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# Analysis of Cultivational Cost of Sugarcane in Tamil Nadu

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Received: 08<sup>th</sup> March 2019 Revised: 21<sup>st</sup> May 2019 Published: 11<sup>th</sup> June 2019

Abstract: Agro-based industries have been playing a crucial role in Indian economy. About 7.5 per cent of the rural population, covering about 60million cane farmers their dependents and a large number of agricultural labourer are involved in sugarcane cultivation harvesting and ancillary activities. Generally, sugarcane production is mainly depended upon the expenditure of sugarcane cultivation, prices fixed by the Government and subsidy support for mills. The fluctuations in the Government fixed prices for sugarcane and variation between public, cooperative and private sector sugar mill also affect the sugarcane production. The labour cost for cutting and transport cost was relied upon the availability of labour, distance between mills and sugarcane cultivated area, seasons for harvesting, availability of vehicles etc., Government needs to increase the sugarcane prices according to the inflation rate. Government has to ensure that subsidies have to reach the farmers in time.

#### Introduction

Agro-based industries have been playing a crucial role in Indian economy. About 7.5 per cent of the rural population, covering about 60million cane farmers their dependents and a large number of agricultural labourers are involved in sugarcane cultivation harvesting and ancillary activities. Sugar industry had initially brought socio-economic changes in rural India by way of facilitating entrepreneurial activities such as diaries, poultries, fruits and vegetable processing and providing educational, health and credit facilities. However, today the industry bleeds due to state-level policies and lack of proper planning.

Also, unlike many western or major sugarcane growing countries, sugarcane is the only source of sugar in our country and therefore, any mismatch between demands and supply of sugar in the country assumes significance at the national level and influence the economics of sugarcane cultivation to great extent often, the initiatives of the state government in the form of fixing a remunerative sugarcane price on one end and pressurizing mills to make payments within a reasonable time on the other end encouraged farmers to put in more area under the sugarcane crop3.

# Cost of Sugarcane Cultivation

Rakshit (1980), analyzed "Cost of protecting India's sugar industry". The study discussed about two costs i.e., production cost of protection and consumption cost of protection and fully decontrolled price policy on 1971. The change in protection cost estimates over the period is explained to large measures by shifts in the government's price control policy. This policy though unjustifiable for a

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society in which income distribution is nearly equal does alleviate to a certain extent the sufferings of the low income groups.

Suresh et.al (2007), described "Cost analysis in Cooperative sugar mills in Tamil Nadu". The cost of sugar production is determined by quality of cane, cane cost, recovery rate, interest paid, salaries and wages. The Cooperative sugar mill in Tamil Nadu is very poor because to sugar mills do not have effective control over the cost incurred during the production. Modern machineries may improve the recovery of sugar, which will lead to improve the productivity and increase the profitability of sugar mill.

Thakar (2012), illustrate financial viability of sugar factories in South Gujarath. The present study detailed about the financial institutions and banks to provide term loans to the sugar mill. Sugarcane is the multiple use of raw material to the mill i.e., molasses, bagasse and pressmud etc., since, government should ensure nicest and cheaper credit facilities to the sugar industry which leads to timely disbursement of sugarcane prices to sugarcane farmers.

Malyadri (2013), described the financial performance of sugar industry in India. India's sugar consumption has steadily increased from 5.3kgs per annum in the early 1960's to around 18kgs per annum in 2012. Driven by the continued switching from gur to sugar raising income and growing population, India's sugar consumption is projected to increase 20.5million tonnes in 2011 and 21.4 million tonnes in 2012. High income elasticity of sugar and the continued switch in demand from gur and khandsari of sugar are expected to drive consumption. The growth of growth demand by food industries and other non-household users, estimated to account for about 45 per cent of total consumption, could provide additional importunes longer term market growth.

Generally, sugarcane production is mainly depended upon the expenditure of sugarcane cultivation, prices fixed by the Government and subsidy support for mills. Moreover, those who depend upon the Public/Government and Cooperative sector sugar mills could get subsidy easily since the production is high. Whereas, those who are depend upon the private sector could not get because of low price of sugarcane, high interest rate for bank loan, no subsidy and payment delay. The fluctuations in the Government fixed prices for sugarcane and variation between public, cooperative and private sector sugar mill also affect the sugarcane production.

