

## Trend of Urbanization in Chhattisgarh: A Review

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### Abstract:-

A considerable urbanization trend has been seen in Chhattisgarh, a state in central India, in recent years. This abstract offers a succinct summary of the main causes, effects, and prospects for urbanization in Chhattisgarh. Rapid industry, better transportation systems, and a rising need for better employment prospects are just a few of the causes driving urbanization in Chhattisgarh. Urban migration has risen as a result of the state's shift from an agricultural economy to one with a more diversified industrial and services sector. Major metropolitan hubs have formed in places like Raipur, Bilaspur, and Durg, luring both local and foreign investment. Numerous changes have been made to the social, economic, and environmental landscape of Chhattisgarh as a result of this urbanization trend. Even while it has provided access to infrastructure, healthcare, and education, it has also created problems including worsening traffic jams, deteriorating environmental conditions, and a widening gap between urban and rural communities. Urban planning and governance have also emerged as crucial problems for ensuring equitable and sustainable urban growth. Opportunities and difficulties are presented by the future of urbanization in Chhattisgarh. The state must prioritize infrastructure development, affordable housing, and sustainable urban planning if it is to reap the advantages of urbanization. It will be necessary to strike a balance between economic development, environmental sustainability, and social equality. In order to solve the problem of rural-to-urban migration, policies that promote skill development and job creation in urban regions should be put into place. In summary, Chhattisgarh's urbanization process is a dynamic and transformational one that is changing the state's terrain. It promises economic progress and higher living standards, but it also demands rigorous planning and governance to guarantee that the benefits are shared fairly and that the environmental effect is kept to a minimum. The rate of urbanization in Chhattisgarh will be a key factor in determining how the state develops in the future.

### Keywords:-

*Chhattisgarh, Urbanization, Industrialization, Migration, Infrastructure*

### Introduction:-

In recent decades, the state of Chhattisgarh, located in the center of India, has seen a spectacular change that is distinguished by a strong and compelling trend of urbanization. The state has entered a new age as a result of this process, which was fuelled by different socioeconomic causes. This process has changed the state's environment and presented both possibilities and problems. Rapid industry, stronger transportation systems, and the attraction of better livelihood opportunities that metropolitan areas provide have been the main drivers of Chhattisgarh's urbanization process. Cities like Raipur, Bilaspur, and Durg are developing as dynamic concentrations of economic and social activity in this state that was formerly mostly agricultural. Along with fundamentally altering the state's economic structure, this development has also had a significant impact on the lives of its citizens.

In Chhattisgarh, urbanization has brought in a wide range of changes. Many locals now enjoy higher levels of living because to improved access to modern infrastructure, healthcare, and education. Additionally, it has drawn large local and foreign investments, supporting economic development. This change has not, however, been without its share of difficulties. There are urgent worries over urban congestion, environmental deterioration, and the widening disparity between urban and rural communities. Effective urban planning and governance are now essential for guaranteeing sustainable and equitable development as the urban population grows. The rate of urbanization in Chhattisgarh is very important to the state's future. The state's long-term prospects will be heavily influenced by how well it can balance economic development with social inclusion, environmental sustainability, and economic growth. To meet the requirements of the urban population, policymakers must concentrate on important issues including infrastructure development, affordable housing, and skill development. Chhattisgarh may take advantage of the advantages of urbanization while minimizing the difficulties that come with it by developing comprehensive plans to manage the process successfully. Urbanization in the state is a dynamic, transforming process that certainly will have a lasting impact on the development environment.

**Rationale of the study:-**

A considerable urbanization trend has been seen in Chhattisgarh, a state in central India, in recent years. This study helps to learn about the main causes, effects, and prospects for urbanization in Chhattisgarh. Rapid industry, better transportation systems, and a rising need for better employment prospects are just a few of the causes driving urbanization in Chhattisgarh. Urban migration has risen as a result of the state's shift from an agricultural economy to one with a more diversified industrial and services sector. Major metropolitan hubs have formed in places like Raipur, Bilaspur, and Durg, luring both local and foreign investment. Numerous changes have been made to the social, economic, and environmental landscape of Chhattisgarh as a result of this urbanization trend. Even while it has provided access to infrastructure, healthcare, and education, it has also created problems including worsening traffic jams, deteriorating environmental conditions, and a widening gap between urban and rural communities. Urban planning and governance have also emerged as crucial problems for ensuring equitable and sustainable urban growth. Opportunities and difficulties are presented by the future of urbanization in Chhattisgarh. The state must prioritize infrastructure development, affordable housing, and sustainable urban planning if it is to reap the advantages of urbanization. It will be necessary to strike a balance between economic development, environmental sustainability, and social equality. In order to solve the problem of rural-to-urban migration, policies that promote skill development and job creation in urban regions should be put into place. In summary, Chhattisgarh's urbanization process is a dynamic and transformational one that is changing the state's terrain. It promises economic progress and higher living standards, but it also demands rigorous planning and governance to guarantee that the benefits are shared fairly and that the environmental effect is kept to a minimum. The rate of urbanization in Chhattisgarh will be a key factor in determining how the state develops in the future

**Objective of the study:-**

Objective of this research are illustrated below:

- To analyse recent trends of urbanization in Chhattisgarh.

