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## JAMMU AND KASHMIR: THE IMPACT OF URBANIZATION ON ENVIRONMENTAL QUALITY

# B.N VENKATA CHALAMAIAH RESEARCH SCHOLAR SUNRISE UNIVERSITY ALWAR DR. SUNITA KUMARI ASSISTANT PROFESSOR SUNRISE UNIVERSITY ALWAR

#### **ABSTRACT**

The process that increases the population in urban areas is known as urbanization. It mostly comes about as a consequence of urban physical growth. Jammu and Kashmir is becoming more urbanized, and in order to make plans for a sustainable urban future, urgent attention has to be given to the population's spatial distribution, where there has been a major disparity among the state's many areas. Rapid urbanization results in continual loss of natural resources, stress on water bodies that pollute land, increases in crime, energy crises, depletion of forestry resources, production of solid water, etc. People have exploited the land and its resources for begging in an effort to live healthy lives. But the fact that its resources have been overused over time is a significant issue. Jammu and Kashmir is becoming more urbanized, and in order to make plans for a sustainable urban future, urgent attention has to be given to the population's spatial distribution, where there has been a major disparity among the state's many areas.

Keywords: -Environment, Urbanization, Quality, urban, Rural

#### I. INTRODUCTION

With rapid urbanization there is constant degradation of natural resources, stress of water bodies' contamination of land, increase in crime rates, violence energy crises, depletion of forest resources, generation of solid water etc. Human's beings used land and its resources for the begging in a pursuit of their healthy lives. But it has been exploited its resources over time is a serious problem [1] as it has changed land cover and impacted the balance of the ecosystem. The agriculture, modern technology, and the rise of capitalist mode of economy, the degradation of land and its resources has increased dramatically. Modern land use practices like agriculture, mining, logging, housing, recreation, etc. have become so intensive and predominant that The impacts in forms of uncontrolled development like urbanization and sprawl had deteriorating had quality of environment, loss of agricultural lands, destruction of resources, and depletion fish and distraction wildlife habitats. Such impacts have decreased the local capacity of lands to support both ecosystem and human enterprise at global scale. Therefore, the effect of land use change is no longer a local environmental problem but a global issue.

At global scale, detailed information on existing land use pattern and sound knowledge about changes in land use through time is important for legislators, environments, historically planners, and State and local governmental officials [3]. Towns are growing faster all over the world. There will be nearly 2 billion

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new city residents accounting for around 60 percent of the world's population by 2030 leading to a severe destruction of natural resources and ecosystems (The Nature Conservancy, 2008). When cities grow, it requires more land and resources to support the growth.

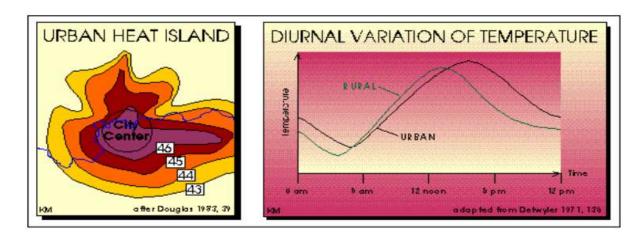
### II. IMPACTS OF URBANIZATION ON VARIOUS COMPONENTS OF ENVIRONMENT QUALITY

Probably most of the major environmental problems of the next century will result from the continuation and sharpening of existing problems that currently do not receive enough political attention. The problems are not necessarily noticed in many countries or then nothing is done even the situation has been detected. The most emerging issues are climate changes, freshwater scarcity, deforestation, and fresh water pollution and population growth. These problems are very complex and their interactions are hard to define. It is veryimportant to examine problems through the social-economic-cultural system. Even the interconnections between environmental problems are now better known, we still lack exact information on how the issues are linked, on what degree they interact and what are the most effective measures. One problem is to integrate land- and water use planning to provide food and water security.

