India's Peri-Urban Regions: The Need for Policy and the Challenges of Governance

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ABSTRACT Population relocations driven by economic reasons or caused by land speculation have led to people settling in peri-urban areas (or areas in the periphery of the urban). The in-migration of population and emergence of new activities is transforming such areas, as seen in changes in land use and occupational patterns, reduced farm activities, and growth of built structures. Inadequate planning and governance of peri-urban areas by local governments is resulting in various problems. With India urbanising and the scarcity of land in megacities, the pressure on peri-urban areas will only grow further. This brief calls on India's national government to formulate a broad policy for planned spatial growth of megacities to ensure the sustainable development of the country's peri-urban areas. It builds understanding of the deficiencies in peri-urban areas, and gives suggestions for overcoming these.

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INTRODUCTION

Many people wishing to migrate to cities for engaging in economic activity or for pursuing other interests are unable to do so because living costs in cities are high. A more reasonable option for them is to reside in rural areas that are situated just outside city limits, or in the periphery within city limits. There are also instances of population relocation to peripheral areas of cities due to development of planned townships. Such population movements and concentration of population, triggered by economic reasons or caused by land speculation, have led to the occurrence of changes and problems in peri-urban (or peripheral urban) areas.

Peri-urban areas can be described as fringe areas of cities or adjoining rural areas, which are intrinsically linked with the city economy, experience constant transformation, and are characterised by a mix of rural and urban activities. Ravetz, Fertner and Nielsen describe peri-urban areas as "a new kind of multi-functional territory."[1] The areas could be imagined as intermediary zones overlapping rural and urban jurisdictions (See Figure 1) and are inhabited by the native population—who are normally engaged in agro-based activities, livestock rearing, and fishing—as well as by a migrant population who pursue non-farm interests. Narain, Anand and Banerjee observe, "Small farmers, informal settlers, industrial entrepreneurs, and urban middle class commuters may all co-exist in the same territory, though with different and competing interests, practices and perceptions."[2] There are also examples of peri-urban areas which were earlier situated at a distance from the city core, being engulfed, due to statutory extension of city boundaries (or urban spatial expansion).

In India, the increase of 'census' towns in close proximity of 'statutory' towns may also be understood as peri-urban growth. However, unlike statutory towns, which are governed by urban local governments (i.e., municipalities), the census towns, which lie

Figure 1: A Visualisation of urban and peri-urban areas
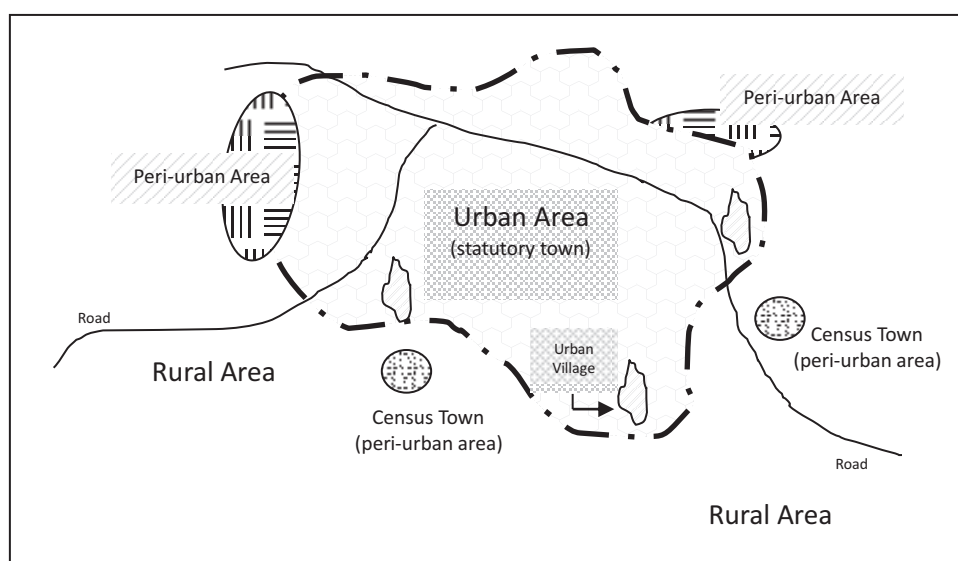
Source: Author's own.

outside urban limits but display urban characteristics are administered by rural local governments (i.e., *panchayats*). Local politics and vested interests are important reasons for this anomaly.

