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Urbanization and Urban Sprawl in Gorakhpur City

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Abstract-

According to environmentalists, local weather is influenced by both large-scale global warming and local factors. Changes occurring on a large scale also affect wind speed, direction, rainfall, humidity and sea conditions etc. Local green areas, ponds, forests etc. also contribute to the local weather. The increasing pollution in the atmosphere has changed the nature of the weather. While toxic vehicle smoke, black carbon and dust particles flying due to construction work are making people sick, experts claim that the weather cycle is also changing due to pollution. These all are happening due to urbanization and urban sprawl in Gorakhpur city of Uttar Pradesh. In the last five and a half years, the state government has accelerated the pace of urbanization in the state. Various action plans have been edited towards planned urbanization. Rapid urbanization in Gorakhpur is putting pressure on natural resources and swallowing up existing agricultural land on the city's periphery. Large-scale conversion of agricultural land to non-agricultural uses is increasing the risks of climate change. The paper tries to throw light on different incidences occurring due to urbanization and urban sprawl in Gorakhpur city.

Key-words: Gorakhpur city; Urbanization; Urban sprawl; Development; Infrastructure.

Introduction-

According to the 2011 census, Uttar Pradesh is the most populous state of India (19.96 crore), out of which 15.51 crore population lives in rural areas and 4.45 crore population lives in urban areas. Between 2001-2011, there has been an increase of 1.09 crore population in urban areas. Thus, about 16.50% of the total population of India lives in the state and 11.80% of the population lives in the cities of Uttar Pradesh. Of the 4041 statutory towns of India, 648 (16%) reside in

Uttar Pradesh. Out of the total population of the state, 22.28% lives in cities (as per 2011 census), which was 20.78% in 2011, i.e. an increase of 1.50 percent. However, the level of urbanization (22.28%) is much lower than that of the country as a whole (31.16%). According to the 2001-2011 census, the urban population is 28.75 percent, which was 31.80 percent in 1991-2001. It is estimated that by 2021 the population of cities in the state will reach 5.83 crore.¹

Although Uttar Pradesh has the largest municipal system, with 630 municipalities, it still ranks 23rd in terms of urbanization. There are many irregularities in the level of urbanization of the state. According to the 2011 census, the western regions have 32.45% of the urban population (highest), while the eastern regions have 13.40% of the population (least). The urban population of Center and Bundelkhand region is in the ratio of 20.06 and 22.74. The increase in urban population shows that big cities, especially Class-1 cities, are developing very fast, due to which it cannot be denied the fact that the urban areas whose population was only 33.71% in 1951, in 2011 Has increased to 60%. Additionally, the number of Class-I category cities increased from 14 in 1991 to 54 in 2001, which increased to 64 in 2011, while the number of metropolitan cities increased from 06 (in 2001) to 07 (in 2011). Seeing increasing urbanization in this way, it seems that employment opportunities will also increase in cities. Small towns (especially Class-5 and Class-6) have seen negative growth so far.²

The population of the Gorakhpur city has increased by one lakh more. After the inclusion of 31 villages in the municipal corporation area, the current population of the city has increased to more than 10 lakh. However, according to the 2011 census, the population of the city was approximately 6.82 lakh. Meanwhile, the process of including six more villages in the municipal corporation area has started. In this way, the process of including total 15 villages in the Municipal Corporation is going on. If these villages are included then 46 villages will be included in the municipal corporation area.³

Proposal has been made for these villages-

The proposal for Banagai, Amwa Khas, Daulatpur, Narayanpur, Lakshmipur, Jungle Ramgarh alias Rajhi, Jungle Chhatradhari, Jungle Dhusad and Jungle Tikonia No. 2 has been made. Apart from this, preparations are going on for Bhilora Khurd, Bhilora Buzurg, Harraiya, Pipri, Baghagada and Pewanpur.

Development will be done with Rs 188 crores

Development work will be done in 31 villages with Rs 188 crore. The Municipal Corporation had prepared a report after surveying these villages. The proposal for the budget has been sent to the government.

Municipal Corporation's area increased by 76 kilometers

After the inclusion of 31 villages in the municipal corporation area, the radius of the city has crossed the two hundred kilometer mark. Now the radius of the city has increased to 226.6 kilometers. Earlier the area of the city was 145.5 square meters. The area of the city has increased by 76.11 kilometers.

This facility will be available-

Roads, drains, sewers, street lights, cleanliness and garbage collection facilities will be available. Besides, by becoming a part of the city, the land rates will increase

and the standard of living of the citizens will improve due to availability of facilities. After this, citizens will have to pay water, sewer and house taxes.

Survey of villages is being done

In this regard, Municipal Corporation Commissioner Anjani Kumar Singh says that a proposal has been received to include six more villages in the Municipal Corporation area. Survey of villages is being conducted. The development work in these villages is currently being carried out by the Gram Sabha. After the end of the financial year, development work will be done from the money received from the 14th financial year.

