

EFFECTS OF AGRICULTURE LANDUSE AND IRRIGATION FACILITIES ON RURAL DEVELOPMENT AT KUSUR VILLAGE IN SOUTH SOLAPUR TAHSIL : A CASE STUDY

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Article Info	ABSTRACT
Article History: Received: 17th Sep 2025 Accepted: 01st Oct 2025 Published: 15th Oct 2025	India is a primarily agricultural country in the world. Agriculture is the main occupation of Indian people. Agriculture sector provides food to the people and raw materials to the industrial sector. So Indian agriculture has got very important place in the Indian economy and rural development in India. Out of the total population in India 65 percent people have directly or indirectly depending on agriculture and in rural region maximum peoples are depends on agriculture. Rural economy is totally depends on agriculture and agriculture is the most important sector which provides number of employment opportunities. While studying about land and its use, agricultural sector cannot be kept aside. In any country out of the available land most percentage of it will be used for agriculture. Due to the study of land, we will come to know about structure of crops, the capability land output per hector. Apart from these things we will come to know the physiographic and climatic conditions of the study area, irrigation pattern, physical structure and different types of soils and its fertility. The aim of present paper is to assess the effects of agriculture land use and irrigation facilities on rural development in Kusr village in South Solapur tahsil in Solapur district of Maharashtra. The entire investigation is based on secondary sources of data and field observations. The data has obtained from gram panchayat office and Talathi karalaya of the village. It is also observed that the relation between irrigation facilities for agriculture and its effects on rural development .
Keywords: Land use pattern, Agriculture land use, Irrigation Facilities, Rural development	

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INTRODUCTION:

India is a primarily agricultural country. It is the ancient occupation of the nation. Agricultural sector provides not only food to the growing population but also raw materials to the industrial sector. So the Indian agriculture has gained more importance in the Indian economy also in rural development. This sector provides near about 70 % employment opportunities to the people. According to 2024 data agriculture contributes 16% of India's GDP and it employs near about 45% of Indian people. Out of the total available land much part of the land will be used for cultivation and it is necessary to study the use of land for agriculture. While we are studying the use of land, we will come to know the pattern of crops, per hectare production capacity of the land and the use of land for residential purpose etc. Apart from the above matters we will study the physiographic and climatic conditions, new changes in the cultivable land, adopted technology, water drainage system of the selected study area. We will study about the land structure and relation between climate and use of land. All the above said matters are studied in detail in this research paper.

OBJECTIVE:

The basic objective of present research paper is to study the effects of agriculture land use and irrigation facilities on rural development at Kusur village in South Solapur tahsil of Solapur district.

SOURCE OF DATA AND METHODOLOGY:

The study is based on primary and secondary data and field observations. General land use, means of irrigation and cropping pattern and economic condition of farmer this data is obtained from gram panchayat karyalaya of Kusur village and Socio-economic abstract of Solapur district. Collected data is processed and presented in the tabular and cartographic technique.

Primary Data:

For the collection of primary information we are used interview and questionnaire then we are observed study area and collected the primary data. We are prepared questionnaire of agriculture land use and irrigation facilities, rural development and visited to village and take the interview of the farmers and villagers and collect the information for this research.

Secondary Data:

Secondary information has been collected from grampanchayat office maps & statistical information is collected from Talathi karyalay of this village. Secondary information is collected from socio economic census of Solapur district. Grampanchayat office is also give us the village maps and statistical information. This information tabulated and graphs will prepared and represent the information in this research paper. Secondary information is qualitative information and this information is give the accurate information.

STUDY AREA:

Kusur village is one of the most important villages of the south Solapur tahsil of Solapur District. The area of this village is 1085 sq. hectors. This village is located left bank of Bhima river. This river is big river on deecan trap of Maharashtra plateau. This river location of this village is mostly affected on the agriculture landuse of this village in cultivated land and also affected on irrigation facilities of agriculture for this village. Due to river connectivity the cultivated soil in this village area is very high fertile. So this condition is mostly affected on agriculture development and economic growth of farmers in this village. The location of this village is towards the south-west of Solapur and it is only 48 km from Solapur city. The latitudinal extension is $17^{\circ} 30'$ north to $17^{\circ} 32'$ north and the longitudinal extension is $75^{\circ} 53'$ east to $75^{\circ} 56'$ east is the location of this village. The location of this village is also affected on land use pattern. The climatic conditions, temperature, geographical conditions and structure of land have been affected on the vegetation and agricultural occupations.

