

Impact of Sugarcane Production on Change in Economic and Social Policy of Maharashtra

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Abstract

Sugarcane production has had a very positive impact on the economic and social conditions of Maharashtra. Sugarcane production has increased the income of the people of Maharashtra and improved their standard of living. Sugarcane production has contributed greatly to the cooperative. Various branches of co-operatives have been established in Maharashtra including banks, credit unions, co-operatives, sugar factories, milk unions, spinning mills, etc. Cooperatives have been an important part of Maharashtra's economic development for the past 50 to 60 years. In the early period after the formation of Maharashtra, co-operation was given an important place and a separate Ministry of Co-operation i.e. Department was created at the Centre. Co-operation has brought great changes in the social and economic spheres and improved the standard of living of the people.

Key words: sugarcane production, social, economic, development, co-operation, income and expenditure, factories etc.

Introduction:

Sugarcane is an important cash crop in Maharashtra. Although the climate here is very favorable for sugarcane as it is located in tropical climate, Tamil Nadu is leading in India in production of sugarcane per hectare. The sugar industry is the second largest agro-based industry after the textile industry. Sugarcane farming in Maharashtra and the sugar factory based on it has become a symbol of economic, social and political development in the rural areas. The sugarcane farmers of Maharashtra have contributed a lot to keep the sugar industry in Maharashtra on a solid footing. That's why co-operative sugar mills are established in Maharashtra. The cooperative sector sugar industry in Maharashtra became a model of good planning and effective work. In the last half century, there has been a significant increase in sugarcane area, sugarcane production, sugar mills and the number of members in Maharashtra.

Problems of the Study:

Sugar mills in Maharashtra have provided employment opportunities to the rural people especially the youth. At the same time, there has been a significant improvement in the education sector and the children of farmers in the rural areas have been provided with a great opportunity for education.

Objectives of the Study:

The main objective of this research is to study the effect of change in sugarcane production in Maharashtra on economic and social conditions and some specific objectives have been given by the researcher as follows.

1. To study the effect of sugarcane production on economic conditions.
2. To study the change in human social life of sugarcane production in Maharashtra.
3. To study the factors affecting the overall economic situation of sugarcane production in Maharashtra.

Significance of the Study:

Sugarcane is an important cash crop and this crop has brought about a radical change in the economic, social, educational and industrial conditions of rural areas. India leads the world in the area under sugarcane. Sugarcane is a perennial grass species cultivated since ancient times in India as well as other countries of South Asia. Education, clinics, training programs, water supply etc. in rural areas through cooperative sugar industry. In terms of development as well as dairy farming, poultry farming etc. Complementary industries have grown tremendously. Heavy or medium Magadura silt and well drained soils are suitable for this crop. A heavy soil with a depth of one meter and a layer of well-draining material like humus underneath and a soil ratio of 6.5 to 8.5 is best for sugarcane.

Scope of the Study:

Climatic factors such as temperature, humidity, rainfall and sunlight affect the growth and yield of this crop. Excessive cold or cold wave affects the growth of sugarcane. Excessive cold or cold wave affects the growth of sugarcane. Sugarcane cultivation is done in the month of July-August. This sugarcane stays in the field for 16 to 18 months. Lately, due to reduced rainfall and sugarcane requiring more time, labour, water and inputs, the cropping has almost stopped.

Limitation of the Study:

Sugarcane cutting and sieving is going on in full swing. The harvesting season is now approaching its final stage and the sugarcane in the paddy has gone to the factory, but not everything is done. The management after this will be useful for future production growth. It is also necessary to plan for what remains in the paddy field after sugarcane harvesting. With the passage of time, sugarcane area is increasing along the river belt in Marathwada. However, sugarcane waste is not properly managed. Due to this, farmers suffer loss but they do not realize it. Therefore, agriculturist Deepak Kachhave has expressed the opinion that there is a need for timely management of Pachta.

Period of the Study:

In order to study the impact of agricultural production on social and economic conditions in Maharashtra, the researcher reviewed the data from 2022 and conducted this research.

Research Methodology:

As sugarcane is produced on a large scale in Maharashtra, economic and social changes have taken place in human life under cooperatives. Sugarcane production is taking place on a large scale for economic and social change and the researcher has used many types of secondary resources to research the same. In this, research papers, articles, newspapers, audio videos, texts, etc. have been used in detail.