This kind of favorable environment clearly shows that urbanization towards big cities in the state is developing very fast. As a result, people from different states of the country are migrating to Uttar Pradesh, and taking advantage of employment opportunities. Urbanization in the state is moving in a positive direction, which is leading to rapid development, economic capabilities and more opportunities to earn employment. Therefore, due to urbanization, more employment is increasing in cities than in rural areas, and it can also make economic improvement of cities possible.

City Housing and Infrastructure Scenario

Urban housing

Housing is a basic and most essential thing for living. "Housing" means more than just a roof, providing adequate space, civic amenities, safety, structural stability, electricity, water, air, privacy, work space and many more. It is not just the economic value of a dwelling, but also livability, inclusivity and sustainability. Adequate housing for the urban poor is a social responsibility of the state and also a huge challenge, which requires innovative thinking and planning.

Lack of proper housing is a big problem, which is not only in a state like Uttar Pradesh, but in the entire country. Due to large-scale urbanization, housing planning requires large-scale investment in physical and social infrastructure. It is estimated that the housing industry in the country contributes 6% to the country's GDP. This industry also has 250 backward and forward linkages with supporting industries. It is ironical that despite urban population growing rapidly, the supply of serviced land and housing units is restricted, leading to creation of sub-standard and illegal housing stock. The shortage of 5.46 lakh housing units was estimated at the beginning of the 12th Five Year Plan (2012–17), and 13.20 lakh housing units are expected to be created by the end of the 12th Five Year Plan as per the estimated population. Additionally, the needs of unusable raw houses, needs of increasing population and needs of obsolescence factor are 0.099 lakh, 2.06 lakh and 3.30 lakh respectively. Thus, the estimated housing requirement at the time of 12th Five Year Plan is 24.119 lakh, which means that 4.8 lakh housing units have to be provided per year.⁴

Physical infrastructure

Due to the analysis of the level of basic infrastructure, the real situation of the urban areas of the state has now come to light. Due to increasing urbanization, slum areas have also increased. According to the estimates of the Central Statistical Organization, in 1991 there was a population of 58.4 lakh in slum areas of Uttar Pradesh, which increased to 77.10 lakh in 2011 and by the fall of 2011 this

population reached 1.02 crore, which is 2011 census of Uttar Pradesh. According to this, it is 23.05% of the total population. This results in a high burden on the urban infrastructure system, including services such as drainage, sewerage, solid waste management and water supply. Water supply connections are available to only 50% of the households in the Municipal Corporation Town and the remaining 41% of the water supply is non-revenue, i.e. it is being wasted in the form of leakage. Only 20% of urban areas are served by the sewerage system and 73% of households have toilet facilities. Only 58% of urban centers have facilities like storm water drainage and only 88% of solid waste is collected. Integrated drainage and solid waste management system is not available in any city. Therefore, the biggest challenge is to provide basic services and basic housing services to the urban citizens at a reasonable cost. It is also necessary to analyze the existing policies, rules and regulations to address the current infrastructure scenario and promote developing policies and public-private partnerships for provision of appropriate housing and infrastructure.⁵

Urban transportation

Problems of urban transport are seen in most of the cities of Uttar Pradesh, which has been going on for many years. This problem has greatly affected the movement of people and the economic development of urban areas. The main reason for these problems is inadequate transport infrastructure and its sub-optimal utilization. This is also due to lack of integration between land use and transport planning and lack of improvement in mass transit system and urban bus service. Providing better bus transport system at a reasonable rate is a challenge. Apart from this, it is also necessary to find alternative public transport technical services. Public transportation options vary between low-rate buses and high-rate rail metros. Additionally, the size of the city is also considered important in choosing the appropriate transport mode and capacity building plays an important role in launching and implementing a public transport system. Many initiatives have been started in this regard. Comprehensive dynamic plans were prepared by cities like Lucknow, Kanpur, Agra, Prayagraj, Varanasi and Meerut of the state. The bus systems under JNNURM have been improved by giving priority to better buses, better information system and bus movement from the respective bus lanes. However, this is still not enough to meet the needs of the city. Looking at the urban transport sector in the state, it can be said that the proposed approach should be comprehensive and cater to multiple needs of human life.⁶

According to environmentalists, local weather is influenced by both large-scale global warming and local factors. Changes occurring on a large scale also affect wind speed, direction, rainfall, humidity and sea conditions etc. Local green areas, ponds, forests etc. also contribute to the local weather.

Nowadays, due to decreasing humidity and temperature, a layer of dust and pollution particles accumulates over the area. Due to this the temperature remains below that and due to the density of air the temperature becomes slightly higher. At the same time, consumption of coal, diesel and petrol has increased to meet the demand of increasing population. The gas coming out of it contains carbon particles in the smoke. The temperature is increasing due to carbon particles being absorbed from the sun's rays from above.

Apart from this, the continuous increase in pollution due to development related

construction work, increasing number of vehicles and decreasing greenery is affecting the natural cycle. Due to this the duration of winter days has reduced. Generally, cold starts showing its effect from mid-December, but this time the dry weather is making one sweat.

