



Regulation of Peri-Urban Development: A Comparative Analysis of Selected States

Priyanka¹, Dr. Parmod Kumar²

¹Research Scholar, Department of Geography, Maharshi Dayanand University, Rohtak, Haryana, India-124001

²Senior Professor, Department of Geography, Maharshi Dayanand University, Rohtak, Haryana, India-124001

Received: 05 Dec 2025; Received in revised form: 10 Jan 2026; Accepted: 18 Jan 2026; Available online: 22 Jan 2026

©2026 The Author(s). Published by Infogain Publication. This is an open-access article under the CC BY license

(<https://creativecommons.org/licenses/by/4.0/>).

Abstract— Peri-urban areas in India are undergoing rapid transformation driven by urban expansion, industrialisation, infrastructure development and population growth. These transitional zones face challenges such as unplanned development, agricultural land conversion, environmental degradation and complex governance. This study examines and compares the regulatory frameworks governing peri-urban areas in Haryana, Maharashtra and Tamil Nadu. Using a comparative analysis of planning legislation, institutional structures, land-use control mechanisms and development regulations, the study evaluates the effectiveness of different approaches to peri-urban governance. The findings reveal significant variations in legal provisions, planning institutions and implementation practices across the selected states. The study emphasises the need for stronger legal frameworks, integrated planning, GIS-based monitoring, public participation and sustainable land-use strategies to ensure balanced and sustainable peri-urban development in India.



Keywords— Peri-urban areas, urbanisation, land-use regulation, planning legislation

I. INTRODUCTION

Urbanisation represents one of the most prominent spatial dynamics influencing contemporary socio-economic and environmental systems. Factors such as rapid population growth, industrial development, infrastructure expansion and intensified rural-urban migration have driven the ongoing expansion of urban areas worldwide. As urban centres expand beyond their administrative boundaries, transitional zones known as peri-urban areas have become increasingly important in understanding contemporary urban development. Peri-urban areas are dynamic spaces where rural and urban characteristics coexist, leading to complex land-use transformations, socio-economic changes and governance challenges (Narain, Benerjee and Anand 2014; Follmann et al., 2018). These areas function as interfaces between urban and rural systems and often experience intense pressure from real estate development, infrastructure projects, industrial activities and demographic growth.

In India, urbanisation has progressed rapidly during the last few years. Large metropolitan regions such as Delhi, Mumbai, Bengaluru, Chennai, Hyderabad and Kolkata have expanded far beyond their municipal limits, incorporating surrounding villages and rural landscapes into their functional urban regions. This process has generated extensive peri-urban belts characterised by mixed land uses, changing occupational structures and evolving governance arrangements (Narain, Benerjee and Anand, 2014). Unlike many developed countries, where metropolitan planning institutions coordinate regional development, peri-urban governance in India is often fragmented across multiple agencies, leading to overlapping jurisdictions and weak regulatory enforcement. Such institutional complexities frequently contribute to unauthorised development, land speculation and inefficient infrastructure planning.

The challenge of regulating peri-urban development has prompted several Indian states to enact specific planning legislation and development control mechanisms. These regulations aim to manage land-use conversion, prevent

haphazard urban growth, protect environmentally sensitive areas and facilitate infrastructure-led development. For example, Haryana enacted the Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963, which established controlled areas around expanding towns to regulate land use and development. The state further strengthened urban growth management through the Haryana Development and Regulation of Urban Areas Act, 1975, designed to prevent ill-planned urbanisation and ensure orderly development.

Similarly, states such as Maharashtra, Karnataka and Tamil Nadu have adopted comprehensive town and country planning legislation to regulate urban and peri-urban growth. The Maharashtra Regional and Town Planning Act, 1966; the Karnataka Town and Country Planning Act, 1961; and the Tamil Nadu Town and Country Planning Act, 1971 provide statutory frameworks for land-use planning, zoning regulations, development permissions and regional planning. While these legislative frameworks share common objectives, their institutional arrangements, enforcement capacities and development outcomes vary considerably across states. Such variations offer valuable insights into the effectiveness of different approaches to peri-urban governance and growth management.

