



LAND UTILIZATION OF UNDARGAON VILLAGE IN KARMALA TAHSIL : A GEOGRAPHICAL REVIEW

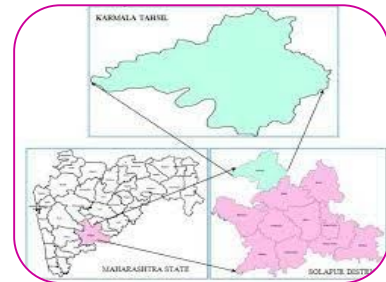
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Abstract :

Land utilization is significant to understand geographical, agricultural, Socio-economic development. The use of land is determined physical and human factor. Physical factors are topography of land, climate, types of soil etc. and human factors are population, culture, technical capability, transport facilities etc. This is important for the growth of region. There are many factors affecting land Utilization i.e. agriculture, availability of land, population, various resources, industrialization, urbanization etc. Land is used by various purposes like. Purposes of land use are agriculture, forest, transportation, settlement, etc. The use of total land of region for various purposes is called Land use or land utilization. Total geographical area of Undargaon village is 714 hect. In this village, land is used basically purpose agriculture. The entire economic life of Undargaon is mainly dependent on agriculture.

Key Words: Land Utilization, Irrigation, Land Use.

Introduction:

Undargaon is a village 30 km south-west of Karmala, dist. Solapur. The Daund-Kurduwadi railway line has passed nearby. Geographical location of this village is clear from Indian topographical map 47N/3. This village is situated at 75°15' East Longitude and 18°17' North Latitude. The average height of Undargaon village is above sea level is 540 m. The boundaries of Undargaon are defined as Ritewadi, Sogaon to the north, Parewadi to the west and the water from Ujani Dam's to south. A stream named 'Chandrakarin' flows from Bhimariver near this village. Therefore, in terms of drinking water, this village has been colonized and has acquired a rectangular shape. In terms of water system, an earlier stream named 'Chandrakarin' was flowing from the western side of the village. The source of this stream was in the northern part of the village and it was flowing from north to south. 'Kolhapur style Dam' has been built on this stream to the west of the village and the water stored during monsoons is used for agriculture. The total geographical area of Undargaon is 714.28 hectares and the population is 1048. Out of them 550 are male and 498 are female.

Agriculture is primary activity in Undargaon village. The north of Undargaon village, the 'Chandrakarin' stream originates in a hill near the border of Rajuri and flows southwards near the

village to join the Bhima river. From there, the land of Undargaon village slopes from north to south. Part of the northern and eastern part of this village is high. The slope of the village land is mainly found in north-west. Here, black soil is found in high range. In the east is 'Murgad' soil and in the southeast is white soil. Generally, the climate of Karmala and Undargaon is almost same. Undargaon falls under the tropical monsoon climate and in terms of weather there are three seasons here namely summer, monsoon and winter. The maximum temperature of this village is 30°C and minimum temperature is 25°C. Average annual rainfall is 400 to 450 mm. is Relative humidity is high due to proximity to Ujani Dam.

Objectives

1. To know the availability of land in Undargaon village and its different uses.
2. To identify the area under different crops.

Data Collection and Methodology

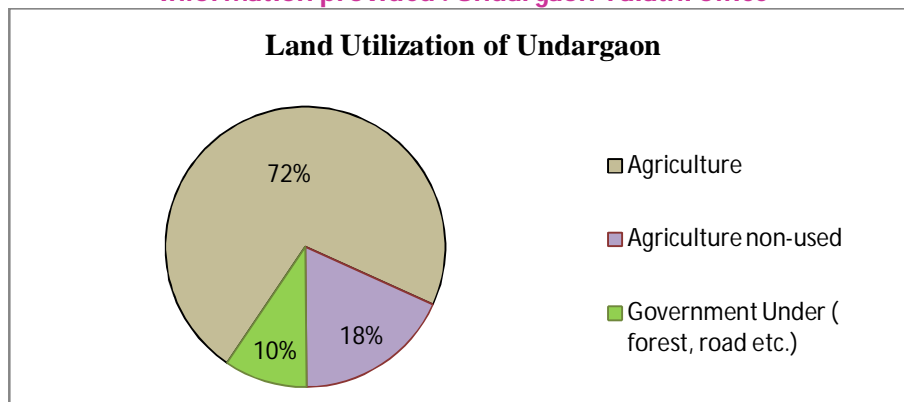
Primary data is collected by farmers of Undargaon. Secondary data collected to talathi office of Undargaon. Primary data is a source of random sampling method. Primary datais collected farmers on interview and questionnaire.

