



Study of Changing Cropping Pattern of Pune District Maharashtra; A Case Study of Baramati and Purandar Tahsil

Jadhav Madhuri Sambhaji
Asst. Professor in Geography
Dada Patil Mahavidyalaya, Karjat
Dist: Ahmednagar, India

Abstract-

The study of Cropping Pattern Constitutes a significant aspect within the spatial dimension of agriculture as it provides a good base for regional planning (Ali 1985). The cropping pattern in India underwent several changes with the advent of modern agriculture technology, especially during the period of the Green Revolution in the late sixties and early seventies. There is a continuous surge for diversification agriculture in terms of crops, primarily on economic considerations. The cropping pattern changes however are the outcomes of the interactive effect of many factors which can be studied. The predominance of food grains group together with the fact that a significant proportion of agricultural production is concentrated in small farms, lead one to conclude that much of the cultivation is for self consumption.

Key Words-Cropping Pattern, Regional Planning, Diversification

Introduction-

The history of agriculture in India started in the Indus civilization and even before this in the southern part of India. In farm outputs India ranks second in the world. India ranks first in net cropped area. The economic contribution of agriculture to India's GDP is declining constantly. The agriculture face of the third world of which India is a part, has changed and is still changing because of the diffusion of green revolution technology but not changed at a balanced scale. Whereas the level of agricultural performance in the country are observed at differential rates. The characteristics of rainfall in India audits spatial variation due to orthographic conditions make water scarcity. Though rainfall is not a reliable source of supply of water throughout the year, it requires constant supply for irrigation works through tanks lakes wells etc. Irrigation has been the principal pre occupation with the Indians. The importance of canal irrigation has also developed. Wilson and Swarthy (1927) they explained the relation between rainfall, irrigation and drainage and the changes in the water-table.

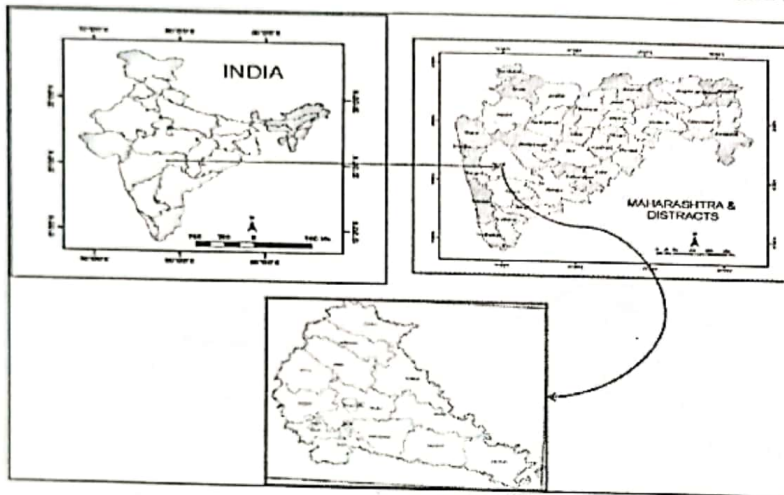
Pune is the second largest district of Maharashtra State in respect of area. The geographical area of the district is 15642 sq.km, which is 5.08% of the total area of State. It is situated in the western part of the State and lies between north latitude 17°54' and 19°24' and east longitudes 73°29' and 75°10'. It is bounded by Ahmednagar district in the north and east. Sholapur and Satara districts in south and south east respectively and Thane and Raigarh districts in North West and west respectively. For administrative convenience it is divided in 14 talukas namely Pune City, Haveli, Khed, Ambegaon, Junnar, Shirur, Daund, Indapur, Baramati, Purandhar, Bhor, Velhe, Mulshi and Maval. The population of the district is 72, 33,000 as per 2001 census with density of 462 persons/sq.km. There are 25 towns and 1866 villages in the district, out of which 18 villages are not habited. The district has 13 Panchayat Samitis, 11 Nagar Parishads, 2 Municipal Corporation and 1407 Gram Panchayats. As per land use details (2010-



11) the district has an area of 1720 sq.km occupied by forest. The gross cultivable area of district is 10150 sq.km whereas net sown area is 9920 sq.km.

Study Area

Pune is the second largest district of Maharashtra State in respect of area. The geographical area of the district is 15642 sq.km. This is 5.08% of the total area of State. It is situated in the western part of the State and lies between north latitude 17°54' and 19°24' and east longitudes 73°29' and 75°10'. It is bounded by Ahmednagar district in the north and east. Sholapur and Satara districts in south and south east respectively and Thane and Raigarh districts in North West and west respectively. The study area selected is Baramati and Purandar tahesil.



Objectives-

- 1) To study the cropping Pattern of the area.
- 2) To analyze the percentage of different crops