Recent studies indicate that peri-urban areas in India are experiencing unprecedented land-use changes due to expanding urban footprints. Research conducted in Faridabad demonstrates that peri-urban landscapes have undergone significant spatial transformation under pressure from urbanisation and changing economic activities

(Follmann et al., 2018). Similarly, geospatial analysis of Hisar city revealed extensive urban expansion and conversion of agricultural land within peri-urban zones between 2001 and 2021, highlighting the need for stronger planning interventions and monitoring mechanisms (Rahul and Kaur, 2024). These findings underscore the importance of adopting integrated planning approaches that balance economic development with environmental sustainability and social equity.

Against this background, the present study examines and compares the regulatory frameworks governing peri-urban areas in selected Indian states. It evaluates the legal provisions, institutional structures, development control measures and implementation challenges associated with peri-urban governance. By identifying strengths, weaknesses and best practices across different states, the study seeks to contribute to ongoing discussions on sustainable urbanisation and effective peri-urban planning in India.

CONCEPT OF PERI-URBAN AREAS

The concept of peri-urban areas emerged from attempts to understand the spatial transition between urban and rural landscapes. Early studies by T. G. McGee described these zones as areas where urban and rural activities coexist and interact, leading to mixed land-use patterns and socio-economic transformations. McGee's *Desakota* model highlighted the blending of agricultural and non-agricultural activities in the urban fringe of Asian cities (McGee, 1991).

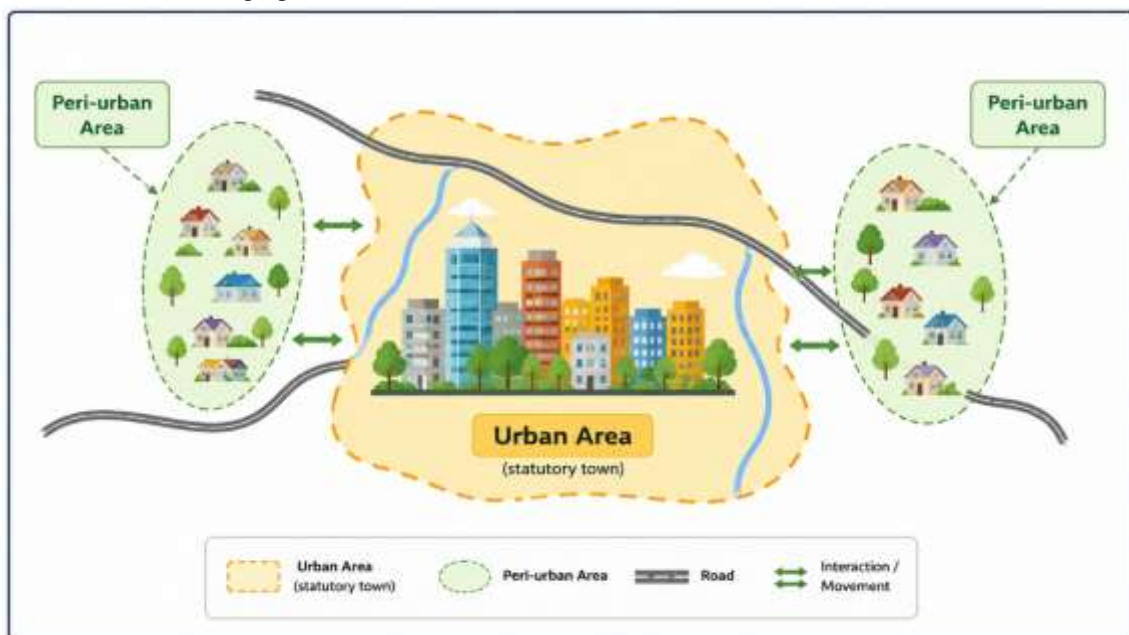


Fig.1: Urban and Peri-Urban Areas

Source: Made by Research Scholar

Peri-urban areas are generally defined as transitional zones located at the interface of urban and rural regions, characterised by rapid land-use change, population growth and increasing functional linkages with nearby cities (Narain, Benerjee and Anand, 2014). These areas exhibit both rural and urban characteristics, creating a dynamic landscape where agriculture, residential development, industry and infrastructure compete for land and resources. Peri-urbanisation is therefore understood as a process of urban expansion that transforms rural hinterlands into hybrid socio-spatial environments (Follmann et al., 2018).