Land Utilization of Undargaon

The use of total land for various purposes is called Land use. In land use, land use for agriculture is important. The entire economic life of Undargaon is mainly dependent on agriculture. Therefore, maximum area is found to be for agriculture. The total geographical area of this village is 714.28 hectares and it has 164 account holders.The division of the total area is as follows.

Purpose of Land Use	Area in hect.
Agriculture	516.5
Agriculture Unused	129.5
Government Under (forest, road etc.)	68.28
Total	714.28

Information provided : Undargaon Talathi office

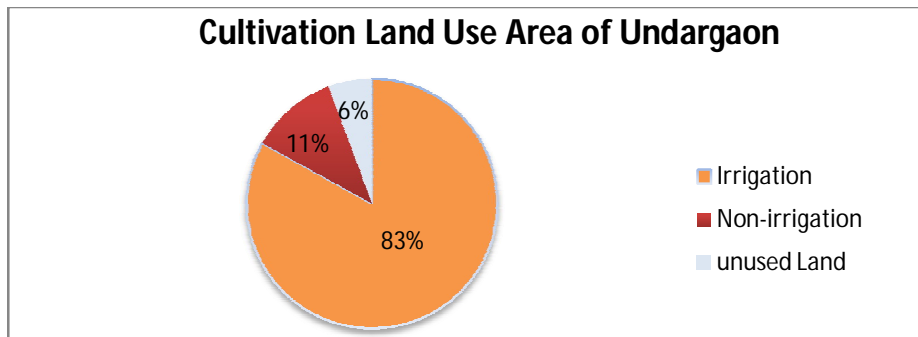


This pie chart divided land utilization of Undargaon village. In this chart clear that the Cultivation use area of Udargaon is 72.31 percent (516.5hect.), the uncultivated area is 18.13 percent (129.5hect.), the government under area(forest, road etc.) is 68.28 percent (68.28 hect.). In this village, most of the land use is under agriculture sector.

Cultivation Land Use Area of Undargaon

In this village, area under crops 94 percent of total cultivated land. Total irrigation area 83 percent (427.2 hect.) non-irrigation area 11percent (58.2 hect.).The amount of non-crop area is less and

it is 6 percent (29.1 ha.). In Undargaon, irrigation area is more and non-irrigation area is less. Irrigation area is increasing day by day. However, in the years when there is a lot of rain, the water level of the Ujani Dam rises and the water comes to the outskirts of the village. Water storage in the dam on Chandrakarin increases the irrigation area.

