



Impact Of Urbanization In Indore On Surrounding Region

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Abstract : As urbanization is increasing in every city of the country, same is the case with Indore city in the state of Madhya Pradesh. Ever growing population and urbanization leads to over utilization of the resources and increase in human settlement with irregularity, resulting in difficult urban planning and management plans. Land has been converted for urban purposes as a result of urban growth without the adoption of a formal development plan. The objective of this study is to identify and analyze the urban growth of Indore, the commercial capital of Madhya Pradesh state of India.

Keyword: Urbanization

Introduction

The population shift from rural to urban areas, corresponding fall in the number of people living in rural areas, and the ways in which societies adjust to this change are all referred to as urbanization. It is primarily the process by which villages and cities are created and enlarge as more people move into urban centres to live and work.

A myriad of contemporary issues facing humankind are frequently caused by urbanization. The terms which are sometimes used interchangeably, urbanization and urban growth should be separated. Urbanization is the percentage of the entire country's population that resides in urban areas, whereas urban growth is the precise number of people who live there. By 2050, 86% of the developed world and 64% of the developing world, respectively, are expected to be urbanized. For the majority of metropolitan dwellers, this is anticipated to result in land scarcities, shortage of drinking water, playgrounds, and other amenities. By 2050, there will be an estimated 3 billion metropolitan residents worldwide, with the majority of them living in Africa and Asia. The United Nations also predicted that cities will account for almost all of the increase in global population between 2017 and 2030, adding about 1.1 billion new urban residents in that time. Urbanization is anticipated to have a negative long-term effect on the quality of living.

Urban planning and urbanization

Urban planning is a technical and political process that focuses on the design and development of land use and the built environment, including air, water, and the infrastructure that enters and exits urban areas, such as transportation, communications, and distribution networks, as well as the accessibility of these networks. Urban planning is also known as town planning, city planning, regional planning, or rural planning. In the past, a top-down approach was used to plan the built environment of human communities. The public's welfare was the main priority, and this included taking into account issues like effectiveness, hygienic conditions, environmental preservation and use, as well as how the master plans would affect social and commercial endeavours. Urban planning currently emphasises the use of planning as a tool to improve people's health and well-being while preserving sustainability norms. It places a priority on the social and environmental bottom lines. When the negative economic and environmental effects of the earlier models of planning became clear in the late 20th century, sustainable development was added as one of the main goals of all planning initiatives. Similar to this, urban planners in the early 21st century were greatly influenced by Jane Jacobs' writings on legal and political perspectives that emphasise the interests of residents, companies, and communities, which prompted them to adopt a more thorough approach to resident experiences and demands.

Urban planning provides solutions to the issues of how people will live, work, and play in a particular area, directing orderly growth in urban, suburban, and rural areas. Urban planners are primarily responsible for the planning of settlements and communities, but they are also accountable for the efficient transportation of goods, resources, people, and waste; the distribution of necessities like water and electricity; a sense of inclusion and opportunity for people of all kinds, cultures, and needs; economic

growth or business development; improving health; and protecting areas of natural environmental significance that serve as a buffer from other areas of development.

The fields of civil engineering, building, human geography, politics, social science, and design sciences all play a role in urban planning. Research and analysis, strategic planning, engineering and architecture, urban design, public involvement, policy recommendations, execution, and management are all important to urban planners. It has a direct connection to urban design, and some urban planners create plans for buildings, parks, streets, and other urban areas. To accomplish strategic, policy, and sustainability goals, urban planners collaborate with professionals in the related disciplines of civil engineering, landscape architecture, architecture, and public administration. Urban planning is a broad subject that encompasses a number of related disciplines, including zoning, economic development, environmental planning, and transportation planning. A thorough knowledge of the planning zonal codes and penal codes is necessary to create the plans.

About Malwa Region

In terms of geology, the volcanic highland to the north of the Vindhya Range is referred to as the Malwa Plateau. It also alludes to the former state of Madhya Bharat, which was later politically and administratively merged with Madhya Pradesh. Currently, the historic Malwa region includes districts in western Madhya Pradesh and portions of south-eastern Rajasthan.

The majority of the Malwa population works in agriculture. The area has historically been one of the world's major opium growers. Other significant crops include wheat and soybeans, and a significant industry is textiles.

The term "Malwi" is used to refer to residents of the Malwa region.