GROWTH OF PERI-URBANISATION IN INDIA

The growth of peri-urbanisation in India has accelerated significantly since the economic liberalisation of the 1990s, driven by rapid urban expansion, industrialisation, infrastructure development and rural-urban migration. Major metropolitan regions such as Delhi, Mumbai, Bengaluru, Chennai and Hyderabad have expanded beyond their municipal boundaries, transforming surrounding rural areas into peri-urban landscapes. These transitional zones are characterised by mixed land uses, increasing population densities and changing livelihood patterns. Studies indicate that much of India's contemporary urban growth is occurring on city fringes, where agricultural land is being converted to residential, commercial and industrial uses, creating dynamic but often poorly regulated peri-urban regions (Follmann, 2022; Paul et al., 2025). Such expansion highlights the growing importance of peri-urban areas in India's urban development trajectory.

NEED FOR REGULATION OF PERI-URBAN AREAS

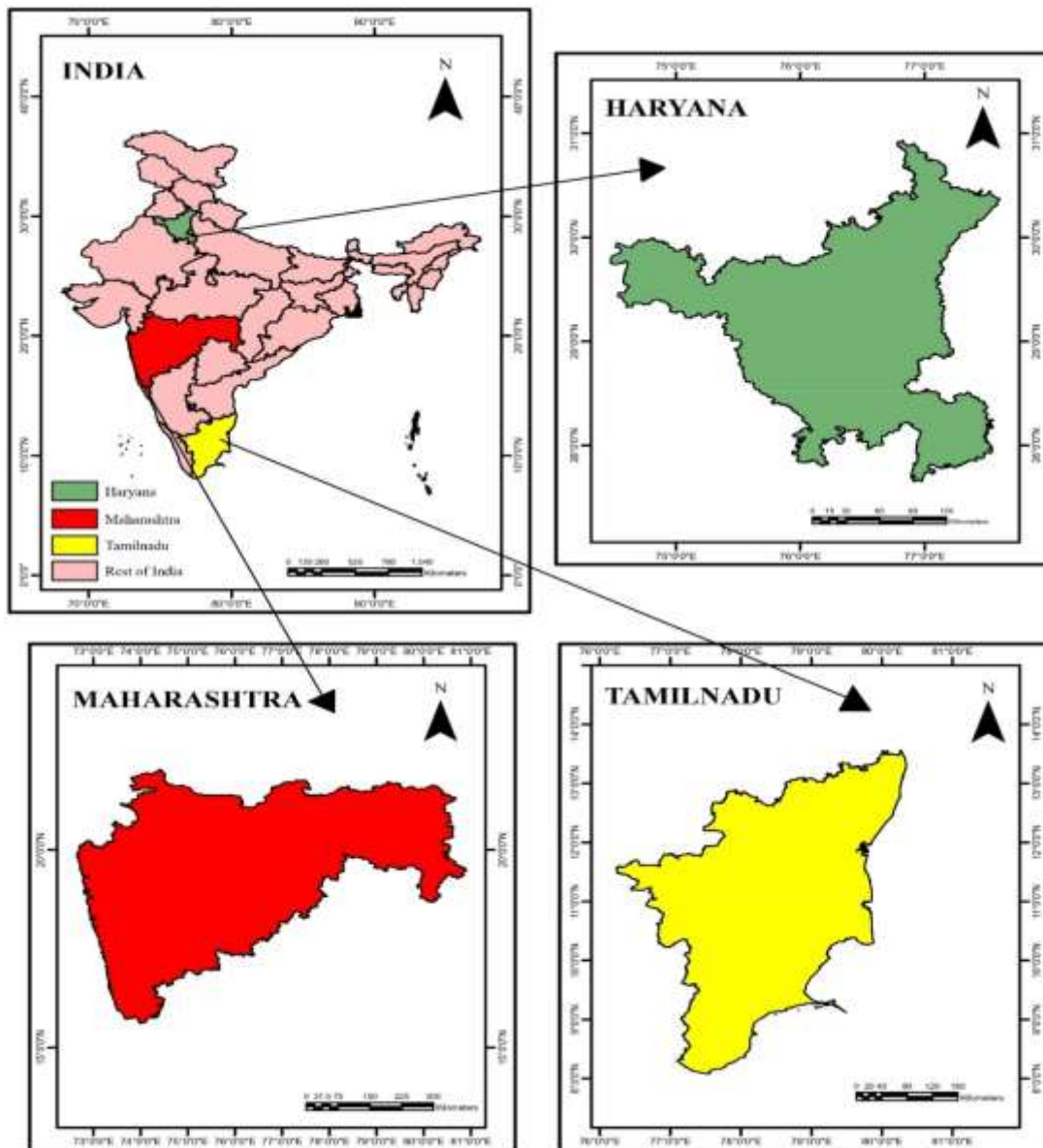
Regulating peri-urban areas is essential to achieving balanced, sustainable urban development. The major reasons include:

- **Control of Unplanned Urban Expansion** - To prevent haphazard growth, urban sprawl and unauthorised developments.

- **Protection of Agricultural Land** - To safeguard fertile farmland from indiscriminate conversion into non-agricultural uses.
- **Infrastructure Planning** - To ensure the timely provision of roads, water supply, sewerage, drainage and public services.
- **Environmental Conservation** - To protect wetlands, forests, water bodies and ecologically sensitive areas from degradation.
- **Land Use Management** - To promote compatible land uses through zoning and development controls.
- **Prevention of Land Speculation** - To regulate land markets and curb illegal colonisation and encroachments.
- **Promotion of Sustainable Development** - To balance economic growth, social equity and environmental sustainability in rapidly urbanising regions.

II. STUDY AREA

The present study focuses on the states of Haryana, Maharashtra and Tamil Nadu, which have experienced significant peri-urban growth due to rapid urbanisation, industrialisation and infrastructure development. These states represent diverse geographical regions of India and possess distinct planning frameworks for regulating urban expansion. Haryana, located in northern India, is known for its Controlled Areas Act around rapidly growing cities. Maharashtra, in western India, has a comprehensive regional planning system under the MRTP Act, 1966. Tamil Nadu, situated in southern India, regulates urban and peri-urban development through the Tamil Nadu Town and Country Planning Act, 1971. Together, these states provide an ideal basis for comparative analysis of peri-urban governance and land-use regulation.



Map 1: Location map of the Study Area

Source: Made by Research Scholar with the help of ArcGIS

SIGNIFICANCE OF THE STUDY

Peri-urban areas represent the most dynamic and contested spaces in contemporary India, where rural landscapes are rapidly transformed by urban expansion, infrastructure projects, industrial growth and real estate development. These zones serve as the frontline of urbanisation, yet they often remain inadequately governed and poorly understood. The significance of this study lies in its comparative examination of how different Indian states regulate these transitional spaces through diverse legislative and institutional frameworks. By identifying successful regulatory practices and persistent challenges, the study contributes to the broader discourse on sustainable urban

development, land-use governance and environmental protection. Furthermore, it provides valuable policy insights for managing future urban growth while balancing economic development, agricultural sustainability and social equity in rapidly urbanising regions of India.

OBJECTIVES

- i. To examine the legal frameworks regulating peri-urban development in selected Indian states.
- ii. To compare planning instruments and institutional mechanisms used for peri-urban governance.

III. RESEARCH METHODOLOGY

The study adopts a comparative, qualitative research design to examine the regulatory frameworks governing peri-urban areas in selected Indian states: Haryana, Maharashtra, and Tamil Nadu. The research focuses on analysing the legal provisions, planning mechanisms and institutional arrangements established under major state planning legislations. The study is based entirely on secondary data sources, including state planning acts, government notifications, development plans, policy documents, planning reports and scholarly publications. Key legislative documents, such as the Haryana Controlled Areas Act (1963), the Maharashtra Regional and Town Planning Act (1966) and the Tamil Nadu Town and Country Planning Act (1971), are critically reviewed. Comparative analysis is used to identify similarities, differences, strengths and challenges in peri-urban regulation across the selected states. ArcGIS software has been used for map-making.

