INTRODUCTION

Agriculture is a primary occupation of human being. It plays an important role for stable and economically sound life of human. It is a science of growing different crops from the land. In prehistoric period, human were attracted towards the rivers in search of water. They started to grow crops according to the traditional ways. Now a day, the agriculture sector has become wider and developed new techniques. Agriculture is depends on water, soil, weather and other natural resources. Nature has provide various resources for agriculture. Our basic needs like food, shelter and cloth are totally depends on agriculture, man of the rural areas agriculture is an important occupation for man of the rural areas in almost all the countries. In India Dr. Swaminathan, Dr. Bhatia, Prof. B. C. Vaidya, Prof. Praveen Saptarshi, Dr. Ramachandran Sable and other have focused on the importance of agriculture.

About 195 countries grow sugarcane crop to produce 1,324 million tons of sugarcane (more than six times the amount of sugar beet produced). As of the year 2005, the world’s largest producer of sugarcane is Brazil followed by India. Uses of sugarcane includes the production of sugar, Falernum, molasses, rum, soda and ethanol for fuel. The bagasse that remains after sugarcane crushing may be burned to provide both heat – used in the mill and electricity, tropically sold to the consumer electricity grid. The production of sugarcane cultivation in Rahuri tahsil is consider for this study. The main objective of this topic is to identify the sugarcane production from last twenty years. At the same time, study deals with the pattern of sugarcane, Distribution and changes of sugarcane in details in the study area. Various industry and employment create by sugarcane in study area. For ex. Small Scale industry, Fodder for animal, Paper mill, Rasvanti gruh, Bagasse production and electricity. Sugarcane and sugar industry is helped to improve in standards of living, educational development, and socio-economic development in the study area. The production of sugarcane cultivation is seen all over the study area. Because of suitable climate, rainfall, irrigation facility and easily transportation are available in the study area. Farmers in the tahsil takes sugarcane as their income source. They give ore preference to sugarcane compared to food grain and pulses. Averagely each farmers create own irrigation system for better production of sugarcane in study area.

KEYWORDS: Sugarcane, Rahuri, Tahsil.
STUDY AREA

Rahuri is located at 19° 15' to 19° 30' North Latitude and 74° 15' to 74° 30' East Longitude, in the north eastern part of Ahmednagar District, Maharashtra (India). Rahuri tahsil is bounded by Rahata tahsil on the north, Nagar tahsil on the south, Nevasa on east and and Sangamner and Parner tehsil on the west, of the same district. It is well connected by roads to Mumbai (240 k.m.), Pune (140 k.m.), Aurangabad (120 k.m.) and the district headquarter Ahmednagar (37 k.m.). Rahuri tahsil includes 98 villages.

OBJECTIVE

In present research paper containing the outcomes of change in sugarcane to find out change in sugarcane production from 1990-91 to 2000-01 and 2000-01 to 2010-11. Sugarcane distribution and changes is discussed in detail in this paper.

METHODOLOGY

In present research paper to study the changes in sugarcane production by last 20 years the primary data is collected from annual reports of sugar industries in Rahuri tahsil. Besides this Tahsil agriculture office, Panchayatsamitee of Rahuri, Mahatma Phule Agriculture
University, and Rahuri, research paper and reference books and maps are used for reference. For conclusion of the study Primary and secondary data will present by various maps.

**SUGARCANE PRODUCING VILLAGES**

Rahuri is suitable for sugarcane cultivation. The area of sugarcane is rapidly increased after the construction of Mula Dam with right and left canal after 1970. Actually, the area of Rahuri tahsil comes under rain shadow zone so the water scarcity is the main problem affected on the agriculture production and development. Consider this geographical condition Rahuri tahsil is known as its agriculture development.

**MAP 2**

**SUGARCANE PRODUCING VILLAGES**

The map no. 2 is shown that the village wise area under sugarcane in the tahsil. Rahuri tahsil is divided into seven division for administration purpose, which is Rahuri, Satral, Deolali, Taharabad, Vambori and Taklimiya. In these division Taharabad is only division who is un irrigated. Western part of the study area is not suitable for sugarcane cultivation. Rahuri, Satral, Deolali, Taklimiya and Bramhani divisions are produce sugarcane on large scale. Vambori division having irrigation facility in less quantity, so there is a medium area cover by sugarcane. In study area out of 98 villages, sugarcane production is done in 73 villages. 25 villages are situated on plateau region and totally un irrigated, besides this they are unable for transportation. so they are not able to produce sugarcane. The villages under Satral, Taklimiya, and Rahuri are famous for sugarcane cultivation. River Mula and Pravara provide water supply for sugarcane. The right banks canal of Mula dam is played important role to development in sugarcane cultivation. 12 villages in study area produce sugarcane on large scale.