- To analyse geographical pattern and historical perspective of urbanization in Chhattisgarh.
- To justify socioeconomic impact of urbanization in Chhattisgarh and its future improvement

### Methodology:-

Selection of proper research methodology is very essential for this research that helps researches to conduct this research in a systematic and logical way. Along with this, legitimacy of research is also improved authentically with the involvement of research methodology. To maintain overall structure and strategy of this research descriptive research design has been selected. This research is conducted with the involvement of secondary data and qualitative data analysis technique. Different published literature on urbanization in Chhattisgarh has been selected for that research. Qualitative data analysis technique is used on this research to analyse collected literature.

### Geographical setting of Chhattisgarh:-

The Indian state of Chhattisgarh is renowned for its rich cultural legacy, plenty of natural resources, and variety of topographical characteristics. The major physical features of Chhattisgarh are highlighted in this geographical overview:

**Location:** Madhya Pradesh is to the northwest, Uttar Pradesh to the north, Jharkhand to the northeast, Odisha to the east, Telangana to the south, and Maharashtra to the southwest are the states that border Chhattisgarh.

**Size and geography:** With a total size of over 135 519 km<sup>2</sup>, Chhattisgarh has a diverse topography. A mixture of plateaus, plains, hills, and woods define it. Along its northern and northeastern edges are the Maikal Hills, a section of the Satpura Range.

**Rivers:** The Mahanadi, Indravati, Godavari, and Sabri are just a few of the significant rivers Chhattisgarh is blessed with. Particularly important for the state's agriculture and providing water for irrigation is the Mahanadi River.

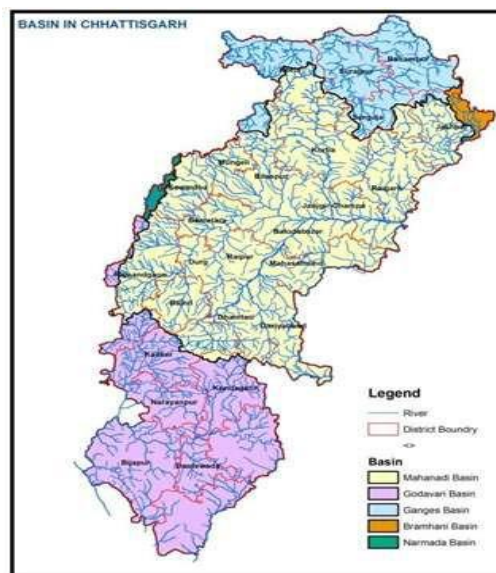


Figure1: Rivers basin of Chhattisgarh  
(Source: Buchholz and Egerer 2020)

**Forests:** The state has substantial forests, which make up around 44% of the whole land area. These woods are a vital biological resource since they are very diverse and home to a wide range of flora and wildlife.

**Mineral Resources:** Chhattisgarh is well known for its abundant mineral resources, which include coal, iron ore, limestone, bauxite, and dolomite reserves. It is important for India's production of minerals, especially coal mining (Awuchiet al.2020).

**Tropical monsoon weather** is typical in Chhattisgarh. With a hot and dry summer, a wet monsoon season, and a colder winter, it has three different seasons. Large amounts of rain occur during the monsoon season, which lasts from June through September.

The state has a number of protected sites, including Indravati National Park, Kanger Valley National Park, and Barnawapara Wildlife Sanctuary. For the protection of wildlife, these places are crucial.

**Agriculture:** The economy of Chhattisgarh depends heavily on agriculture. Rice, wheat, legumes, and oilseeds are all grown in the rich plains that border the rivers. The state is renowned for producing a variety of unique horticulture goods.

**Urban Centers:** In recent years, Chhattisgarh has had a significant urbanization process, with the capital city of Raipur, Bilaspur, Durg, and Bhilai functioning as important industrial and urban centers.

**Cultural Diversity:** The state has a mix of tribal and non-tribal communities, making it culturally varied. The distinctive tribal culture, traditional song, dance, and handicrafts are well-known.

In conclusion, the geography of Chhattisgarh has a variety of terrain types, including fertile plains, thick forests, mineral-rich plateaus, and a mix of urban and rural areas. The economics, culture, and way of life of the state are all significantly impacted by this variety.

#### **Location Map:-**



Figure 2: Location map of Chhattisgarh

Chhattisgarh is located in east-central India. Total area of this state is 192,000 square kilometres. Geographic, location of Chhattisgarh is 17 degree 46 min north and 24 degree 5 min north latitude from 80 degree 15 min and 84 degree 20 min east longitude.

**Data analysis:-****Understanding Urbanization**

Urbanization is a multifaceted and profound phenomenon that is changing cultures all over the world. This process entails a steady migration of people from rural to urban regions, which promotes the development and growth of cities and towns. Urbanization is fundamentally a reflection of greater sociological and economic transformations (Bonvoisin et al.2020). It is fuelled by a number of things, such as industrialization, technological development, and the expectation of greater job prospects and higher living standards in metropolitan areas.

The fast expansion of cities, which often results in the creation of urban infrastructure, such as transportation systems, housing, and utilities, is one of the characteristics of urbanization. The demand for services like healthcare, education, and entertainment also rises as a consequence of this expansion. Cities grow and develop into hubs of commerce, drawing enterprises, capital, and a diversified workforce. Urbanization does not, however, come without difficulties. The increase in population in cities may put a pressure on infrastructure and resources, causing problems including housing shortages, transportation congestion, and environmental deterioration. In addition, the social fabric of metropolitan regions may be complicated due to the coexistence of a variety of individuals from various origins, which can result in social inequities and governance difficulties.