Indore is the capital and largest city of Madhya Pradesh, India. Both the Indore District and the Indore Division have it as their administrative hub. It is recognised as a centre for education because it is the only city in the state to have campuses for both the Indian Institute of Technology and the Indian Institute of Management. It has the highest elevation among the major cities of Central India and is situated on the southern edge of the Malwa Plateau, at an average altitude of 553 metres (1,814 feet) above sea level. The city is located 190 kilometres (120 miles) west of Bhopal, the state capital. In 2011, the population of Indore was found by the census to be 2,170,295 (municipal corporation) and 1,994,397 (urban agglomeration). The central province's largest city, Indore, has the highest population density yet barely has a land area of 530 square kilometres. According to the Swachh Survekshan Report 2022, which is released by MoHUA (Ministry of Housing and Urban Affairs) and the largest urban sanitation and cleanliness study ever, for the sixth year in a row, Indore is the cleanest city in India.

The Madhya Pradesh Stock Exchange is located in Indore's business area, which serves as the state's financial centre.

Indore is one of the 100 Indian cities that will undergo a smart city transformation as part of the Smart Cities Mission. It qualified for the first round of the Smart Cities Mission and was selected as one of the first twenty cities to be developed as Smart Cities. Indore has participated in Swachh Survekshan since it began, and in 2016 the city was placed 25th.

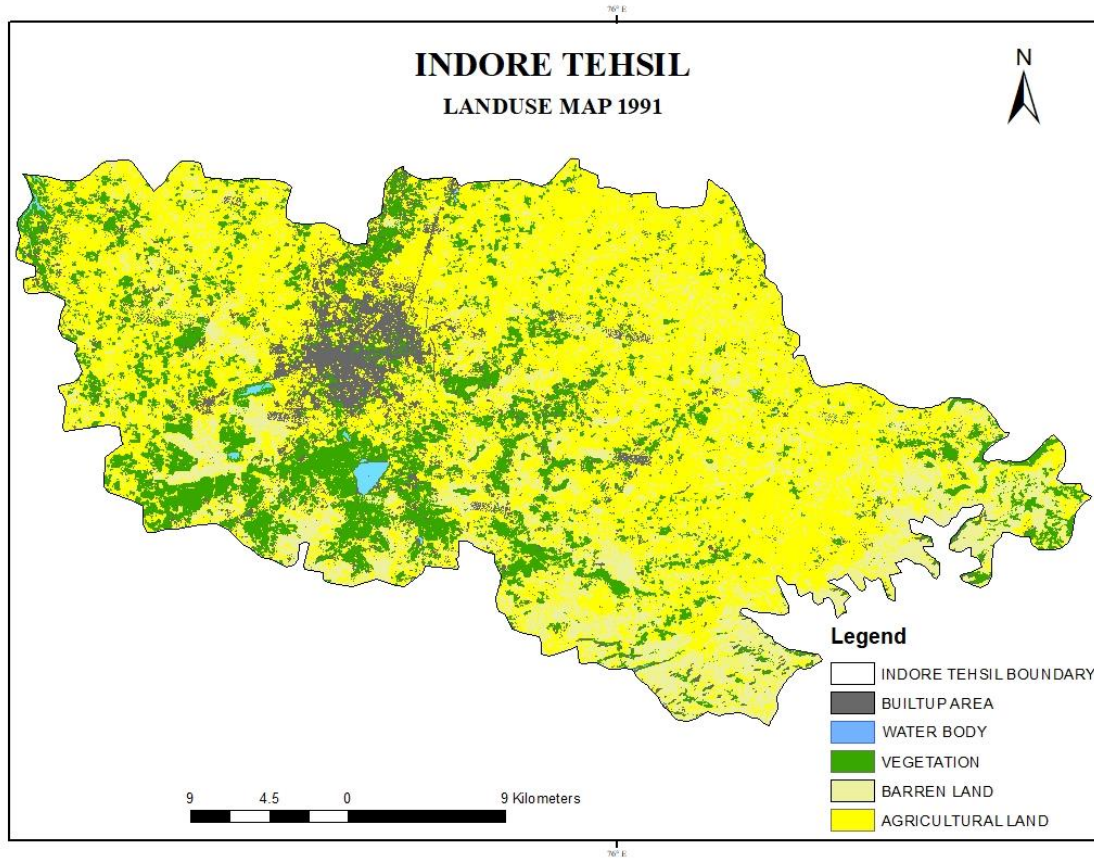
According to the Swachh Survekshan, it has been named India's cleanest city six years in a row for the years 2017, 2018, 2019, 2020, 2021, and 2022. Under Swachh Survekshan 2021, Indore has also been recognised as the nation's first "water plus" city. The International Clean Air Catalyst Programme only selected Indore as one of the Indian cities. The Madhya Pradesh Pollution Control Board and the Indore Municipal Corporation are supporting the five-year plan to clean up the air in the city.