**SUGARCANE PRODUCTION IN TAHSIL**

Study area is suitable for sugarcane in the river basin generally plain region. Besides this some villages have partly suitable for sugarcane. Require physical factors are mostly soil, which is available almost part of the tahsil. But the area is changed under this crop a village wise. Maximum numbers of farmers are turned to this crop because their professional views and had consider the sugarcane production in the sustainable and economic source. Beside this bot sugarcane factories motivate them brought maximum area under this cultivation in the study area. The maximum area (20 percent) occupied by sugarcane after cereals. The area under pulses is decreasing slowly, it is not neglect. Sugarcane factories create increasing ratio of employment and provide business to hotels, transport,
communication and market during sugarcane crushing season. Sugarcane movements is helped to social and educational development in tahsil, which is helped to improve the standards of living of the people. Consider all these factors we can say that the area under sugarcane cultivation increasing rapidly.

In 1991-92, nearly 12107 hect. area was covered by this crop. It is decreased up to 10027 He. Area in 2001. This crop is depending upon the rainfall conditions, canal irrigation. If these facilities are not successfully provided so the area under sugarcane is automatically decreasing. In 2010-11 it is again increased to 13890 hectore in the tehsil.
Rahuri Tehsil
Sugarcane Changes From 1991 to 2001

Source: Agriculture Department of Rahuri Tehsil
The map no. 4 is shows that the area sugarcane changes from the year 1990-91 to 2000-01. The area under this crop is recorded in year 17.35 percent and its decreasing up to 13.9 percent in the year 2000-01. It means there are negative changes is indicates in the map. These changes is generally seen in Rahuri, Taharabad and Taklimiya divisions. But other villages are supported to positive changes in sugarcane production. Satral, Vambori, Brmhani and Deolali divisions acquire more area under sugarcane cultivation. Some villages is found
that there is no change among 10 years. These villages coming from almost all divisions. In this villages have no major problem facing by farmers in last ten years. Therefore there is no changes is found in sugarcane cultivation. These changes is generally saw in Rahuri, Taharabad and Taklimiya divisions. But other villages are supported to positive changes in sugarcane production. Satral, Vambori, Bramhani and Deolali divisions acquire more area under sugarcane cultivation. Some villages is found that there is no change among 10 years. These villages coming from almost all divisions. In this villages have no major problem facing by farmers in last ten years. Therefore there is no changes is found in sugarcane cultivation.

The map no. 4 is focused on the production of sugarcane in the year 2000-01 to 2010-11. This decade is found some changes as per first decade. The area under sugarcane is recorded 13.9 percent area which is reached up to 18.7 percent after slowly increasing. The difference between first year and second year of this decade is consider, its shows 5.8 percent extra area cover under by sugarcane. Therefore, there is negative changes found in sugarcane cultivation in the study area. More than 70 villages shows negative changes in sugarcane cultivation. The area under sugarcane is increasing fastly after 2008-09. Rainfall condition and canal irrigation are easily available for this cultivation. So maximum farmers are turned to sugarcane from other crops. Besides this local society of farmers, sugar industries and NGO create awareness among farmers about production. At the same time Govt. of Maharashtra implement the scheme of drip methods of irrigation for farmers. Sugar factories gives Rs. 1900 per tons to farmers and it is increased up to Rs. 2300 in the year 2012-13. Now present situation (2016-17) the sugar factories consider farmers demand of rate of sugarcane per ton up to Rs. 2500.

**CONCLUSION**

This research papers focused on changes in sugarcane cultivation in selected periods. The area under sugarcane cultivation is changed during 20 years. Highest area under sugarcane recorded in three times, which is 1998-99, 2003-04 and 2010-11. It means that the rainfall and supply of water by canal is supported to increased area under sugarcane. It is maximum depends on rainfall condition in study area. Western part of the study area is notable for sugarcane so study is suggested that farmers will get other crop production. The production and yield in sugarcane is found different in all villages during last 20 years. It is necessary to the farmers to apply new technology, drip irrigation methods for better production of sugarcane in study area. The rapidly increasing area under sugarcane is caused overall development of the study area.

**REFERENCE**

5. Mane, Ankush, (2015), District Agriculture superintendent Officer, “Ahmednagar Soil health campaign” a research article published in daily newspaper Sarvat 5 Dec. 2015, P/p-1
7. O. D. Cheesman, “Environmental impacts of sugarcane production”, CABI, Bioscience, UK CentreSurvey, U.K., P/p-79-84