Because urbanization has significant effects on society, the economy, and the environment, understanding it is essential. It offers both possibilities and difficulties. On the plus side, urbanization may promote innovation, accelerate economic development, and raise living standards. It may also encourage easier access to healthcare and education. On the other hand, it may amplify wealth disparity, place a pressure on resources, and contribute to environmental issues like pollution and higher energy use. In summary, urbanization is a complex process that represents the development of economies and civilizations. It is a widespread phenomenon that has a significant influence on how we connect, live, and work. It is crucial to have a thorough knowledge of urbanization and to create policies that support equitable and sustainable urban development in order to take advantage of its advantages and handle its problems.

**Historical Evolution of Urbanization:-**

The intriguing journey of Chhattisgarh's historical urbanization progression is a reflection of the area's socioeconomic and cultural changes through time.

**Early Urban Centers in Chhattisgarh:** Chhattisgarh saw early urbanization during the period when it was a part of several kingdoms and empires. During the administration of the Mauryas and the Satavahanas, towns like Sirpur, which are situated on the banks of the Mahanadi River, became important urban centers. With several monasteries and temples that date back to the sixth century, Sirpur was a prosperous commerce city and a center for Buddhist culture.

**Urbanization-Producing Factors over Time:**

Market towns and trading stations grew as a result of the area's strategic placement along trade routes, which also helped commerce.

Agriculture was encouraged by the rich plains of Chhattisgarh, which prompted the development of cities and communities.



**Dynastic Rule:** Urban centers prospered under a variety of dynasties, notably the Kalchuri and Maratha dynasties, because to their support for commerce, culture, and the arts (Koshale and Singh 2020).

**Mineral Wealth:** In recent times, industrialisation and urban expansion were greatly aided by the mineral-rich terrain of Chhattisgarh, notably its coal and iron ore resources.

**Defining moments in the history of urbanization**

**Colonial Influence:** Chhattisgarh was a part of the Central Provinces and Berar under British colonial control. The British contributed to urbanization by establishing administrative hubs and constructing railroads.

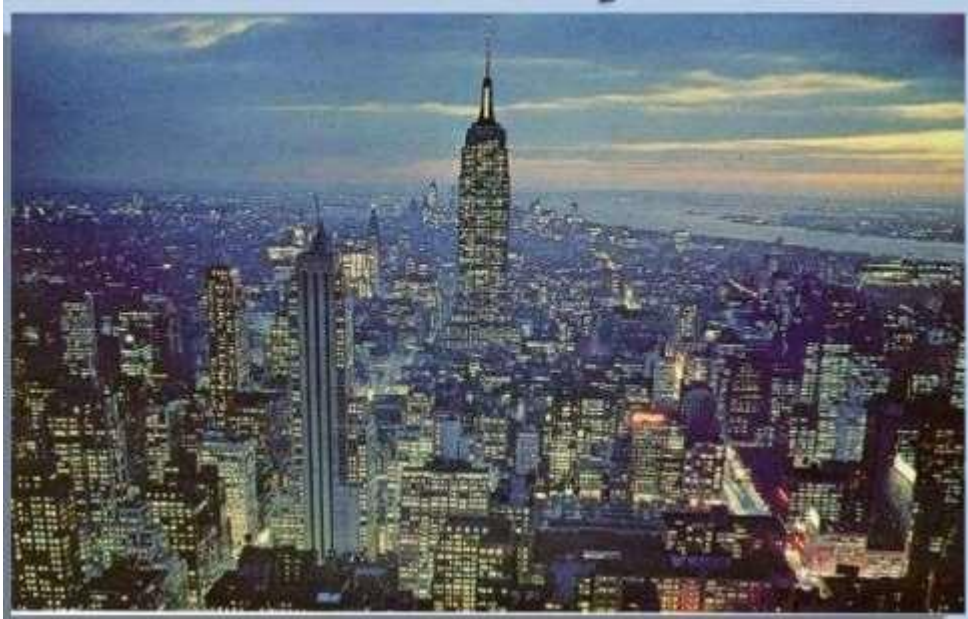


Figure 3: Historical Urbanization of Chhattisgarh  
(Source: Khan et al.2020)

**Industrialization:** The 1950s saw the creation of the Bhilai Steel Plant, which contributed significantly to the post-independence era's tremendous industrial boom. Bhilai developed into a significant urban and industrial hub that drew people from all over the world.

When Chhattisgarh was separated from Madhya Pradesh in 2000, Raipur was transformed into the new state capital and a fast expanding metropolitan area.

**Modern urbanization:** Thanks to industry, trade, and better infrastructure, cities like Raipur, Bilaspur, and Durg have seen exponential expansion in recent decades. Particularly in Raipur, a thriving metropolitan center with an expanding IT industry has evolved.

Chhattisgarh's urbanization is still progressing, offering chances for economic growth and higher living standards. Infrastructure, environmental sustainability, and social inclusion are all issues that it raises. Balancing the advantages and disadvantages of urbanization remains a crucial task for the state's politicians and urban planners as Chhattisgarh enters the twenty-first century.

#### **Current Urbanization Trends:-**

In September 2020, when I last updated my expertise, I was able to provide some insights regarding the broad tendencies of urbanization (Tiwari and Das 2020). However, the most recent studies and statistics from governmental sources or research organizations are crucial for the most up-to-date information and trends unique to Chhattisgarh or any area.

