

Farmers Perception on Contract Farming of Sugarcane in Orissa : A Village Level Study

R.K. Rout¹, R.K. Mishra², Narayan Bar³ and Debabrata Mondal⁴

^{1&2}Department of Agricultural Economics, College of Agriculture, OUAT, Bhubaneswar-751003, India

³Krishi Vigyan Kendra, Samalpur, India

⁴Department of Agricultural Extension, Palli Siksha Bhavana, Visva Bharati, Sriniketan, India

Email: mondal.debabrata@gmail.com

Paper no: 88 **Received:** 23 August, 2013 **Revised:** 26 September, 2013 **Accepted:** 08 November, 2013

Abstract

Sugarcane is a major cash crop of India, particularly in UP, Maharastra, Tamil Nadu, Karnataka, Andhra Pradesh, Bihar, Gujarat, and foot hills of Uttarakhand. Sugarcane crop has an productivity of 70 tonnes/ha and an area of 4.2 mha. It plays a pivotal role in the state and national economy. Sugarcane is considered as one of the best cash crops in Orissa. It is grown in all the 30 districts of Orissa. The selected district Dhenkanal occupied 10th position in area (1.19 thousand ha), 9th position in production (81.46 thousand MTs) and 14th position in yield (68510 kg/ha) in 2004-05. The establishment of a sugar factory in Dhenkanal district has increased the prospect of this crop in the surrounding area. On contract farms the important constraints experienced by the sugarcane contract growers in its order of importance were (i) delay in payment of produce, (ii) lack of credit for crop production, (iii) scarcity of water for irrigation, (iv) difficulty in meeting quality requirements and (v) lower prices of crop produce. The constraints expressed by the sugar industry were (i) violation of terms and conditions by farms, (ii) lack of proper management by company, (iii) frequent price fluctuations in international market, (iv) scarcity of transport vehicle during peak periods, (v) inability to provide proper transport facilities to farms and (vi) families negligence in maintaining quality. Among different benefits from contract farming, contract farmers felt that lack of initial investment was the prime factor to prefer contract farming as the firms provided the inputs such as seeds, fertilizers etc. to the farmers without cash from the farmers and these costs were deducted at the time of final payment.

Keywords; Cash crop, Sugarcane, Company, Market

Introduction

Sugarcane is the main source of sugar in India and holds a prominent position as a cash crop. It contributes approximately 56 per cent of total sugar production in the world. Sugar is one of the oldest commodities in the world and traces its origin in 4th century AD in India and China. India is the largest consumer (18 million tones) and the second largest producer of sugar after Brazil. The Indian sugar Industry is one of the largest producers of white crystal sugar with massive enterprise of sugar factories located throughout the country with an annual turn over of Rs. 150 billion. Indian agriculture has undergone a phenomenal transformation during the past five decades. The metamorphosis was brought by not only technological changes such as green

revolution, but also by institutional innovations in delivering farm inputs and marketing of output. Contract farming is one such institutional initiative undertaken in recent years to address some of the problems faced by the Indian farmers. The National Agricultural Policy 2000, announced by the Govt. of India, seeks to promote contract farming by involving the private sector to 'accelerate technology transfer, capital inflow and assured marketing of crop production' (Asokan, 2005).

Contract farming or marketing is essential is an arrangement between the farmers (producers) and the agribusiness firms to produce certain pre-agreed quantity and quality of the produce at a particular price and time. It can only be a pure procurement transaction or can extend to the supply of inputs or even beyond.

In contract farming companies or organization engaged in processing and marketing of agricultural products are entering into contracts with the farmers. They provide inputs to the farmers and buy back the product at a rate specified in advance.

In view of the above perspectives, a study on "Farmers perception on contract farming of sugar cane in Orissa: A village level study" was undertaken with the following objective.

Objective

- To examine the nature of contracts in sugar cane cultivation.
- To study the type of inputs and services provided by the sugar factories to the farmers.
- To study the benefits and constraints experienced by the farmers in sugar cane farming.
- To suggest measure for promoting contract farming in sugarcane.

Methodology

The multi-stage stratified random sampling technique was adopted in the study. In the first stage two blocks namely Dhenkanal Sadar and Kankadahada were selected randomly, in the second stage, 16 villages were randomly selected at the rate of 8 villages per block. This constituted 5 per cent of the total number of villages of two selected blocks. In the final stage, list of sugarcane farmers was prepared separately for both types of sample villages and 10 farm households from each of the 16 sample villages were selected randomly.

Results and Discussion

Contract farming in sugarcane has emerged as an important mode of procurement of raw materials in sugarcane by the sugar factories to ensure uninterrupted supply of cane to the factories. The factor produces white crystal sugar, molasses ethanol and other products which have high market demand. This is an important initiative for reducing transaction costs by established farmer –processor linkages in addition to the already existing methods of linking farmers to consumers. The sample sugar cane farmers have entered advance contract with the sugar factory before the sowing of the crop.

The types of inputs and services provided by the sugar factors (Shakti Sugar) include (a) sugarcane sets / planting material of good quality needed for processing (b) guide lines to grow the crop, (c) fertilizers required for the crop (d) pesticides which do not have residual toxicity (e) extrusion service and (f) transport facilities for lifting the sugar cane of farmers to the factories. Majority of the farmers (87.25 percent) are satisfied with the support provided by the sugar factory.

