

Role of Saat Nishchay Programme in the Socio-Economic Development of Bihar: Evidence from Infrastructure Development

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Abstract

The **Saat Nishchay Programme** represents a comprehensive development framework of the Government of Bihar aimed at addressing key challenges related to human development, basic infrastructure, youth empowerment, women's participation, digital inclusion and connectivity. This study examines the role and progress of the programme in promoting socio-economic development in Bihar, with particular emphasis on rural infrastructure and road connectivity. The study is based entirely on **secondary data** and adopts a descriptive and analytical approach using information from government reports and official sources. The findings indicate significant expansion of infrastructure under different components of the programme. Rural road length increased from 835 km in 2005–06 to 1,16,880 km in 2024–25, while expenditure on rural roads increased from ₹1,574 crore during 2005–10 to ₹28,973 crore during 2020–25. Approximately ₹60,000 crore was spent during 2005–25 to achieve last-mile connectivity in rural habitations. Under various construction schemes, 1,16,879.99 km of roads and 2,073 bridges had been constructed by September 2024, with expenditure of ₹63,512.78 crore. The study also highlights the expansion of bypasses and bridge infrastructure under Saat Nishchay-II. The evidence indicates that the programme has contributed to strengthening basic amenities, connectivity, rural infrastructure and economic opportunities in Bihar. Continued attention to effective implementation, maintenance, accessibility and quality is important for sustaining these development outcomes.

Keywords: Saat Nishchay Programme, Rural Infrastructure, Road Connectivity, Socio-Economic Development

1. Introduction

Infrastructure development is an important foundation of socio-economic development because it improves the movement of people and goods, facilitates access to markets and public services, and creates conditions for greater economic activity. In a state like Bihar, where a large proportion of the population lives in rural areas, the development of basic infrastructure and connectivity has particular significance. Rural roads, bridges, drainage, electricity, drinking water, sanitation and digital connectivity influence the accessibility of education, healthcare, employment and other economic opportunities. The Government of Bihar has therefore undertaken various development initiatives aimed at improving basic amenities and strengthening infrastructure across rural and urban areas.

In this context, the **Saat Nishchay Programme** emerged as a comprehensive development framework of the Government of Bihar. The first phase, implemented during **2015–2020**, focused mainly on household-level basic infrastructure and human development. The second phase, **Saat Nishchay-II (2020–2025)**, expanded the development agenda to include youth empowerment, women's economic participation, agriculture, rural cleanliness, urban development, connectivity and healthcare. Its major components include **Har Ghar Nal Ka Jal, Ghar Tak Pakki Gali-Naliyaan, Shauchalay Nirman–Ghar Ka Samman, Bijli Har Ghar Tak, Aarthik Hal–Yuvaon Ko Bal, Har Ghar Tak Internet and Aarakshit Rozgar Mahilaon Ka Adhikar**. These components collectively address basic amenities, human development, employment, women's participation and digital inclusion.

Among the different components of the programme, **Sulabh Samparkata** under Saat Nishchay-II has particular importance for improving physical connectivity. The initiative focuses on the construction of bypasses to improve road connectivity and reduce congestion in towns. During 2021–22, ₹143 crore was sanctioned for eight projects covering about 40 km, while in 2022–23, 12 projects worth ₹413 crore were sanctioned for about 52.7 km of bypass roads. During 2023–24, five additional projects costing ₹128.09 crore and covering around 30 km were sanctioned. The programme is therefore closely associated with the expansion of road infrastructure and improved movement of people and goods.

The importance of connectivity is also evident from the development of bridges and rural roads in Bihar. Between 2012–13 and 2023–24, Bihar Rajya Pul Nirman Nigam Limited constructed 1,112 bridges and executed works worth ₹16,761.40 crore. Similarly, rural road length increased substantially from 835 km in 2005–06 to 1,16,880 km in 2024–25. Expenditure on rural roads also increased from ₹1,574 crore during 2005–10 to ₹28,973 crore during 2020–25, while approximately ₹60,000 crore was spent during 2005–25 to achieve last-mile connectivity in rural habitations.

