

## **Research Article**

# IMPACT OF CONTRACT FARMING ON ECONOMIC STATUS OF THE FARMERS PRACTICING CONTRACT FARMING

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**Abstract-** The study was conducted in six districts of Karnataka state *viz.*, Chikkaballapur, Tumkur, Davanagere, Haveri, Gadag and Bellary. Totally six crops were selected purposively namely Tomato, Marigold, Gherkin, Cotton, Watermelon and Pearl millet. The farmers practicing contract farming since from four seasons were considered in selecting respondents for the study. Economic impact of Marigold contract farming was found to be high in the case of savings (11010.03%), household materials (9005.02%) but 2902.67 per cent increase could be seen in the case of draft power. economic impact of contract farming in Pearl millet high impact could be seen in case of housing (2859.84%), household material (1405.22%). It was surprising to saw that less impact could be observed in case of savings (53.98%) and very negligible impact could be observed in case of land holding (6.48%). the economic impact of contract farming land holding has shown significant impact in crops like Tomato, Cotton and Pearl millet, while non-significant in Gherkin, Marigold and Watermelon. Farmers considered nutritional aspects as a part of life which was followed from years together. In this case instead of nutrition farmers had given importance to savings and other aspects. Housing, savings and also material position of the farmers practicing contract farming has shown significant impact in all the crops under contract farming like Tomato, Gherkins, Marigold, Cotton, Watermelon and Pearl millet.

#### Keywords Pearl millet, Contract Farming

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#### Introduction

As a result of market liberalization and globalization, Indian agriculture in recent years created a situation in which the small farmers find difficulty in participating in the market economy. Because of this there will be continuation of migration of population to urban. The government has m encourage the farmers by promoting various income generating activities. But, such attempts have not performed to the expected level due to lack of proper forward and backward linkages. Contract farming is an exciting way of giving the power of scale to the small farmers, transferring corporate management skill to agriculture field, providing assured markets for the produce, reducing the transaction costs involved in the value chains of the commodities and of ensuring vertical integration through forward and backward linkages. In this regard, a study has been made to know the impact of contract farming on economic status of the practicing farmers [1].

#### Methodology

The study was conducted in six districts of Karnataka state *viz.*, Chikkaballapur, Tumkur, Davanagere, Haveri, Gadag and Bellary. Totally six crops were selected purposively namely Tomato, Marigold, Gherkin, Cotton, Watermelon and Pearl millet. The farmers practicing contract farming since from four seasons were considered in selecting respondents for the study. For each crop 40 respondents were selected thus the total sample size for the study was 204 farmers.

#### **Result and Discussion**

It is very curious to know that [Table-1] there was a good economic impact could

be observed in Tomato contract farming with respect to housing (2706.85%) and household materials (6240.72%). But, it was interesting to know that nutrition (-0.14) had shown per cent decrease due to contract farming. In the case of savings (36.06%) there was increase due contract farming which was somewhat less compared to other variables. But when we saw the overall economic impact all the indicators were found to be significant at one per cent but land holding was found to be significant at 5 per cent, whereas nutritional variables were non-significant.

Economic impact of contract farming in Gherkin was indicated in [Table-2], which shows that 4570.14 per cent increase in savings due to contract farming. Further we could also observe in investment on housing (2659.21%) and household materials (3439.12). But in case of land holding which was having non-significant impact, it was only 4.84 per cent increase due to contract farming.

Economic impact of Marigold contract farming was found to be high in the case of savings (11010.03%), household materials (9005.02%) but 2902.67 per cent increase could be seen in the case of draft power. The per cent increase in household material was 9005.02 per cent [Table-3]. It is surprising to see a very negligible impact could be observed in the case of land holding (1.20%).

The savings had been increased (1603.98%) along with household material possession (702.45%) and was housing increased to 224.34 per cent. Comparatively less impact could be seen in case of land holding (6.15%) was the economic impact on the farmers due to Cotton contract farming, which was indicated in [Table-4].

International Journal of Agriculture Sciences ISSN: 0975-3710&E-ISSN: 0975-9107, Volume 9, Issue 28, 2017 The data in [Table-5] indicates the economic impact contract farming in Watermelon crop shows that housing has shown 1437.76 per cent change followed by material possession *w.r.t.* draft animals (547.08%). In case of housing 706.01 per cent increase could be observed. Comparatively less impact could be observed in case of land holding (0.56%). It was interesting to know that there was a negative impact in case of household material possession (-64.47%) in case of Watermelon contract farming.