Based on the information furnished by the sample farmers, the constraints being faced by contract farmers in

practicing contract farming were ranked and prioritised by using the Garretts ranking method and have been recorded in Table 1.

On contract farms, delay in payment of produce was the most important constraint (62.5 Garrette Score) followed by lack of credit for crop production (57.4 score) scarcity of water for irrigation (55.7 score) difficulty in meeting quality requirements (52.1 score) and lower price of the crop produce (50.1 score).

Table 1: Ranking of various constraints faced by contract farmers of sugarcane

Sl. No.	Constraints	Contract farms	
		Score	Rank
1.	Lack of credit fro crop production	57.4	2
2.	Lower price for crop produce	50.1	5
3.	Faulty grading by an agency	48.3	7
4.	Scarcity of water for irrigation	55.7	3
5.	Difficulty in meeting quality requirements	52.1	4
6.	Lack of quality inputs	46.2	8
7.	Provision of inputs at higher rate	39.5	11
8..	Poor service delivery by firms	44.0	9
9.	Delay in arranging inputs	42.8	10
10.	Delayed payment for crop produce	62.5	1
11.	Frequent power cutting	23.1	14
12.	Scarcity of labour during peak periods	49.2	6
13.	Delay in procurement of produce	31.7	12
14.	Lack of government control	25.0	13

The constraints expressed by agencies in expanding contract farming were prioritized based on Garrett score and have been presented in Table 2. It was found that violation of terms and conditions by farmers was the most important constraint with 62.8 Garrett Score, followed by lack of proper management by the company (60.6 score), frequent price functions in international market (58.4 score), scarcity of transport vehicle during peak periods (56.1 score), inability to provide proper transport facilities to farmers (50.3 score) and families negligence in maintaining quality (48.8 score).

Table 2: Ranking of Various Constraints Expressed by Agencies

Sl. No.	Constraints	Garrett Score	Rank
1.	Lack of proper management by the company	60.6	2
2.	Non-availability of extension staff	40.0	9
3.	High rate of rent for hiring transport vehicles	46.7	7
4.	Inability of provide proper transport facilities to farmers due to poor road network, strikes, etc.	50.3	5
5.	Scarcity of transport vehicles during peak periods	56.1	4
6.	Frequent price fluctuations in international markets	58.4	3
7.	Violation of terms and conditions by farmers	62.8	1
8.	Selling of produce to other agencies by farmers	44.0	8
9.	Farmer's negligence in maintaining quality	48.8	6

Constraints Expressed by Agencies in Expanding Contract Farming

On the prospects of contract farming 58.6 per cent of the farmers willing to retain existing area under sugarcane where as 34.8 per cent wanted to decrease the existing area under the crop. Only 6.6 per cent sample farmers showed their inclination towards increasing the existing contract farming area under sugarcane. The contract farmers expressed difficulty in maintaining more area under sugarcane due to labour-intensive nature. The contracting firm was interested to extend the area under sugarcane by covering more farmers.

Benefits of Contracts Farming in Sugarcanes

Among the different benefits from contract farming contract farmers felt that lack of initial investment was the prime factor to prefer contract farming as the firm provided the inputs such as seeds fertilizers etc to farmers initially without cash from the farmers and these costs were deducted at the time of final payment. The second most important factor was fair price and the third was assured market, guarding them against fluctuating prices in the open market. The fourth factor was information on production methods. The fifth factor was timely access to inputs and provision of transport facilities, which lowers transportation cost to contract farmers.

Table 3: Advantages of Contract Farming

Sl. No.	Advantages	Garrett Score	Rank
1.	Low initial investment	63.5	1
2.	Fair price for the produce	63.5	2
3.	Assured market, less risk	61.4	3
4.	Access to information on production	52.3	4
5.	Access to inputs	46.4	5
6.	Transportation facilities	42.9	6

Conclusion

In contract farming, quality inputs such as reeds, fertilizer, plant protection chemicals etc are provided to the farmers at their farm gate, coupled with technical advice on production aspects. This not only reduces the working capital needs of the farmers but also substantially reduces their transaction cost per unit of output.

Govt. should take steps to establish in least one sugar factory each district of the state to promote the contract farming of sugar cane. The contract farming has helped the marginal and small farmers to increase their income levels. Government should promote contract farming of sugar cane in feasible areas. Contract should be made under high scrutiny and transparent with the knowledge of the concerned Govt. Officials should avoid exploitation of the farmers by the contracting firms. The terms of contract should be spelled out in advance and a consent letter should be maintained / obtained both from the farmer and company. Government should establish the monitoring mechanism and a dispute settlement body to ensure that both parties adhere to the terms of contracts.

References

- Kumar Jagdish 2008. "Contract Farming: Problems, Prospects and its Effect on Income and Employment", *Indian Agricultural Economics Research Review* **21**:243-250
- Nagaraj N. 2008. "Contract Farming and its Implication for Input-supply, Linkages between Markets and Farmers in Karnataka", *Indian Agricultural Economics Research Review* **21**: 307-316.
- Tyagi, R.C. and Hasnain, I., 2001. Growth Pattern of Sugarcane and Problems at its Marketing in India, *The Bihar Journal of Agricultural Marketing* **9** (1): 51-63.