The Census office under the national Ministry of Home Affairs, declares as a census town any settlement fulfilling the urban definition criteria (pertaining to population size[3] and density[4], and share of non-agricultural male workers[5]). India had 3,892 census towns in 2011 with a population of 54 million (or 14 percent of India's total urban population). Between 2001 and 2011, census towns grew by 186 percent, as against a six-percent decadal increase in the number of statutory towns. Pradhan observes that at the all-India level, "About 37 percent of new census towns declared in 2011 are concentrated around major metropolises."[6] The census office uses these criteria to record the extent of urbanisation occurring in the country. Further, the national Ministry of Housing and Urban Affairs has called for the establishment of urban local governments in census towns for their efficient management.[7] However, since urban and rural development, as well as governance, are responsibilities of state/local governments, the state governments classify settlements as 'urban' or 'rural' based on their own criteria, which are not clearly spelt out. Further analysis by this author reveals the following:[8]

• Since all central government interventions and financing for development of settlements are based on their status as either 'urban' or 'rural', settlements are converted into towns or villages by state governments irrespective of the local area characteristics they possess.

• If a settlement is declared 'urban', it is subjected to the application of rules and regulations, building by-laws, development controls, and taxation, in order to ensure planned growth and development. For this reason, state governments generally avoid converting villages into towns as they feel that application of urban laws will make villagers unhappy, and the political leadership at the state/local level would become unpopular among the rural electorate.

The absence of urban governments in census towns is leading to poor quality of life, as the *panchayats* are not equipped properly to deal with the changing characteristics caused by urbanisation.

In the dynamic setting that peri-urban areas display, many societal interests are met. The in-migration of population and emergence of new income-generating activities leads to a major transformation of the peri-urban area. This is visible in the form of increasing population densities, changes in land use and occupational patterns, reduced farm activities, and growth of houses, commercial and industrial establishments. For example, with the inflow of migrants, the local population begins to lease out their spare premises for residential or commercial uses. The growing demand for work and residential spaces also leads to new constructions. Furthermore, numerous service providers begin to operate to cater to the various needs of the migrant population.

STATEMENT OF PROBLEM AND RATIONALE FOR STUDY

Both, the native population and migrant settlers in peri-urban areas derive various

benefits from their proximity to cities. However, the adverse impacts of urbanisation are also visible in peri-urban areas (this will be discussed further in succeeding sections of this brief). Therefore, it may be useful that along with developing India's villages and small/medium towns—which will help in reducing migration to megacities/urban agglomerations and ensure a balanced distribution of the country's population—immediate efforts must be made to understand and manage the transformation occurring in peri-urban areas. Such efforts will help in creating better living and working conditions in peri-urban areas.

Aim, method and scope of study

This analysis aims to build understanding of the issues and challenges facing peri-urban areas in India, and give suggestions for overcoming these. A review of existing literature is used to assess the following:

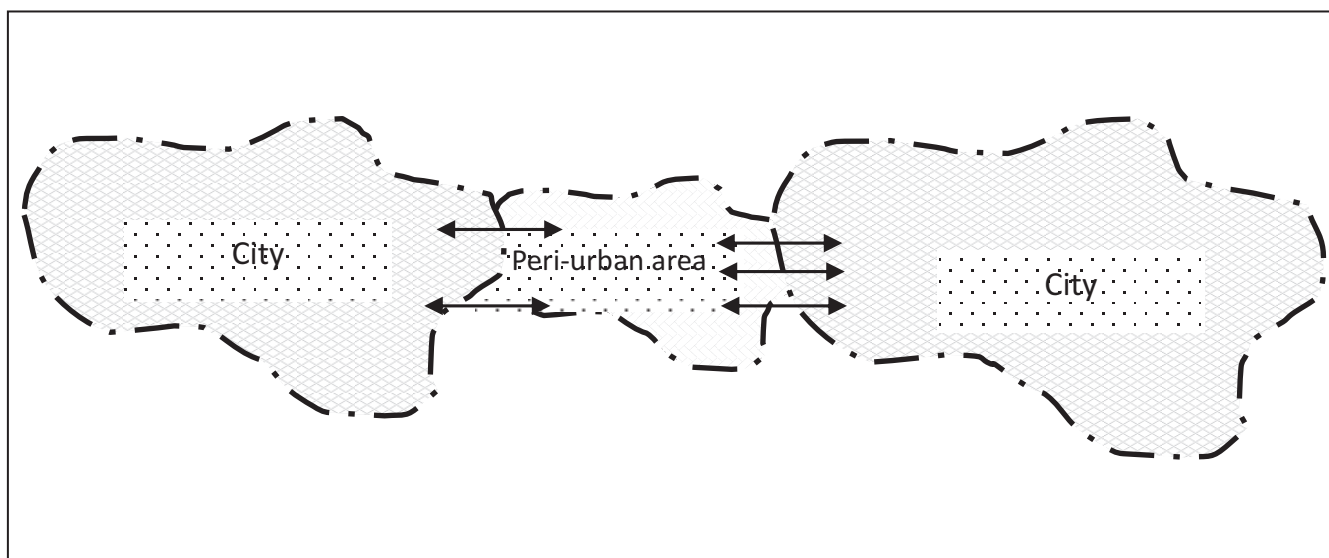(i) Changes and problems occurring in peri-urban areas of India; and

(ii) Approach of the national, state and local government agencies towards planning and management of peri-urban areas.

The author's observations of conditions prevailing in select peri-urban areas of India are also documented to offer a wider understanding of the issue. These include peripheral areas of Delhi and Gurugram in the National Capital Region, and Chennai in the southern state of Tamil Nadu, all three of which this author has empirically examined.

ISSUES AND PROBLEMS IN PERI-URBAN AREAS

Enough evidence exists that an eco-system is bound to be affected when its carrying capacity is pushed to the limits. This is true for peri-urban areas, too. India's existing peri-urban areas are undergoing a transformation and are under tremendous stress due to pressures created by urbanisation (See Table 1 and Figure 2).

Figure 2: Commonly observed problems and their causes

Source: Author's illustration; literature survey.

Table 1

Issues	Causes
• Uncontrolled growth • Unregulated/haphazard development • Abysmal services (water, sanitation)	• Absence of statutory development plans, laws, land use maps & land monitoring systems
• Increase in population density/buildings	• Absence of land/building/ development controls
• Unsafe high-rise built structures • Forced land acquisition by mafia	• Fragmented & uncoordinated planning
• Shrinking open spaces • Changing land use	• Lack of clarity in administrative boundry & areal extent
• Delays in project implementation due to illegal land occupancy	• Administrative unpreparedness & inferior management of the area
• Forced eviction of unauthorised occupants	• Prohibition to apply urban byelaws
• Displacement of native population • Reduced food grain & vegetable produce; rising food grain prices	• Unplanned dispersal of industries & other economic activities from city

Source: Author's illustration; literature survey.
Note: The causes for occurrence of problems mentioned in this table may not be compared row by row.

Unregulated development

Uncontrolled growth at the periphery of cities is occurring, as seen in the increasing population densities and haphazard development of built structures (residential, commercial, industrial) that fail to meet building safety norms. The local administration agencies are neither vigilant, nor equipped to prevent such violations. Further complications are created by the ambiguity in administrative boundaries and areal extent of peri-urban areas. The National Capital Region (NCR) plan for 2021, for example, refers to non-existence of proper legislation, planning and development controls in rural areas close to Delhi, which has led to unauthorised conversion of rural land to urban use, and the growth of unplanned urban/industrial activities.[9] In a study of a peri-urban area of Indore city in Madhya Pradesh, the authors observed a lack of statutory development plans, development controls and building by-laws, land use maps and institutional monitoring systems.[10] Even in the Mumbai region in the state of Maharashtra, for which a statutory regional plan is prepared by the Mumbai Metropolitan Region Development Authority (MMRDA) to control future development, the existence of fragmented and uncoordinated planning practices result in unregulated development in peri-urban areas.[11]