Criteria for Selection of States

Haryana, Maharashtra and Tamil Nadu were selected due to their rapid urbanisation, significant peri-urban expansion and established regulatory frameworks for urban growth management. Maharashtra has the largest urban population and attracts substantial internal migration, resulting in extensive peri-urban development. Haryana, influenced by the National Capital Region (NCR), experiences rapid urban expansion and follows a unique Controlled Areas approach. Tamil Nadu is one of India's most urbanised states with strong industrial growth and a well-developed planning system. Together, these states provide diverse models of peri-urban regulation and governance.

LEGISLATIVE AND INSTITUTIONAL FRAMEWORK FOR PERI-URBAN REGULATION IN INDIA

Constitutional and Planning Provisions

The constitutional basis for urban and regional planning in India was significantly strengthened by the 74th Constitutional Amendment Act, 1992, which conferred constitutional status on Urban Local Bodies (ULBs) and emphasised decentralised urban governance. The Twelfth Schedule assigns functions related to urban planning, land-use regulation, roads, water supply, environmental protection and urban development to municipalities. Although land and urban planning remain State subjects under the Seventh Schedule of the Constitution, the constitutional framework encourages coordinated planning and democratic participation in urban governance. In addition, the Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines provide a national framework for land-use planning and

urban development, including peri-urban areas (MoHUA, 2015).

National Urban Policies

India's national urban policies have increasingly recognised the challenges of urban expansion and peri-urban transformation. Programmes such as the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Smart Cities Mission, AMRUT (Atal Mission for Rejuvenation and Urban Transformation) and the National Urban Policy Framework (NUPF) promote planned urban growth, infrastructure development and sustainable land-use management (MoHUA, 2018). The URDPFI Guidelines (2015) specifically emphasise urban-rural integration, metropolitan planning, environmental conservation and the management of urban fringes. These policy initiatives provide strategic direction for controlling unplanned development and promoting sustainable peri-urban governance.

Role of State Governments

State Governments play the most significant role in regulating peri-urban development because land, planning and local governance fall under their jurisdiction. States enact planning legislation, prepare development plans, regulate land-use conversion, establish planning authorities and enforce development control regulations. For example, Haryana regulates peri-urban growth through the Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963, Maharashtra through the Maharashtra Regional and Town Planning Act, 1966 and Tamil Nadu through the Tamil Nadu Town and Country Planning Act, 1971. State governments also oversee urban development departments, town and country planning organisations and metropolitan authorities responsible for implementing planning policies and controlling unauthorised development (Sivaramakrishnan, 2013).

Development Authorities and Planning Agencies

Development authorities and planning agencies are the primary institutions responsible for implementing peri-urban planning and development regulations. These agencies prepare master plans, regional plans, zoning regulations and development control rules while coordinating infrastructure development and land-use management. Examples include the Haryana Department of Town and Country Planning (DTCP), the Mumbai Metropolitan Region Development Authority (MMRDA), the Pune Metropolitan Region Development Authority (PMRDA) and the Chennai Metropolitan Development Authority (CMDA). Such institutions act as intermediaries between state governments and local bodies, ensuring planned urban expansion and effective regulation of peri-urban areas. Their effectiveness largely determines the

success of peri-urban governance and sustainable urban development (Aijaz, 2019; Narain, Benerjee and Anand, 2014).

REGULATORY MECHANISMS IN SELECTED STATES

Haryana

Haryana regulates peri-urban development through the Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963, which aims to prevent haphazard growth around expanding urban centres. The Act empowers the government to declare controlled areas and regulate land-use changes through development permissions and statutory development plans. It has been widely used around cities such as Gurugram, Faridabad, Sonipat and Rohtak.

