



EMPIRICAL ASSESSMENT OF SOCIO-ECONOMIC AND LIVELIHOOD STATUS OF FARMERS ENGAGED IN SUGARCANE PRODUCTION IN ERODE DISTRICT

Dr.V.Usha Rani

Associate Professor,

*PG & Research Department of Economics,
Chikkaiah Government Arts and Science College,
Erode, Tamil Nadu, India.*

A. Banupriya

Research Scholar,

*PG & Research Department of Economics,
Chikkaiah Government Arts and Science College,
Erode, Tamil Nadu, India.*

Abstract

Sugarcane cultivation plays a significant role in the agrarian economy of Erode District, Tamil Nadu. The present study empirically assesses the socio-economic characteristics and livelihood status of farmers engaged in sugarcane production. Primary data were collected from 150 sugarcane farmers across selected blocks of Erode District using a structured interview schedule. Descriptive statistics, livelihood index analysis, and socio-economic indicators were employed to evaluate farmers' living conditions and income generation patterns. The findings reveal that a majority of respondents belong to the middle-age category (46%), possess secondary education (38%), and own small to medium-sized landholdings (62%). Sugarcane cultivation contributes nearly 68% of household income. However, challenges such as labor scarcity, rising input costs, fluctuating sugarcane prices, and water scarcity adversely affect livelihood sustainability. The study suggests strengthening extension services,

promoting water-efficient technologies, and improving market linkages to enhance farmers' socio-economic well-being.

Keywords: Sugarcane Farmers, Socio-Economic Status, Livelihood Assessment, Agricultural Economics.

I. Introduction

Agriculture remains the backbone of the Indian economy, employing a substantial proportion of the rural population. Sugarcane is one of the most important commercial crops cultivated in India and contributes significantly to rural livelihoods, agro-industrial development, and national income. Tamil Nadu is among the leading sugarcane-producing states, and Erode District is recognized for its extensive sugarcane cultivation due to favorable agro-climatic conditions and irrigation facilities.

The livelihood status of farmers depends on various socio-economic factors, including landholding size, education, income diversification, access to credit, and

agricultural productivity. Understanding these factors is essential for designing effective agricultural policies and rural development programs. Therefore, the present study aims to assess the socio-economic and livelihood conditions of sugarcane farmers in Erode District.

Objectives of the Study

- To analyze the socio-economic profile of sugarcane farmers.
- To evaluate the livelihood status of farming households.
- To identify constraints affecting sugarcane production and farmer welfare.
- To suggest policy measures for improving farmers' livelihoods.

The increasing demand for convenience and accessibility has encouraged banks to invest heavily in digital technologies. Customer satisfaction has become a key determinant of the success of digital banking services because satisfied customers are more likely to remain loyal and recommend banking services to others.

II. Literature Review

Several studies have examined the relationship between agricultural production and rural livelihoods. According to Ellis (2000), livelihood diversification significantly enhances rural household resilience against economic shocks. Studies conducted in Tamil Nadu have highlighted that sugarcane farming contributes substantially to

household income but is constrained by labor shortages and water scarcity.

Research by Chambers and Conway (1992) introduced the Sustainable Livelihood Framework, emphasizing the role of human, natural, financial, social, and physical capital in livelihood sustainability. Previous studies in South India indicate that farm income, education, and access to institutional credit positively influence the socio-economic status of farming households.

III. Methodology

A. Study Area

The study was conducted in Erode District, Tamil Nadu, which is known for its intensive sugarcane cultivation. Major sugarcane-growing blocks such as Gobichettipalayam, Bhavani, and Sathyamangalam were selected.

B. Sampling Technique

A multistage random sampling method was employed. A total of 150 sugarcane farmers were selected for primary data collection.

C. Data Collection

Primary data were collected through personal interviews using a pre-tested structured questionnaire.

D. Analytical Tools

The following tools were used:

- Percentage Analysis
- Mean and Standard Deviation
- Livelihood Index

- Frequency Distribution
- Descriptive Statistics

B. Income Distribution among Sugarcane Farmers

IV. Results and Discussion

A. Socio-Economic Characteristics of Respondents

Table I: Socio-Economic Profile of Sugarcane Farmers (n = 150)

| Characteristics | Category | Frequency | Percentage (%) |
|-----------------|------------------|-----------|----------------|
| Age | Young (<35) | 36 | 24 |
| | Middle (35-55) | 69 | 46 |
| | Old (>55) | 45 | 30 |
| Education | Primary | 42 | 28 |
| | Secondary | 57 | 38 |
| | Higher Secondary | 33 | 22 |
| | Graduate | 18 | 12 |
| Farm Size | Small | 51 | 34 |
| | Medium | 42 | 28 |
| | Large | 57 | 38 |

Interpretation

The majority of respondents belong to the middle-age category (46%). Secondary education was found among 38% of farmers, indicating moderate educational attainment. Large and medium landholdings collectively account for 66% of respondents.

Table II: Annual Household Income Distribution

| Income Source | Average Annual Income (₹) | Contribution (%) |
|-----------------------|---------------------------|------------------|
| Sugarcane Cultivation | 3,40,000 | 68 |
| Other Crops | 75,000 | 15 |
| Livestock | 45,000 | 9 |
| Non-farm Activities | 40,000 | 8 |

Interpretation

Sugarcane cultivation remains the primary source of income, contributing approximately 68% of total household earnings.