Year	Total Population	Urban Population	Urbanization Rate (%)
2010	25688987	56988789	86.99
2020	897778782	102548778	91.58

Table 1: Urban Population Growth in Chhattisgarh (2001-2011)

(Source: Khan et al.2020, p- 45)

**New Population Growth Statistics for Cities:**

Due to a number of socioeconomic variables, urbanization in India has increased, particularly in Chhattisgarh. According to the 2011 Census, over 23.24% of the people of Chhattisgarh resided in urban areas. But since that time, urbanization has steadily risen as more people move to cities and towns in quest of greater services and opportunities.

The most recent census data, which is carried out every 10 years, and subsequent updates from governmental organizations would determine the precise statistics. It's critical to get the most current data from sources like the Census of India, the Ministry of Housing and Urban Affairs, or state government papers in order to comprehend the most recent developments.

**Urban Amenities and Infrastructure:**

Urbanization is often fuelled by upgrades to the facilities and infrastructure of cities. To accommodate the expanding urban population, Chhattisgarh cities like Raipur, Bilaspur, and Durg have been investing in infrastructural improvements. This involves the construction of highways, water supplies, sewage systems, medical facilities, educational institutions, and recreational areas.

Urban development has received more national attention recently as a result of programs like the Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT). These initiatives seek to improve metropolitan regions' quality of life by offering improved facilities and services.

**Patterns of Urban-Rural Migration:-**

Migration trends from rural to urban areas are intimately related to urbanization. People from rural regions often relocate to urban areas in quest of economic opportunities, better housing options, and access to more effective healthcare and educational institutions. The expansion of metropolitan regions is significantly impacted by this migratory pattern.

It's important to remember that migration trends might vary greatly depending on the state of the economy, the development of the industrial sector, and local variables. The growth of industrial centres like Bhilai and Raipur as well as the expansion of industries and mining has traditionally drawn a sizable migration of migrants to Chhattisgarh.

I suggest consulting official reports and research studies released by pertinent government departments and organizations to gain a thorough understanding of current urbanization trends in Chhattisgarh, including the most recent information on urban population growth, migration patterns, and infrastructure developments. The patterns of urbanization in the state today may also be better understood by contacting specialists or academics in urban studies and demography.

**Geographical Patterns of Urbanization:-**

Geographical patterns of urbanization in Chhattisgarh show a complex environment with a geographical distribution of urban centers, differing levels of urbanization in various areas, and a number of urban planning and development issues.

**Distribution of Urban Centers Spatially:**

**Raipur:** Raipur is a significant urban hub in Chhattisgarh and is both the state capital and biggest city (Khan et al.2020). Significant urban expansion has resulted from its advantageous position, well-developed infrastructure, and economic prospects.

**Bhilai-Durg:** Bhilai, often known as the "Steel City," with the nearby city of Durg make up a single metropolitan agglomeration. The biggest steel factory in India, located in Bhilai, has significantly accelerated urbanization in this area.

Another significant metropolitan area is Bilaspur, which also functions as a major transit hub because to its accessibility by train. Trade and commerce have increased, which has accelerated urbanization.

**Other Urban Centers:** Chhattisgarh features a number of minor cities and towns, including as Korba, Rajnandgaon, and Jagdalpur, each of which has its own distinctive traits and urbanization-promoting factors.

**The Different Regions of Chhattisgarh's Urbanization**

Chhattisgarh's urbanization is not equally dispersed across the state. It mostly depends on elements like industrialization, transportation systems, and administrative importance, and it tends to cluster in certain geographic areas.

**Central area:** Because Raipur serves as the state capital, the administrative hub, and the site of expanding industrial and commercial activity, the central area, where it is situated, has seen extensive urbanization.

**Eastern area:** The existence of industry, like as coal mines and power plants, has led to the urbanization of cities like Bilaspur and Korba in the eastern area.

**Northern area:** Due in part to its steep terrain and tribal population, the northern area, which includes cities like Ambikapur and Surguja, has a lesser degree of urbanization than the central and eastern regions.

**Southern area:** Due to its tribal population and historical governance characteristics, the southern area, which encompasses Bastar and Dantewada, has special urbanization-related problems.

**Urban Development and Planning Challenges:**

**Infrastructure:** Rapid urbanization has put a strain on many metropolitan areas' already-stretched infrastructure, causing difficulties including backed-up traffic, insufficient water supply, and sanitary concerns.

**Housing:** There is a growing need for cheap housing in urban areas, and providing enough housing for the urban population continues to be difficult (Tiwari et al.2020).

**Environmental Sustainability:** In locations with a wealth of biodiversity, it is especially important to strike a balance between urban growth and environmental preservation.

Industrial and mining operations must be handled sustainably.

Urban planning has a significant problem in bridging the social equity gap between urban and rural communities and resolving inequalities inside urban centers. It is crucial to guarantee that all citizens have access to healthcare, education, and work opportunities.



Government: Addressing the problems of urbanization requires effective urban government. This includes administration that is open and responsible, planning for land use, and building infrastructure.

In conclusion, the regional patterns of urbanization in Chhattisgarh reflect the wide range of dynamics present in various parts of the state. Urban centers must be sustainable, inclusive, and well-planned, despite the fact that urbanization presents chances for economic growth and development.

### **Infrastructure and Services:-**

Although urban areas in Chhattisgarh have witnessed substantial advances in infrastructure and services recently, difficulties still exist in assuring access to necessities such as basic utilities, transportation, healthcare, and education.

