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Manuscript ID:
IJWGAFES-2025-020601

DOI: 10.5281/zenodo.16563214

DOI Link:
<https://doi.org/10.5281/zenodo.16563214>

Volume: 2

Issue: 6

June

Year: 2025

E-ISSN: 3066-1552

Submitted: 10 May 2025

Revised: 15 May 2025

Accepted: 05 June 2025

Published: 30 June 2025

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How to cite this article:
Kumari, K., & Kumar, P. (2025).
Population Explosion and Its Effect on
Resources in Gopalganj District: A
Geographical Study. International
Journal of World Geology, Geography,
Agriculture, Forestry and Environment
Sciences, 2(6), 1–3.
<https://doi.org/10.5281/zenodo.16563214>

Population Explosion and Its Effect on Resources in Gopalganj District: A Geographical Study

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Abstract

Population explosion refers to the rapid and uncontrollable increase in the human population over a relatively short period of time. This phenomenon has become a global concern, especially in developing countries like India, where it exerts pressure on limited natural and economic resources. A population that grows beyond the carrying capacity of its environment poses significant challenges to social environmental and economic stability. There are several reasons for this problem increase, including improved medical care, which has reduced death rates and a lack of education about family planning in some areas. In rural regions many people still believe that having more children bring more financial support for the family, which adds to the problem. The impact of population explosion is visible in over crowded cities, rising unemployment issues as more farming causing deforestation and population. To control population growth steps such as spreading awareness about family planning decision about their families are necessary. Lastly population explosion is a serious issue that affects the overall progress of a nation. Socially the population explosion has led to increased unemployment, underemployment and poverty, particularly among the youth. The existing educational and healthcare infrastructure is insufficient to meet the needs of the growing population, especially in rural blocks such as Baikunthpur, Hatuha and Kuchaikot. Overburdened schools and hospitals lack of skilled human resources and limited accessibility are major concerns. Additionally Pressure of water supply, sanitation and electricity is intensifying with each passing year. Economically population growth without corresponding industrial or service sector development has led to a mismatch between labour supply and job creation. This has resulted in large-scale outmigration to states like Punjab, Delhi and Maharashtra in search of better opportunities. Remittances, through helpful, are not a sustainable solution to the district's structural problems.

This research examines the phenomenon of population explosion in Gopalganj district Bihar and its significant impact on local resources. The study utilizes census data, field survey and secondary resources to identify how rapid population growth is affecting land, water, forests, agriculture and employment. This paper concludes with planning strategies to ensure sustainable resource management in the face of demographic pressures.

Keywords: Population explosion, Resource development, Migration, Population, Explosion, Migration, Uncontrolled Growth, density etc.

Introduction

Change in population with respect to time is called population growth. There are two types of this growth (a) Positive growth having increase results on population. (b) Negative growth in which population is decreased. When the growth rate of population explosion. Infact increase in population is supposed to be a natural phenomenon and treated as an essential ingredients of development, but it is under control and planning. When it becomes uncontrollable and reaches to the extent of being capable of disturbing the natural balance, it becomes a problem. The term population explosion refers to rapid and unchecked increase in population. In district like Gopalganj this trends poses serious challenges to the availability and quality of natural and man-made resources population pressure is a significant factor behind land fragmentation declining agricultural productivity and increasing rural-urban migration.

Study Area:

Gopalganj is a prominent district in the north western part of Bihar. Geographically and Socio-economically it holds a significant place due to its agricultural productivity, fertile agricultural soil and demographic dynamics. It is located between 26° 12' N and 26° 39' N latitudes and between 83° 54' E and 84° 54' E longitudes. It covers an area of 2033 square kilometres. It is bordered by East Champaran and Muzaffarpur to the East, siwan and Saran to the South and Uttar Pradesh to the West and North. The district experiences hot and dry summers with temperatures potentially reaching 45 degrees Celsius. Total population of the district is 2562012 (as per census of 2011) with rural population 2399207 and urban population 162805.

Methodology:

The paper is based secondary sources, Print and electronic media and web based sources. Government documents like records and published reports have been consulted and analysed.

Population Explosion in Gopalganj District:

Population explosion is a serious concern in many parts of India and Gopalganj district in Bihar is no exception over the past few decades. Gopalganj has witnessed a rapid rise in population which has created significant pressure on its land, water and employment resources. According to the census of India increased from around 20.19 lakh in 2001 to 31.25 lakh in 2021 showing a growth rate of nearly 27%. The estimated population in 2021 is around 31.25 lakh. This sharp growth has led to higher population density crossing over 1260 persons per square kilometre.

Year	Population (in Lakh)	Growth Rate (%)
2001	20.19	-----
2011	25.62	26.83 %
2021	31.25	21.95 %

Sources: Census Development of India

Year	Density
2001	994
2011	1260
2021	1537 (Projected)

Sources: Census of India.

There are several reasons for this population explosion. High birth rates, easily marriage, lack of family planning awareness and low female literacy contributes to the problem. Although male migration to cities and abroad (like Punjab, Delhi and Gulf Countries) is common, It has not been enough to slow down population growth. The effects of this population boom are clearly visible. There is increasing pressure on agricultural land, leading to land fragmentation. Water resources are under stress due to overdue of ground water. Health and education facilities are over bounded. Unemployment is rising, particularly among the youth which causes further migration. To manage this problem, awareness about family planning must be increased. Education especially of girls should be prioritized. Local employment opportunities must be created to reduce dependence on outside migration.

Causes of Population explosion:

1. High Birth Rate
2. Decline in Death Rate
3. Lack of Family Planning
4. Illiteracy and social factors
5. Early marriage

Effects of population explosion:

1. **Resource Depletion:** Rapid Population growth leads to overuse of natural resources such as water, forests and analyse land.
2. **Unemployment and Poverty:** Unemployment is a major problem in Gopalganj District. More people means fewer jobs and higher competition, which often results in poverty and economic instability.
3. **Housing Problem:** Housing Problems is a major problems in research area. Cities become overcrowded, leading to the growth of slums and poor living conditions.
4. **Environmental Degradation:** Due to population explosion is increasing environmental degradation. Deforestation, Air and Water Pollution and loss of Biodiversity are direct consequences of population pressure.
5. **Strain on Infrastructure:** Health cause, Education, Sanitization and transportation system fail to meet the needs of an oversized population.

Solution and Preventative measures:

1. **Promoting education:** Especially for women as educated women tend to have fewer children.
2. **Awareness Campaigns:** Spreading knowledge about family planning and contraceptive use.
3. **Government Policies:** Implementation of effective population control policies and incentives for small families.
4. **Health Services Access:** Improve access to reproductive and maternal health services.
5. **Empowering women:** Gender equality and employment for women reduce dependence on large families foe economic support.

Conclusion:

Population explosion is one of the most pressing issue of the 21st Century. While it Signifies a dynamic and young population unchecked growth leads to sever challenges for development and environmental sustainability. A balanced approach involving education, awareness and policy enforcement is needed to control this explosion and ensure a better future for coming generations.

Acknowledgment

I express my sincere gratitude to my research guide, Prof. Dr. Pramod Kumar, Department of Geography, B. R. A. Bihar University, Muzaffarpur, for his invaluable guidance, constant encouragement, and unwavering support throughout the course of this research work.

I am also thankful to the University Department of Geography, B. R. A. Bihar University, for providing a conducive academic environment and access to relevant resources.

Financial support and sponsorship

Nil.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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