

International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)
Website: www.ijirset.com

Vol. 6, Issue 3, March 2017

Changing of Land Utilization in India

Dr. Jagdeep Slngh

Associate Professor of Geography, Government College for Women, Hisar, Haryana, India

ABSTRACT: Since land is a nonrenewable resource, its scarcity cannot be contested. As both the population and the economy expand, more and more people will need access to property that is being used for increasingly diverse purposes. Human and livestock population size, patterns of demand, technological advancements, cultural norms, geographic location, available land area, and institutional variables (such as ownership structure, property rights, and government oversight) all play a role in determining the current pattern of land use. The land-use pattern is important not only economically, but also ecologically. The repercussions of dismissing these factors could be dire. The land is utilised to cultivate crops and raise cattle, providing the only sustenance for all forms of life (human, animal, and plant). Man uses land for a wide variety of purposes, including farming, city-building, settling, establishing industries, and so on. Population growth and other competing demands are putting pressure on our planet's limited land resources. This research shows an increase from 8.9% to 11% in non-farming land, an increase from 3.2% to 6% in fallow land, and a decrease from 4% to 3% in cultivable waste land.

KEYWORDS: The Ecological, the Urban, and the Financial Consequences

I. INTRODUCTION

Land is the most valuable and scarce of all resources. Land use pattern refers to the configuration of land uses. Land use encompasses several academic disciplines and provides the necessary foundation for all societal endeavours. It explains how people use and regulate the earth's natural resources. The distribution of human activities throughout a given area, or the kind of uses to which a given area is put, is what is meant by the term "land use pattern." Second, we spoke about cropping pattern, which is the combination of crop types grown and the percentage of land that is devoted to each crop at a given period. Many different types of farming, foresting, and grazing may take place on this area. Many elements, including topography, climate, soil, population density, economics, and technology, all have a role in determining how land is put to use.

Agriculture is one of man's earliest and most important economic pursuits, and there are conflicting demands for efficient and sustainable use of the land on which it is conducted. Global environmental change is complicated by the way in which land is used. A land-management plan is therefore required. Researching and analysing land use is crucial in the field of geography. The pattern and scale of human activities are changing, and with it, the way land is used. Thus, the amount to which the land use pattern has become lateral becomes an issue of importance for agricultural geographers. So, this research looks at how land has been used in different locations and during different periods of time..

Data Sources And Research Methodology

The current research makes use of a data collection compiled from secondary sources to examine the levels, trends, and differentials for India as well as its states since independence. Data on demographic shifts, urbanisation, land use, economic indicators, and agricultural practises are all included. Much of the socioeconomic and demographic information used in this analysis comes from Census reports published by the Auditor General of India for the various time periods considered. The information on land use categorization was gathered from publications released by the Indian Ministry of Agriculture, while the information on forests was gathered from papers provided by the Indian Environment and Forests Ministry.



International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)
Website: www.ijirset.com

Vol. 6, Issue 3, March 2017

II. DISCUSSION

A significant shift occurred in land usage patterns between the days before and after independence. Much of the area used for farming has changed since independence. In India, gathering information on how land is used often starts in smaller communities, such as villages. The Ministry of Agriculture, which gathers primary data from several state Authorities, is responsible for compiling the agricultural statistics, of which the land utilisation or land use statistics were a component. In 1948, the Ministry of Food and Agriculture established a technical Committee on Coordination of Ministry Of agriculture, which proposed a nine-fold land-use categorisation and normal concepts and terms for all the states to follow in order to facilitate greater comparability and understanding..

Classification of land use

To rationally and efficiently identify and comprehend their core utility, land must be classified according to comparable qualities. There is a dynamic and intricate land use pattern. In India, five primary forms of land use predominate. New categories were created, however, by expanding on the preexisting ones..

Land use Pattern in India, 1950-51 to 1999-2000

The land-use pattern of a nation at any given period is a function of the country's physical, economic, and institutional structure as a whole. Specifically, the physical features of the land, the structure of resources like capital and labour, and the position of something like the region in relation to other elements of economic growth, such as those relating to transport and industry and trade, have all played a role in shaping the current land use pattern in different regions of India.

