

# Land Use and Demographic Changes in Haryana

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**Abstract – Land use changes are dynamic in nature and should be checked at standard interims for economical advancement. Land use implies use of land in a specific region. Land use design incorporates sorts of land and how much land is being used under various employments. Land is essential asset of human culture and land use is the surface usage of all created and empty arrives on explicit point at a given existence. It is an orderly course of action of different classes of arrives based on certain comparative attributes chiefly to distinguish and comprehend their central utility, brilliantly and successfully in fulfilling the necessities of human culture.**

**Keywords: Land Use, Demographic Changes**

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## 1. INTRODUCTION

Haryana as seventeenth state was comprised in 1966. It is one of the two recently made states cut out of the more noteworthy Punjab region. It is flanked by Punjab and Himachal Pradesh in the north and by Rajasthan in the West and South. The lasting waterway Yamuna characterizes its eastern outskirt with Uttrakhand and Uttar Pradesh. Haryana encompasses Delhi on three sides. Therefore, a substantial zone of Haryana further bolstering her good fortune is incorporated into the National Capital Region. Haryana is presently a main supporter of the nation's generation of nourishment grains and milk. Agribusiness is the main control of the inhabitants of the state. The level arable land is flooded with ground water removed with submersible siphons and cylinder wells, and by surface water through broad waterway framework. Haryana's commitment to the Green Revolution made India independent in sustenance creation during the 1960s and onwards. Haryana is one of the wealthiest conditions of India and has the third most elevated Per capita salary in the nation with per capita GDP at Rs. 109227 (2011-12). Haryana is likewise a standout amongst the most financially created locales in South Asia and its horticultural and assembling industry has encountered supported development since 1970s. Haryana is India's biggest producer of traveler vehicles, bikes, and tractors. Since 2000, the state has risen as the biggest beneficiary of venture per capita in India.

In light of its agroclimatic conditions, Haryana can be separated into two homogeneous districts: the eastern semiarid zone and the western bone-dry

zone. These districts show checked contrasts in examples of land use, particularly in the horticultural area, and in dimensions of advancement. Power of land use in the two districts does not contrast altogether, yet agribusiness in the semiarid locale is overwhelmed by the development of high-yielding, high-esteem harvests, for example, rice and wheat, which represented 58.3 percent of the gross edited region in 1991– 1992. On the other hand, around the same time a huge extent of the edited territory (63.4 percent) in the bone-dry zone was assigned to bring down yielding, lower-esteem harvests, for example, bajra (millet), heartbeats, oilseeds, and cotton.<sup>1</sup> thus, the per-hectare amount and estimation of yield in the two areas contrast essentially.

Haryana has all around created agrarian and mechanical segments, and its economy is developing quickly—per capita salary is the third most elevated among the sixteen noteworthy states in India. Haryana's exceptional agrarian improvement has been ascribed principally to the Green Revolution. Started over the period 1967– 1978, it brought about the increase and extension of agribusiness in many creating nations and was fruitful in India.

Significant parts of the Green Revolution were the extension of farmland and the appropriation of twofold editing frameworks (two harvest seasons for each year) and seeds that had been improved hereditarily—that is, high-yielding assortments (HYV) of wheat, rice, corn, and millet. These

practices keep on molding land use in Haryana today.

## 2. LITERATURE REVIEW

Humanity's essence on the earth and his alterations to the scene has had a significant impact upon the regular habitat. These anthropogenic impacts on moving examples of land use are an essential part of numerous flow ecological worries as land use and land spread change is picking up acknowledgment as a key driver of natural change (Riebsame et al, 1994).

Changes in land use and land spread are inescapable, progressively fast, and can have unfriendly effects and suggestions at neighborhood, local and worldwide scales. In India, unparalleled populace development combined with arranged and spontaneous advancement exercises has brought about urbanization, however urban regions need foundation offices. This likewise has brought about genuine ramifications for the assets of the locale. Urbanization happens either spiral way around a settled city or straightly along the interstates.

This scattered improvement along roadways, or around the city and in rustic wide open is regularly alluded to as spread because of change of existing landuse and landcover. Land use changes are dynamic in nature and calls for checking at customary interims for manageable advancement. The remote detecting information because of concise view, dreary inclusion and constant securing has demonstrated an indispensable innovation in landuse examines. The advanced information in type of satellite symbolisms, in this way, empower to precisely figure different land spread and land use classifications and aides in keeping up the spatial information foundation (SDI) which is fundamental for observing urban development and change identifications thinks about (Burrough, 1986).

To more readily comprehend the effect of land use change on earthbound biological systems, the components influencing land use should be inspected. Developing human populaces apply expanding weight on the scene as requests increase for assets, for example, sustenance, water, safe house, and fuel. These financial factors frequently direct how land is utilized territorially. Land use rehearses for the most part create over a significant lot under various ecological, political, statistic, and social conditions. These conditions regularly shift yet directly affect land use and land spread (Ojima et al, 1994).

Among the elements changing landuse are populace development, economy and closeness to assets and fundamental conveniences. Affected by developing populace in Chandigarh city and its surroundings regions, especially three towns specifically Panchkula Urban Estate, Pinjore and Kalka of

Haryana express, the arranged land use holds most extreme noteworthiness for sound natural arranging and asset the board. Challenging Corbusier's structure and dreams Chandigarh couldn't hold its way of life as a completely arranged urban island wrapped by a green belt of wide open. There has been an extensive spontaneous advancement especially in its fringe. The arranged improvement occurred in the outskirts of Chandigarh before just as after the redesign of Punjab.

