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Contract farming – A new approach for marketing

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Abstract

Liberalization and globalization has a significant influence on marketing of agriculture produce. This situation created a requirement for commercialization of the farming system. In India small holding of the farming acts as a hurdle for commercialization of agriculture. Along with commercial production marketing of the produce is also a great challenge. With respect to horticulture produce, which are of perishable nature with lesser shelf life, there is a need for specific market and market infrastructure within a time period. In this context contract farming is recognized as important aspect of agri-business. Contract farming is an agreement between the buyer and seller about supply of inputs and other element and buying the produce at pre decided price. Present study has been conducted by adopting case study method. Data has been collected by the farmer who was following contract farming in watermelon from last five years. After the detailed information about social and economic impact of contract farming it has been found that farmer has added up in his land holding from 7.00ac. to 11.27 ac. He bought additional 2.00 ac. under irrigation after following contract farming. As he was growing field crops now he switched over to commercial crops. His economic status has been improved from 21,000 per annum to 5.5 lakhs per annum. Apart from this his social status has been upgraded as he was treated as one of the contact farmer. Along with educational status of the family member has been improved. Now he has got capital in his hand by repaying his entire loan. Over all commercialization and contract farming has influence in improvement of social and economic status of the farmer and acts as a model farmer in his

Keywords: Contract farming, approach, marketing

Introduction

Over the past few decades, market liberalization has profoundly influenced agriculture in both developed and developing parts of the world. Commercialization of agriculture and horticulture has gone dramatic transformation over the centuries. Horticultural produces are perishable with lesser shelf life, there is a need for specific market and market infrastructure within in a period. In this context, private participation can be promoted through contract farming to allow accelerated technology transfer and capital inflow and assured market for crop production, especially in horticultural crops. Contract farming is recognized as anessential aspect of agri-business and as a valuable tool for commercialization of agriculture. Contract farming defined as forward agreements specifying the obligations of farmers and buyers as a partner in business. The Legally farming contract entails the farmer (seller's) obligations to take of goods and realize payments as agreed. The buyers usually provided with embedded services which help them to take diversified activities in their farm. It helps to minimize the risk involves in undertaking farm business by supplying appropriate inputs in time, monitoring and supervision of farm and buying arrangements of outputs. Contract

farming by national and multinational companies is increasing drastically and they are helping in the development of supermarket chains. This paper contributes to understanding the opportunities for farmers in the production and marketing of horticultural crops through contract farming.

Review of Literature

Keshavamurthy (2005) [1] revealed in his study that 61.6 per cent of the respondents belonged to medium level of income (50, 000 - 90,000) and in low income category (21.68%) of respondents were noticed whereas, 16.66 per cent of farmers belonged to high income group (more than `90,000).

Nethravathi (2006) conducted a study on comparative analysis of the preference and performance of the marketing organizations of fruits and vegetables in Bangalore Rural and Urban Districts and indicated that exactly half of the farmers (50.00%) had medium social participation followed by low (30.00%) and high (20.00%) level of social participation.

Raghavendra Naduvinmani (2007) [3] in his study on economics of red Banana production under contract farming in Karnataka found that the total cots of Red banana

production per hectare was `1,30,991 while the gross and net returns were `4,28,630 and `2,97,639 respectively. The benefit-cost ratio for red Banana contract was 3.28.

Methods

The study was conducted at Tumkur district of Karnataka state in 2015. The district was purposively selected as the major area under contract farming. The data was collected by using a case study. The data was collected from the farmers who are practicing contract farming under horticultural crops for five years. The details of the case study are given below;

A Case Study on Watermelon Crop Contract Farming

Watermelon is also an important crop which gives more remuneration to the farmers when they grow under contract farming for hybrid seed production compared to commercial production. MrVenkatesh, 40 yrs. Old is from Tavarekere village of Sirataluk. He has studied up to 5th standard. He is living in a joint family and details of his family members are given below;