#### (A) IMPACTS OF URBANIZATION ON VARIOUS COMPONENTS OF ENVIRONMENT

#### 1. The creation of heat island

Materials like concrete, asphalt, bricks etc absorb and reflect energy differently than vegetation and soil. Cities remain warm in the night when the countryside has already cooled.



#### 2. Changes in Air Quality

Human activities release a wide range of emissions into the environment including carbon dioxide, carbon monoxide, ozone, sulfur oxides, nitrogen oxides, lead, and many other pollutants.

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#### 3. Changes in Patterns of Precipitation

Cities often receive more rain than the surrounding countryside since dust can provoke the condensation of water vapor into rain droplets.

#### (B) IMPACTS ON THE LITHOSPHERE AND LAND RESOURCES

#### 1. Erosion and other changes in land quality

Rapid development can result in very high levels of erosion and sedimentation in river channels.



#### 2. Pollution

Pollutants are often dispersed across cities or concentrated in industrial areas or waste sites. Lead-based paint used on roads and highways and on buildings is one such example of a widely dispersed pollutant that found its way into soil. Burying tremendous amounts of waste in the ground at municipal and industrial dumps.

#### (C) IMPACTS ON THE HYDROSPHERE AND WATER RESOURCES

#### 1. Flow of Water into Streams

Natural vegetation and undisturbed soil are replaced with concrete, asphalt, brick, and other impermeable surfaces. This means that, when it rains, water is less likely to be absorbed into the ground and, instead, flows directly into river channels.

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#### 2. Flow of Water through Streams

Higher, faster peak flows change streams channels that have evolved over centuries under natural conditions. Flooding can be a major problem as cities grow and stream channels attempt to keep up with these changes.

#### 3. Degraded Water Quality

The water quality has degraded with time due to urbanization that ultimately leads to increased sedimentation there by also increasing the pollutant in run-off

#### (D) IMPACTS ON THE BIOSPHERE

#### 1. Modification of Habitats

The fertilizers that spread across lawns finds its way into water channels where it promotes the growth of plants at the expense of fish.

The waste dumped into streams lowers oxygen levels during its decay and cause the die-off of plants and animals.

#### 2. Destruction of Habitats

There is also complete eradication of habitats as an outcome of urbanization and native species are pushed out of cities.

#### 3. Creation of New Habitats

New habitats are also created for some native and non-native species. Cities also create habitats for some species considered pests, such as pigeons, sparrows, rats, mice, flies and mosquitoes. Urbanization has, for example, eliminated many bat colonies in caves, but has provided sites such as bridges for these species to nest.

#### III. CAUSES OF URBANIZTION

Rural to urban migration is happening on a massive scale due to population pressure and lack of resources in rural areas. People living in rural areas are "PULLED" to the city. Often they believe that the standard of living in urban areas will be much better in urban areas Urbanization usually occurs when people move from villages to cities to settle, this usually takes place in developing countries. In rural areas, people become victims of unpredictable weather conditions such as drought and floods, which can adversely affect their livelihood. Consequently, many farmers move to cities in search of a better life. Natural increase caused by a decrease in death rates while birth rates remain high, some the causes of urbanization includes:

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Industrial growth is a major cause of urbanization. It has expanded the employment opportunities. Rural people have migrated to cities on account of better employment opportunities.

Many social factors such as attraction of cities, better standard of living, better educational facilities, need for status also induce people to migrate to cities. There are numerous social benefits attributed to life in the cities and towns

In rural sector people have to depend mainly on agriculture for their livelihood. But Indian agriculture is depending on monsoon. In drought situations or natural calamities, rural people have to migrate to cities. In cities and towns, there are ample job opportunities that continually draw people from the rural areas to seek better livelihood. Therefore, the majority of people frequently migrate into urban areas to access well-paying jobs as urban areas have countless employment opportunities in all developmental sectors such as public health, education, transport, sports and recreation, industries, and business enterprises.

Urban areas are characterized by sophisticated technology better infrastructure, communication, medical facilities, etc. In urban areas, people also embrace changes in the modes of living namely residential habits, attitudes, dressing, food, and beliefs.