Such deficiencies in planning and governance leave these areas open for the rampant construction of illegal structures by individuals and groups. Private real estate developers are also able to convince villagers with attractive prices to acquire, gain control and hold agricultural land, and carry out illegal sub-division and disposal when land values increase. There are cases of peri-urban areas being colonised by private builders and public sector agencies that cater only to the

interests of influential groups.[12] In the peri-urban areas of Hyderabad city in Telangana, the Dalit community lost their lands to the real estate brokers who misled them.[13] Similarly, villagers in peri-urban areas of Chennai are aggrieved over the acquisition and exploitation of their lands for residential and industrial purposes by different players in the real estate market. In this regard, Gajendran notes that many players accumulate capital and circulate real estate products (such as housing), and such initiatives adversely affect the lives of the native dwellers.[14]

City development authorities are unable to sanction building plans in peri-urban areas because building by-laws are not applicable in such areas.[15] In Khora, a census town (2011 population: 190,005) situated near Delhi, the height of residential structures has gone up on small plots because no building regulations are applicable.[16] In Jaipur in Rajasthan, informal development has occurred in peri-urban areas due to the absence of a suitable plan and the inefficient management of the area.

Even within planned fringe areas of cities, unregulated development is occurring. A study of a peri-urban area of Faridabad city in NCR reveals application of inappropriate planning norms on a fast urbanising city. Thus, "every centre is growing in isolation without integrating the growth with other nearby centres."[17]

Population displacement

The shrinking in size of vacant lands and open spaces due to illegal constructions in peri-urban areas also affects implementation of local and regional infrastructure projects. In the National Capital Region, difficulties have been faced in laying down a regional circular road corridor around Delhi because land is occupied by unauthorised buildings. From the time of the announcement of the road project and until its implementation, there have been a series of protests by the population affected by the project.[18] The households were unwilling to be relocated because of the huge investment made by them on constructing their homes. However, since the residents were unauthorised occupants of land, they were eventually evicted. The process of relocation has, however, not been smooth and many families are unhappy with the relocation to a new place.[19]

In many places, due to the growing demand for housing, land has been legally acquired by private developers for building planned townships adjacent to large cities for the low, middle and high-income groups. This practice—which is only growing over time—often displaces the native population comprising small farmers and landless labourers, and causes unemployment due to changing land uses.[20]

Slum-like conditions

Another negative consequence is the emergence of unauthorised (and therefore unplanned) colonies in the neighbouring areas where basic services are abysmal and the quality of life is comparable to that in slums. There is, however, a close relationship between the two areas: residents of the planned colonies look to the neighbouring unplanned colonies for hiring domestic help (e.g., cleaners, gardeners, and drivers).

Indiscriminate land use conversion

With regard to changes in land use, it is observed that agricultural land is indiscriminately being converted to urban use, resulting in reduced food grain and vegetable production. This affects local and regional supply of food. Marshall and Randhawa in this regard suggest, "Policy and planning must support those fragile communities engaged in peri-urban agriculture while protecting the environmental services on which they depend."[21] Many cities are solely dependent on the rural food-producing hinterland, and a reduced supply from the neighbourhood implies food being brought from farther distances, and in turn, consumers paying more. This problem has been overcome in some cities with the creation of national markets and distribution systems (such as Safal retail outlets).

A study on the changing land use pattern in and around Delhi found a decline in agricultural land over time due to the pressures of urbanisation.[22] These changes have created a negative impact on the livelihoods of the farming community as well as the poor people who depend on these lands for cattle grazing and collection of fuel wood. In the Hubli-Dharwad region of south India, other types of changes are being observed. For one, with a growing proportion of the farming community exploring and engaging in urban activities in view of higher economic returns, weightage is given to cultivation of less labour-intensive crops.[23] Karmakar in an empirical study of census towns in West Bengal describes the shifts from agriculture to household industry and other sectors, such as construction, trade and transport in some census towns. People who are unable to cope with the changes in their livelihoods end up facing reduced incomes.[24] Similar land use changes are observed in peri-urban areas of Jammu city in the state of Jammu & Kashmir, where urban sprawl has significantly reduced farming and priority is being given to non-agricultural economic activities.[25]

