

ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
 Vol. 17, Issue, 07, pp.756-758, July 2026

**International Journal
 of Recent Scientific
 Research**

Subject Area : Management

IMPACT OF INCREASING HUMAN POPULATION IN SUSTAINBLE DEVELOPMENT

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DOI: <http://dx.doi.org/10.24327/ijrsr.20261707.0138>**ARTICLE INFO****Article History:**Received 16th June 2026Received in revised form 27th June 2026Accepted 19th July 2026Published online 28th July 2026**Key words:**

*Population demographics, Sustainable
 Development, UNSDG-2030*

ABSTRACT

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. Health and wellness, gender equality, clean water, and a host of other issues have remained top priorities for global development. However, “Resource Estimation & Planning,” which, in turn, is dominated by the “Human Population Trends” of various regions on the globe, plays a crucial role in the planning, execution, and achievement of these goals. The success of all future plans for sustainable development around the world has been hindered by the expanding human population. The current study emphasizes the close connection between population trends and sustainable development.

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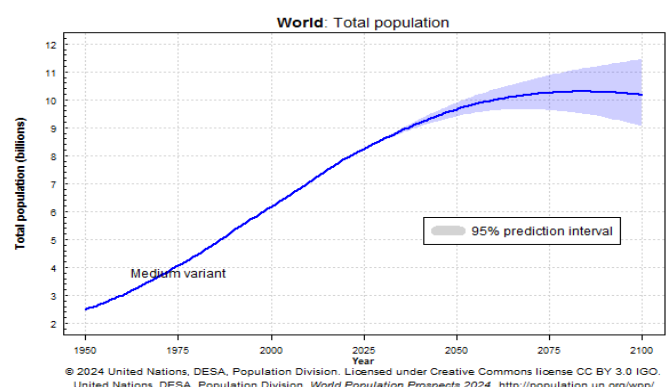
INTRODUCTION

In 2013, the world's population surpassed 7 billion, and it is expected to reach over 9 billion by 2043. The human population of a region and its trend toward growth or decline are crucial factors in the planning and success of any regional development programs. The increasing human population places greater demands on planning resources than is typically the case, places it at the center of every resource crisis, and it poses obstacles to the society's ability to develop sustainably. The expansion, decline, and migration of the human population, as well as their urbanization and migration, all have an impact on virtually every development goal on the national and global development agendas. It has an impact on all development plans, including consumption, production, employment, income distribution, poverty, and social protections. It also complicates every effort to ensure universal access to health, education, housing, sanitation, water, food and energy.

It is not difficult to comprehend that an expanding human population contributes to an increase in energy consumption, carbon emissions, global warming, forest depletion, the shortage of food and drinking water, and the demand for every

resource that can be used. In this span of 200 years, where the world population has increased by 6-times, this has increased the energy consumption to 35 times and carbon emission to 20 times.

Even though these figures have improved technically, it is still unclear exactly how the rise in population or energy use will affect carbon emissions. The next question is how the expanding human population will affect the state's sustainable development. In 2000, the world's population was 6.1 billion, and in 2023, it was 7.2 billion. These figures make it abundantly clear that human population growth is accelerating, as is the consumption of environmental resources.

World population trend**Figure 1.** Shows World Human Population Growth*Corresponding author: **Dr. Savita Ojha**

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The world human population growth rate has slowed significantly, falling to approximately 0.85% per year at the end of 2025. This decline, shown in time-mapped demographic models like Figure 2, reflects a global shift toward lower birth rates and longer life expectancies in the majority of regions.



Figure 2. World Human Population Growth Rate

The annual human population growth rate in South Asia has been steadily declining, falling from a peak of more than 2.5% in the late 1960s to about 0.8% by the end of 2024–2025. The total number of people living in the region increased from roughly 600 million to over 1.68 billion during this time.