Growth and Development of Indore Urban Area

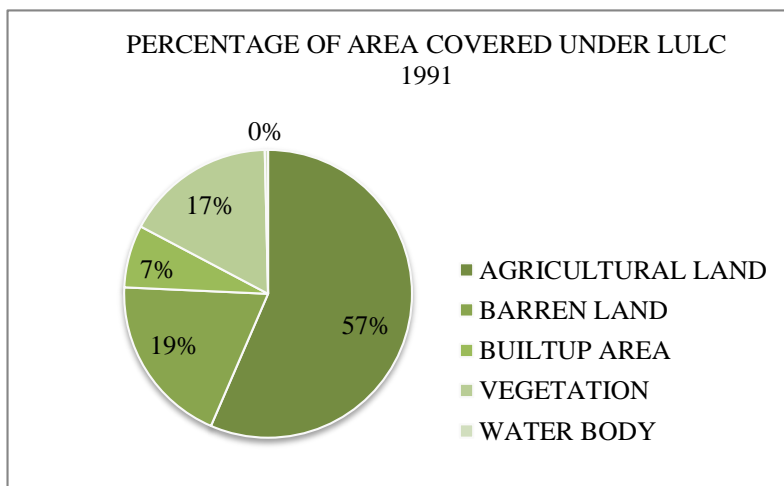
Indore city's origin was marked by the presence of Indreshwar Temple on the bank of river Saraswati, earlier it was a small riverside village.

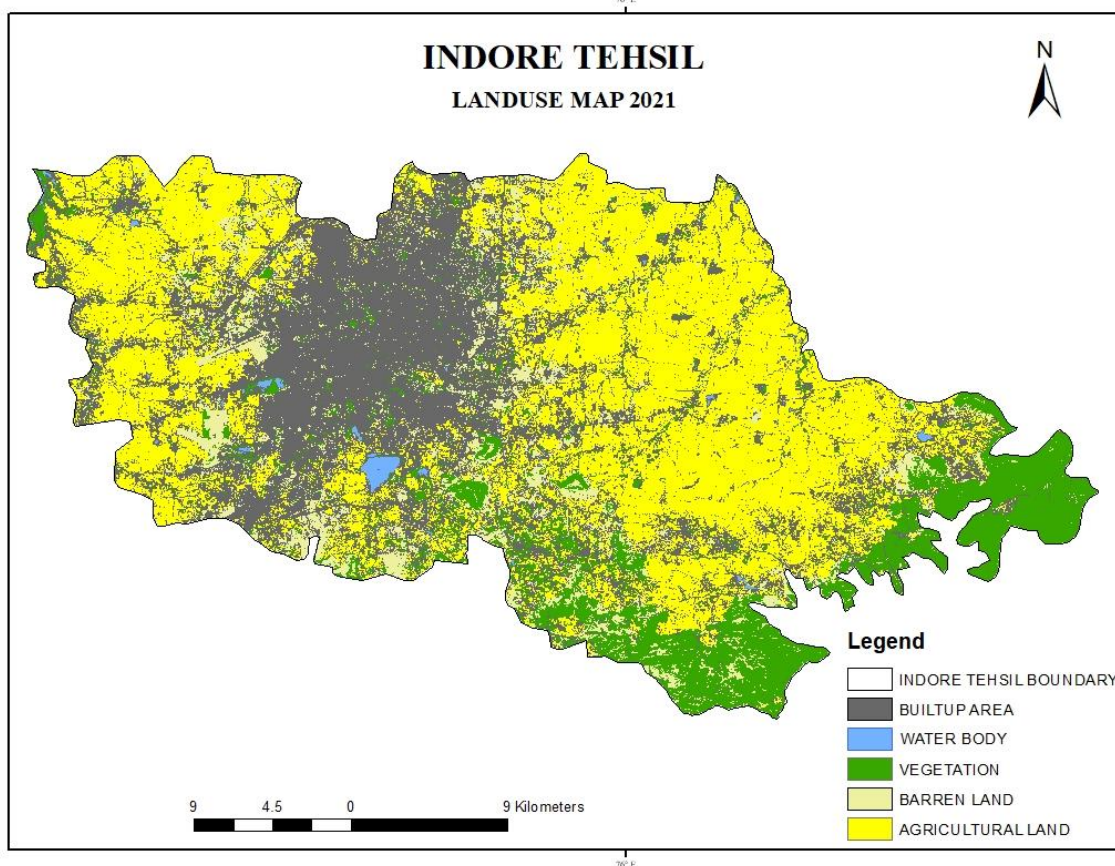
Indore's urbanisation history starts with the construction of RAJWADA, the administrative centre from which the Malwa region was ruled by Holkars. Because Indore had favourable conditions for commercial activity, it became a commercial city. Many contemporary styles were used from Jaipur, Ajmer, and Pune, as well as Mughal styles, to give the structure a royal appearance. Later, small settlements came up in lieu of agricultural land as people shifted their employment from agriculture to trading.