Table-1 Impact	of contract farming	on economic chara	cteristics of farmers
	practicing contract	farming in Tomaton	=40

		Mean scores		Percent	
SI. No.	Variables	Before contract farming	After contract farming	change due to contract farming	Paired t-value
II.		Economic va	ariables		
1.	Land holding (ac)	3.90	4.33	11.03	2.38*
2.	Nutrition (Rs.)	683.50	635.13	-0.14	0.93 <sup>NS</sup>
3.	Saving (Rs.)	11941.25	431718.75	36.06	6.74**
4.	Housing (Rs.)	10225.00	287000.00	2706.85	10.24**
5.		Material pos	session		
	a. Draft power (Rs.)	6975.00	106625.00	1428.67	4.46**
	b. Farm implements (Rs.)	1360.00	26731.25	1865.53	7.44**
	c. Household materials (Rs.)	1071.25	67925.00	6240.72	7.68**
*Significant at 5% ** Significant at 1%			ant at 1%	NS- Non sign	ficant

 Table-2 Impact of contract farming on economic characteristics of farmers

 practicing contract farming in Gherkins n=40

	í ř	Mean	scores	Percent		
SI. No.	Variables	Before contract farming	After contract farming	change due to contract farming	Paired t-value	
		Econom	ic variable			
1.	Land holding (ac)	2.48	2.60	4.84	0.71 <sup>NS</sup>	
2.	Nutrition (Rs.)	202.05	947.13	368.76	10.44**	
3.	Saving (Rs.)	5525.00	258025.00	4570.14	7.53**	
4.	Housing (Rs.)	9930.00	273990.00	2659.21	11.78**	
5.		Material	possession			
	a. Draft power (Rs.)	5300.00	100237.50	1791.27	3.52**	
	b. Farm implements (Rs.)	1327.50	26737.50	1914.12	6.43**	
	c. Household materials (Rs.)	936.25	33135.00	3439.12	7.27**	
*Significant at 5% ** Significant at 1% NS -Non significant						

 
 Table-3 Impact of contract farming on economic characteristics of farmers practicing contract farming in Marigold n=40

	Variables	Mean scores		Per cent	
SI. No.		Before contract farming	After contract farming	change due to contract farming	Paired t-value
11	Econo	mic variables			
1.	Land holding (ac)	6.65	6.73	1.20	0.28 <sup>NS</sup>
2.	Nutrition (Rs.)	95.13	549.38	477.50	16.34**
3.	Saving (Rs.)	871.79	96858.79	11010.03	5.51**
4.	Housing (Rs.)	6372.50	96950.00	1421.38	12.54**
5.		Material po	ssession		
	a. Draft power (Rs.)	1875.00	56300.00	2902.67	5.47**
	b. Farm implements (Rs.)	318.00	4867.50	1430.66	19.22**
	c. Household materials (Rs.)	273.75	24925.00	9005.02	17.93**
*Significant at 5% ** Signifi			ficant at 1%	NS-Non signi	ficant

 
 Table-4 Impact of contract farming on economic characteristics of farmers practicing contract farming in Cotton n=40

	Mean scores		Percent			
SI. No.	Variables	Before contract farming	After contract farming	change due to contract farming	Paired t-value	
- 11		Econom	ic variables			
1.	Land holding (ac)	4.88	5.18	6.15	2.53*	
2.	Nutrition (Rs.)	534.83	1148.33	114.71	5.91**	
3.	Saving (Rs.)	8525.00	27650.00	224.34	5.88**	
4.	Housing (Rs.)	24021.25	409317.50	1603.98	7.43**	
5.		Material	possession			
	a. Draft power (Rs.)	16700.00	96625.00	478.59	3.71**	
	b. Farm implements (Rs.)	9802.50	50836.25	418.60	5.21**	
	c. Household materials (Rs.)	5723.75	45930.00	702.45	5.49**	
	*Significant at 5% ** Significant at 1% NS-Non significant					

Table-5 Impact of contract farming on economic characteristics of farmers practicing contract farming in Watermelon n=40

		Mean scores		Per cent	
SI. No.	Variables	Before contract farming	After contract farming	change due to contract farming	Paired t-value
I		Econo	omic variables		
1.	Land holding (ac)	5.40	5.43	0.56	0.16 <sup>NS</sup>
2.	Nutrition (Rs.)	658.63	3110.50	372.27	6.44**
3.	Saving (Rs.)	23775.00	365602.50	1437.76	5.24**
4.	Housing (Rs.)	66985.50	539912.00	706.01	5.15**
5.		Mater	ial possession		
	a. Draft power (Rs.)	26925.00	174225.00	547.08	3.18**
	b. Farm implements (Rs.)	29800.00	72762.50	144.17	6.70**
	c. Household materials (Rs.)	135525.50	48152.50	-64.47	7.38**
	*Significant at 5%	** Significa	nt at 1%	NS-Non sig	nificant

If we considered economic impact of contract farming in Pearl millet [Table-6] high impact could be seen in case of housing (2859.84%), household material (1405.22%). It was surprising to saw that less impact could be observed in case of savings (53.98%) and very negligible impact could be observed in case of land holding (6.48%).