#### **Basic Services Accessibility in Urban Areas:**

In many metropolitan areas of Chhattisgarh, access to basic utilities like power, water supply, and sanitary facilities has increased. Disparities still remain, however, with certain regions dealing with problems with the quality and dependability of these services (Guria et al.2020). To offer more reliable access to these necessities, the state government has been improving the infrastructure.

#### **Connectivity and transportation:**

Roadways and roads: Chhattisgarh has made progress in developing its highway system, with a well-developed network of both state and federal roadways. Roadways link major cities like Raipur and Bilaspur well.

With key rail junctions like Bilaspur and Raipur, rail connection is essential for Chhattisgarh. The movement of people and things is made easier by these links.

Airports: Raipur's Swami Vivekananda Airport, which offers domestic flights, is the state's main aviation center. Trade and tourism have increased because of improved air connections.

### **Facilities for healthcare and education:-**

Healthcare: Infrastructure for healthcare has improved in Chhattisgarh's urban regions. There are public hospitals, for-profit hospitals, and clinics available. However, in certain isolated or underdeveloped metropolitan areas, getting access to high-quality healthcare might still be difficult.

Education: Numerous educational institutions, including schools, colleges, and universities, are available in the state's urban areas. The capital of Raipur features a concentration of educational institutions. Even yet, there might be regional differences in the quality of education and options for postsecondary study.

Although there has been improvement in several areas, difficulties still exist:

Inequity: There are often differences in the quality and availability of services, with urban regions benefiting from superior facilities than peri-urban and slum areas.

Urban Congestion: Some cities, including Raipur and Bilai, have traffic congestion and pollution problems, which call for improved urban planning and public transit systems.

Healthcare Shortages: In rapidly urbanizing regions, the demand for healthcare facilities often outpaces the supply, necessitating further expenditures in the sector's infrastructure.

Education excellent: It is still a top goal to provide all urban inhabitants, particularly those from underprivileged neighborhoods, with opportunity for excellent education and skill development (Donget al.2020).

The state government and urban planners will continue to put emphasis on maintaining equal access to these facilities throughout urban regions and tackling the issues created by growing urbanization, even though urbanization in Chhattisgarh has resulted in improvements in infrastructure and services.

### **Socioeconomic Implications:-**

Chhattisgarh's continuous urbanization process has significant socioeconomic effects on nearby villages, job possibilities, economic development, and social inequality.

#### **Impact on Local Lifestyles and Communities:**

**Cultural Changes:** As individuals from various origins converge in cities and towns, urbanization often results in a blending of cultures. As a consequence, local cultures may be impacted by the interchange of customs, languages, and traditions.

**Changes in Lifestyle:** Compared to rural settings, urban places often provide a distinct way of life. The way individuals live and their goals may be influenced by access to contemporary conveniences, improved healthcare, education, and entertainment opportunities.

**Social networks:** As cities grow, so do their social networks. While technology gives people the chance to interact with a wider variety of people, it may also cause familial networks and traditional community connections to dissolve.

#### **Opportunities for Employment and Economic Growth**

Urbanization is often linked to more work possibilities, particularly in non-agricultural industries. The expansion of metropolitan businesses, services, and industries draws employment seekers from rural areas.

**Economic Diversification:** As a result of urbanization, there is less reliance on agriculture. The diversification of the economy may provide better economic stability and growth.

Cities often provide an atmosphere that is favorable to entrepreneurship and innovation. Urban environments are ideal for start-ups and small enterprises because they promote economic dynamism.

#### **Social Inequalities and Problems:**

Urbanization has the potential to make economic disparity worse. While some city dwellers earn more money and have better living conditions, others, especially those who work in low-wage or informal occupations, may find it difficult to make ends meet.

City	Population (2011)	Key Features
<b>Raipur</b>	8988789	State Capital, Economic Hub, Infrastructure
<b>Bilaspur</b>	9788589	Transportation Hub, Commerce
<b>Bhilai</b>	989777892	Steel Industry, Industrialization

<b>Korba</b>	5989799	Coal Mining, Power Plants
<b>Durg</b>	598897772	Industrial Centre, Education

Table 2: Major Urban Centres in Chhattisgarh

(Source: Jaiswal and Jhariya 2020, p-89)

Housing shortages and the expansion of slums may result from the sudden surge of migrants into metropolitan areas. Many urban residents, particularly those in peri-urban regions, live in subpar housing.

Urban regions have better healthcare and educational services, yet there are still inequalities in these locations. There may be disparities in access to high-quality healthcare and education, and underprivileged people often face obstacles.

**Social Services:** In metropolitan regions, it may be difficult to handle social services like public transit, trash management, and sanitation. These services may be hampered by overcrowding and poor infrastructure.

**Cultural Dissonance:** The fast-paced metropolitan lifestyle and traditional beliefs may not mesh well, resulting in generational and social difficulties.

In conclusion, Chhattisgarh's growing urbanization has a variety of socioeconomic repercussions. Despite the benefits it offers for economic development, the production of jobs, and access to better services, it also brings difficulties with it in the form of income disparity, housing issues, and discrepancies in healthcare and education (Tiwari et al.2020). For politicians and urban planners in the state, striking a balance between the advantages of urbanization and inclusive and fair development continues to be a top goal.

#### **Government Policies and Initiatives:-**

Chhattisgarh's urbanization process is significantly shaped by government policies and programs that work to alleviate problems, advance sustainable development, and enhance urban dwellers' quality of life.