Abysmal water, sanitation and environment

The other set of problems pertain to infrastructure and service availability in peri-urban areas. With respect to water, peri-urban areas generally remain uncovered by formal service delivery systems (piped and metered supply). Thus, residents have to make their own arrangements. The practice of collecting water (often from untreated sources) to meet daily requirements is time consuming and affects income as well as health. Where peri-urban developments have spread over adjoining rural and urban areas, the concerned rural and urban development departments do not invest and work together for the creation of the required infrastructure due to jurisdictional and land ownership issues. The high requirement of water for a variety of purposes within peri-urban areas also reduces the quantities available for the native population, for their crops, and livestock. The availability is also affected by the depletion of surface water sources, such as rivers and lakes which tend to be exploited beyond their replenishing capacity to meet the city's water requirements.

The other important aspect is the quality of surface water, on which birds and water species thrive, which act as rainwater reservoirs and

utilised by the poor communities. These water sources have become receivers of untreated domestic, commercial and industrial liquid and solid waste. The vulnerability of the population living in peri-urban environments may be understood from the damage caused to their agricultural lands, food crops and health due to the disposal of harmful industrial effluents in canals from where water is obtained for crop cultivation. In Delhi, for instance, disposal of the city's untreated sewage and effluents in river Yamuna causes major harm to peri-urban poor communities that are dependent on the river for a variety of purposes. There are also instances of huge surface water bodies, on which animal species thrive, filled with debris to make way for new constructions. This phenomenon is prominent on the outskirts of Chennai.

Adequate arrangements for surface water drainage have not been made which causes waterlogging during the rainy season. Such conditions affect daily activities such as walking and cycling to work. Besides causing harm to the road surface, the waterlogged areas also become breeding grounds for mosquitoes, posing health hazards to the population.

Inefficiencies in solid waste management are prominent too. In populous cities, the capacities of dumping sites are exhausted and the managing agencies are struggling with waste disposal. Institutional inefficiencies in waste planning and handling is an important reason for the occurrence of the problem. City governments thus see vacant lands in fringe areas as ideal places for dumping solid waste.[26] Within peri-urban areas (such as an urban village located on the periphery of a city), there

are notable irregularities in waste collection and disposal.[27] Thus, deterioration is seen in the environment. The untreated waste dumped on agricultural land, in water bodies, and along roads by the native population/city agencies, reduces soil productivity, contaminates surface and ground water and seriously affects public health. In Ahmedabad, following a government policy, the poor have been relocated from the city centre to a peripheral area of Ganeshnagar, which is near a major open waste dumping site.[28]

Poor mobility and connectivity

Mobility within peri-urban areas and proper connectivity of the peri-urban areas with the city and surrounding settlements by suitable transport networks and facilities are the other matters of concern. Generally, the surface of local roads and streets is in bad condition, proper pavements for walking and vacant spaces for motor vehicle parking are unavailable, and, due to their peripheral location, the areas are not served adequately by convenient, safe and comfortable public transport services. These are important reasons for the phenomenal growth of private motor vehicles, in turn causing traffic congestion and air pollution.

In peri-urban areas situated between two adjoining cities, namely Delhi and Gurugram, proper road corridors have not been created for connecting one city with the other at various points. Thus, thousands of motorists going from one city to the other every day for work or other reasons pass through the narrow and poorly maintained corridors (rural roads) available in peri-urban areas. The high density of motor vehicles, compounded by

violations of traffic rules, result in heavy traffic and long commutes. The response of the administration towards preventing the occurrence of such problems is minimal. Suitable and prompt grievance redressal mechanisms have also not been created for the citizens. The traffic police, responsible for traffic management, mostly remain absent in peri-urban areas, nor can be easily contacted on phone or through their website. Even when contacted, the response is unsatisfactory.

POLICY INITIATIVES AND REFORM MEASURES

As India is urbanising, concern is growing over the adverse conditions created by uncontrolled growth and unregulated development in peri-urban areas. The government's approach and response over the years have been gleaned from the following:

- policy documents (i.e., erstwhile Five-Year plans of the Planning Commission);

- legislations (e.g., Seventy-fourth Constitution Amendment Act, 1992);

- programmes/schemes (Jawaharlal Nehru National Urban Renewal Mission, 2005[#]; Atal Mission for Rejuvenation and Urban Transformation, 2015[@]; National Rurban Mission, 2016[^]); and,

- Initiatives of town and country planning departments, regional planning and development authorities, state and local governments.