Against this background, the present study examines the role of the Saat Nishchay Programme in the socio-economic development of Bihar, with particular emphasis on infrastructure development and connectivity. The study analyses the progress of road and bridge infrastructure, rural road expansion, expenditure on rural roads, bypass development and the growth of the road transport sector using secondary data from government reports and official sources. The study also examines the scheme-wise status of rural road construction and upgradation. As of September 2024, 1,16,879.99 km of roads and 2,073 bridges had been constructed under various construction schemes, involving expenditure of ₹63,512.78 crore, while the transport sector increased from ₹8,400 crore in 2011–12 to ₹25,100 crore in 2023–24.

Thus, the study seeks to understand how the **Saat Nishchay Programme has contributed to strengthening infrastructure, connectivity and economic opportunities in Bihar**. Particular attention is given to the expansion and accessibility of rural roads, bridges and transport infrastructure, while also recognising the importance of effective implementation, maintenance, quality and accessibility for sustaining the development outcomes of the programme.

2. Review of Literature

Singh, B. K. (2025), examined the impact of rural road development on the socio-economic empowerment of small and marginal farmers. Using secondary information from the Bihar Economic Survey, Ministry of Rural Development, NABARD, NITI Aayog and agricultural census reports, the study found that improved rural connectivity strengthened market access, reduced transportation costs and improved access to education, healthcare and employment. The study also reports that road

development supported agricultural marketing and rural livelihoods, while identifying continuing challenges such as road maintenance, floods, waterlogging, regional disparities and construction quality. **Chakrabarti (2025)** examined the economic effects of India's Pradhan Mantri Gram Sadak Yojana (PMGSY) using district-level evidence. The study found a positive relationship between progress in rural road connectivity and per-capita agricultural GDP growth, with the effects being particularly relevant for districts with lower initial agricultural performance. The study therefore provides recent evidence that rural road connectivity can contribute to agricultural economic performance and rural prosperity.

Asher, S., & Novosad, P. (2020). in their study *Rural Roads and Local Economic Development*, examined the effects of rural road construction on local economic outcomes. Their findings indicate that rural roads can improve market connectivity, labour mobility and opportunities for non-farm employment. This literature is particularly relevant to Bihar, where improved rural connectivity can link villages with markets, service centres and employment opportunities. The study therefore provides an important basis for examining the relationship between road development and socio-economic development in Bihar.

Aggarwal (2018) examined the effects of rural road construction in India and found evidence of increased market integration following improved road access. The study reported lower prices and greater availability of goods from outside villages, greater adoption of agricultural technologies such as fertilizer and hybrid seeds, and changes in educational and labour-market decisions. These findings demonstrate that road connectivity can affect rural households through several channels, including markets, agricultural technology, education and employment.

Chand, Srivastava and Singh (2017) examined the changing structure of India's rural economy and its implications for employment and growth. Their work highlights the importance of rural infrastructure in supporting the transformation of the rural economy. The literature indicates that improved infrastructure can strengthen agricultural marketing, diversify rural employment and support the transition towards a more market-oriented rural economy. This perspective is relevant to the present study because the **Saat Nishchay Programme** combines physical infrastructure with broader objectives of economic and social development.

3. Objectives of the Study

The overall objective of the study is to examine the role of the Saat Nishchay Programme in promoting socio-economic development in Bihar, with particular emphasis on infrastructure development, rural road connectivity and transportation. The study seeks to assess the progress of major infrastructure initiatives under Saat Nishchay and examine how improvements in roads, bridges, bypasses and rural connectivity have contributed to better access to markets, public services, employment and economic opportunities.

The specific objectives of the study are:

- To examine the major components and development priorities of the Saat Nishchay Programme.
- To analyse the development of road and bridge infrastructure in Bihar.
- To assess the expansion and expenditure of rural road infrastructure.
- To examine the growth and economic contribution of the road transport sector in Bihar.

4. Research Methodology

The study is based entirely on **secondary data** and follows a **descriptive and analytical research approach**. Data have been collected from official government reports and publications, including the Bihar Economic Survey, Finance Department, Government of Bihar, Rural Works Department, Government of Bihar, Bihar Rajya Pul Nirman Nigam Limited (BRPNL), and the Ministry of Statistics and Programme Implementation (MoSPI), Government of India. The study analyses information on Saat Nishchay, bypass projects, bridges, rural road length, expenditure on rural roads, scheme-wise road construction and upgradation, and the road transport sector to assess infrastructure development in Bihar.