More than 20 thousand trees lost to development

In the last few years, a lot of four-lane construction work is going on in Gorakhpur and surrounding areas. Due to this, more than 20 thousand trees have been cut. Saplings are planted, but it is difficult to say how many plants survive. Its direct impact is on the environment. According to the Forest Department, 10448 trees were cut on the Gorakhpur-Barhalganj road in the year 2018. 1181 trees have been cut on Gorakhpur-Sonauli road, 8392 trees on Gorakhpur-Maharajganj road, 3140 trees on Gorakhpur-Deoria road, 1,507 trees have been cut from Mohaddipur to Jangal Kauria in the city.

Green house gas emissions are increasing

At present, due to the rapid increase in the number of vehicles, construction of wide roads, and continuous decline in the number of trees due to the spread of urbanization, the temperature of the atmosphere is warmer than expected. Due to decrease in greenery and increase in pollution, it has also affected the weather cycle. Global warming due to continuous increase in emissions of greenhouse gases at the global level is also responsible for relatively higher temperatures.

Due to less greenery there is imbalance in the weather

Due to increasing level of pollution and decreasing greenery, it is directly affecting the weather cycle. There is an imbalance in the environment. For this, everyone will have to emphasize on increasing greenery. Wheat crop is being affected due to dry weather.

To meet the demand of increasing population, consumption of coal, diesel and petrol has increased. The gas coming out of it contains carbon particles in the smoke. The temperature is increasing due to carbon particles being absorbed from the sun's rays from above.

As the temperature of the earth is increasing, the temperature of the sea is also increasing. The continuous increase in pollution due to development related construction work, increasing number of vehicles and decreasing greenery is affecting the natural cycle. Due to this, the duration of rainy and winter days has reduced.

Local reasons also behind increase in pollution

Gorakhpur Environmental Action Group President Dr. Shiraz Akhtar Wajih said that local weather is affected by global warming and local factors on a large scale. Changes occurring on a large scale also affect wind speed, direction, rainfall, humidity and sea conditions etc.

Local green areas, ponds, forests etc. also contribute to the local weather. Nowadays, due to decreasing humidity and temperature, a layer of dust and pollution particles accumulates over the area. Due to this the temperature remains below that and due to the density of air the temperature becomes slightly higher.

One leaf releases five hundred and fifty liters of oxygen in a year

Due to development works, continuous construction work and the dust particles

arising from them are also quite effective in pollution. Along with this, pollution is also increasing due to cutting of trees for road widening. One leaf of a tree releases five hundred and fifty liters of oxygen in a year. The particles flying in the atmosphere stick to its leaves. But due to less greenery and increase in pollution, it has also affected the weather cycle.⁷

Green house gas emissions are increasing

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Vehicles increasing year after year in Gorakhpur district

<u>Year</u>	<u>Number of vehicles</u>
2019	85154
2020	70208
2021	79540
2022	85270
2023	66646 (till now)

(As per RTO)

Thousands of trees lost to development in five years

In the last few years, a lot of four-lane construction work is going on in Gorakhpur and surrounding areas. Due to this, about 20 thousand trees have been cut. Saplings are planted, but it is difficult to say how many plants survive. Its direct impact is on the environment. According to the Forest Department, 10448 trees were cut on the Gorakhpur-Barhalganj road in the year 2018. 1181 trees have been cut on Gorakhpur-Sonauli road, 8392 trees on Gorakhpur-Maharajganj road, 3140 trees on Gorakhpur-Deoria road, 1,507 trees have been cut from Mohaddipur to Jungle Kauria in the city.⁸

As per forest department, in the last five years, the Forest Department in the district has planted 72.06 lakh saplings on 6835 hectares of land, while 27 departments including the Forest Department together have planted 2.15 crore saplings. According to the report of Forest Survey of India, the total area under forest cover in the district has increased by 79 square kilometers as compared to 76 square kilometers in 2015. Still the forest cover of Gorakhpur is 79 square km.⁹

Due to air pollution, nose allergy patients have increased. Cold and cough patients are coming regularly. Apart from this, the number of ear patients has also increased due to noise. Therefore, if we go to a polluted area, definitely wear a mask. Avoid noise; otherwise we will become vulnerable to other diseases.

Conclusion-

Due to increasing urbanization in the Gorakhpur, the problems being faced in the city include increasing slum population, lack of adequate housing, lack of potable water facility, environmental problems like air, water and noise pollution, lack of cleanliness, increasing pressure on land, encroachment. , irregular urban development and transportation problems etc. are also included. Although a lot of

efforts are being made to mobilize resources for urban local bodies to discharge their functions, the rapidly growing population still needs access to clean and safe drinking water supply, sanitation, drainage, Problems are being faced in providing facilities like sewerage, street-lights, roads etc. To solve all these problems, it is necessary to increase their capacity and at the same time strengthen modern technology and meet the growing needs of the city.

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