Name	Age (yrs.)	Education	Occupation	Income (Rs.)
Pandurangappa (Father)	74	UnEducated	Agriculture	
Ratnamma (Wife)	38	2ndstandard	Agriculture	
Prakesh (Son)	21	M.A.	-	
Manjula (Daughter)	20	SSLC	Married	
Ranganath (Brother)	34	7th standard	Ration shop (Kirana shop)	4000/month
Yashodamma (Wife of Ranganath)	29	5th standard	Housewife	
Bush (Son of Ranganath)	10	6th standard	-	

Before Contract Farming

MrVenkatesh had 4.27 ac of land. The only occupation was agriculture and no subsidiary occupation. From all the sources the farmer used to get an income of Rs. 35,000/annum. Out of

his total land holding of 4.27 ac. 2.27 ac. was under irrigation, and the major source of irrigation was bore well. For excavating this bore well, the farmer spent Rs. 15,000/-. The method of irrigation followed by the farmer was flooding.

Material Possession the material possession of the farmers can be known by below table

Material	Cost (Rs)	Year of Purchase	
	Agriculture Implements		
Bullock Cart	3,500.00	1998	
Hoe (Wooden)	300.00	2000	
	House Hold Material		
1.Telivision	3.000.00	2003	

Cropping pattern

The major crops grown by the farmer in Kharif and Rabi are Maize and Sunflower in 2.27 acres under irrigated conditions, and in remaining 2.00 acres, he is growing Groundnut under rainfed conditions. The farmer depended on vendors for the

inputs required for the cultivation of the crops, for purchasing of inputs the farmer took a loan of Rs. 15,000/- from wholesaler of inputs or sometimes money lenders. Because of his money constraints, the farmer may not apply the fertilizer in time and required quantities.

Labour requirement

	Labour					Contribution			
Sl. No	Crop	M	en	Wo	men	Bullock Pairs	Machinery	of Family	Activity performed
		No.	Cost	No.	Cost			labour	
1	Ground Nut	08	400	15	600	Two times Rs. 500		05 and Rs 200	Sowing, weeding, IC
1	(Rain fed)	08	400	13	000	I wo tilles Rs. 500	_	03 and Ks 200	Spraying and harvesting
2	Maize	10	500	15	750	2 times Rs. 500		10 and Rs	Sowing, weeding, IC
2	(Irrigated)	10	300	13	730	2 times Rs. 500	_	500	Spraying and harvesting
3	Sunflower	07	350	15	750	Two times Rs. 500		15 and Rs 750	Sowing, weeding, IC
3	Sumower	07	330	13	730	I wo times Ks. 300	-	15 and K8 750	Spraying and harvesting

From the above information, we can say that the farmer required a large number of labourers per crop per acre. The total labour expenditure works out to be nearly Rs. 47,000 to Rs. 50,000 per acre. But as the members of the family involved in agricultural operations like sowing, weeding,

spraying, harvesting etc. labour cost is reduced by Rs 18,000 to Rs. 20,000 per acre.

Once the crop is harvested until the product is ready for marketing, there is some amount of post-harvest loss. In the case of Sunflower, they will go for manual harvesting and drying, which accounts for the expenditure of Rs. 2000 per 50 Kg. Bag and a very negligible amount of loss occurred in this. Whereas Maize is harvested in machinery, so loss rate is more in this, a farmer may lose nearly 70-80 kg. /acre, which accounts for Rs. 1000 to Rs.2000. Groundnut is harvested manually, and loss is 40 kg, which accounts for Rs. 2500/-. Once the product is ready, many times, the farmer will sell his produce to local agents as he will get money immediately.