5. Saat Nishchay Programme of Bihar

The **Saat Nishchay Programme** was introduced as a comprehensive development roadmap to address Bihar's persistent socio-economic challenges, including infrastructure deficits, youth unemployment, gender disparities and limited digital connectivity. The first phase, implemented during **2015–2020**, focused mainly on household-level basic infrastructure and human development, while **7 Nishchay Phase II (2020–2025)** broadened the approach towards youth empowerment, women's economic participation, agriculture, rural cleanliness, urban development, connectivity and healthcare.

Major Schemes under 7 Nishchay

Scheme	Major Focus
1. Har Ghar Nal Ka Jal	Provision of safe and piped drinking water to households; improvement of hygiene and public health.
2. Ghar Tak Pakki Gali-Naliyaan	Construction of paved streets and drainage to improve rural connectivity and reduce waterlogging.
3. Shauchalay Nirman – Ghar Ka Samman	Household toilet construction, sanitation improvement, dignity and safety, particularly for women.
4. Bijli Har Ghar Tak	Universal household electricity connectivity to support education, healthcare and economic activities.
5. Aarthik Hal – Yuvaon Ko Bal	Youth skill development, financial assistance, employability and self-employment opportunities.
6. Har Ghar Tak Internet	Expansion of household-level digital connectivity and reduction of the digital divide.
7. Aarakshit Rozgar Mahilaon Ka Adhikar	Reservation in government employment to promote women's economic participation and gender equality.

The seven schemes collectively address **basic infrastructure, human development, youth empowerment, women's empowerment and digital inclusion**. Har Ghar Nal Ka Jal, Ghar Tak Pakki Gali-Naliyaan, Shauchalay Nirman and Bijli Har Ghar Tak strengthen basic household amenities, while Aarthik Hal – Yuvaon Ko Bal focuses on improving the skills and employment opportunities of young people. Har Ghar Tak Internet promotes access to digital education, e-governance and economic opportunities, and Aarakshit Rozgar Mahilaon Ka Adhikar seeks to strengthen women's participation in government employment and decision-making.

The 7 Nishchay Programme represents an integrated approach to inclusive socio-economic development in Bihar. Its components also correspond with several Sustainable Development Goals, including SDG 5 (Gender Equality), SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), and SDG 9 (Industry, Innovation and Infrastructure). At the national level, the programme complements initiatives such as Swachh Bharat Mission, Jal Jeevan Mission, Saubhagya Yojana, Digital India and Skill India, linking state-level development priorities with broader national and global development objectives.

6. Sulabh Samparkata under Saat Nishchay-II

The Government of Bihar has identified ‘Sulabh Samparkata’ as one of the seven resolves under Saat Nishchay-II, with the objective of improving road connectivity and reducing traffic congestion in towns across the state. Under this initiative, ₹143 crore was sanctioned during 2021–22 for eight projects, covering approximately 40 km of road stretches on different bypasses. In 2022–23, the programme was expanded with 12 projects sanctioned at an outlay of ₹413 crore, aimed at constructing around 52.7 km of bypass road network.

During 2023–24, five additional bypass projects were sanctioned at a cost of ₹128.09 crore, covering approximately 30 km of road length. The development of these bypasses is expected to improve connectivity, facilitate smoother movement of vehicles, reduce congestion within urban areas, and enhance the overall accessibility of towns. Once operational, these bypass projects are expected to contribute significantly towards making a large number of towns in Bihar more accessible and relatively congestion-free, thereby supporting economic and regional development.

7. Bridge Sector in Bihar

Bihar, being one of the most densely populated states, requires a large number of bridges and overbridges to ensure smooth movement of road traffic and improve connectivity across rivers, roads, and railway lines. In recent years, several overbridges and high-level bridges have been constructed at important locations, helping to reduce travel distance and journey time for many towns and improving overall transportation infrastructure.

The Bihar Rajya Pul Nirman Nigam Limited (BRPNL) is a profit-making state government corporation responsible for constructing roads and bridges with an estimated cost of more than ₹25 lakh. During 2012–13 to 2023–24, BRPNL constructed 1,112 bridges and executed works worth ₹16,761 crore, earning a cumulative net profit of ₹545.07 crore. In 2023–24, its work turnover stood at ₹1,567.15 crore, with a gross profit of ₹47.74 crore and net profit of ₹18.65 crore. The Corporation also contributed ₹205.11 crore as dividend to the State Government, donated ₹205 crore to the Chief Minister’s Relief Fund, and undertook ₹54.43 crore of CSR works. Furthermore, 132 new projects worth ₹2,523.58 crore were allotted during 2023–24, while 12 projects worth ₹267.30 crore were allotted up to 30 September 2024 for 2024–25.