Research Method:

While studying sugarcane production and the changing economic and social conditions in Maharashtra, various factors affect sugarcane production. In this research, the materials required to produce food and the changes in the economic conditions of human life have been studied by the researcher through descriptive analysis method.

Results and Discussion:

Our country, which was once an importer of sugar, started exporting sugar. As of today, 165 sugar factories have been registered in Maharashtra and 147 cooperative sugar factories including 18 private factories are operational. Sugar factories are also being set up in the Konkan division of Maharashtra. Only 18 % of the total area under sugarcane in India is in Maharashtra and compared to the country, Maharashtra's share of sugar production is 35 %. Looking at the fall season of 2014-15, it can be seen that the sugarcane area increased to 10.55 lakh hectares. Sugarcane productivity was around 88 tonnes per hectare while sugar yield was also 11.3g. The sugar production of the state also increased to 105.14 lakh tonnes. Although the state has done well in sugar production, there is a lot of room for improvement in sugarcane productivity and sugar extraction. Since 1955, the area under sugarcane in Maharashtra has increased by almost 1g times and productivity has not increased to that extent. The sugar production of the state also increased to 105.14 lakh tonnes. Although the state has done well in sugar production, there is a lot of room for improvement in sugarcane productivity and sugar extraction. Since 1955, the area under sugarcane in Maharashtra has increased by almost 1g times and productivity has not increased to that extent.

Sugarcane Productivity:

There are many reasons for the non-increase in sugarcane productivity and sugar output of Maharashtra. Among them, lack of selection of sugarcane varieties according to seasonality and maturity, selection of improved varieties of sugarcane according to season and improper planning of their cultivation, lack of three-tiered sugarcane for supply of clean and healthy sugarcane, improper planning of water. Imbalanced use of chemical fertilizers, lack of proper crop rotation, improper intercropping practices, lack of integrated code and disease management, improper planning of weed control, improper management of crop, excessive rainfall, unseasonal rain, hail, drought, changing climate, increasing temperature, disease pests. Increasing prevalence etc. The scarcity of water available for agriculture in Maharashtra limits the area under sugarcane. Farmers in the state have the potential to increase sugarcane production and sugar yield. If we adopt modern techniques without increasing the area under sugarcane, we can achieve the desired sugarcane yield. Due to low rainfall in the last two years, the sugarcane farmers are in a lot of trouble. This year there will be a

decline in sugarcane area. Therefore, the sugar industry seems to be in trouble to some extent. For that, it is necessary to plan and make all-out efforts to save sugarcane farming and sugar industry in the future.

Sugarcane Research Center Variety:

Regarding sugarcane research in Maharashtra, there are two major research centers operating in Maharashtra for sugarcane research namely Central Sugarcane Research Center, Padegaon and Vasantdada Sugar Institute, Pune under Mahatma Phule Agricultural University. Over 15 varieties of sugarcane and over 100 of modern technologies have been circulated for Maharashtra till date. Includes VSI-9805, VSI-434 pre-broadcasted sugarcane V-10001, VSI-3102. Use of modern technology recommended by sugarcane production and sugarcane improvement centres. In order to make sugarcane farming economically affordable, it will be necessary to reduce the cost of sugarcane cultivation, plan the planting and cutting of sugarcane according to the season, and create a three-tier bene. In order to maintain soil fertility, agricultural management should avoid excessive use of water, use of drip irrigation system, crop rotation, integrated code and disease management, reuse of compost, use of organic and biological fertilizers along with green manures and chemical fertilizers, improved management of Khodva crop and use of improved implements for sugarcane. Things have to be followed carefully.

Future Challenges for Sugarcane Farming and Sugar Industry Fluctuations:

In order to stabilize the area under sugarcane and production and also to make the sugar mills economically viable, it is necessary to implement by-product manufacturing projects. If the cultivation of maize and sweet sorghum is increased in the factory area for the production of ethanol for by-products production, the ethanol production plants can continue for a long time of the year. Projects like co-generation plants like ethanol, bio-compost plants from Spentbosch can be set up. Hence, the increase in total income from sugarcane crop will ensure fair price to the farmers and stabilize the area under sugarcane and productivity.