Maharashtra

The Maharashtra Regional and Town Planning (MRTP) Act, 1966, provides a comprehensive framework for regional planning, zoning and development control. Regional Planning Authorities prepare regional and development plans to guide urban expansion, infrastructure development and land-use management in peri-urban areas.

Tamil Nadu

The Tamil Nadu Town and Country Planning Act, 1971, governs urban and peri-urban development through master plans and development control regulations. The Chennai Metropolitan Development Authority (CMDA) plays a significant role in managing metropolitan growth, coordinating infrastructure development and ensuring planned expansion in peri-urban regions surrounding Chennai.

IV. COMPARATIVE ANALYSIS OF PERI-URBAN REGULATORY FRAMEWORKS

A comparative analysis of peri-urban regulatory frameworks helps understand the similarities, differences, strengths and limitations of the planning mechanisms adopted by different states. It facilitates the evaluation of legal provisions, land-use controls, institutional arrangements and implementation practices, thereby identifying effective strategies for sustainable peri-urban development and growth management in India.

Table 1: Comparative Analysis of Peri-Urban Regulatory Frameworks in Selected States

Regulatory Aspect	Haryana	Maharashtra	Tamil Nadu
Legal Provisions	Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963	Maharashtra Regional and Town Planning (MRTP) Act, 1966	Tamil Nadu Town and Country Planning Act, 1971
Land Use Control Mechanisms	Declaration of Controlled Areas, Development Plans and Change of Land Use (CLU) permissions for regulating development in peri-urban areas.	Regional Plans, Development Plans, Town Planning Schemes and zoning regulations for planned land use.	Master Plans, Detailed Development Plans and zoning regulations for regulating urban and peri-urban growth.
Development Permission System	Prior permission from the Department of Town and Country Planning (DTCP) is mandatory for construction and land development within controlled areas.	Planning Authorities and Special Planning Authorities grant development permissions under the MRTP Act.	Planning permissions are issued by CMDA and local planning authorities under the Tamil Nadu Town and Country Planning Act.
Agricultural Land Protection	Agricultural land conversion is controlled through CLU approvals and restrictions within notified controlled areas.	Regional plans designate agricultural zones and regulate conversion through planning permissions.	Agricultural land is protected through land-use zoning and development control regulations.
Infrastructure Planning	Infrastructure development is integrated with Development Plans prepared by DTCP.	Regional Planning Authorities coordinate transport, housing and infrastructure development at regional scales.	CMDA integrates infrastructure planning with metropolitan and peri-urban development plans.

Environmental Safeguards	Green belts, controlled development zones and restrictions on unauthorised development near environmentally sensitive areas.	Environmental considerations are incorporated into the Regional and Development Plans.	Conservation zones, environmental regulations and sustainable land-use provisions are included in planning frameworks.
Institutional Structure	Department of Town and Country Planning (DTCP), Haryana; Haryana Shahari Vikas Pradhikaran (HSVP).	Directorate of Town Planning; Regional Planning Boards; MMRDA, PMRDA and Municipal Planning Authorities.	Chennai Metropolitan Development Authority (CMDA) and Directorate of Town and Country Planning (DTCP).
Major Strength	Strong regulatory control through Controlled Area provisions and CLU mechanism.	Comprehensive regional planning approach with statutory regional plans.	Integrated metropolitan planning through CMDA and statutory master planning framework.
Major Challenge	Unauthorised colonies and enforcement-related issues.	Coordination among multiple planning agencies and rapid metropolitan expansion.	Urban sprawl and infrastructure pressures in expanding metropolitan regions.

Source: Compiled and synthesised from the statutory provisions of the Haryana Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963, MRTP Act (1966), Tamil Nadu Town and Country Planning Act (1971)

SUGGESTIONS AND RECOMMENDATIONS

Strengthening Legal Frameworks

- i. Update planning laws to address urban sprawl and unauthorised development.
- ii. Strengthen enforcement mechanisms and penalties for violations.
- iii. Ensure coordination between state and local planning regulations.

Integrated Peri-Urban Planning

- i. Prepare dedicated peri-urban development plans.
- ii. Promote coordination among urban and rural planning agencies.
- iii. Adopt a regional approach to manage urban expansion.