Summary of workings of Bihar : Working Condition of Bihar Rajya Pul Nirman Nigam Limited (Rs. in cr.)

Year	No. of Bridges	Work Execution (Work Turnover)	Percentage (Agency Charge/Other Income)	Administrative Expenditure	Gross Profit	Net Profit
2012–	136	1,273.31	141.94	34.95	106.99	63.81

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2013–14	119	1,480.85	159.22	39.03	120.18	72.54
2014–15	177	1,739.32	183.22	44.12	139.10	80.93
2015–16	173	1,698.99	150.59	42.88	107.71	70.26
2016–17	103	1,840.02	147.44	39.29	108.15	68.76
2017–18	84	1,500.98	118.31	40.22	78.09	37.98
2018–19	97	1,496.76	128.21	47.55	80.66	42.74
2019–20	81	1,114.31	161.85	85.70	76.10	39.23
2020–21	69	827.55	102.10	63.77	38.34	8.97
2021–22	19	789.55	96.81	62.58	34.23	16.01
2022–23	28	1,432.61	104.64	57.05	47.58	25.19
2023–24	26	1,567.15	96.14	48.40	47.74	18.65
Total	1,112	16,761.40	1,590.42	605.55	984.86	545.07

Source: Bihar Rajya Pul Nirman Nigam Limited, Government of Bihar.

Rural infrastructure plays an important role in promoting economic development and improving the quality of life of the rural population in Bihar. According to the Census 2011, rural areas accounted for 88.7 percent of the state's geographical area/population context, highlighting the importance of extending road connectivity to rural settlements. Providing access to roads in every settlement is essential for enabling people to access markets, education, healthcare, employment and other economic opportunities.

To strengthen the rural economy and ensure smooth and hassle-free movement of people and goods, the Government of Bihar has made strategic investments in the construction, expansion and maintenance of rural roads. These efforts have focused on improving connectivity between villages and larger markets and service centres.

Trend of Rural Road Length in Bihar (2005-06 to 2024-25*)



Source: Rural Works Department, Government of Bihar.

The chart shows a substantial expansion of rural road length in Bihar between 2005–06 and 2024–25. In 2005–06, the total rural road length was only 835 km, which increased to 22,205 km by 2010–11. The expansion continued rapidly, reaching 64,205 km in 2015–16 and 99,272 km in 2020–21. By 2024–25, the rural road network had expanded further to 1,16,880 km.

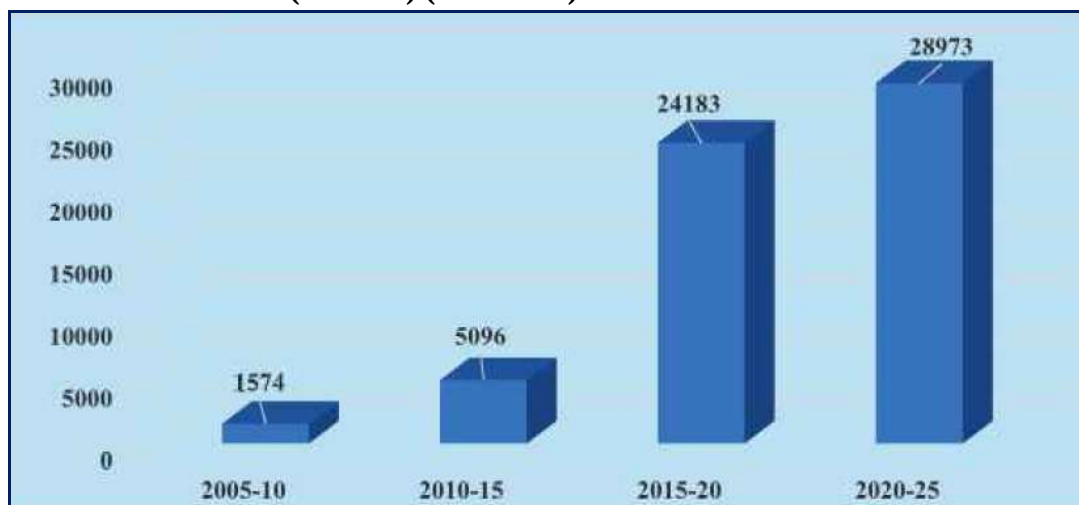
The data indicate a major improvement in the rural road connectivity and transport infrastructure of Bihar over the last two decades. The increase from 835 km in 2005–06 to 1,16,880 km in 2024–25 reflects the sustained efforts of the state government to connect rural settlements and facilitate the movement of people, agricultural produce and other goods. Improved rural road connectivity can also support access to markets, education, healthcare, employment and other economic opportunities, thereby contributing to broader rural development.