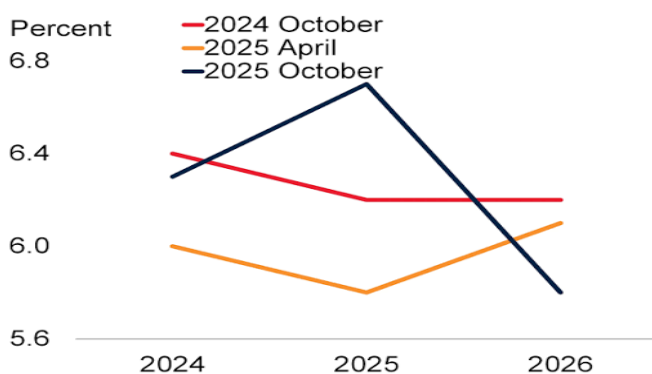


Figure 3. South Indian Population Growth Rate

World Bank and UN demographic data reflect a significant deceleration in India's population growth. By the end of 2025, the annual growth rate had fallen to around (0.9%), continuing a slowdown that had been going on for decades due to falling Total Fertility Rates (TFR) and rising life expectancy.

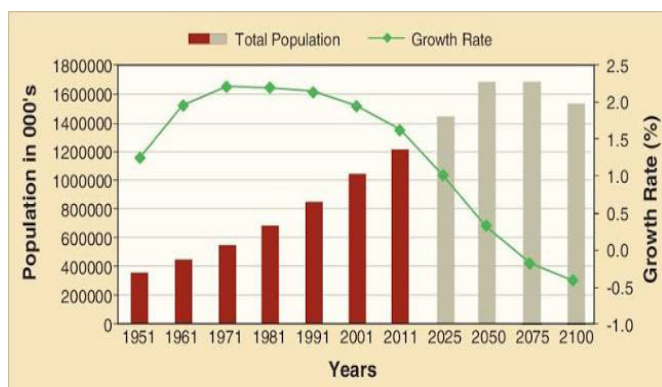


Figure 4. Indian Population Growth Rate

Concept of compound Demand

The idea of a Combined Demand Any plans to meet the resource requirements of the population of any region of the world or of the entire globe are most likely to fail because of the expanding human population. Plans for optimizing resource use as well as long-term uses of resources must be made. Plans can be made to protect resources and distribute them evenly among all humans in accordance with their needs. Unfortunately, however, there is no way to lessen the increased demand for resources. In this context, compounded demand refers to the total demand for all resources intended for a single purpose, such as fuel. There may be multiple fuel resources available viz. Petrol, gas, fossil fuels, etc., and depending on the circumstances, one might be able to meet demand for the other. However, the fuel compound demand cannot be reduced because it has not changed.

Impact of Sustainable Development

Figure 4 shows that sustainable development is a concept that includes economic, environmental, and social development all rolled into one. The compounded result of all these three gives a sustainable development to the region.

A region's sustainable development requires meticulous planning of its focus areas, resource requirements, distribution systems, dedicated efforts, a genuine sense of responsibility, and honesty in plan execution. Sustainable development encompasses not only the growth of the current population but also the growth that must be sustained for future generations. It is not difficult to comprehend that there would be a significant difference due to differences in human population growth rates between nations. Between the current and predicted demographic distribution of populations worldwide. The majority of the human population, both now and in the not-too-distant future, resides in developing nations.

Component of Sustainable Development

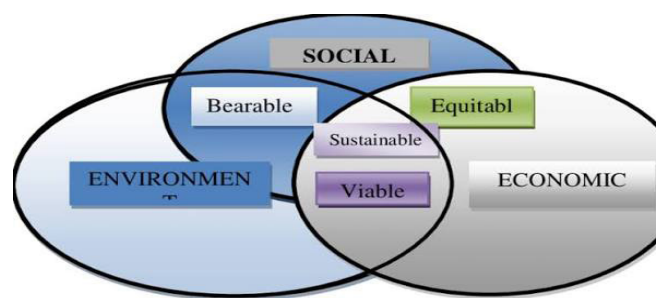


Figure 5. Shows integration of Sustainable Development

The expansion of the human population has an impact on virtually all sustainable development projections and plans. This is much clear that world human population is increasing at an exponential rate and earth is accelerating to the saturation of its capacity to serve to such huge human population.