**State and federal programs for urban development:**

Chhattisgarh has taken part in the Smart Cities Mission, which aims to improve the infrastructure and services in a number of cities to make them more sustainable and habitable. Among the cities covered by this project are Bilaspur and Raipur.

The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) seeks to enhance the fundamental urban infrastructure in metropolitan areas, including the transportation, sewage, and water supply systems. To improve urban services, Chhattisgarh has been carrying out initiatives under the AMRUT program.

**Swachh Bharat Mission (Urban):** The Swachh Bharat Mission aims to make urban areas more hygienic and clean. Chhattisgarh has worked to improve sanitation and promote cleanliness in its urban areas.

**Pradhan Mantri Awas Yojana (PMAY):** PMAY-Urban seeks to provide all urban dwellers access to affordable housing. Under this program, Chhattisgarh has been aggressively developing housing developments.

**Local government bodies' functions:**

Urban growth is greatly influenced by local government entities, including municipal corporations and municipal councils (Wan et al.2020). They are in charge of carrying out and overseeing several urban projects and activities. Their duties consist of:

**Urban Planning:** Local government entities are active in urban planning, which includes infrastructure development, building code enforcement, and land-use zoning.

**Infrastructure Development:** They are in charge of building and maintaining the city's sewage systems, roadways, and public areas.

**Delivery of Services:** It is the responsibility of local governments to provide urban people with basic services including water supply, waste management, and sanitation.

**Community Involvement:** Successful urban development depends on including the neighborhood community. Residents are often consulted and invited to participate in local government planning and decision-making processes.

**Successes and Potential Improvements:**

**Success Cases**

The state's capital, Raipur, has advanced significantly in terms of urban development. It has seen advancements in communication, infrastructure, and transportation.

The inclusion of Bilaspur in the Smart Cities Mission has sparked initiatives for urban renewal, including the creation of smart infrastructure.

**Areas for Development**

**Inclusive Development:** It's important to make sure that slum dwellers and other underprivileged groups get the advantages of urban development.

Urban infrastructure development must place a strong emphasis on being environmentally friendly and sustainable in order to solve pressing environmental issues.

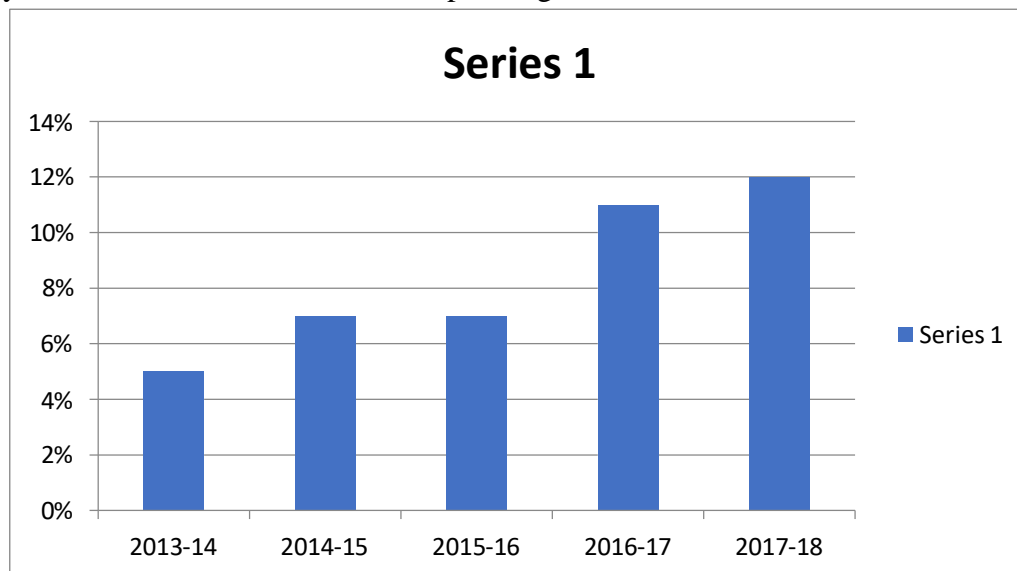


Figure 4: National Health Insurance Scheme budget in Chhattisgarh  
(Source: Barona et al.2020)

Building capacity is essential for efficient urban administration. Local governments need to be better able to plan, govern, and carry out projects.

**Cheap Housing:** It is still difficult to meet the demands of the urban poor in terms of housing, thus measures to increase the supply of cheap housing must be made.

In conclusion, local government entities actively participate in defining the urbanization process in Chhattisgarh via their support of national policies and efforts. Even though there have been advancements in services and infrastructure, there still has to be more work done to promote inclusive, sustainable, and well-planned urban growth across the state.

### **Problems and Solutions:-**

Chhattisgarh's urbanization faces the following obstacles:

**Infrastructure Gap:** Rapid urbanization has resulted in a major infrastructure gap in terms of housing, transportation, and basic services, making it difficult to provide the expanding urban population with necessary facilities.

Urbanization has made income disparities worse, making it harder for a sizeable segment of the population to obtain possibilities for employment and keep their families afloat, especially in slum regions.

Unplanned urban expansion may result in environmental deterioration, which includes deforestation, water pollution, and biodiversity loss.

**Lack of Housing:** The flood of migrants has resulted in a lack of housing, which has caused slums and informal settlements to expand in metropolitan areas.

### **Best Practices and Solutions:-**

**Integrated Urban Planning:** Addressing infrastructure shortages may be accomplished by implementing integrated urban planning strategies that emphasize sustainable growth, effective land use, and well-designed infrastructure.