1853 is the year which marks the founding of Adda Bazaar, a ladies market in the vicinity of Rajwada. Shiv Vilas Palace (1894) was also built near Rajwada, further emphasising the significance of the precinct. Following the creation of Adda Bazaar, other bazaars such as Sarafa gali, Shakkar Bazaar, and Imli Bazaar arose to benefit from the security of being near to the Royal Palace. Holkar rulers built Imli Saheb Gurudwara (1880) and Imambada (1893) just next to the royal temple Gopal Mandir to offer equitable standing to the Muslim and Sikh communities, giving Rajwada Precinct the unique character of having religious structures of multiple communities.

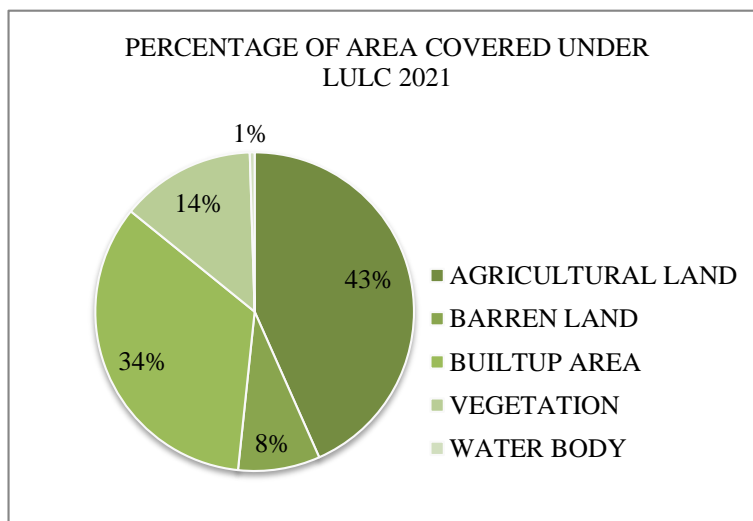


Map 1: Landuse Map of 1991





Map 2: Landuse Map of 2021



Analysis of Land Use Change: Indore Tehsil

S. No.	Type	1991	2001	2011	2021
1	Agricultural Land	579.15	620.52	539.40	444.53
2	Barren Land	197.06	84.94	133.06	85.22
3	Built up Area	71.98	114.18	244	350.29
4	Vegetation	173.23	205.40	105.76	140.15
5	Water Body	3.75	0.176	2.98	5.033
6	Total	1025.19	1025.23	1025.21	1025.23

Table:1 Indore profile from GIS mapping (kms)

Conclusion

The city doesn't have any hierarchy of recreational spaces and lacks in city parks and regional parks. Increasing the number of parks and public spaces will help in capacity enhancement of surface water bodies of the city would help in controlling the pollution with overall conservation. Indore city is experiencing the urban sprawl. Compact communities in the centre are increasingly moving outward toward the city limits. The north, northeast, south, and south-east directions are where the expansion is most noticeable. Within the city's municipal boundaries, rise in the population has been seen along the transportation infrastructure. However, as the population of the city grows and more adjacent towns merge with it, the city's municipal boundaries will undoubtedly expand. On productive agricultural and barren land, there has been encroachment due to rapid residential and commercial growth. Due to the rapid urbanization and population growth, sustainable development necessitates effective management of both natural and human resources.

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