



Geographical Analysis of Infrastructure Development and Socio-Economic Impacts of Samruddhi Mahamarg

Ms. Pratima Satish Shinde¹ & Dr. M. B. Potdar²

¹Associate Professor, Department of Geography, SSCM, Kolhapur

²Assistant Professor, Department of Geography, Shivaji University, Kolhapur

Corresponding Author – Ms. Pratima Satish Shinde

DOI - 10.5281/zenodo.18478716

Abstract:

The Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg (MSM), popularly known as the Nagpur–Mumbai Super Communication Expressway, is one of India's most ambitious infrastructure projects. Envisioned as a transformative transport corridor, the 701-kilometer greenfield expressway aims to catalyze regional development, improve socio-economic integration, and promote industrial growth across Maharashtra. This research paper provides a comprehensive academic assessment of the project, examining its conceptual foundations, development stages, spatial features, economic impacts, environmental issues, and social-cultural outcomes. Using secondary data, government reports, scholarly articles, and spatial analysis methods, the study critically evaluates the expressway's role in reshaping mobility and regional planning in Maharashtra. The findings highlight the project's vast potential to reduce travel time, improve logistics efficiency, and foster industrial corridors, while also addressing challenges such as land acquisition disputes, environmental degradation, rehabilitation issues, and financial constraints. The paper concludes by offering policy-relevant suggestions for sustainable management and inclusive development associated with the Mahamarg.

Introduction:

Transport infrastructure is the foundation of regional economic growth, spatial integration, and national competitiveness. In India, expressways have become key tools for solving mobility issues, easing logistics bottlenecks, and connecting production areas with markets. In this context, the Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg (MSM) stands out as a major project of the Maharashtra government. Extending from Nagpur in Vidarbha to Mumbai in the Konkan region, the expressway passes through ten districts—Nagpur, Wardha, Amravati, Washim, Buldhana, Jalna, Aurangabad (Chhatrapati Sambhajinagar), Nashik, Thane, and Mumbai. It is built as an eight-lane, access-controlled, greenfield corridor

that combines transport, industrial, and agricultural logistics functions.

Given its transformative potential, the Mahamarg merits rigorous academic scrutiny. The present study evaluates the expressway from geographical, economic, environmental, and social perspectives, focusing on its contributions to Maharashtra's urban–regional dynamics and long-term development trajectory.

Location Map Of The Study Area:

Figure 1: Route of Samruddhi Mahamarg:



(Source: <https://mahasamruddhimahamarg.com>)

Objectives:

1. To examine the conceptual, geographical and infrastructure aspects of the Samruddhi Highway.
2. To assess the efficiency, expected benefits and emerging concerns related to the planning, construction and management of the expressway in the districts connected by the Samruddhi Highway.
3. To analyse the socio-economic impacts of the Samruddhi Highway and assess the factors related to environmental impacts
4. To provide policy suggestions to improve the sustainability, inclusiveness and long-term usefulness of the expressway.

Research Methodology:

This research adopts an exploratory and descriptive methodological framework supported primarily by secondary data sources. The methodology includes:

1. Data Collection:

- Government Reports: Maharashtra State Road Development Corporation (MSRDC), Maharashtra Industrial Development Corporation (MIDC), Ministry of Road Transport and Highways (MoRTH).

- Published literature: Scholarly articles on transport geography, regional development, expressway impacts, and infrastructure planning.
- Newspaper archives and digital databases: To review recent developments, policy announcements, and project updates.
- Maps and spatial documents: Studying route alignments, district-level geography, and location of industrial nodes.

Discussion:

1. Concept and Development of the Samruddhi Mahamarg:

Expansion of infrastructure is important to accelerate the process of overall development of the country. To speed up the development process, the Maharashtra state government is planning to connect Nagpur and Mumbai with a length of 701 km. The Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg is an ambitious project of the people of the state as well as the government.

The Samruddhi Mahamarg was conceived to bridge the developmental gap between the industrially advanced western Maharashtra and the agrarian, less-developed Vidarbha region. In the drive to accelerate further development in trade, business & industrialization in Nashik, Aurangabad, and Nagpur, and other such neighboring districts, the Government of Maharashtra has envisioned to build the 'Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg'.