Economic impact of contract farming on farmers practicing contract farming in selected crops was presented in [Table-7]. Economic impact was highest in case of Watermelon as the mean score before contract farming (162628.90) has increased to 1205596.00 after contract farming, followed by increase in mean score in cotton from before contract farming (66486.96) and after contract farming (881513.30). However, in case of Marigold economic impact was found to be less comparing to other crops as the change in mean score before contract farming (9985.05) to after contract farming (282635.90) was comparatively less.

When we have a look at the economic impact of contract farming land holding has shown significant impact in crops like Tomato, Cotton and Pearl millet, while nonsignificant in Gherkin, Marigold and Watermelon. Now a day's farmers were having nuclear family and availability of labour was also a major problem leads to have same land holding. Farmers have subdivided their lands and started cultivating crops separately to get individual benefits. Irrigation facility is compulsory for contract farming. This made the farmers to bring more area under irrigation rather than increasing holding. If we take nutritional aspects of the farmers in Gherkins, Marigold, Cotton, Watermelon and Pearl millet contract farming it was significant. In Tomato there was a non-significant impact of contract farming on nutrition. Farmers considered nutritional aspects as a part of life which was followed from years together. In this case instead of nutrition farmers had given importance to savings and other aspects. Housing, savings and also material position of the farmers practicing contract farming has shown significant impact in all the crops under contract farming like Tomato, Gherkins, Marigold, Cotton, Watermelon and Pearl millet. Once the farmer entered into contract

International Journal of Agriculture Sciences ISSN: 0975-3710&E-ISSN: 0975-9107, Volume 9, Issue 28, 2017 farming farmers were assured about income as the price of the output was fixed before and also assured market for their produce that made them to get good profit. To commercialize the farming farmers need to possess some of the agricultural implements and draft animals this made them to improve in material possession also. Overall economic status of the farmers has been increased due to contract farming. By looking at the above result it could be concluded that there was a great impact on their economic status of the farmers who were involved in contract farming in terms of their savings standard of living and material possession status comparing with their previous crops.

Table-6 Impact of contract farming on economic characteristics of farmers
practicing contract farming in Perl millet n=40

		Mean scores		Per cent			
SI. No	Variables	Before contract	After	change due to contract	Paired t-value		
		farming	farming	farming	t value		
		Economi	c variables				
1.	Land holding (ac)	3.55	3.78	6.48	3.15**		
2.	Nutrition (Rs.)	263.43	1122.18	325.99	10.14**		
3.	Saving (Rs.)	9275.00	274525.00	2859.84	3.59**		
4.	Housing (Rs.)	59428.75	91508.75	53.98	9.41**		
5.		Material	oossession				
	a. Draft power (Rs.)	10187.50	59137.50	480.49	2.80**		
	b. Farm implements (Rs.)	2325.00	22892.50	884.62	5.35**		
	c. Household materials (Rs.)	2131.25	32080.00	1405.22	8.65**		
	*Significant at 5% ** Significant at 1% NS-Non significant						

 
 Table-7 Economic impact of contract farming on farmers growing crops under different contract farming n=40

			Mean	scores	
SI. No.	Crops	Model of contract farming	Before contract farming	After contract farming	Paired t-value
1.	Tomato	Multipartite model	22146.79	927319.40	9.82**
2.	Gherkins	Informal model	23621.22	693421.80	12.75**
3.	Marigold	Centralized model	9985.05	281992.90	12.13**
4.	Cotton	Intermediary model	65583.47	878983.00	7.91**
5.	Watermelon	Centralized model	161918.90	1203545.00	7.06**
6.	Pearl millet	Intermediary model	41732.89	561962.90	5.49**
*Significant at 5% ** Significant at				at 1%	

#### Conclusion

The economic impact is high in case of Watermelon as the mean score before contract farming (162628.90) has been increased after contract farming (1205596.00) which is followed by Tomato having 22146.79 before contract farming has been increased 927319.40 after contract farming. In case of Cotton also there is a considerable amount of economic impact compared to before contract farming (65583.47) to after contract farming (878983.00). In Gherkin mean score before contract farming is 23621.22 has been increased after contract farming as the mean score is 693421.80. In Pearl millet also mean score has been increased from before contract farming (41732.89) to after contract farming (561962.90). When we have a look at the economic impact of Marigold compared to before contract farming (9985.05), after contract farming (281992.90) has been increased.

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