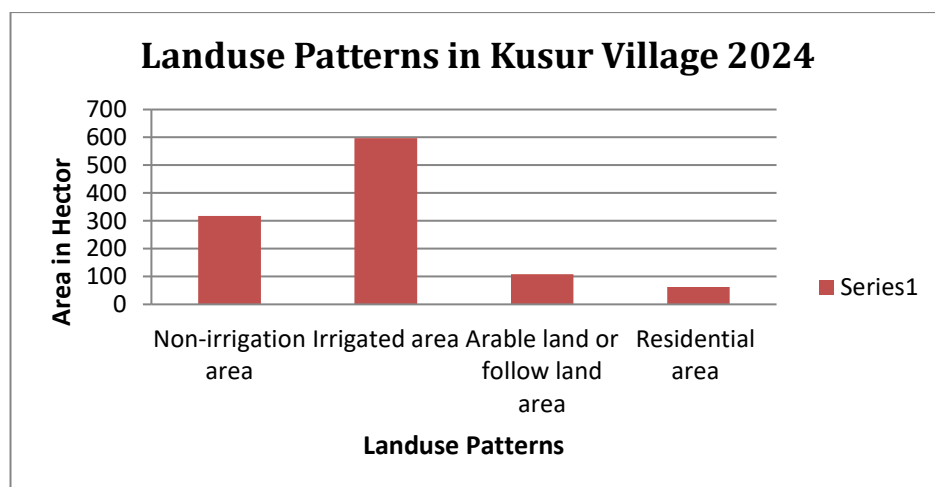
DISCUSSION:**Land use pattern:**

Land use of any region will be decided by man with the observation, of physiographic structure, fertility of the land, river-pattern and natural vegetation of the area. While observing the land use of Kusur Village is 1085 square hector, out of this, the residential area, follow-land area, non irrigated area, irrigated area is shown on the table no.1

TABLE NO 1. LANDUSE PATTERN IN KUSUR VILLAGE

Sr. No.	Unit	Area in Hector	Percentage
1.	Non-irrigation area	318.00	29.30%
2.	Irrigated area	596.95	55.04%
3.	Arable land or follow land area	108.05	9.95%
4.	Residential area	62.00	5.71%
Total geographical area		1085	100%

Source: Talathi karalaya Kusur Village

**Fig. 1**

Land use of Agriculture:

After considering the above divided circle, we will come to know that only 85% of land of Kusur village is cultivable land. Out of the cultivable only 914.95 hector land is under cultivation and the percentage non-irrigation land is (29.30%) i.e. 318.00 hector and irrigated land around about 596.95 hector (55.04%) is there. The arable land is near about 108.05 (9.95%) hector. And residential area is 62.20 hector. It is necessary to bring the arable land under irrigation to increase agricultural production.

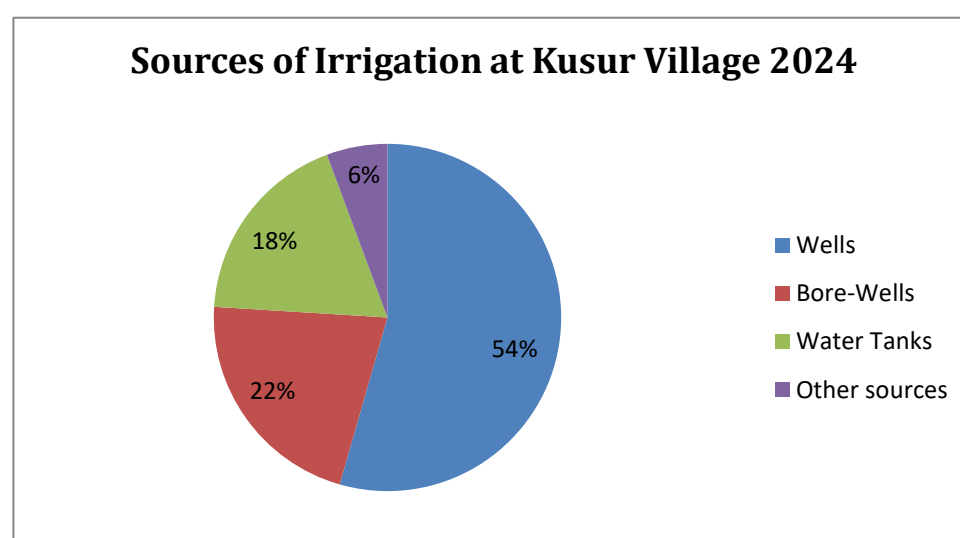
Means of Irrigation:

There is close relation in there between agriculture development and irrigation. This village area as is under rain-shadow region of Maharashtra state but this village is located at left bank of Bhima river. So irrigation facilities are high available in this region. Out of available land, only 364.80 hector lands are under irrigation. The main source irrigation is Bhima river and another sources of irrigation facilities are wells, bore-wells, water-tanks in this region.

TABLE NO 2. SOURCES OF IRRIGATION IN KUSUR VILLAGE (2024)

Sr. No.	Means of irrigation	Area in Hector	Percentage
1.	Wells	325.00	54.44%
2.	Bore-Wells	128.60	21.54%
3.	Water Tanks	109.55	18.35%
4.	Other sources	33.80	5.67%
Total area		596.95	100%

Source: Talathi karalaya Kusur.

**Fig. 2**

As we see the above diagrams we will come to know that wells and water tanks are play very important role in irrigating the land in this area than bore wells & other sources.

Rural Development and Economic Status of Kusur Village

After study of present paper the economic status of kusur village is change following major drastic changes are created in this study area and this is related to rural development

- Change in cropping pattern.
- Increased standard of living of this village
- Increased per capita income.
- Due to irrigation facility the agriculture productivity in increased.
- Change in agriculture technology.
- Growth of literacy rate.
- Due to high literacy sex ratio have also increased
- Change in settlement pattern.
- Increased economic status of this people

CONCLUSIONS:

After studying the land-use of Kusur Village, Following things included in the conclusion.

- 1) Out of the total land use 318.00 hect. land is under non-irrigation and irrigated land is 596.95 hector and the total cultivable land is 914.95 hector.
- 2) In this village area 55% irrigation is by wells, 19% by Tube-wells, and 22% land by water tanks and 5.67% agriculture is provided irrigation facilities from other sources.
- 3) The Wells and water tanks are most useful sources of irrigation in this village.
- 4) The Bore-wells and other sources are less used for irrigation for agriculture in this village area.

SUGGESTIONS:

- 1) It is necessary to provide more irrigation facilities as those are no areas.
- 2) It is essential to extend two cultivable lands.
- 3) It is necessary for year's plan of crops according to the seasons of the year.
- 4) Modern's methods of irrigation like drip and sprinkler should be used for agriculture.

The above measures must be adopted to bring to the green revolution in the study area of Village of South Solapur Tahsil.

REFERENCES:

1. Banthia J.K., (2011). Census of India Solapur District
2. Chopra, K. (1982): "Alternative Source of Irrigation and Land Use Patterns in the Punjab", Indian Journal of Agricultural Economics. Vol. 37 (2) pp. 171- 183.
3. Gandhi, P. R.(1992): "History and Practice of Management of Irrigation Waters in Maharashtra". Aurangabad: WALMI Publication. pp.5 to 8.
4. Gupta Rajiv, (2014). Agricultural Geography. Delhi: K.K. Publications.
5. Government of Maharashtra(2010-11).: Socio-Economic Reviews and District Statistical Abstracts, Solapur District
6. Government of Maharashtra (1997): Gazetteer of the Bombay Presidency, Solapur District. Pune: The government Photozinco Press.
7. Hussain Majid (1979). Agriculture Geography. Delhi: Inter India Publicationi.
8. Husain Majid (2002). Systematic Agricultural Geography. Jaipur: Rawat Publication.
9. Mamta Siddharth, (2023). Agricultural Geography. Jaipur: Book Enclave.
10. Reddy Rajendra and Abhay Shankar J P, (2019). Agriculture and Rural Development. Delhi: Commenwealth Publishers.
11. Shaikh Aftab Anwar & others, (2016). Agricultural Geography. Delhi: Jnanada Prakashan.
12. Singh Suvindra, (2022). Physical Geography. Allahabad: Pravalika Publications.
13. Singh Suvindra, (2015). Environmental Geography. Allahabad: Pravalika Publications.
14. <https://villageinfo.in/maharashtra/solapur/solapur-south/kusur.html>
15. <https://tpnsindia.org/index.php/sipn/article>