The recommendations for more effective governance of peri-urban regions include:

- planning for peri-urban areas;

- providing a rational regional land use pattern;

- formulating an effective regulatory regime;

- constitution of Metropolitan Planning Committees (MPCs);

- provision of affordable housing, basic services, regional transport corridors and facilities; and,

- developing a cluster of rural settlements/ growth centres including census towns.

The state government of Uttarakhand, for example, is taking steps to merge peri-urban areas with urban local bodies. This will entitle these areas to civic amenities such as piped water supply, sewerage network, and solid waste management. This work, estimated to cost some INR 35 billion, is being supported by the Asian Development Bank (ADB) and the Indian government. Regulating the construction of commercial establishments in peri-urban areas is also part of the plan.[29] The

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\# The Mission was launched in 2005 to encourage reforms and fast track planned development of 65 cities. It focused on efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of urban local bodies/parastatals towards citizens. The Mission came to an end in 2014-15.

@ The Mission aims to provide basic services (such as water supply, sewerage, urban transport, parks) to households and build amenities in cities to improve the quality of life. It covers 500 cities with a population of over 100,000.

^ The objective of the Mission is to develop a cluster of villages by provisioning of economic, social and physical infrastructure facilities.

state government is also working with the national government and the World Bank for increasing access to improved water supply services in peri-urban areas of the state, where over 700,000 people reside.[30]

In the farm sector, the Union Ministry of Agriculture and Farmers Welfare plans to increase production in peri-urban areas and thus improve supply of food to cities. Peri-urban cultivation and diversification of food resources for the urban population, according to the Ministry, will help in climate change adaptation and price stabilisation.[31]

CONCLUSION

An appraisal of conditions in various peri-urban areas of India reveals a transformation in character and emergence of different kinds of problems due to growth, which affect people's lives and the environment in numerous ways. While Indian cities and towns too display problems and deficiencies, the peri-urban areas are worse in this regard. The problems are occurring because peri-urban areas are not receiving proper attention from the administrative agencies, i.e., effective legal mechanisms for planning, management, and governance of peri-urban areas have not been created. Continuous growth of built structures over urban and rural jurisdictions could be an important reason for lack of ownership of peri-urban areas by the rural and urban administration. Such governance deficit is exploited for different purposes.

A second area of concern is the inability of the rural/urban governments to deal with the changing circumstances in peri-urban areas. Such deficiencies give opportunity to influential groups and individuals to operate in an undesirable manner. The absence of laws, rules and mechanisms also creates difficulties for the local and regional authorities to control wrongdoings.

Cities and urban agglomerations in India will continue to attract people and investments, and the pressure on peri-urban areas will likely only grow further. Moreover, with scarcity of land and housing in some megacities, the peri-urban areas will experience growth as a consequence. In view of these emerging trends, and to benefit from the urbanisation phenomenon, it is necessary for the national government to formulate a broad policy for planned spatial growth of megacities in order to ensure sustainable development of peri-urban areas in India. Ideally, the forthcoming National Urban Policy of India must address these concerns. The state governments too must develop their state-specific policies and regulations in this regard based on their urbanisation patterns. In doing so, it is imperative to ensure that the vulnerable groups and their social and cultural practices and economic activities are protected, and the actions of the government or individuals do not disturb the environment.

The respective local governments (rural and/or urban) within whose jurisdictions the peri-urban area lies should have with them a guiding document (such as a local area plan) that helps in future planning and development of the peri-urban area. The plan and guidelines should be informed by data and provide clarity on every aspect of the peri-urban area, such as land use, building construction, employment, energy, infrastructure, services, environment, and safety. Further, the local governments should be prepared by national and state agencies to handle such responsibilities

efficiently, and public-private-community partnerships must be explored. The local government agencies also ought to create proper grievance redressal services for the citizens residing in peri-urban areas. The adoption of a regional planning and development approach can be an alternate strategy to address the issue. ◉RF

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ENDNOTES

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