## 3. HARYANA: A DEMOGRAPHIC PROFILE

Two critical powers driving changes in land use in Haryana are the size and development rate of its populace. These powers and their relationship to relocation, land accessibility, and urbanization are analyzed

### Population

Haryana encountered a low populace development rate all through the main portion of the twentieth century, however it is at present adding to India's populace extension by a yearly development rate of 2.5 percent. Indeed, Haryana is one of the quickest developing states in India, in spite of its moderately high per capita pay and estimable monetary advancement. In 1991 Haryana's absolute populace was 16.5 million, or around 2 percent of India's 850 million individuals. The number of inhabitants in Haryana tripled over the period 1951– 1991, from 5.6 million to 16.5 million. Despite the fact that the yearly development rate has declined from 2.85 percent for the period 1951– 1971 to 2.47 percent for the period 1971– 1991, the last development rate is still a lot more noteworthy than the national yearly development rate of 2.17 percent for a similar period. The fast decrease in mortality in the last 50 years is regularly credited to upgrades in nourishment and sanitation in some urban zones and better human services.

Haryana's rough yearly birth rate for the period 1991– 1996 was 31.9 per thousand people contrasted and 29.2 for India. Its demise rate for a similar period was 8.6 per thousand people, which is lower than the national normal of 9.8. Consolidating these rates results in a characteristic development rate for 1991– 1996 of 23.3 per thousand people for Haryana contrasted and 19.4 for India.

Future during childbirth in Haryana is 59.5 years for females, 61.5 years for guys. The state positions third among the significant states in future for guys, after Kerala (65.9 years) and Punjab (63 years). Its future for females, be that as it may, is

unremarkable; Haryana positions eighth among the real states.

The expansion in populace has prompted more prominent populace thickness, in light of the fact that the land zone stays unaltered. The populace thickness of Haryana ascended from 227 people for each square kilometer in 1971 to 372 out of 1991, an expansion of 64 percent. This thickness is a lot higher than the 1991 national normal of 257 people for every square kilometer. Despite the fact that the rate of increment of populace thickness has been declining since the 1950s, it is anticipated to ascend in the twenty-first century—to as high as 455 people for every square kilometer in the year 2001 and 530 constantly 2011 ( Table 6-3). Such high densities, notwithstanding the decrease in populace development rates saw as of late, originate from the high populace development kept up in before decades. Consequently, the pace at which populace weights on the land are expanding involves incredible concern.

#### 4. ANALYSIS

Spatial appropriation of land use draws out that the urban development towards north-eastern parts is compelled because of the nearness of naturally touchy zone for example saved woods and extraordinary region (Cantonment Area). The investigation calls attention to that a huge part of around 43 percent of land in the examination region goes under regular assets including streams and held and ensured woods.

Classification	1972	1990	2008	1972	1990	2008
	Area (in Hectares)			Per cent of Total Geo-graphical Area		
1. Agricultural and Related (including crop land, plantation)	12800.00	11330.00	9064.80	43.39	38.41	30.73
2. Built-up ( including residential, commercial, industrial, Public & Semi Public and Recreational etc)	257.96	2707.00	5279.70	0.87	9.18	17.90
3. Reserve Forest	10317.01	10317.00	10317.01	34.97	34.97	34.97
4. Vegetal Cover (natural open vegetation)	1930.00	1119.70	857.00	6.54	3.80	2.91
5. Special Area: including Cantonment, Terminal Ballistic Research Laboratory, Hindustan Machine Tools(HMT) and Indo Tibetan Border Police (I.T.B.P)	1857.38	1857.38	1857.38	6.30	6.30	6.30
6. Water bodies (river, streams, nallas)	2228.63	1824.96	1528.23	7.55	6.19	5.18
7. Mining	109.03	309.029	509.03	0.37	1.05	1.73
8. Slums	0.0	34.96	86.85	0.00	0.12	0.29
Total	29500.00	29500.00	29500.00	100	100	100

Source: LANDSAT Satellite Imageries of Year 1972, 1989 and 2008

Haryana Sub-Region, Chandigarh Periphery Controlled Area : Per penny Area under Different Landuse Categories over Different Time Periods

Henceforth, there are least chances of even development towards north-east in the investigation territory for urbanizable land for future extension. Land dedicated to unique undertakings, which

incorporate cantonment, terminal ballistic research lab, Hindustan Machine Tools and ITBP complex has not seen.

#### CONCLUSION

This examination looks at changes in land use in the parched and semiarid agroecological areas of Haryana and the degree to which such changes are predictable with the objectives of economical improvement. All the more explicitly, it investigates land use designs with regards to the jobs of populace, innovation, costs, and open arrangements, and breaks down the natural results, especially on water assets, of the escalation of farming. This examination additionally looks at financial markers to decide if the achievement brought by cutting edge agrarian innovation has been converted into social advantages. At long last, it takes a gander at the job of Haryana in giving nourishment security to the country, differentiating the interest for agrarian products for nearby utilization with the interest from business sectors outside the locale.

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