8. Expenditure on Rural Roads in Bihar

The expenditure on rural roads in Bihar has increased substantially during the period 2005–06 to 2024–25, reflecting the state government's continued emphasis on improving rural connectivity and infrastructure. According to the data, expenditure on rural roads increased from ₹1,574 crore during 2005–10 to ₹28,973 crore during 2020–25. This significant rise in investment indicates the growing priority given to the construction, upgradation and maintenance of rural roads across the state.

To ensure the quality and sustainability of rural road infrastructure, the Output and Performance Based Road Maintenance Contract (OPRMC) has also been implemented. During the period, the Government of Bihar introduced several policy initiatives, including Saat Nishchaya and road maintenance policies, to strengthen rural connectivity and road maintenance. Overall, approximately ₹60,000 crore was spent during 2005–25 to achieve last-mile connectivity in rural habitations, thereby improving access to markets, public services and economic opportunities for the rural population.

Expenditure on Rural Roads (2005-25) (Rs. crore)



Source: Finance Department, Government of Bihar.

The chart shows a substantial increase in expenditure on rural roads in Bihar during 2005–25, indicating the growing emphasis on rural road infrastructure and connectivity. During 2005–10, expenditure on rural roads was ₹1,574 crore. It increased to ₹5,096 crore during 2010–15, representing a considerable rise over the previous five-year period. The expenditure increased much more sharply during 2015–20, reaching ₹24,183 crore, which indicates a major expansion in government investment in rural road development.

The upward trend continued during 2020–25, when expenditure reached ₹28,973 crore, the highest level shown in the chart. Thus, expenditure increased from ₹1,574 crore in 2005–10 to ₹28,973 crore in 2020–25, reflecting a substantial strengthening of investment in rural roads over the period. This increased expenditure has supported the expansion, improvement and maintenance of rural road infrastructure, which is important for improving connectivity and facilitating the movement of people and goods in rural areas.

9. Road Transport Sector in Bihar

The road transport sector has emerged as an important driver of economic growth in Bihar during the last two decades. As indicated by Chart 6.6, the sector recorded double-digit growth throughout the period from 2012 to 2024, reflecting the expansion of road-based transportation activities and improved connectivity across the state. The sustained growth of this sector has strengthened the movement of people and goods and supported wider economic activities.

As a result of this continued expansion, the size of Bihar's transport sector increased nearly three times, rising from ₹8,400 crore in 2011–12 to ₹25,100 crore in 2023–24. This substantial increase highlights the growing contribution of transport infrastructure and services to the state economy and indicates the increasing importance of road transport in facilitating trade, mobility and regional economic development.

Growth of Road Transport of GSVA, at Constant (2011-12) Prices, of Bihar

Trend of Rural Road Length in Bihar (2005-06 to 2024-25*)



Source : Ministry of Statistics and Programme Implementation, GoI

The chart presents the trend in rural road length in Bihar from 2011–12 to 2023–24 and shows a clear overall expansion of the rural road network over the period. In 2011–12, the rural road length was 8.4 thousand km. It increased progressively to 10.0 thousand km in 2012–13, 11.4 thousand km in 2013–14, and 12.7 thousand km in 2014–15. The upward movement continued during the following years, with road length reaching 14.0 thousand km in 2015–16, 15.4 thousand km in 2016–17, and 17.6 thousand km in 2017–18. By 2018–19, the rural road length had increased to 20.0 thousand km, indicating that the expansion of rural connectivity continued steadily during this period.

The trend remained positive in 2019–20, when rural road length reached 21.8 thousand km, the highest level recorded up to that point. However, the chart shows a noticeable decline in 2020–21, when the figure fell to 16.3 thousand km. This was followed by a strong recovery, with rural road length increasing to 23.0 thousand km in 2021–22. In 2022–23, it remained relatively high at 22.6 thousand km, before rising further to 25.1 thousand km in 2023–24, the highest value shown in the series. Thus, the chart indicates a substantial long-term expansion of Bihar’s rural road network, rising from 8.4 thousand km in 2011–12 to 25.1 thousand km in 2023–24. The increase in rural road connectivity represents an important component of rural infrastructure development, facilitating the movement of people and goods and improving connectivity between rural settlements and economic and social service centres.