#### Expenditure

The sugarcane cultivation expenditure analyzed with five indicates, like seed, fertilizer, weeding, labour cost and transport cost. The seed, fertilizer and weeding cost belongs to the category of input cost because these three-cost incurred during the process of sugarcane cultivation. Whereas, labour cost for cutting and transport cost incurred after harvesting of sugarcane. The seed, fertilizer and wedding cost were depended upon the varieties of seeds, soil quality, number of acres of sugarcane cultivation and availability of labour, The labour cost for cutting and transport cost was relied upon the availability of labour, distance between mills and sugarcane cultivated area, seasons for harvesting, availability of vehicles etc.

Table 1, explains about the expenditure of sugarcane cultivation in the selected districts of Tamil Nadu during the period 2013-14. The highest average expenditure of sugarcane cultivation was incurred for sugarcane cutting was in Veerasolapuram village withRs.27,462 in Villupuram District because this village had insufficient labour for sugarcane cutting, hence available labourers demand for more wages. The majority of the farmers belong to the category of small farmers i.e., 38 out of 50 farmers. The mill does not provide cutting order at the appropriate time to the farmers. As a result, the farmers got the cutting order in the month between March and May during dry season so, labour

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demands high wages, the transport cost high and the sugarcane losses its weight quickly, hence the farmers got either only minimum profit or sometimes loss. The highest average for sugarcane seeding of small farmers was Rs.10,607.55 in Kuthirichanthal village in Villupuram district. The majority of the farmers belong to the small farmers i.e., 40 out of 50 farmers in Kuthiraichanthal village. Though the expenditure was high, the government policies motivated the farmers to cultivate sugarcane in this village. The transport cost was depending upon distance between mill and farmer cultivated area, availability of labour, harvesting season Transport cost was not in Arputhapuram village. Because, as per the Report on Price Policy for sugarcane in the year 1992-93 sugar mills bear the transport cost for the farmers whose lands falls under 10kms, this policy prevails only in Tamil Nadu. But, farmers says the mills bear the transport cost only when the mills are in profit.

## Findings and Conclusion

Total cultivated area of sugarcane and production was high in Kothangudi Thattumal village but the productivity was marginally lower than Valkai village. The field officers of sugar mill encourage Kothangudi Thattumal village farmers to cultivate more sugarcane, they get motivated.

The productivity of sugar also witnessed a high volatile because inconsistent of area under cultivation of sugarcane in the study period. Several times farmers are affected either by flood or drought, especially the sugarcane farmers demoted at the time of drought because during the drought time, due to lack of water sugarcane lose its weight. At the time, the sugarcane farmers expected much support(mainly financially) was not fully satisfied by the Government. So, the sugarcane farmers immediately go far cropping pattern change.

It shows the sugarcane cultivation is more labour intensive. The transport cost Arputhapuram village sugarcane farmers was mill, because the government bare the transport cost for the farmers falls under 10 kms, which motivate farmers to cultivate sugarcane but not

for the farmers whom had their lands 10 kms away from the mills, hence the farmers of second category are not get motivated in cultivating sugarcane.

In the study for calculating sugarcane cultivating cost, seed, fertilizer, weed, cutting and transport cost. The cutting cost constitutes 30 to 45 per cent of the total average cost in the study area.

Sugar industries and sugarcane cultivation contribute significantly to the development of the nation. Government needs to increase the sugarcane prices according to the inflation rate. Government has to ensure that subsidies have to reach the farmers in time.

# References

Susmita Rakshit(1980), "Cost of protecting India's sugar industry", Economic and Political Weekly, Vol. 15, No. 20 (May17,1980), pp.893-899P

Suresh .P, Samuel Joseph .C, Vanniarajan .T (2007), "Cost analysis in Cooperative sugar mills in Tamil Nadu", Journal of Contemporary Research in Management, Volume-1, No.1, 2 Jan -June2007,pp.no.87-98.

Noronha. Rand Dilipsinh Thakor(2012), "Financial viability of sugar factories in South Gujarat-A Case Study", International Journal of Multidisciplinary Research, Vol. 2, No. 2, Feb-2(2012).