Table 1: Land Use Pattern in India, 1950-2000

Classification	1950-51	1960-61	1970-71	1980-81	1990-91	1999-2000
1. Forest	14.24	18.11	21.04	22.18	22.24	22.52
2. Not available for cultivation	16.71	17.00	14.70	13.3	13.28	13.83
(a) Non Agricultural uses	3.29	4.97	5.43	6.46	6.92	7.31
(b) Barren and uncultivable land	13.42	12.03	9.27	6.46	6.36	6.20
3. Uncultivated land	17.39	12.61	11.54	10.62	9.91	9.29
(Excluding fallow land)						
(a) Permanent pastures and	2.35	4.68	4.37	3.94	3.74	3.60
other grazing land						
(b) Land under Miscellaneous	6.82	1.49	1.42	1.18	1.25	1.18
tree crops and groves not						
included in net area sown						
(c) Cultivable waste land	18.7	6.44	5.76	5.50	4.92	4.51
4. Fallow land	9.89	7.65	6.54	8.14	7.66	8.12
(a) Other Fallow land	6.13	3.75	2.88	3.26	3.17	3.29
(b) Current Fallows	3.76	3.91	3.66	4.88	4.49	4.82
5. Net sown area	41.77	44.63	46.18	46.03	46.91	46.07



International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)

Website: www.ijirset.com
Vol. 6, Issue 3, March 2017

Forest Area

All areas designated as forests or managed as forests by law fall under these umbrella terms.

In 1950–51, just 14.2% of India was covered by forests. However, a 22.5% increase was made in 1999-2000. The National Forest Policy of 1952 mandates that at least 33.3% of the total land area be reported as forested. The decade between 1950 and 1951 and 1970 and 1971 had the greatest increase in forest cover.

Not every region of the nation has the same amount of forest land. If we include UTs, Lakshadweep has the greatest percentage of forest cover (90.33%), but Mizoram has the most forest cover area (85.41%) of the total land. While in contrast, the proportion of forest cover in Punjab and Haryana is among the lowest in the world.

Land not available for cultivation

This category includes two sub types

- a. Non-farming applications
 - b Land that has never been farmed

This includes both inhabited and uninhabited areas, as well as natural features like mountains, deserts, marshes, and the like. In 1950–51, it made up 16.71% of India's total area, but by 1999–2000, that number had dropped to 13.83. Arunachal Pradesh has the most of this kind, followed by Rajasthan, Madhya Pradesh, and Gujarat. Comparatively little land is included here compared to Dadra and Haveli, Andaman & Nicobar, and Sikkim.

Uncultivable Land (Excluding Follow Land)

Land that, based on current standards of assessment, might be farmed but hasn't been for the current year and the five years before is regarded to be cultivable waste land. Perpetual pasture and some other grazing land i.e. all grazing grounds which could include permanent medows and village communal pasture. All arable land is covered with a variety of trees, crops, and groves that are not included in the net area sown but are used for agriculture in some way outside of the typical growing season. In the subsequent discussion they are considered jointly. This is undeveloped land that might be used to expand existing farms but has not yet been developed. Under this group 17.3% are covered during 1950-51 however until 1999-2000 it has been dropped to \s9.29 % of the entire area of India.

Fallow Land

Lands that have previously been seeded but are not currently being farmed are considered "fallow" at the time of reporting. It has been shown that in various regions of the research area, the time that land is left fallow varies considerably.

This land use category consists of

Current fallow refers to land that has been left unsown for the duration of the current agricultural year in order to restore its fertility, as well as land that has been left uncultivated for the time being due to a lack of water or financial considerations. Lands that have been abandoned for a longer length of time than one year but less than five years are classified as "other fallow lands." This kind of terrain predominates in the Indian states of Rajasthan and Tamil Nadu.

The amount of land classified as such has likewise shrunk from 1950–51...

Cultivated Land

India has more of its total land area classified as such than any other nation. A field's "net sown area" is the total area that has been actively planted in seed or seedlings. If an area is planted more than once in the same years, only the first sowing is counted toward the net sown area. The term "net area sown" refers to the total land area that was actually planted with crops during a given growing season. In addition, it may be resold as net cropped area. In 1950–51, net displayed area accounted for 41.77 percent of the total land, and by 1999–2000, it had increased to 46.07 percent.



International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)

Website: <u>www.ijirset.com</u>
Vol. 6, Issue 3, March 2017

Farms and fields Agricultural land is defined generally as land that is utilised for food and fibre production. Distinctive area and road outlining in the backdrop, and patches made by cattle or motorised machinery still, will be the primary evidence of agricultural turmoil.

