



AGRICULTURAL SCENARIO IN HARYANA & LAND USE PATTERN OF

HARYANA

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Abstract :

The Green Revolution was initiated in India in the late 1960s and after that the growth of economy of the country was boosted up. The farmers of the country started using high yield variety seeds to increase the crop production. In the mid-1990s, farmers started to focus on small commercial crop due to many factors such as diminishing farm sizes, fluctuating prices, demands for livelihoods and lack of work in the high agricultural season (Sebby, 2010). During that time the food and nutritional welfare of many poor farmers family have been seriously damaged.

India has done well in the post-change era (since 1991) on a few metrics, such as economic development, external dispatches, payment adjustment, flexibility to external goods, development in the service sector, impressive set of external trade, information technology (IT) and securities trading, upgrades in broadcast communications etc. (Centre for Civil Society, 2020).

After 1991, economic reforms and regulatory approaches have been introduced in India, initially focusing on manufacturing, telecommunication sector, civil aviation, finance and capital markets. This economic reform was absent in informal sectors like street vendors, rikshaw pullers and specially the agricultural sector.

The Government of India, has made a declaration to double the income of farmers by 2022. The decisions and processes for achieving this timely aim are judged by experts. One of the alternatives is to determine the potential to increase the income of farm families within the fair era of the age-old organized cultivation system (Kotadiya, 2021).

Key Words : Agriculture, Land use pattern, Crops

Introduction : Haryana is proudly known as Bread Basket of India and it has witnessed a significant growth in agriculture sector over the past years (Singh & et al, 2020). The agricultural sector in Haryana is considered to be very rich if compared to the other states of India. Nearly 75 per cent of the total procurement of rice and wheat by government was from Punjab and Haryana (Radhakrishnan, 2020). After Haryana became a food shortage state when it was established in 1966, it became a major sponsor of the National Grain Reserve. Overall,

thanks to the country's diverse political leadership, current science and technology, agricultural organizations, land reform, flexible support from the central government, strong structure, improved food varieties, and progress in production, Agricultural production has experienced surprising growth ((UNCTAD, 2017).

Agriculture has continued to grow Haryana's economy though witnessing numerous changes in the midst of the last three decades. The largest transition came in the mid-1960s with the Green Revolution that generously expanded the yield and its benefits would certainly stream down to all

of the rural society's sector. In the aftermath of the introduction of modern agricultural methods, The agrarian economy of Haryana, with an unusually changed agricultural base, started to weaken for just three decades. The agriculture sector has been a reliable and important supporter of the Gross State Domestic Product (GSDP) immediately, considering the fact that the supply of this sector to the Gross State Domestic Product is slowly decreasing. The portion of Gross State Domestic Product shows that the supply of agricultural and partnered industries dropped from 32.0 per cent in 1999-2000 to 20.5 per cent in 2007-08. In the State GDP, it declined further to 16.7 per cent (at consistent costs for 2004-05) and 19.5 per cent (at present costs) in mid-2010-11 (Economic Survey Haryana, 2010-11).

It is estimated that almost 67 per cent of Haryana's 16 lakh landholdings are small and marginal, with only 3 per cent being significant. As per the census 2011, the state of Haryana has an average holding size of 2.25 hectares, which is 1.1 per cent larger than the national rate of 1.15 hectares. Crop season adjustments, temperature changes, increase in water supply for agriculture irrigation and groundwater consumption, reduced organic soil carbon, and various plant nutrients have affected crop productivity for farmers in the ten selected districts of Haryana. Wheat, rice, and maize yield gaps and management yield gaps (crop loss owing to inadequate management in farmers' fields) have been found.

On community land, the scaled-up effort promotes sustainable farming practices in model fields, such as zero-tillage farming; raised bed planting; direct-planted rice; alternating rice soaking and drying; and management/protection of crop residue. Fertilizer application on a site-by-site basis and precise control of water resources (laser levelling) Weather-driven seed and food banks with added value; capacity development; ICT-based guidance and capacity building; and information exchange are examples of this approach.

The introduction of these extensive climate-smart agriculture activities in the state will also raise severe national issues, which must be addressed. Many hurdles to doubling the income of farmers in India by 2022 include the need for a better understanding of handling temperature-sensitive agricultural products, as well as low-quality cold chain facilities, the need for suitable integrated agricultural aggregation facilities, and post-harvest storage facilities, as outlined in a Government of India's Department of Administrative Reforms & Public Complaints (DARPC) History Paper (2017). (Chand, 2017).

Although one of the world's principal farming regions, India's share in the global food store is less than 2 per cent. There are several nations in the world whose crop yields per hectare are higher than India's in varieties such as paddy, wheat, maize, pulses, and so on, including the United States and France (FAO, 2019).



Source: Haryana Space Application Centre, 2021

Agricultural expansion has led to a social and cultural shift in the population of Haryana since the state's inception. Their impact on people's standard of living may be seen in the Green Revolution and agrarian reform. In Haryana's culture, some discrepancies still arise as

economic growth progresses. Compared to small-scale farmers in Haryana, big farm owners have greater access to digital information and technology and more financial ability to adopt modern inputs. As new developments are introduced, they can expand their operational holdings. This group of people is usually well-educated, well-trained, and has easy access to the benefits of development organizations and political leaders.

India's Green Revolution introduced new agriculture technologies, which enhanced agricultural production and it also show some negative aspects like as long-term soil fertility loss, widespread plant genetic variety loss, increased pesticide danger, and the environment are only a few consequences. “The policies and practices of Government and practices in rural techno-infrastructure advancement such as highways, irrigation, electricity and other modes of supply, utilities and marketplaces for agricultural growth were implemented after independence. Land reform, remunerative pricing policies, credit availability, and several different forms of support for small and marginal farmers were made possible thanks to policy and regulatory involvement. Farmers have become self-sufficient in food grains thanks to new agricultural technology, resources, and public policy (Nelson, Ravichandran, & Antony, 2019).