GIS-Based Monitoring Systems

- i. Use GIS and remote sensing for monitoring land-use changes.
- ii. Develop digital databases for planning and development control.
- iii. Identify unauthorised developments through regular monitoring.

Public Participation

- i. Encourage stakeholder involvement in planning processes.

- ii. Conduct public consultations and awareness programmes.
- iii. Enhance transparency in planning decisions.

Sustainable Land Use Strategies

- i. Protect agricultural land and environmentally sensitive areas.
- ii. Promote compact and infrastructure-oriented development.
- iii. Encourage sustainable and climate-resilient land-use practices.

These measures can strengthen peri-urban governance and support sustainable urban development in India.

V. CONCLUSION

Peri-urban areas have emerged as critical zones of transformation in India due to rapid urbanisation, industrial growth and infrastructure expansion. The comparative analysis of Haryana, Maharashtra and Tamil Nadu reveals that each state has developed distinct regulatory mechanisms to manage peri-urban development through statutory planning frameworks, land-use controls and institutional arrangements. While Haryana emphasises controlled area regulations, Maharashtra adopts a regional planning approach and Tamil Nadu relies on metropolitan planning mechanisms. Despite these efforts, challenges such as unauthorised development, agricultural land

conversion, environmental degradation and weak enforcement continue to affect peri-urban governance. The study highlights the importance of strengthening legal frameworks, promoting integrated planning, adopting GIS-based monitoring systems, encouraging public participation and implementing sustainable land-use strategies. Effective regulation of peri-urban areas is essential for achieving balanced urban growth, protecting natural resources and ensuring sustainable regional development in India.

REFERENCES

- [1] Aijaz, R. U. M. I. (2019). India's peri-urban regions: the need for policy and the challenges of governance. *ORF Issue Brief*, 285, 1-12.
- [2] Directorate of Town Planning, Maharashtra. (2024). *Regional Plans under MRTTP Act, 1966*. Government of Maharashtra.
- [3] Follmann, A. (2022). Geographies of peri-urbanization in the global south. *Geography Compass*, 16(7), e12650.
- [4] Follmann, A., Hartmann, G., & Dannenberg, P. (2018). Multi-temporal transect analysis of peri-urban developments in Faridabad, India. *Journal of Maps*, 14(1), 17-25.
- [5] Government of Haryana. (1963). *Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963*. Department of Town and Country Planning, Haryana.
- [6] Government of Maharashtra. (1966). *Maharashtra Regional and Town Planning Act, 1966*. Government of Maharashtra.
- [7] Mcgee, T. (1991). The emergence of desakota regions in Asia: expanding a hypothesis.
- [8] Ministry of Housing and Urban Affairs (MoHUA). (2015). *Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines*. Government of India.
- [9] Ministry of Housing and Urban Affairs (MoHUA). (2018). *National Urban Policy Framework*. Government of India.
- [10] Narain, V., Banerjee, P., & Anand, P. (2022). Shadow of Urbanization: The Periurban Interface of Five Indian Cities in Transition. *East-West Center*.
- [11] Paul, S., Rout, S., Behera, R. N., & Mallick, S. K. (2025). How is peri-urban research evolved towards sustainable urban planning in last five decades: a quantitative analysis and systematic review. *Frontiers of Urban and Rural Planning*, 3(1), 19.
- [12] Rahul, & Kaur, R. (2024). Peri-urban delineation and urban expansion quantification from 2001 to 2021 of Hisar city, India, using geospatial techniques. *International Journal of Geoinformatics*, 20(4), 86–99.
- [13] Sivaramakrishnan, K. C. (2013). Revisiting the 74th Constitutional Amendment for better metropolitan governance. *Economic and Political Weekly*, 86-94.
- [14] Government of Tamil Nadu. (1971). *Tamil Nadu Town and Country Planning Act, 1971*. Chennai Metropolitan Development Authority.
- [15] Chennai Metropolitan Development Authority (CMDA). (2024). *Metropolitan Planning and Development Framework*.