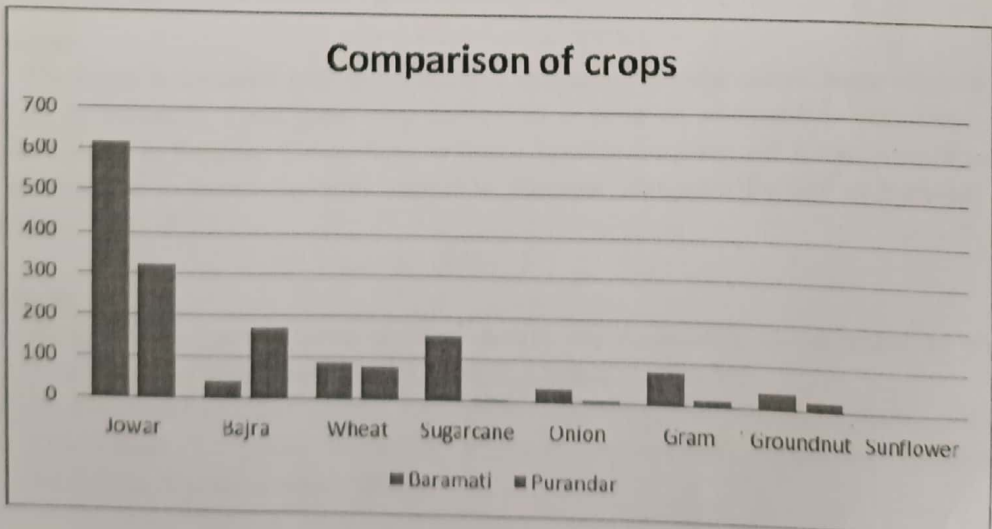
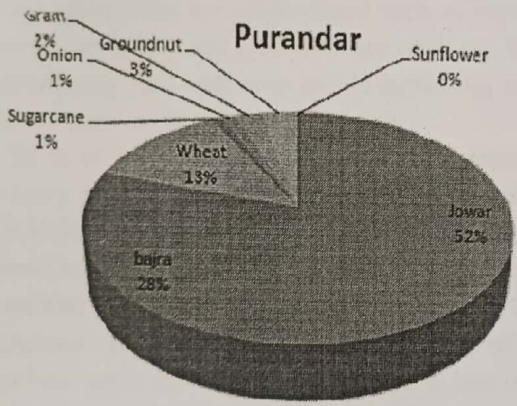
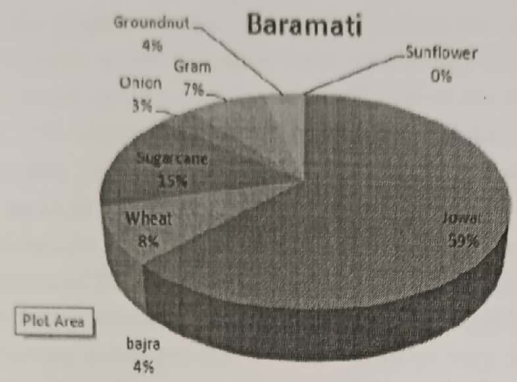
Methodology-

Data has been collected by referring different statistical abstracts, Agriculture Department of Pune, Maharashtra, district gazetteers statistical information. The Secondary data was also collected from various Government offices and Institutions and Maharashtra Economic survey. The collected data was processed, edited and analyzed by applying Pie Diagram and bar diagram using the formula. Representated the methods through tables, maps and diagram.

Area under Principle crops, Baramati and Purandar (ha) (2011-12)

Taluka	Jowar	Bajra	Wheat	Sugarcane	Onion	Gram	Groundnut	Sunflower
Baramati	617.91	40.79	88.8	155.3	35.08	77.91	39.08	1.9
Purandar	321.88	170.98	78.83	5.62	8.31	14.25	20.23	0.44

Source-Superintendent of Land Record, Commissioner of Agriculture, Pune





Result and Discussion

The agricultural distribution of crops does not follow traditional pattern as cash crops like sugarcane and fruits like grapes, custard apple, pomegranate etc. are becoming popular. Jowar and Bajra are grown in areas where irrigation water availability is less. The ground water based irrigation caters to the major area i.e., 71.52 sq.km. (8.35% of net sown area) in Purandar taluka and 181.54 sq.km. (8.35% of net sown area) in Baramati Taluka, while surface water irrigated area is about 71.52 sq.km. (17.5% of net sown area) in Purandhar Taluka and 233.79 sq.km. (22.5% of net sown area) in Baramati Taluka. The crops grown in Baramati taluka is Jowar which is 52% (617.91 ha). As Baramati is drought prone region the average rainfall so jowar is major crops some villages of Baramati there is canal and well irrigation there 15% (155.3 ha) is under sugarcane cultivation wheat ranks 3 rd in percentages (08%) Gram seven Percent Bajra and Groundnut are having same percent (04%) Onion is very less (03%) and sunflower is negligible. Comparison of bar diagram gives a very clear view of the cropping pattern of the two talukas. The talukas taken for study both of them come under the drought prone region having less rainfall.

In Purandar food grain crops are predominant such as bajra jowar and wheat and cash crops such as sugarcane, onion, gram, and groundnut are very less. But the trend seen in Baramati taluka food crops is decreasing and cash crop area is increasing, which shows that the cropping has an influence of factors such as political and irrigation.

Purandar has 52 % of Jawar which is 321.88 ha. Purandar taluka has Average rainfall 696.3mm during the rainy season there is water availability in this tahsil major kharif crop is Jowar and rabi crop is Bajra the area under Bajra crop cultivation is 170.98 ha (28%) Wheat 13 % and Sugarcane, onion Gram and Groundnut that is very less (1 to 3) Percent

The average rainfall in Baramati is less than Purandar taluka but the traditional crops Jawar and Bajra is dominant crop According to Weaver method where there is monoculture crop combination found for food grain the economic development less seen here. Irrigation Facility as like canal irrigation in present in Baramati so the cropping pattern changing from traditional to cash crop such as Sugarcane, onion, Graphs, Pomegranates etc. The factor which also play vital role for the cropping pattern is political Factor. In Baramati tahsil Political impact has help to change the cropping Pattern from food grain to cash crop.

Conclusion

The Jowar is dominant crop in Baramati as well as in Purandar tahsil. Jowar cultivation is highest in Baramati. Food grain crop cultivation is more as compared to cash crops in Purandar taluka. In Baramati Taluka bajra or food crops seen are jowar and wheat. Area of cash crop in Baramati is increasing with respect to Purandar. Irrigation Facility in Baramati is developing.

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