These unusual symmetrical designs are also indicative of urban or built-up fields due to street layout and expansion by blocks, therefore they may not be as noticeable in meadow or other lands where such equipment is utilised seldom. On the basis of urban-activity indicators and the related population absorption, it might be possible to distinguish between farmed and urban or built up areas in general. Comparing agricultural land to other urban or built-up area, the most striking contrast is the lower concentration of man-made infrastructure, such as schools, hospitals, and highways. Often situated on the outskirts of cities, parks and big open spaces designated for cemeteries might be easily misunderstood for farmland.

III. CONCLUSION

Based on urban-activity indicators and the related population absorption, it would be possible to differentiate between farmed and urban or built up areas in general. Most obviously, the number of institutional complexes, such as the road and highway network, is far lower in agricultural land than in the other urban or built-up area. When constructed on the outskirts of cities, the parks and vast open spaces designated for cemeteries may easily be mistaken for farmland.

REFERENCES

- 1. Ahmad, N., Sinha, D.K., K.M.Singh (2016). Changes in Land Use Pattern and Factors Responsible for Variations in Current Fallow Land in Bihar, India, Agricultural Research Communication Centre, Vol-52, No.3,PP236-242.
- 2. Malik, J. (2012). Changing Landuse Pattern in Haryana, International Journal of Computing and Corporate Research, Vol-2, No.2
- 3. Changing Land Use Pattern in Haryana: A Spatio-Temporal Study, Pooja Rani
- 4. Morepatil, K. S. (1995), "Studies in Agricultural Landuse", Himalay Publishing House, Bombay, pp II.
- 5. Mohammad Noor (1973), "A Study in Agricultural Land use (1951-1970)", Geographical Review of India, Vol. XXXV, No. 3, Pp 277-288.
- 6. Agrawal, A., Pandey, R. S., & Sharma, B. (2010). Water pollution with special reference to pesticide contamination in India. *Journal of Water Resource and Protection*, **2**(05), 432.
- 7. Alkemade, R., Reid, R. S., van den Berg, M., de Leeuw, J., & Jeuken, M. (2013). Assessing the impacts of livestock production on biodiversity in rangeland ecosystems. *Proceedings of the National Academy of Sciences of the United States of America*, **110**(52), 20900–20905.
- 8. lexandratos, N., & Bruinsma, J. (2012). World agriculture towards 2030/2050: The 2012 revision (ESA Working Papers). ESA Working Paper No. 12-03, Agricultural Development Economics Division, Food and Agriculture Organization of the United Nations. Rome.
- 9. Bhattacharyya, R., Ghosh, B., Mishra, P., Mandal, B., Rao, C., Sarkar, D., Das, K., Anil, K., Lalitha, M., Hati, K., & Franzluebbers, A. (2015). Soil degradation in India: Challenges and potential solutions. *Sustainability*, **7**(4), 3528–3570. https://doi.org/10.3390/su7043528
- 10. Biggs, R., Simons, H., Bakkenes, M., Scholes, R. J., Eickhout, B., van Vuuren, D., & Alkemade, R. (2008). Scenarios of biodiversity loss in southern Africa in the 21st century. *Global Environmental Change*, **18**(2), 296–309. https://doi.org/10.1016/j.gloenvcha.2008.02.001
- 11. Bondeau, A., Smith, P. C., Zaehle, S., Schaphoff, S., Lucht, W., Cramer, W., Gerten, D., Lotze-Campen, H., Müller, C., Reichstein, M., & Smith, B. (2007). Modelling the role of agriculture for the 20th century global terrestrial carbon balance. *Global Change Biology*, **13**(3), 679–706. https://doi.org/10.1111/j.1365-2486.2006.01305.x
- 12. Brooker, R. W., Karley, A. J., Newton, A. C., Pakeman, R. J., & Schöb, C. (2016). Facilitation and sustainable agriculture: A mechanistic approach to reconciling crop production and conservation. *Functional Ecology*, **30**(1), 98–107. https://doi.org/10.1111/1365-2435.12496
- 13. Del Grosso, S. J., Gollany, H. T., Reyes-Fox, M. (2016). Simulating soil organic carbon stock changes in agroecosystems using CQESTR, DayCent, and IPCC Tier 1 methods. Synthesis and Modeling of Greenhouse



International Journal of Innovative Research in Science, Engineering and Technology

(An ISO 3297: 2007 Certified Organization)

Website: www.ijirset.com
Vol. 6, Issue 3, March 2017

Gas Emissions and Carbon Storage in Agricultural and Forest Systems to Guide Mitigation and Adaptation, (advagricsystmodel6), 89-110.

14. ICAR (2015). Vision 2050. New Delhi. Retrieved from http://www.icar.org.in/files/Vision-2050-ICAR.pdf Google Scholar