Lack of Mechanization:

Sugarcane farming in Maharashtra is mainly dependent on bullocks and manpower. Manpower has to be depended on from planting to harvesting in sugarcane. As the area under sugarcane in Maharashtra is scattered in small pieces, it is necessary to develop small implements for the work. In sugarcane, mechanization from planting to harvesting is easily possible, which will also save production costs. The sugar industry and sugarcane farming, which is known as the economic backbone of Maharashtra, is getting stuck in the vicious cycle of losses caused by drought and sometimes by excessive rains and unseasonal rains.

Climate Change:

In order to overcome global warming and climate change, developing sugarcane varieties those are sensitive to different climates, resistant to abiotic and biotic stresses, high yielding sugarcane and sugarcane, non-sprouting and sugarcane resistant. Development of non-degrading sugarcane varieties and use of biological technology for production of sugarcane varieties etc. It is necessary to decide the direction of future sugarcane research keeping in mind the objectives.

Agriculture Development:

Agricultural management should avoid excessive use of water, use of drip irrigation, crop rotation, integrated code and disease management, recycling of paddy, use of organic and biological fertilizers along with green manures and chemical fertilizers, improved management of Khodwa crop and use of improved implements for sugarcane. Many important recommendations have been given. By using this technology, some farmers are getting 100 to 125 tonnes of sugarcane per acre. However, there is a wide gap between the expected production of sugarcane and the average productivity of the state. If this disparity in sugarcane production is removed, the pressure on the management of sugar factories and the government to pay more for sugarcane can be reduced.

Effectiveness and Productivity:

In order to raise the standard of living of the farmers in Maharashtra and to make the sugar industry more efficient, it is necessary to make the sugarcane extension work more active. Extension work should not only increase productivity by promoting new technologies, but should be accompanied by appropriate inputs and demonstrations. For this it is necessary to give training to all the employees working in the sugarcane development department of the sugar factory. Thus, if the management of each sugar factory consistently considers all the factors related to sugarcane production and sugar processing and properly plans and

implements them, we believe that our sugarcane farming and sugar factory will remain financially viable even in the future competition.

Sugarcane Production and Health:

White granulated sugar is the most common form of table sugar and is made by refining and purifying sugar cane juice or syrup. Brown sugar is made by adding molasses to white granulated sugar, giving it a brown color and a slightly different taste.

Sustainable Sugarcane Initiative:

The Sustainable Sugarcane Initiative aims at providing practical options to the farmers in improving the productivity of land, water and labour, all at the same time. It is also expected to reduce the overall pressure on water resources and contribute to recovery of ecosystems. Sustainable Sugarcane Initiative is an innovative method of sugarcane production using less seeds, less water and optimum utilization of fertilizers and land to achieve more yields.

High cost of Production:

High cost of sugarcane, inefficient technology, uneconomic process of production and heavy excise duty result in high cost of manufacturing. The production cost of sugar in India is one of the highest in the world. It is concluded from the study that the main problems faced by the farmers regarding sugarcane production were; lack of irrigation water, non-availability of improved varieties of sugarcane, land preparation, high cost of inputs, diseases and insect pest, weeds and marketing problem.

Conclusion:

Intercropping in sugarcane according to the season provides income throughout the year. Intercropping in sugarcane reduces the number of weeds. Dicot intercropping improves soil texture. Intercropping increases total income. Intercropping makes optimum use of land, water and applied fertilizers as well as sunlight. Vegetable crops viz., cauliflower, cabbage, knoll-khol, turnip, carrot, radish and potato are suitable for intercropping with sugarcane planted in autumn.

Sugarcane is a major crop in many countries. It is one of the plants with the highest bioconversion efficiency. Sugarcane crop is able to efficiently fix solar energy, yielding some 55 tonnes of dry matter per hectare of land annually. After harvest, the crop produces sugar juice and bagasse, the fibrous dry matter. Sugarcane production may have been negatively affected and will continue to be considerably affected by increases in the frequency and intensity of extreme environmental conditions due to climate change. The degree of climate change impact on sugarcane is associated with geographic location and adaptive capacity.

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