For the overall socio-economic development of the state and to seek new employment opportunities for the local population along the expressway, the Maharashtra State Road Development Corporation (MSRDC) has announced as a flagship project in 2015, the expressway aimed to reduce travel time between

Nagpur and Mumbai from 16 hours to approximately 8 hours, to enhance freight movement, to support agricultural value chains, and to stimulate industrialisation through 24 planned economic nodes.

The Samruddhi Corridor aims to build an encompassing agro-ecosystem for the regional population as agriculture continues to be their primary occupation. With export-ready infrastructure, food processing zones, and food markets, the expressway cum utility belt will boost farmers' income and quality of livelihood.

The HBTMSM corridor will ensure equal economic growth opportunities to the remote regions by developing 18 new townships. Several economic nodes catering to industrial hubs, IT parks, manufacturing units, skill development & training institutes will generate new employment opportunities and migration control.

Warehousing hubs are planned at strategic locations close to industrial and manufacturing units to facilitate storage and quick logistics. Truck terminals and bus bays at various economic nodes will complement the freight forwarding experience and ease the supply chain for domestic markets. New townships are being developed in the districts of Aurangabad, Buldhana, and Wardha by State Warehousing Corporation.

The state government has identified a massive scope of promoting tourism and hospitality along the expressway route. Several tourism circuits for eco, pilgrim, and heritage tourism besides wayside amenities are proposed to develop along the route having wildlife resorts, museums, tiger safaris, food plazas, regional and theme-based retail outlets, periodic cultural events, restaurants, etc.

The project's greenfield nature allowed planners to design a modern, access-controlled expressway with service roads, intelligent transport systems, and climate-resilient construction practices.

2. Geographical Alignment and Spatial Significance:

The route alignment is geographically strategic, cutting across major agro-climatic zones such as Vidarbha's cotton belt, Marathwada's drought-prone plateau, and western Maharashtra's sugar and grape-growing regions.

Key geographical significance includes:

- **Enhanced East–West Connectivity:** Linking India's inland logistics hub (Nagpur) with its financial capital (Mumbai).
- **Transformation of Land Use:** Agricultural land near interchanges is witnessing rapid conversion to commercial, warehousing, and residential purposes.
- **Integration of Hinterlands:** Remote talukas gain improved access to markets and services.

3. Economic and Industrial Impact:

The Mahamarg is expected to stimulate economic growth through:

- **Industrial Nodes:** Agro-processing zones, textile parks, electronics hubs, and logistics centres planned along the corridor.
- **Employment Generation:** Both direct (construction, maintenance) and indirect (retail, service sector) employment opportunities.
- **Agricultural Benefits:** Faster access to Mumbai's port and urban markets reduces spoilage and expands market reach.
- **Real Estate Appreciation:** Land values near expressway interchanges have significantly risen, reflecting investor confidence.

However, concerns remain regarding uneven development, where urban and industrial centres may benefit more than rural communities unless policy interventions ensure equitable distribution.

4. Social Dimensions and Community Impacts:

Land acquisition emerged as a major challenge. Thousands of farmers and households were displaced or relocated. While compensation

packages were comparatively high, several socio-cultural issues persisted:

- Loss of livelihoods, especially among small farmers.
- Disruption of traditional land-use practices.
- Inadequate rehabilitation support in certain pockets.
- Community resistance in environmentally sensitive areas.

Yet, improved connectivity has increased access to health, education, and employment for many rural communities.

5. Environmental Concerns:

Infrastructure projects of this scale inevitably induce environmental stress. Major concerns include:

- Loss of agricultural land and green cover during land acquisition.
- Alteration of drainage patterns, affecting local hydrology.
- Increased vehicular emissions, requiring long-term mitigation.
- Wildlife movement disruptions in forest-adjacent areas.

Mitigation measures such as wildlife crossings, compensatory afforestation, and controlled access points are incorporated, but implementation effectiveness requires monitoring.

6. Financial Aspects and Project Management:

The project's estimated cost exceeded ₹55,000 crore, funded through loans, government contributions, land monetisation, and private investments. Efficient project management enabled partial operation of the expressway within timelines, although pandemic-related delays and cost escalations occurred. Long-term revenue recovery depends on toll collection and industrial corridor success.