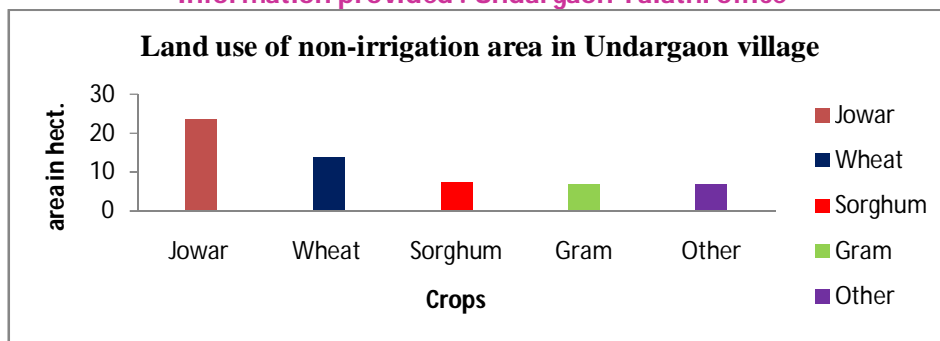


Land use of Non-irrigation area

The non-irrigation area of Undargaon was much reduced this year, as the monsoon was very late this year. The water level of Ujani reservoir was up to 85 percent till January. According to the agricultural census of the year 2021-22, out of the cultivable area, 58.2 hectares were cultivated. Most non-irrigation under crop is jawar. Therefore, the crop is grown in large quantities. After that comes wheat, sorghum, gram and other crops.

Crops	area in hect.
Jowar	23.5
Wheat	13.7
Sorghum	7.5
Gram	6.7
Other	6.8
Total	58.2

Information provided : Undargaon Talathi office

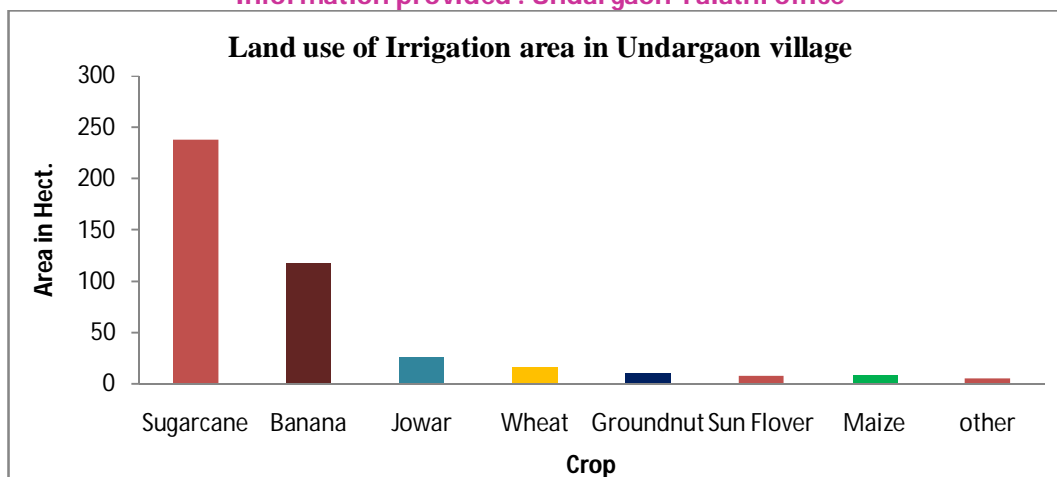


Land use of Irrigation area

The Irrigation area of Undargaon has been found to have increased to a large extent. The irrigation area of Undargaon is 83.10 percent i.e. 427.2 hectares. Sugarcane, banana, Jowar, wheat, maize, fruit vegetables, gram, sunflower, groundnut, grass and other crops are grown in this horticultural area. In the above Irrigation sector crops mainly cash crops are seen. The area under cash crops mainly sugarcane and banana is increasing.

Crop	Area in Hect.
Sugarcane	238.4
Banana	118.1
Jowar	25.4
Wheat	15.5
Groundnut	10.3
Sun Flower	8.3
Maize	8.1
other	5.2
Total	429.3

Information provided : Undargaon Talathi office



A Makai Co-operative Sugar Factory has been started in the distance. So it is convenient to send sugarcane to this factory. Therefore, the sugarcane area of this village is increasing. Sugarcane irrigation area is 238.4 hectares i.e. 55.53 percent of the total irrigation area. Banana is the second cash crop after sugarcane. Banana crops area is 118.1 hectares and in recent times, it has been cultivated on a large scale. This is followed by jowar (25.4 ha), wheat (15.5 ha), groundnut (10.3 ha), sunflower, maize, gram, orchard, vegetables and other crops. Also for the food grain requirement, crops such as jowar, wheat, maize are grown. Onion, garlic, vegetables are taken for daily needs and grass and maize crops are grown for the milch animals.