Malyadri .G and Sudheer Kumar .B (2013), "Financial performance of sugar industry in India", International Journal of Management and Strategy (IJMS), Vol. No. 4, Issue 6.

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Table 1: AVERAGEEXPENDITUREOFSUARCANECULTIVATION (Rs.)

TYPES OF FARMERS	VILLAGES		Fertilizer	Weed	Cutting	Transport	Others	Total
MEDIUM FARMERS SMALL FARMERS	Vilar	8341.37	9243.62	3399.72	23351.70	4707.22	7902.33	56946.95
		(14.65)	(16.24)	(5.96)	(41.01)	(8.27)	(13.87)	
	Arputhapuram	8629.58	6277.71	3382.52	18582.35	-	9536.96	46409.12
		(18.59)	(13.53)	(7.28)	(40.04)		(20.56)	
	Kothangudi Thattumal	7242.01	9489.35	2916.64	23632.78	11695.17	15571.43	70547.38
		(10.27)	(13.45)	(4.13)	(33.50)	(16.57)	(22.08)	
	Valkai	8454.52	9616.10	3000.79	20015.10	2093.18	5080.69	48260.38
		(17.52)	(19.93)	(6.22)	(41.47)	(4.33)	(10.53)	
	Veerasolapuram	9215.84	6986.36	2726.61	27462.13	3506.93	10797.72	60695.59
		(15.18)	(11.51)	(4.49)	(45.25)	(5.78)	(17.79)	
	Kuthiraichanthal	10607.55	8703.19	2692.80	21479.60	916.35	12884.34	57283.83
		(18.52)	(15.19)	(4.70)	(37.50)	(1.60)	(22.49)	
	Vilar	7789.07	9984.34	2901.31	25015.54	2545.51	8282.38	56518.15
		(13.78)	(17.67)	(5.14)	(44.26)	(4.50)	(14.65)	
	Arputhapuram	9557.58	8788.35	3295.37	17265.73		10846.05	49753.08
		(19.22)	(17.66)	(6.62)	(34.70)		(21.80)	
	Kothangudi Thattumal	8238.34	9307.61	3125.32	24239.15	10172.22	14838.35	69920.99
		(11.78)	(13.31)	(4.47)	(34.67)	(14.55)	(21.22)	
	Valkai	9536.94	9416.59	3494.41	23716.58	1090.90	6722.10	53977.52
		(17.67)	(17.45)	(6.47)	(43.94)	(2.02)	(12.45)	
	Veerasolapuram	8771.88	6366.42	3658.54	27228.01	3692.96	11578.90	61296.71
		(14.31)	(10.39)	(5.97)	(44.42)	(6.02)	(18.89)	
	Kuthiraichanthal	10514.25	10317.52	2852.23	16093.96	2124.28	29187.71	71089.95
		(14.79)	(14.51)	(4.01)	(22.64)	(2.99)	(41.06)	
LARGE FARMERS	Vilar	7649.99	9433.32	2933.00	24425.00	7358.33	10500.00	62299.64
		(12.28)	(15.14)	(4.71)	(39.21)	(11.81)	(16.85)	
	Arputhapuram	7753.08	8634.12	5168.74	17620.04		12512.17	51688.15
		(15.00)	(16.70)	(10.00)	(34.09)		(24.21)	
	Kothangudi Thattumal	9249.97	9999.97	3996.90	24886.51	2942.30	16057.67	67133.32
		(13.78)	(14.90)	(5.95)	(37.07)	(4.38)	(23.92)	
	Valkai	13947.36	9578.94	4310.52	23842.09	,	4999.99	56678.90
		(24.61)	(16.90)	(7.61)	(42.07)		(8.82)	
	Veerasolapuram	15384.60	16076.91	1615.37	53038.44	13461.52	18076.91	117653.75
		(13.08)	(13.66)	(1.37)	(45.08)	(11.44)	(15.37)	
	Kuthiraichanthal	NLF	NLF	NLF	NLF	NLF	NLF	

Source: Compiled from primary data Note: NLF-No large farmers in the village

Figures in Parent has is shows percentage computed from Total expenditure