Status of Rural Road Network by Scheme in Bihar

Category	Name of Scheme	Road Constructed (kms.)	Bridge Constructed (Nos.)	Expenditure (₹ crore)
Construction	Gramin Tola Sampark Nishchay Yojana (GTSNY)	3,966.82	—	2,319.27
	Mukhya Mantri Gram Sampark Yojana (MMGSY)	31,821.79	120	21,748.92
	Pradhan Mantri Gram Sadak Yojana-I (PMGSY-I)	53,419.09	1,153	28,292.47

	State Scheme	4,784.85	760	5,209.21
	Other State Plan Schemes	22,887.44	40	5,942.91
Total		1,16,879.99	2,073	63,512.78
Upgradation	Pradhan Mantri Gram Sadak Yojana-II (PMGSY-II)	2,434.90	98	1,650.07
	Pradhan Mantri Gram Sadak Yojana-III (PMGSY-III)	3,850.32	96	3,579.46
	Mukhya Mantri Gramin Sadak Unnayan Yojana (MMGSUY)	77.19	—	100.00
Total		6,362.41	194	5,329.53

Source: Department of Rural Works, Government of Bihar.

The table presents the status of the rural road network in Bihar as of September 2024 under different construction and upgradation schemes. Under the construction category, a total of 1,16,879.99 km of roads and 2,073 bridges were constructed, with total expenditure of ₹63,512.78 crore. Among the major schemes, Pradhan Mantri Gram Sadak Yojana-I (PMGSY-I) contributed the largest share, with 53,419.09 km of roads and 1,153 bridges, involving expenditure of ₹28,292.47 crore. The Mukhya Mantri Gram Sampark Yojana (MMGSY) also made a substantial contribution by constructing 31,821.79 km of roads and 120 bridges, with expenditure of ₹21,748.92 crore.

Under the upgradation category, a total of 6,362.41 km of roads and 194 bridges were covered, with expenditure of ₹5,329.53 crore. PMGSY-III accounted for 3,850.32 km of upgraded roads and 96 bridges, while PMGSY-II covered 2,434.90 km of roads and 98 bridges. The Mukhya Mantri Gramin Sadak Unnayan Yojana added 77.19 km of upgraded roads with expenditure of ₹100 crore. Overall, the figures demonstrate the substantial investment made to expand, improve and strengthen rural road connectivity in Bihar, supporting better access to markets, education, healthcare, employment and other essential services.

10. Conclusion

The Saat Nishchay Programme represents an integrated development approach aimed at addressing major socio-economic and infrastructure challenges in Bihar. The programme combines household-level basic amenities, human capital development, youth empowerment, women's economic participation and digital inclusion. Under the first phase during 2015–2020, emphasis was placed on basic infrastructure and human development, while Saat Nishchay Phase II (2020–2025) broadened the development agenda towards youth empowerment, women's participation, agriculture, rural cleanliness, urban development, connectivity and healthcare. The seven major components—*Har Ghar Nal Ka Jal, Ghar Tak Pakki Gali-Naliyaan, Shauchalay Nirman–Ghar Ka Samman, Bijli Har Ghar Tak, Aarthik Hal–Yuvaon Ko Bal, Har Ghar Tak Internet and Aarakshit Rozgar Mahilaon Ka Adhikar*—together address multiple dimensions of inclusive development.

The study particularly highlights the importance of Sulabh Samparkata under Saat Nishchay-II in strengthening connectivity and reducing congestion. During 2021–22, ₹143 crore was sanctioned for eight bypass projects covering about 40 km, followed by 12 projects worth ₹413 crore covering 52.7 km in 2022–23. In 2023–24, another five projects costing ₹128.09 crore and covering around 30 km were sanctioned. These investments demonstrate the emphasis placed on improving road connectivity and

facilitating the movement of people and goods. The bridge sector has also expanded considerably: between 2012–13 and 2023–24, BRPNNL constructed 1,112 bridges and executed works worth ₹16,761.40 crore, recording a cumulative net profit of ₹545.07 crore.