7. Project Statistics:

Table 1: Project Statistics of Samruddhi Mahamarg

Length of Samruddhi Mahamarg	701 km
Samruddhi Mahamarg Route	Nagpur to Mumbai
Number of districts the Samruddhi mahamarg passes through	10
Number of talukas connected	26
Number of villages connected by the expressway	392
Number of proposed Krushi Samruddhi Nagar	19
Land required for the project (Expressway + Krushi Samruddhi Nagar)	24,255 acres (9,900 Ha) approximately
Total Project Cost	Rs. 55,000 crores approximately
Proposed Project Completion date	2022

(Source: <https://mahasamruddhimahamarg.com>)

8. Project Benefits:

Samruddhi Expressway will be connecting to the major markets of Nagpur, Aurangabad, and Mumbai due to the harmonious network of various agricultural products and industrialization in the state. Krishi Samruddhi Kendra's agri-entrepreneurs and investors will be provided with world-class facilities and markets for easy trade with easy transportation services. Businesses will also prosper as human resources, and skilled, unskilled workforce will be readily available to agriculturally prosperous cities.

The distance from Mumbai to Nagpur on the Samruddhi Expressway will cover a distance of 701 km in just 8 hours. The journey time from Mumbai to Aurangabad will be reduced to four hours, and the journey time from Aurangabad to

Nagpur will also be reduced to four hours. As a result, vehicles' maintenance and repair costs will be saved. A better way will also make it possible to control accidents. Planting trees on both sides of the highway will help reduce pollution. The fastest communication service will be available. WiFi and telephone services and many other facilities will be provided along the roadside of Samruddhi Expressway.

Samruddhi Mahamarg' will connect the State of Maharashtra with the Delhi-Mumbai Industrial Corridor (DMIC) and the Western Dedicated Freight Corridor. Also, this corridor will be directly connected to JNPT. This will boost the export trade in the state. The highway and the roads connected to it will be accessible to various tourist destinations like Shirdi, Ellora, Lonar, Ajanta, Mahabaleshwar, etc. This will lead to the overall development of the tourism business. The highway will accelerate economic development in the developing areas of Vidarbha and Marathwada.

Agricultural Prosperity Towns and their agro-based industries will provide self-employment, other employment opportunities, and improve agricultural income. Also, non-agricultural-based employment opportunities will be created in rural areas. This will help reduce inequality and poverty in the state. Each agriculturally prosperous city will employ approximately 20,000 to 25,000 people.

Findings:

1. The Samruddhi Mahamarg significantly enhances regional connectivity, enabling faster travel between eastern and western Maharashtra.
2. The expressway is a major economic catalyst, with potential to transform agrarian districts through industrial corridors and logistics hubs.

3. Land acquisition and social displacement remain sensitive issues, requiring sustained rehabilitation efforts.
4. Environmental impacts, though partly mitigated, have raised concerns regarding long-term ecological balance.
5. Real estate, agro-marketing, and service sectors are experiencing rapid structural changes along the corridor.
6. The project reflects a politically symbolic and development-oriented vision, aligning with Maharashtra's long-term economic aspirations.

Conclusions:

The Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg is more than a transport infrastructure—it is an ambitious developmental vision with the potential to reshape Maharashtra's economic and social landscape. By bridging historically uneven patterns of development between Vidarbha, Marathwada, and western Maharashtra, the expressway positions itself as a backbone for industrialisation, agro-logistics, and regional integration.

While the expressway has already begun to yield positive mobility and economic outcomes, it also highlights the importance of balanced planning, environmental stewardship, and socially inclusive policies. The success of the Mahamarg will ultimately depend on the effectiveness of its industrial nodes, long-term maintenance, ecological safeguards, and equitable benefit-sharing mechanisms.

References:

1. Government of Maharashtra. (2022). *Maharashtra Samruddhi Mahamarg Project Report*. Maharashtra State Road Development Corporation (MSRDC).

2. Ministry of Road Transport and Highways. (2021). *India Transport Sector Report: Expressways and Regional Connectivity*. Government of India.
3. Patil, R., & Joshi, V. (2023). Infrastructure-led regional development: A case study of Maharashtra's expressway network. *Journal of Transport Geography*, 108, 1–12.
4. Singh, A. (2022). Land acquisition and socio-economic impacts of highway projects in India. *Economic and Political Weekly*, 57(42), 45–53.
5. Sharma, M., & Kulkarni, P. (2021). Environmental implications of large-scale transport projects in Western India. *Indian Journal of Environmental Management*, 25(3), 114–129.
6. World Bank. (2020). *Infrastructure and Development: India Transport Sector Overview*. World Bank Publications