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# COST AND RETURNS FROM THE CULTIVATION OF SUGARCANE

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***Abstract***

*Sugar Industry is an Agro-based industry and Sugarcane is cultivated by about 5 Lakhs farmers in Tamil Nadu. The registered Sugarcane crop is cultivated in an area of 2.5 to 3.0 Lakh Hectares comprising of about 2% of the total cultivable area. An average of 300 agricultural mandays is generated for cultivation of one hectare of Sugarcane. Also Sugar Industry employs directly and indirectly about 50,000 persons. Further, the industry engages vehicles for transport of cane from the field to the factory and for despatch of Sugar and molasses. The auxiliary industries viz. Distillery-cum-Ethanol, Co-generation and Paper plants depend upon the Sugar mills for raw material. The Sugarcane is often used for crop rotation wherever paddy, cotton and groundnut is cultivated continuously. The Sugar Mills are also involved in rural development and reconstruction through establishment of Schools, Colleges, Technical Institutions and Healthcare Centers. As Sugarcane is cultivated under contractual obligation, agricultural credit is easily available to Sugarcane farmers under tie up arrangement with the mills. The study conducted in Namakkal district and 50 farmers are approached to find the details regarding the production and problems faced the farmers at the time of production. And study also suggests the various solutions to increase the production of sugarcane.*

***Keywords:*** *Sugarcane, Cost of Cultivation and Net Income*

## Introduction

Sugar industry is the second largest agro based industry next only to textile in India contributing around Rs. 2500.00 crores revenues to Central Statistical Governments. India is the largest producers of sugar from sugarcane in the world. The sugar industry plays an important role in the agricultural economy of India. Sugarcane today has become a hot database issue in every state and at national level, and a more serious concern of everyone form top bigwigs of the country to bureaucrats, policy makers and its growers. The increased production has created glut in the market and lots of hurdles in crushing by the sugar industry.

## Review of Literature

**Anbazhagan (2010)** studied the economic analysis of sugar production in Tamil Nadu. The study found that the sugarcane in India is the third largest crop, next to rice and wheat. The sugar-yield is not only related to the industries, producing capacity, but also to the availability of sugarcane. The erratic monsoon and fluctuating price levels are also vital

factors. **Venkatramam (2009)** has opined that one of the reasons for low cane productivity is the extension of cane cultivation to marginal and sub-marginal lands characterized by soil and moisture stress, under irrigated condition during north-east monsoon and poor ratoon cane management, will influence in increasing the sugarcane productivity. All efforts are the adoption of modern agro techniques to obtain maximum number of sugarcane stocks of more cane weight per unit of land area.

**Mahalakshmi (1996)** studied the cost and returns in cultivation of sugarcane in the selected farms in Coimbatore district. The relationship between farm size and productivity was examined in sugarcane farms and it was found that there existed direct but insignificant relationship between farm size and productivity.

**Significance of the Study**

The importance of agriculture to economic growth in a country depends upon the level of agricultural incomes which in turn depends on the level of the farm efficiency. The main purpose of the present study is to measure and examine cost-return of sugarcane production and also examine the conditions of sugarcane cultivators in Namakkal District.

**Objectives of the Study**

1. To analyse the socio economic conditions of sugarcane cultivators of the study region.
2. To estimate the cost and return structure of sugarcane production.

**Methodology of the Study**

The nature of data used for study is both primary and secondary. Primary data has been collected through personal interview, with the help of preplanned interview schedules. Secondary data like the details collected from various published sources. Simple average and percentage analysis used in the present study.

**Socio Economic Conditions**

**Table.1 Age Wise Distribution of the Respondents**

| Age Group | No. of Respondents | Percentage |
|---|---|---|
| Below 30 | 10 | 20 |
| 30-40 | 10 | 20 |
| 40-50 | 10 | 20 |
| Above 50 | 20 | 40 |
| **Total** | **50** | **100** |

**Source: Primary Data**

**Table.2 Educational Status**

| Literacy Level | No. of Respondents | Percentage |
|---|---|---|
| Primary | 10 | 20 |
| Secondary | 10 | 20 |
| Hr. Secondary | 15 | 30 |
| College | 15 | 30 |
| **Total** | **50** | **100** |

**Source: Primary Data**

**Table.3 Marital Status**

| Marital Status | No. of Respondents | Percentage |
|---|---|---|
| Married | 30 | 60 |
| Unmarried | 20 | 40 |
| **Total** | **50** | **100** |

**Source: Primary Data**

**Table.4 Family Size of the Respondents**

| Family Size | No. of Respondents | Percentage |
|---|---|---|
| 2 to 4 | 20 | 40 |
| 5 to 7 | 20 | 40 |
| Above 7 | 10 | 20 |
| **Total** | **50** | **100** |

**Source: Primary Data**

**Table.5 Income of the Respondents**

| Family Income(in Rs) | No. of Respondents | Percentage |
|---|---|---|
| 5000 to7000 | 10 | 20 |
| 7000 to 9000 | 20 | 40 |
| Above 9000 | 20 | 40 |
| **Total** | **50** | **100** |

**Source: Primary Data**

**Table.6 Cost and Return Structure of Sugarcane Production (Per Acre)**

| Cost Mechanism | In Rs. | Percentage |
|---|---|---|
| Cost on Seed | 6200.00 | 20.98 |
| Harvesting and bundling cost | 7300.00 | 24,70 |
| Cost on Chemical Fertilizers | 2400.00 | 08.12 |
| Cost on Human Labour | 3200.00 | 10.83 |
| Cost on Pesticides | 350.00 | 01.18 |
| Cost of Bullock Labour | 1600.00 | 05.41 |
| Cost of Farm Manure | 800.00 | 02.71 |
| Transportation Cost | 2000.00 | 06.77 |
| Rent on Land | 4200.00 | 14.22 |
| Interest Cost | 1500.00 | 05.08 |
| **Total Cost (Per Acre)** | **29550.00** | **100** |
| Average Yield per acre in tones | 100 | |
| Average Price per tone (in Rs.) | 1000.00 | |
| Total Income/ Per Acre (in Rs.) | 50,000.00 | |

**Source: Compiled From Primary Data**

**Major Findings of the Study**

It is identified from the table 1 that 10 (20%) of the selected respondents are in the age group of below 30. The 10 (20%) of the respondents are in the age group of 30-40. It is also found that 20 (40%) cultivators are more than 50 years old.

It is noticed from the table 2 that all the selected sugarcane growers are educated. Among the 50 respondents 10 (20%) are having up to primary and secondary education. 15 (30%) sugarcane growers are having college education.

It is found from the table 3 that out of 50 selected sugarcane growers 30 (60%) of them are married. 20 (40%) respondents are unmarried.

It is identified from the table 4 that majority of the selected sugarcane growers i.e. 20 (40%) are having 2 to 4 and 5 to 7 member is their family. 10 (20%) farmers having above 7 members in their family.

It is estimated that the income of the respondents of sugarcane per acre is 10 (20%) farmers earn from 5000 to 7000. 20 (40%) farmers earn above 9000.

It is estimated that the cost of production of sugarcane per acre is 29550.00. The average yield per acre is estimated at 100 tons per acre. Average price per ton of sugarcane is calculated as Rs. 1000.

**Conclusion**

It is found from the present study the share of land is the maximum in the sugarcane production. It shows efficiency gain in production in terms of labour under new production technology. The total income generated in the sugarcane production and employment generation is considerably satisfactory in Namakkal District.

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