**Affordable Housing:** The Pradhan Mantri Awas Yojana (PMAY) and other programs and policies for affordable housing may assist alleviate the housing crisis (Barona et al. 2020).

Investments in skill development programs may provide urban people, particularly migrants, the tools they need to improve their chances of finding employment and generating money.

**Green initiatives:** Encouraging the use of sustainable construction methods, renewable energy sources, and effective waste disposal techniques may lessen the negative effects of urbanization on the environment.

Participating in urban planning and decision-making processes with local communities and citizens develops a feeling of ownership and guarantees that development initiatives are in line with their needs and goals.

### **Participation of Stakeholders and the Community:-**

In order to overcome urbanization concerns, it is essential to involve communities and stakeholders:

**Participatory planning:** Involving locals in the conception and implementation of urban projects may result in more environmentally friendly and neighborhood-focused solutions.

**Education and Awareness:** Increasing civic engagement among communities through promoting civic responsibility, environmental conservation, and sustainable living practices.

**Public-Private Partnerships (PPP):** Government, business, and civil society groups working together may bring a variety of skills and resources to bear on urban problems.

**Local Governance:** Improving accountability and transparency in urban development projects may be accomplished by fortifying local governance authorities and promoting public involvement in local governance processes.

In conclusion, although urbanization in Chhattisgarh poses a number of difficulties, attaining sustainable urban development requires creative solutions and community engagement.



Chhattisgarh can successfully manage the challenges of urbanization while enhancing the quality of life for its urban population by implementing best practices, involving stakeholders, and giving priority to the demands of urban people (Koshaleet al.2020)

### **Prospects:-**

Chhattisgarh's future urbanization possibilities provide great promise for economic development and higher living standards, but they also present difficulties for environmental protection and sustainable urban planning.

#### **Future Urbanization Trends Predictions:**

**Growth:** As rural residents go to metropolitan regions for greater employment prospects, Chhattisgarh is anticipated to continue to urbanize. In metropolitan areas, this tendency is anticipated to fuel population expansion.

**Hubs of Industry and Commerce:** Cities like Raipur, Bilaspur, and Bhilai that have a robust economy are expected to continue to urbanize. For job seekers, these cities will continue to be desirable locations.



Figure 5: Sustainable Development Goal  
(Source: Tiwari et al. 2020)

**Peripheral Urbanization:** As peri-urban regions surrounding large cities evolve into extensions of urban centers, new zones for residential, commercial, and industrial development may emerge.

#### **Environmental factors and sustainable city planning:**

**Infrastructure Development:** To lessen the environmental impact of urbanization, sustainable urban planning should concentrate on creating effective transit networks, environmentally appropriate housing, and waste management systems (Gu et al.2020).

**Green Spaces:** For the ecological balance of metropolitan areas, green spaces must be preserved and created. To improve the quality of the air and the lives of the population, urban planners should set aside space for parks, gardens, and green infrastructure.

Expanding and promoting public transit may ease traffic jams and air pollution while also giving locals more convenient mobility alternatives.

**Trash Management:** To reduce the environmental effects of urbanization, it is essential to put in place efficient trash management and recycling systems.

**Development and conservation must be balanced:**

The unique biodiversity of Chhattisgarh, particularly its forests and animals, must be preserved. Plans for urban growth should include safeguards for preserving and regenerating natural environments.

**Water Resource Management:** It's crucial to manage water resources sustainably. To guarantee that there is enough water for the expanding urban population; cities should employ strategies like rainwater gathering and effective water distribution.

**Environmental standards:** To stop pollution and the degradation of habitats, it is crucial to strengthen and enforce environmental standards for businesses and building projects.

**Community Awareness:** Educating urban dwellers about the value of protecting the environment and adopting sustainable lifestyles may encourage a feeling of responsibility and active engagement.

In conclusion, Chhattisgarh's future urbanization brings both potential and difficulties. Urbanization may boost living standards and contribute to economic progress, but it must be planned in a sustainable way that puts citizens' health, resource management, and the environment's preservation first (Dong et al.2020). The state's long-term economy and the welfare of its urban and rural residents depend on finding a balance between development and conservation.

### **Conclusion:-**

In conclusion, Chhattisgarh's urbanization process is a dynamic and transforming journey that is characterized by the expansion of urban centers, economic diversification, and notable changes in the lives of its people. Important conclusions and revelations from our investigation about urbanization in Chhattisgarh include:

**Historical Development:** Sirpur and other ancient cities in Chhattisgarh were thriving hubs of commerce and culture when the state first began to urbanize. However, the industrial revolution gave contemporary urbanization a boost, and the state is still changing as a result.

**Current tendencies:** Chhattisgarh's current urbanization tendencies are influenced by things like industrial development, transportation infrastructure, and rural-to-urban migration. Major urban and industrial centers have formed in cities like Bilai and Raipur.

**Infrastructure and Services:** While improvements to urban infrastructure and essential services have been achieved, there are still gaps and difficulties, which highlight the need for on-going investment and growth.

Urbanization has socioeconomic ramifications that are both favorable and unfavorable. It has increased access to services, raised living standards, and opened up economic possibilities. But it has also increased financial disparity and widened societal divides.

**Initiatives from the government:** The Smart Cities Mission and AMRUT are only two examples of the government-led programs that are crucial in influencing urban development. In order to carry out these initiatives, local government entities are crucial.