Sometimes he will take to APMC which incurred a transportation cost of Rs 200/-. He used to transport the produce with the help of his cart and sometimes in the auto. The farmer sells the produce to the moneylender for repaying his loan amount. The returns per rupee cost are mentioned below:

Crop	COC (Rs/ac.)	Gross return (Rs)	Net return (Rs)	Returns/ rupee cost
Ground Nut(Rain fed)	4,000.00	10,000.00	6,000.00	1:2.50
Maize	12,000.00	20,000.00	8,000.00	1:1.67
Sunflower	8,000.00	14,500.00	6,500.00	1:1.81

Social status of the farmer before contract farming

The farmer was mainly concerned only with his work and not a member of any organization in his village. Very rarely he used to attend village functions. He never took the lead in organizing social events in his village. He never took part in training, demonstrations and did not even visit universities or departments to get information about agriculture. He used to avoid involvement in politics.

The economic status of the farmer before contract farming

The farmer has taken Rs. 15,000/- from a money lender at the rate of interest Rs.2 percent/month. Because of this, he used

to sell his produce to the moneylender to repay the amount and again he used to take new loan every year/season. The farmer could not have any savings as the earning was sufficient to full fill day to day requirement apart from taking a loan from money lenders and has not received any credit.

After Contract Farming

MrVenkatesh has experienced in contract farming, as he is growing crops under contract farming from 10 yrs. First, he started growing Watermelon and slowly added other crops like Cotton and Chilli under contract farming. The area under different crops is mentioned below;

Crop	Area Under Contract Farming
Cotton	5.3 Acre (1- Kharif, 1 Rabi season)
Chilli	0.5 Acre (0.25- Kharif, 0.25 Rabi season)
Water Melon	2.0 Acre (1- Kharif, 1 Rabi season)
Other Crop	3.5 acres
Total	11.3 acres

Because of contract farming, the farmer has got the assured income, and his annual income also increased to Rs. 5,56,000. These days the farmer is not at all following any subsidiary occupation.

The farmer has added 7.00 acres of land to his present holding increasing his total land holdings to 11.27 acres, of which for bringing more area under irrigation farmer has excavated additional bore well by spending Rs.1, 25,000/- Now the farmer has changed his method of irrigation to make judicious use of irrigation water as convinced by the company extension personals. So far the farmer is irrigating his crops

through drip and sprinkle method but sometimes flooding also.

MrVenkatesh has brought 2.00 ac of land under drip irrigation. For this company gave a subsidy of Rs.10, 000/ac. Now a day's farmer is getting more income from contract farming which is given in the table below;

Sl. No.	Crop	Annual Income (Rs)
1	Chilli	1,26,000.00
2	Cotton	3,20,000.00
3	Water Melon	56,000.00
4	Others	57,000.00

Material possession farmer has purchased new things and implements for his house and agriculture in recent days. That could be observed from the below table;

Material	Cost (Rs)	Year of Purchase
	Agriculture Implements	
Sprinkler Unit	14,000.00	2011 (Groundnut Irrigation)
	House Hold Material	
Television	10,000.00	2007
Refrigerator	10,000.00	2007
Mobile	8,000.00	2007
Mixer Grinder	3,500.00	2008
	Vehicle	
Motor Cycle with Gear	55,000.00	2010

Cropping pattern

Apart from contract crops, the farmer is growing other crops both under rainfed and irrigated conditions as mentioned below;

Crop Area (Acre)		Irrigation/Rainfed
Sunflower- ground Nut	2.00	Irrigated – Both Kharif and Rabi
Maize – Sunflower or Millet-Ground Nut	1.50	Irrigated (Rabi- Kharif) Kharif Millet (rainfed) followed by Irrigated Groundnut

Inputs required for the crop are supplied by the company, including staking materials, so it reduces the burden of the farmer to arrange finance for purchasing inputs required for their crops during the season. In Watermelon Hybrid Seed Production Contract Farming – Provide a subsidy of Rs

10000/- Unit area for installation of Drip irrigation and also black polythene mulch to cover seed rows to avoid weed menace and pest incidence as well as for Better WUE (Water Use Efficiency). The cost incurred will be deducted at the time of procurement of seed.

