

4. Result and Discussion

In four circles, namely - Akole, Kotul, Rajur and Samshepur collected data mentioned percentage. The value of change shows highlights in the important changes (Table no. 1). The increase and decrease value of during 2000-01 and 2010-11 period is shown. It is observed that Soya bean is more significant crop which leads to akole and kotul circles and the rajur and samshepur circle was less during in 2000-01 to 2010-11. These changes are well associated with the intensity of irrigation followed by modern inputs and coupled with improved farming techniques.

4.1 Soya bean (Kharip Oilseeds):

Soya bean is an important oilseed crop grown in kharip season. During recent years, the area under Soya bean cultivation is increasing because of good market rates, effective dissemination of Soya bean production technology by extension functionaries and also due to village seed production programmed undertaken by department as a part

of Mahapic. It is being cultivated as rotational crop after harvesting of sugarcane. The area under Soya bean cultivation in the tahsil is about 4,607 hectares on 6.33% in 2010-11. The distribution pattern of Soya bean crop grown 22.44% in 2000-01 and 22.61% in 2010-11. The highest area under Soya been recorded in akole circle i.e. 11.43% in 2000-01 and 9.63% in 2010-11.

4.2 Spatial Distribution of Soya bean (2001 to 2011)

Table 1: (Source: Agriculture Dept. Akole Tahasil)

Sr. No	Name of Circle	Year (Area in %)		Volume of change (%)
		2000-01	2010-11	
1	Akole	11.43	9.63	- 1.8
2	Kotul	8.82	10.70	1.88
3	Rajur	0.44	0.49	0.05
4	Samshepur	1.75	1.79	0.04
Total		22.44	22.61	0.17

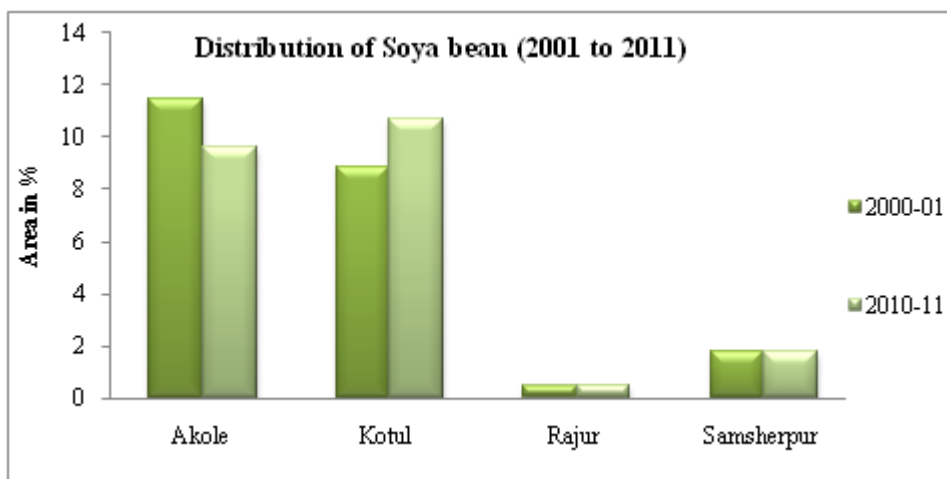
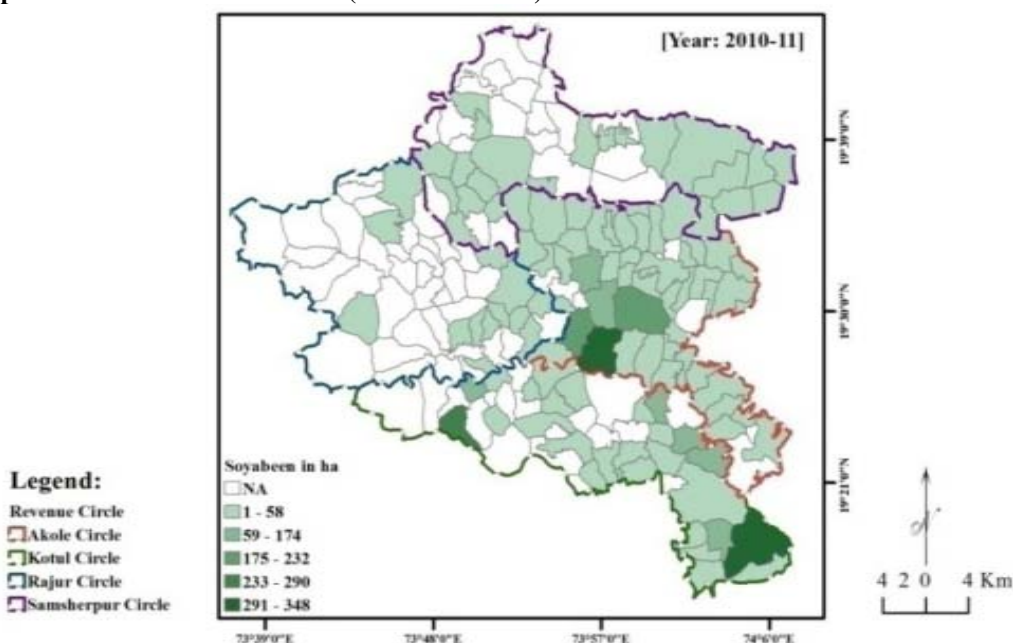