- Accelerated consumption of resources like land, water, air, food, fuels, and minerals as a result of a large human population
- Increased environmental toxicity, accelerated waste production, and climate change

A. Effects on the Environment

According to studies, the increasing number of people on Earth has had negative effects on the natural world and its environment. All aspects of the earth's environment, including clean air, potable water, nutritious food, energy resources, and climate inadaptability, will be severely impacted by the growing human population.

B. Effects on Society

No doubt, when there will be a scarcity of resources, fights of survival will take its most ugly shapes. Humans will compete with one another for the possession of essential resources for themselves, their families, and their communities.

The Sustainable Development Goals will be severely impacted by the expanding human population in all aspects of social life, including employment, poverty, health and well-being, education, and social equality.

C. Humanity as a Brand-new Physical Force

Some scientists have coined the Anthropocene epoch to describe the current era because of the impact of so many humans on the planet. The proposed Anthropocene period is known for the dominant influence of humans and the effects of their activities on the planet's environment, in contrast to the majority of the previous geological epochs, which were defined by various geological and climate processes. Humans are, at their core, a brand-new global geophysical force. [6]

D. Opportunities for Sustainable Development by Growing Human Population

In addition to posing challenges for sustainable development, the expanding human population and its dynamics also present significant opportunities for more sustainable development. If responsible-consumption plans are drafted and implemented appropriately, the growing human population may be opportune for improving production capacity. In addition, the expanding human population may present an opportunity for the development of industry, innovation, and infrastructure if it is carefully planned and carried out. By development of sustainable communities and smart cities, the growing population can give optimal outcomes in the form of mutual collaborations and making human lives better. Urbanization has the potential to significantly facilitate social and economic progress.

CONCLUSION

The world's human population is expanding at an exponential rate, putting more pressure on the planet's resources. Earth is reaching the point where it can support the human population with the resources it has, so serious efforts are needed to develop the best plans for sustainable development. With

an expanding human population, the combined demand for resources cannot be reduced. If sustainable development is properly planned and carried out, a growing human population not only presents opportunities in the fields of innovation and infrastructure but also presents challenges to sustainable development in most plans related to social and environmental development.

References

1. Census.gov. (2010), "International Data Base (IDB) – World Population". 28 June 2010. Archived from the original on 7 July 2010.
2. Retrieved 1 August 2010. [2]. PDDESA-UNS (2009), "World Population Prospects: The 2008 Revision". Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat.
3. PDDESA-UNS (2017), "World population projected to reach 9.8 billion in 2050, and 11.2 billion in 2100". Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat.
4. Pinto Oshma Rosette (2015), "Effect of Global Recession on Indian Realty Sector and its Future Developments", IARS'International Research Journal, Vol. 5, No. 2, 2015 (URL:<https://research.iars.info/index.php/curie/article/download/49/48>)
5. Robert Engelman (2009), "Population & Sustainability", Scientific American Special Editions 19, 2s, pg 22-29, doi:10.1038/scientificamericaneart0609-22; URL: <https://www.scientificamerican.com/article/population-and-sustainability/> Retrieved 10 August 2017
6. Stephen Dovers, Colin Butler (2015), "Population and environment: a global challenge", Australian Academy of Science, URL: <https://www.science.org.au/curious/earthenvironment/population-environment>, Retrieved 15 December 2017
7. TanerGüney. (2017). Population growth and sustainable development in developed-developing countries: an iv(2sls) approach. 22. 1255-1277. URL: <https://www.researchgate.net/publication/321167892> Retrieved 1 August 2017
8. United Nations Population Fund (2013), "Sustainable Development and Population Dynamics: Placing People at the Centre", Statement by Anne-Birgitte Albrechtsen, UNFPA's Deputy Executive Director of Management, at the Open Working Group on Sustainable Development Goals; URL: <https://www.unfpa.org/press/sustainabledevelopment-and-population-dynamics-placingpeople-centre> Retrieved 10 August 2017.

How to cite this article:

Savita Ojha. (2026). Impact of increasing human population in sustainable development . *Int J Recent Sci Res.*17(07), pp.756-758.