Labour Requirement

Labour required for maintaining the crop under contract farming is a little higher than the commercial crop as mentioned below;

Sl.		Labour			Bullock		Contribution of Family				
No.	Crop	Men		Women		Women		Pairs	Machinery	labour	Activity performed
110.		No.	Cost	No.	Cost	rans		laboul			
1	Cotton	120	12000	400	40000	2 time Rs1000	Tractor+ Rotavator+ Ridger RS 25000/-	200 Rs 20000/-	Sowing, weeding, Spraying, Crossing &harvesting		
2	Chilli	8	800	350	35000	One time Rs 500	RS 2000/- Tractor and Disc harrow.	16 Rs 3800/-	Sowing, weeding, IC, Spraying, Crossing and harvesting		
3	Water Melon	15	1500	120	12000	One time Rs 500	Tractor, Ridge- Rs 2000/-	Rs 6000/- savings due to family labour usage	Sowing, weeding, IC, Spraying and harvesting		

In Watermelon total labour expenditure is Rs. 17,000 to Rs. 18,000 except their family labour contribution of Rs 6000/ ac. The major activities performed by the family members are sowing, weeding, inter-cultivation, spraying and harvesting. After harvesting the produce till preparing for marketing some amount of losses may occur which accounts for 2- 3 kg. in

Watermelon which amounts for Rs. 4000/-. Here the farmer does not have any problem of transportation as the company vehicle will pick the produce to the processing unit, which saves a certain amount to the farmer. The increase in income identified by looking at the return per rupee cost of the contracted crops as given below;

Crop	COC(Rs/ac)	Gross Return (Rs)	Net Return (Rs)	Returns/rupee cost
Cotton	2,00,000.00	3,40,000.00	1,40,000.00	1:1.70
Chilli	1,20,000.00	3,00,000.00	9,0000.00	1:2.50
Watermelon	15,000.00	56,000.00	41,000.00	1:3.73

Social impact of contract farming

Exposure of the farmer to the outside world has improved a lot. Now MrVenkatesh is a member of the Primary School Management Committee and also a member of a farmer's club existing in his village. Currently, he is attending training programmes and demonstrations conducted by the company officials on improved methods of cultivation. He has also gone for a study tour to Maharashtra, organized by his farmer's club. Venkatesh has taken an active part in organising many functions in his village and regularly participating in all the functions. He has become a progressive farmer and advice his fellow farmers about improved methods

of cultivation, and because of his advice and by seeing his performance, many farmers of nearby villages have taken up contract farming. MrVenkatesh also got best and loyal farmer award from the company two times. The farmer also stated that he is actively participating in political activities.

The economic impact of contract farming

The farmer has taken a loan for excavating bore well it is fully repaid. Apart from this, he has also taken additional credit of, Rs. Eighty thousand from the bank for agricultural purpose and is repaying it regularly. We can look at the savings of the farmer;

Fixed deposits	Rs. 50,000.00
Insurance for him and family members	Rs. 2,50,000.00 Rs 21,000.00/ Yr (paying premium)
Purchased 9.00 ac land	Rs. 5,00,00.00 Rs.15,00,000.00 (present value)
Constructed house	Rs. 2,50,000.00 Rs. 9,50,000.00 (present value)
Daughter marriage	Rs. 2,00,000.00
Purchasing of gold	Rs. 40,000.00

Apart from all the above, his son and nephew both are pursuing higher education. Now the purchasing power of the farmer is also increased. It is interesting to see that the farmer is giving hand loan to the villagers and buying the produce from them for the loan amount and selling it at a higher price, in turn, getting a good profit from that.

Conclusion

Looking at the overall picture of the farmer, a comparatively good improvement can be seen both in the case of social factor and economical factor. His personality has also improved a lot as the farmer has got self-confidence and got good exposure to the outside world. Contract farming helped the farmer in the marketing of watermelon, gives assurance against price fluctuation and helped to improve the socioeconomic status of the farmer. So directly or indirectly contract farming helped the farmer to get recognition in the society, the income of farmer also increased. Contract farming may be one of the best methods of marketing in horticultural crops.

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