LAND USE PATTERN OF HARYANA

Agricultural land use refers to the important use of geographical areas for diverse uses and practices (Kanianska, 2016). “The greater scale of the net sown area of the aggregate geographical area, the greater the volume of agricultural production (Dayal, 1984). The land use analysis is an integral part of geographical investigations and offers legal guidelines for territorial organization and development, as well as for the potential implementation of agriculture. In this way, several experts and geographers have concluded the investigation of land usage and its modification at national and universal stages. The state of Haryana occupies 1.44 per cent of the country’s geographical area (Kumar S. , 2020). It is situated in the northwest region of India and is region of the plain of Indo-Gangtic. It shares borders in the north with Himachal Pradesh, in the east with Uttar Pradesh and Delhi, and in the northwest with Punjab and Chandigarh.

Table 1.2: Agriculture Classification of Area in Haryana State, per centage of Area under different Land use

Years	Fallow Land (per cent)	Other uncultivated land excluding Fallow Land (per cent)	Land not available for Cultivation (per cent)	Total area according to village papers (000 hectares)
1966-67	83.70	3.11	13.18	4,399
1970-71	81.53	2.04	16.43	4,802
1975-76	85.13	1.77	13.10	4,404
1980-81	85.79	1.36	12.85	4,405
1985-86	86.11	1.18	12.71	4,391
1990-91	85.52	1.10	13.39	4,378
1995-96	85.08	1.18	13.73	4,398
2000-01	85.37	1.34	13.29	4,402
2005-06	85.57	1.56	12.88	4,372
2006-07	84.74	2.38	12.88	4,372
2007-08	84.77	1.51	13.72	4,372
2008-09	84.33	1.67	14.00	4,371
2009-10	84.37	1.58	14.05	4,371
2010-11	83.36	1.46	15.17	4,370
2011-12	83.78	1.46	14.76	4,371
2012-13	83.14	1.28	15.63	4371
2013-14	82.82	1.14	16.04	4,371
2014-15	83.05	1.24	15.72	4,371
2015-16	83.20	1.33	15.48	4,374
2016-17	84.63	1.56	13.82	4,372
2017-18	84.51	1.81	13.68	4,371

Source: Statistical abstract of Haryana 1966-67 to 2017-18

The current table is an attempt to examine the agriculture classification of area in Haryana state, percentage of area under different land use improvements that took place in Haryana's land use model from 1966 to 2018. The analysis indicates that marginal improvements have arisen in all categories of property use; property, with the exception of the proportion of woodland area that has decreased dramatically from 2.575 per cent in 2015-16 to 1.02 per cent in 2016-17. The proportion of net area cultivated in the overall area fell marginally from 82.1 per cent in 2015-16 to 80.16 per cent in 2016-17, although there were positive improvements in the area which were under non-agricultural usage that increased from 8.69 per cent in 2015-16 to 10.14 per cent in 2016-17. A very relevant measure of the extent of agricultural growth and agricultural productivity is the proportion of net area (NSA). For the overall region, the proportion of NSAs decreased slightly from 82.12 per cent in 2015-16 to 80.16 per cent in



2016-17. More fertile land has been opened to construction and human settlements because of urban and industrial growth. Non-agricultural shares of the remaining districts are below the state level (10.14 per cent). This is mostly due to the rugged surface and the high proportion of forest-based areas. The districts in which the NSA per centage was lower than the state average (82.12 per cent) was Ambala, Panchkula, Yamuna Nagar, Panipat, Faridabad, Gurgaon, in much of the province, the NSA comprised 80 to 90 per cent of the total region. Because of urbanization, construction, and infrastructure work (railways, highways, industry creation). For these factors, the per centage of non-agricultural land use rose substantially from 8.69 per cent during the 2015-16 periods to 10.14 per cent during the 2016-17 periods. The proportion of the remaining land use category in the state has risen marginally.

References

1. Dayal, E. (1984). Agricultural Productivity in India: A Spatial Analysis. *Annals of the Association of American Geographers*, 74(1). Retrieved from <https://www.jstor.org/stable/2562616>
2. Khan, Q. U., & Zhang, D. (2012). Rural Transformation Index: Measuring Rural–Urban Disparities.
3. *Skills Development for Inclusive and Sustainable Growth in Developing Asia-Pacific* , 213-240.
4. Kurien, C. (1980). Indian Economy in the 1980s and on to the 1990s. Retrieved from <https://www.epw.in/author/c-t-kurien?page=1>
5. (UNCTAD. (2017). *The role of science, technology and innovation in ensuring food security by 2030*. Retrieved from https://unctad.org/system/files/official-document/dtlstict2017d5_en.pdf
6. Arora, R., & et al. (2021). *COVID-19 AND ITS IMPACT ON RURAL ECONOMY*. Economic & Financial Affairs Wing of the R&I Division. Retrieved from
7. http://164.100.47.193/Refinput/Research_notes/English/16072021_171901_1021204139.pdf
8. CENSUS. (2011). *Census - 2011*. Retrieved from <https://censusindia.gov.in/2011-Common/Archive.html>
9. CENSUS, U. (2021). *U.S. Census Bureau Current Population*. Retrieved from <https://www.census.gov/popclock/print.php?component=counter>



10. Centre for Civil Society. (2020). *Centre for Civil Society*. indiabefore91. Retrieved from <http://indiabefore91.in/1991-economic-reforms>