Land use of unused

The Unused land area of Udargaon is about 5.63 percent i.e. 29.1 hectares and this area is slowly decreasing, because of increasing population and split family system maximum area of land under cultivation.

Concussion -

Undargaon village is far away from the market of Karmala, the farmers have to sell their agricultural produce to local traders and brokers at a low price, so the agricultural produce does not get a fair price. The Covid-19 inflation that came in 2019 affected the world as it affected Udargaon.

- 1. Stop small size of land -** The land is divided among all the children after the death of the father. As a result, small pieces of farm land fall. Farmers do not cultivate such small scale farms carefully and cannot afford to provide irrigation facilities. Hence the production is less. So, land fragmentation should be stopped.

2. **Problem slow to Poverty of the farmer** - Most of the farmers in Udargaon are small landholders and they are poor. They do not get scope to improve agriculture and increase agricultural production. Because they do not meet their daily needs. The government should try to reduce the poverty of these farmers.
3. **Problem slow to inadequate capital** - The farmer of Udargaon is poor and has no land of his own. Also a lot of money to it does not get also, the facilities that provide loans are not in the village but in the taluka. Government should help farmers with herbicides, pesticides, seeds etc. to solve this problem.
4. **Adoption of new scheme of irrigation** - Minimum use of water for drought conditions caused by erratic and erratic monsoons. Agriculture will improve if the farmers adopt sprinkler and drip irrigation schemes with the help of government subsidy to increase the productivity of the land and increase the productivity of the land. Information about new government schemes regarding irrigation facilities and other facilities should be communicated to the farmers. It will benefit them.
5. **To stop soil erosion** - In order to stop soil erosion, the government planners have individually levelled the agriculture, planting trees on the slopes, and planting crops at right angles to the slopes can stop the soil erosion. Soil erosion occurs due to various reasons. Government and farmers should implement various schemes to stop soil erosion.
6. **Increasing the amount of water irrigation** - The government should help in digging wells and sub-irrigation by providing small interest rate or subsidy and also maintain regular electricity supply and complete the digging work of 'Kukadi Canal' early and release water from it to provide perennial water supply to agriculture.
7. **Supply of improved seeds, pesticides and fertilizers** - Talathi and gramsevak of seeds, pesticides and fertilizers provided by the government. Smallholder farmers should be provided directly at moderate rates. Farmers should be encouraged to use more agricultural seeds and chemical fertilizers to increase agricultural production.
8. **Use of improved agricultural implements** - New tillage harvesting and threshing machines and grants and low interest loans should be made available through banks and government for diseases, information and demonstration on how to use machines and implements in agriculture.
9. **Consolidation of agricultural land** - The State Government should ban the fragmentation and fragmentation of agriculture and consolidate the farm land by enforcing the Fragmentation Integration Scheme and practice cooperative farming.

References

1. Baravkar, P. R. (2015) Impact of irrigation on agriculture and socio economic changes in solapur district a geographical analysis, Department of Geography, Dr.BabasahebAmbedkarMarathwada University. Maharashtra.
2. Wodeyar, A. K. (2012) A Study on Change of Land Use and Land Cover in and around Belgaum city using Remote sensing and GIS, Department of Geography, Bangalore University, Karnataka.
3. Olson, G.W. (1974) Land Classification, Agriculture, 4(7):34 p. Cornell University Ithaca, New York
4. Nurbaitil. F. (2021) Analysis of Land Utilization Type and Its Relation to Farmers Welfare in Krakitan Village, Bayat District Suratman, Published by : Earth and Environmental Science
5. Pradyumna P. Karan (1957) Land Utilization and Agriculture in an Indian Village, Vol. 33, No. 1 (Feb., 1957), pp. 55-64 (10 pages), Published By: University of Wisconsin Press
6. Mandal r. B. (1990) Land Utilization : Theory And Practice.