the benefits of the workers in the organized sector. In this context, it was pointed out that 'a system of registration for migrating labour from every district was in place earlier for which the District Magistrate was made responsible. This system has gone into disuse and does not exist anymore. In the absence of necessary data, however, it is difficult to know the true situation regarding the magnitude and direction of out-migration of labour from Bihar. There is a need to put in place a new system. Use of information technology (IT) could be one way to address this issue' (Council of Development of Bihar and Jharkhand, 2020). This may be acted upon.

(vii) Ensure overall development in the economy raising employment and wage rates

The interest of agriculture labour that number nearly two crore people in the state can be best served if employment and wage rates go up. This can happen when there is overall development. This has to be kept in mind by the administrators and the economic planners in the state. The students of economic history know it too well that poverty in Japan banished once the opportunities of employment increased in the economy and the wage rates went up.

(viii) Achieve the industrial potential of the state

The agro-based industries are an important area of manufacturing in Bihar. They are, however, far below their potential; their share at the all-India level is specially very low. In the area of rice milling, for instance, bulk of paddy produced in Bihar continues to be processed outside the state. Similarly, while the production of hides of cattle and buffalo and goat skin is higher than other states, the share of Bihar in the manufacture of leather goods at the all-India level is less than one per cent.

Textile manufacturing has been in existence in the state since centuries, which are mostly in the power loom and the handloom sectors. They are today in condition of decline due to several reasons including competition from the mill sector. However, textile belongs to the category of fast-moving goods and there is recurring demand for its products. Despite best intentions, it is a very neglected sector. More imaginative initiatives need to be taken to transform the textile manufacturing sector in Bihar.

The sugar industry has been traditionally the most developed manufacturing industry in the state. It has seen ups and downs over the years impacting directly the farmers cultivating sugar cane in their region. The problems faced by the sugar industry has often been external such as ban on exports, lower domestic price and competition. Things are now looking up with investments coming in this sector. This trend should be strengthened.

Since Bihar is the third largest producer of vegetables and the fourth largest producer of fruits in the country, there is enormous potential for developing the food processing industry in the state. Due to direct linkage with agriculture, development in the food processing industry would benefit the agriculture sector as well in terms of better prices, assured demand and greater employment. The existing small and medium industries would furthermore need to become larger to reap the economies of scale. Marketing or assessment of demand, both internal and external, has to precede any decision vis-à-vis expansion of production.

(ix) Increase the level of Urbanization

The urban population globally reached 50 per cent in 2008. It is approximately 57 per cent today. More people are residing in urban areas than in the rural areas. This is in marked contrast to the situation in the state. Bihar ought to increase its level of urbanization from the existing level of around 12 per cent, which is less than half of even the national average (at approximately 36 per cent).

Towns and cities are observed to provide better facilities of transportation (railways and airways), uninterrupted supply of electricity, better municipal services of water supply, drainage and sanitation, better hospitals, education centres, financial services and markets for consumer goods and the like in close

proximity. Above all the urban centres provide opportunities of employment (wage employment as well as self-employment) that are more remunerative.

In order to increase urbanization, the State government will need to make sincere efforts to promote industrial development. The State government may also take advantage of the recommendations of one of the Expert Groups of the Planning Commission that suggested for joining a cluster of villages with a ring road around them; thus, raising the total population in the cluster to say 50,000 people to 100,000 people and thus give fillip to the development of market and similar common facilities associated with urban areas.

The sources of finance for local bodies may be augmented through introducing 'pollution tax' or 'eco-tax' and taking recourse to 'municipal bonds' and 'public-private- partnership. These initiatives may be optional implying those ULBs who would like to take advantage of these measures may go ahead while others need not adopt them.

(x) Make 'Family Planning' program, a Priority

In terms of per capita income, however, the state does not have much to boast. The per capita income of Bihar at around ₹66,000 per annum currently is one-third of the per capita income of the country. The reason for this enormous difference lies in the high density of population in the state (1100 people per square k.m), which is more than twice the density of population in the country (480 people per square k.m).

Behind this phenomenon lies a very high growth rate of population. Against the replacement rate of 2.1, that is, two children against two parents, the current level of growth rate of population in the state stands at around 3.0, which is the highest in the country. Every ten years, the state is adding the population of Australia equal to 2 crore people, which is beyond its resources. The State government has been making sincere efforts in the direction of family planning. Efforts in this direction should be further pushed up.

(xi) Avoid misallocation of scarce resources/ 'Freebies'

Recent years have seen the government in power resorting to announce 'freebies' to the electorate, especially so, when elections are close. Free ration, free electricity - to one and all - are good examples of 'misallocation of scarce resources. These measures should be restricted to the 'target group' only, that is, to the very needy and not to everyone. The saving on such expenditures could then be utilized for meeting the shortage of funds in the areas of public education, public health, urban local bodies etc.

References

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