**Sustainability and conservation:** To maintain long-term prosperity, Chhattisgarh's urbanization requires sustainable urban design, environmental protection, and a balance between development and conservation.

In Chhattisgarh, managing urbanization is of utmost significance. The state must give priority to sustainable development strategies that encourage economic growth while protecting its natural heritage and guaranteeing social fairness as it continues to urbanize. Government agencies, local communities, civil society, and the commercial sector must work together to address the possibilities and difficulties brought forth by urbanization.

We must heed the call to action for Chhattisgarh's sustainable urban growth. Integrated urban planning, green initiatives, affordable housing, skill development, and active community and stakeholder involvement are required for this. It also calls for a dedication to inclusion, ensuring that all citizens, regardless of their financial status, benefit from urbanization.

In summary, Chhattisgarh is at a turning point in its urbanization process. The state can create thriving, resilient, and inclusive urban centers that contribute to a successful future by adopting sustainable urban development concepts and encouraging cooperation among all stakeholders.

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#### **References:-**

- Awuchi, C.G., Asoegwu, C.R., Ogbuji, O., Udube, V.C., Ezuru, I.S., Awuchi, C.G., Peters, G.C. and Ukpe, A.E., 2020. OUTBREAK OF COVID-19, ITS EFFECTS AND ENVIRONMENTAL SUSTAINABILITY: A REVIEW. *Int. Res. J. Moderniz. Eng. Technol. Sci*, 2(09).
- Awuchi, C.G., Echeta, C.K. and Igwe, V.S., 2020. Diabetes and the nutrition and diets for its prevention and treatment: A systematic review and dietetic perspective. *Health Sciences Research*, 6(1), pp.5-19.
- Barona, C.O., Devisscher, T., Dobbs, C., Aguilar, L.O., Baptista, M.D., Navarro, N.M., da Silva Filho, D.F. and Escobedo, F.J., 2020. Trends in urban forestry research in Latin America & the Caribbean: a systematic literature review and synthesis. *Urban Forestry & Urban Greening*, 47, p.126544.
- Bonvoisin, T., Utyasheva, L., Knipe, D., Gunnell, D. and Eddleston, M., 2020. Suicide by pesticide poisoning in India: a review of pesticide regulations and their impact on suicide trends. *BMC public health*, 20, pp.1-16.
- Buchholz, S. and Egerer, M.H., 2020. Functional ecology of wild bees in cities: towards a better understanding of trait-urbanization relationships. *Biodiversity and Conservation*, 29, pp.2779-2801.
- Dong, L., Kang, Y.K., Li, Y., Wei, W.B. and Jonas, J.B., 2020. Prevalence and time trends of myopia in children and adolescents in China: a systemic review and meta-analysis. *Retina*, 40(3), pp.399-411.
- Dong, L., Kang, Y.K., Li, Y., Wei, W.B. and Jonas, J.B., 2020. Prevalence and time trends of myopia in children and adolescents in China: a systemic review and meta-analysis. *Retina*, 40(3), pp.399-411.

- Gu, C., Ye, X., Cao, Q., Guan, W., Peng, C., Wu, Y. and Zhai, W., 2020. System dynamics modelling of urbanization under energy constraints in China. *Scientific reports*, 10(1), p.9956.
- Guria, N. and Biswas, S., Poor Nutritional Status and Health in Urban Slum Children of Bilaspur, Chhattisgarh State.
- Jaiswal, T. and Jhariya, D.C., 2020, December. Monitoring the Land Surface and water bodies temperature and its impact on surface water turbidity in Raipur, Chhattisgarh, India. In *IOP Conference Series: Earth and Environmental Science* (Vol. 597, No. 1, p. 012008). IOP Publishing.
- Khan, N., Jhariya, M.K., Yadav, D.K. and Banerjee, A., 2020. Herbaceous dynamics and CO<sub>2</sub> mitigation in an urban setup—a case study from Chhattisgarh, India. *Environmental Science and Pollution Research*, 27(3), pp.2881-2897.
- Khan, R., Indhulekha, K., Mawale, Y.K., Dewangan, R., Shekhar, S., Dwivedi, C.S., Singh, V.K. and Jhariya, D.C., 2020, December. Impact of anthropogenic activities on groundwater quality and quantity in Raipur City, Chhattisgarh, India. In *IOP Conference Series: Earth and Environmental Science* (Vol. 597, No. 1, p. 012006). IOP Publishing.
- Koshale, J.P. and Mahato, A., 2020. Spatio-Temporal Change Detection and Its Impact on the Waterbodies by Monitoring LU/LC Dynamics-A Case Study from Holy City of Ratanpur, Chhattisgarh, India. *Nature Environment & Pollution Technology*, 19.
- Koshale, J.P. and Singh, C., 2020. Multi-Temporal Land Use/Land Cover (LULC) Change Analysis Using Remote Sensing and GIS Techniques of Durg Block, Durg District, Chhattisgarh, India. *Sustainable Development Practices Using Geoinformatics*, pp.185-204.
- Tiwari, B. and Das, S., 2020. Socio-demographic Profile and Reproductive Health Status of Slum Women of Bhilai, Chhattisgarh. *Antrocom: Online Journal of Anthropology*, 16(2).
- Wan, J., Zhang, L., Yan, J., Wang, X. and Wang, T., 2020. Spatial-temporal characteristics and influencing factors of coupled coordination between urbanization and eco-environment: A case study of 13 urban agglomerations in China. *Sustainability*, 12(21), p.8821.