The findings further indicate substantial progress in rural road infrastructure, which is particularly important given the large rural population and settlement structure of Bihar. Rural road length increased from 835 km in 2005–06 to 1,16,880 km in 2024–25. Similarly, expenditure on rural roads increased from ₹1,574 crore during 2005–10 to ₹28,973 crore during 2020–25, while approximately ₹60,000 crore was spent during 2005–25 to achieve last-mile connectivity in rural habitations. The scheme-wise data also show that, as of September 2024, 1,16,879.99 km of roads and 2,073 bridges had been constructed under various construction schemes, with expenditure of ₹63,512.78 crore.

Overall, the evidence presented in the study shows that Saat Nishchay has provided a broad framework for Bihar's socio-economic and infrastructure development, linking household amenities and human capital with connectivity and economic opportunities. The expansion of rural roads and transport infrastructure is also reflected in the growth of the transport sector, whose size increased from ₹8,400 crore in 2011–12 to ₹25,100 crore in 2023–24. Thus, the programme's different components collectively contribute to improving basic living conditions, connectivity, mobility and opportunities for the people of Bihar. The study also indicates that continued attention to quality, maintenance, accessibility and effective implementation will remain important for sustaining the development gains associated with these initiatives.

REFERENCE

1. Singh, B. K. (2025). Impact of rural road development on the socio-economic empowerment of small and marginal farmers in Bihar. *The Chitransh Academic & Research*, 1(2), 550–569.
2. Asher, S., & Novosad, P. (2020). Rural roads and local economic development. *American Economic Review*, 110(3), 797–823.
3. Chand, R., Srivastava, S. K., & Singh, J. (2017). Changing structure of rural economy of India: Implications for employment and growth. NITI Aayog, Government of India.
4. Aggarwal, S. (2018). Do rural roads create pathways out of poverty? Evidence from India. *Journal of Development Economics*, 133, 375–395.
5. Chakrabarti, S. (2025). Rural roads and economic development: Insights from India. *Transport Policy*, 168, 305–318.
6. Aggarwal, S. (2018). Do rural roads create pathways out of poverty? Evidence from India. *Journal of Development Economics*, 133, 375–395. <https://doi.org/10.1016/j.jdeveco.2018.01.004>
7. Asher, S., & Novosad, P. (2020). Rural roads and local economic development. *American Economic Review*, 110(3), 797–823. <https://doi.org/10.1257/aer.20180268>
8. Chakrabarti, S. (2025). Rural roads and economic development: Insights from India. *Transport Policy*, 168, 305–318. <https://doi.org/10.1016/j.tranpol.2025.04.023>
9. Chand, R., Srivastava, S. K., & Singh, J. (2017). *Changing structure of rural economy of India: Implications for employment and growth*. NITI Aayog, Government of India.
10. Directorate of Census Operations, Bihar. (2011). *Census of India 2011: District census handbook, Bihar*. Office of the Registrar General & Census Commissioner, India, Ministry of Home Affairs, Government of India.

11. Government of Bihar, Department of Finance. (2025). *Bihar Economic Survey 2024–25*. Government of Bihar.
12. Government of Bihar, Finance Department. (2020). *Economic Survey 2019–20*. Government of Bihar.
13. Government of Bihar, Rural Works Department. (2024). *Rural road development and construction/upgradation statistics, Bihar*. Government of Bihar.
14. Bihar Rajya Pul Nirman Nigam Limited. (2024). *Annual/working statistics of Bihar Rajya Pul Nirman Nigam Limited*. Government of Bihar. <https://brpnnl.bihar.gov.in/>
15. Ministry of Statistics and Programme Implementation. (2024). *National accounts statistics 2024*. Government of India. <https://www.mospi.gov.in/publication/national-accounts-statistics-2024>
16. Singh, B. K. (2025). Impact of rural road development on the socio-economic empowerment of small and marginal farmers in Bihar. *The Chitransh Academic & Research*, 1(2), 550–569.
17. Government of Bihar. (2015). *Saat Nishchay: Seven resolves for development of Bihar*. Government of Bihar.
18. Government of Bihar. (2020). *Saat Nishchay Phase II (2020–2025): Development initiatives and programmes*. Government of Bihar.
19. Government of Bihar, Rural Works Department. (2021–2024). *Sulabh Samparkata: Bypass and road connectivity projects under Saat Nishchay-II*. Government of Bihar.