C. Livelihood Asset Analysis

Table III: Livelihood Capital Scores

| Capital Type | Mean Score |
|-------------------|------------|
| Human Capital | 3.82 |
| Natural Capital | 3.41 |
| Financial Capital | 2.95 |
| Physical Capital | 3.76 |
| Social Capital | 3.18 |

The analysis indicates that human and physical capital are relatively stronger, while financial capital remains comparatively weak due to limited access to affordable institutional credit.

D. Major Constraints Faced by Farmers

Table IV: Constraints in Sugarcane Production

| Constraint | Respondents (%) |
|----------------------------|-----------------|
| Labor Scarcity | 84 |
| Rising Input Costs | 79 |
| Water Scarcity | 73 |
| Price Fluctuation | 69 |
| Pest and Disease Incidence | 41 |

Interpretation

Labor scarcity emerged as the most severe constraint, followed by increasing input costs and inadequate water availability.

V. Figures

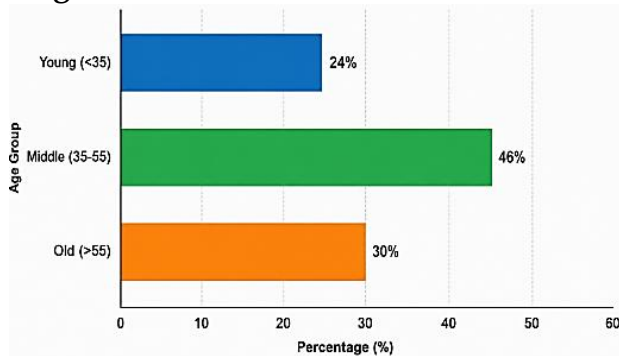


Fig. 1. Age Distribution of Respondents

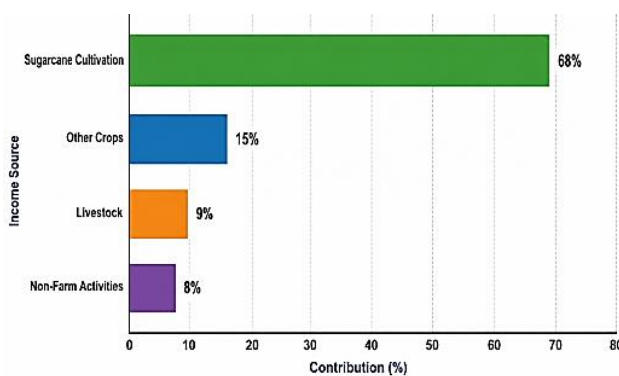


Fig. 2. Household Income Contribution

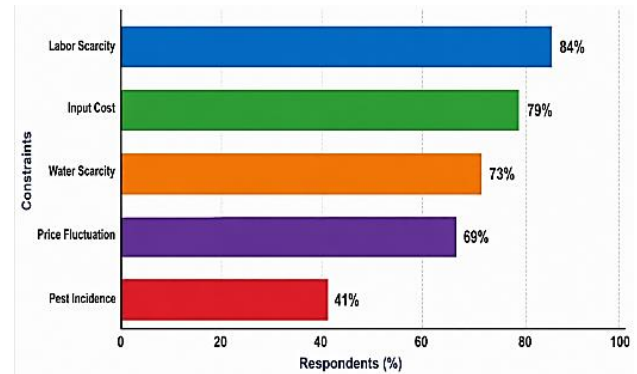


Fig. 3. Major Production Constraints

VI. Policy Implications

- Promotion of drip irrigation and water-saving technologies.
- Strengthening farmer producer organizations (FPOs).
- Enhancing institutional credit accessibility.
- Providing mechanization support to address labor shortages.
- Ensuring fair and timely procurement prices for sugarcane.

VII. Conclusion

The study reveals that sugarcane cultivation remains the principal livelihood source for farmers in Erode District. Despite generating substantial income, farmers face several socio-economic and production-related challenges, including labor scarcity, rising cultivation costs, and water constraints. The livelihood assessment indicates moderate levels of human, physical, and social capital, while financial capital remains weak. Sustainable interventions such as improved



irrigation systems, mechanization, access to credit, and market support are essential for enhancing the livelihood security and socio-economic status of sugarcane farmers. Policymakers should focus on integrated rural development strategies to ensure the long-term sustainability of sugarcane farming and rural livelihoods in Erode District.

References

1. R. Chambers and G. Conway, Sustainable Rural Livelihoods: Practical Concepts for the 21st Century, IDS Discussion Paper 296, Brighton, UK, 1992.
2. F. Ellis, Rural Livelihoods and Diversity in Developing Countries. Oxford University Press, Oxford, 2000.
3. Government of Tamil Nadu, Department of Agriculture, Agricultural Statistics at a Glance, Chennai, 2024.
4. Ministry of Agriculture and Farmers Welfare, Government of India, Agricultural Census Report, New Delhi, 2023.
5. S. Kumar and P. Singh, "Socio-economic determinants of agricultural livelihood sustainability," Indian Journal of Agricultural Economics, vol. 76, no. 2, pp. 145-158, 2021.
6. M. Ramasamy and K. Balasubramanian, "Livelihood assessment of sugarcane farmers in Tamil Nadu," Journal of Rural Development, vol. 39, no. 4, pp. 567-582, 2020.
7. N. R. Bhat and V. Patel, "Economic analysis of sugarcane cultivation in India," Agricultural Economics Research Review, vol. 34, no. 1, pp. 45-58, 2021.
8. Directorate of Economics and Statistics, Tamil Nadu, District Statistical Handbook - Erode District, Chennai, 2024.