#### IV. KEY ENVIRONMENTAL CHALLENGES

Key environmental challenges that the Jammu and Kashmir is facing relate to environmental degradation as a result of unsustainable use of its natural resources for economic growth and development. J&K's agrarian and tourism based economy is heavily dependent on its natural resources because of its large population in rural areas and their economic dependence on primary natural resources. The main human activities contributing to environmental degradation include poverty, population growth, inappropriate technology and consumption choices unsustainable land use practices, poor soil and water management practices, deforestation, overgrazing, and pollution. Developmental activities such as road construction, intensive agriculture, polluting industry, and unplanned urbanization leading to changes in relations between people and ecosystems. This backdrop provides the justification for this environment policy. It gives the framework to guide the state's efforts to deal with the considerable and ever-growing environmental issues in Jammu and Kashmir, specifically in the following ways:

LOSS AND DEGRADATION OF FORESTS AND BIODIVERSITY: The forest are degrading alarmingly and the biodiversity base is shrinking, disrupting the ecology seriously; especially the pristine faunal and floral life. These lead to alarming fall in water availability in the rivers and other wetland systems and, also to landslides and heavy sedimentation of reservoirs. J&K continues to lose its biodiversity at alarming rates due to habitat destruction, overgrazing, deforestation, pollution, unsustainable harvesting of natural resources, and introduction of invasive and alien species, among others. Invasive and alien species are a major threat to the environment.

LOSS OF WETLAND ECOSYSTEMS: Unfortunately, our unique wetlands are facing tremendous ecological stress primarily because they are visualized only as a source of water, ignoring their vitality as a holistic biotic system. In spite of being the very productive ecosystems wetlands are confined mainly to

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Kashmir valley. The remaining patches are also facing increasing threats, especially from new industrial and infrastructure development projects including tourism and housing.

**DETERIORATION OF THE RIVERS:** The Rivers and the river ecosystems in J&K are deteriorated, because of sand mining, encroachment and over-exploitation. A revival and remediation programme for the rivers on a river basin basis involving the local self-governments, self-help groups, schools and colleges has to be taken on a high priority. Appropriate acts and laws may also be needed to protect the river systems and maintain its good health.

**ALARMING RATE OF AIR, WATER AND SOIL CONTAMINATION**: It is a matter of serious concern that tonnes of chemical fertilizers are being pumped into the agricultural land in the name of increasing productivity and, chemical pesticides, even those banned, are sprayed indiscriminately, again, in the name of protecting the crop from pests. As a result, today, analyses of pesticide residues in the State show that most of our food and water are contaminated at various levels.

#### V. CONCLUSION

From the above analysis of various indicators across the different zones of Greater Srinagar, it was evident that South-western zone and the outer areas were clearly different in several aspects. It is observed that the outer zones are considered the sprawl areas though they have been only recently merged with Greater Srinagar. Although the level of access to different services and amenities were the same across the different zones, the access to resources (water supply, energy, wastewater and solid waste disposal) was different across the central and outer zones. Further, with the effectiveness of planning and governance on the overall level of services (including that of resources), the outer south-eastern zone (Panthachowk, zawan, khanmoh) had poor delivery of services while the south-western zone (Hyderpora, Baghi-mehtab, peer Bagh, Rawalpora) had better delivery of these services.

- From this we can conclude that some causes of damage to the environment due to urbanization lies in the legislation and the regulating agencies if the country.
- Failure of governance in today's cities has resulted in the growth of informal settlements and slums that constitute unhealthy living and working environment.
- Serious attention should be given to the need for improving urban strategies, which promote efficiency in resource use.
- Vehicular pollution control in metropolitan cities and other cities deserves top priority.
- Urgent attention should be given to reduce the generation of solid waste at the sources through mandatory standards and regulation fee and tax incentives, and education and voluntary compliance.
- In case adequate steps are not taken to prevent pollution and to improve the quality of life by providing more social amenities, the life of the urban dwellers of India may become more miserable this may be the cause of health hazards and worst devastation.

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