Figure 1

Soya bean Crop Distribution in Akole Tahsil (2001 to 2010-11):



In the study area, the Soya bean cultivation has found less than 2% in Rajur and Samshepur circle. In Kotul and Akole circle have found more than 6% in Soya bean area. The value of change in 2001 to 2011 span of 10 years except in Akole circle increasing the area under Soya bean cultivation (Map no. 2, Table and Fig. no. 1).

5. Results

It is observed from the study area, there is a greater variation in the changes land use and cropping pattern, during the study period i.e. 2000-01 to 2010-11. The major crops cultivated in kharip season and rabbi season are grown in the study area. Although the entire cropping pattern seems to be governed by agro-climatic conditions and irrigation has played a prominent role by changing the nature and extent of cropping pattern. The major crops cultivated in kharip season [June to October, November] are Rice, (Cereals) Bajra, (Pulses) mug, math, (Oilseeds) groundnut, Soya bean, kardai, jawa, sunflower, (Cash crops) Cotton etc. It is observed that the agricultural land use is decreasing during the study period. This is mainly because of the agricultural land is being converted into residential and other uses for the growth and development of the specific area of the study region. It is observed from the study area that there is a greater variation in the changes regarding to land use and cropping pattern, during the study period i.e. 2001 to 2011.

6. Conclusion

This crop is cultivated only under kharip season in the study area. In the period of 2000-01, the high and medium concentrated area has been decline. In 2010-11 period, wherever low, medium and high concentration of soya bean was there increased in the study area (Map no. 2). In the study area farmers have adopted partially modern technology i.e. drip irrigation facility, HYV seeds material, sugarcane, fruits, vegetables, food grain and other crops, increasing uses of composting biomass, machineries, improved plantation technology and micro irrigation systems, available for nearby village inputs (seeds, fertilizers, insecticides, cattle feeds and veterinary services), agricultural labour bullock power, crop loans, electricity, irrigation, dairy centers and processing units, nearby sugar factory, good network of transports and markets, good communication facilities, agricultural advisory centers etc are available in the study area. Therefore, recently agricultural land use and cropping pattern is positively increasing day by day in the study area.

7. Future Scope for Research

To understand significance sound evolution and future planning for agriculture is consider for the study. The present study is very useful for social organization, N.G.O, Educational and Governmental Institutes, policies and Agro based small scale Industries in the future

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Author Profile



Dr. Khemnar Shivaji Bhagwan is HOD and Assistant Professor at Agasti Arts Commerce and D.R. Science College, Akole, Department of Geography, Savitribai Phule Pune University, M.S, India. He received the Doctor of Philosophy (Ph.D) degree and Master Degree of Social Science in Geography from Savitribai Phule Pune University State of Maharashtra, India. He is experienced Lecturer with over 22 years.