ECONOMICS OF MARKETING PATTERN OF COLOCASIA IN BASTAR PLATEAU OF CHHATTISGARH STATE

Neha Lakra*, K. N. S. Banafar, A. K. Gauraha, Deo Shankar Ram

*Department of Agricultural Economics, IGKV, Raipur -492001 (CG) India

Abstract

The study aims to examine the economics of Colocasia Marketing pattern which include Marketing Surplus and Price Spread at different size of farms in Bastar and Kanker district of Bastar plateau of Chhattisgarh state. The survey for this purpose was conducted in three blocks of each Bastar and kanker district of Chhattisgarh. Primary data were collected from 300 farmers, five villages from each block was selected through personal interview method with the help of pre-structured schedule for the year 2016-17. Study revealed that the average Marketed surplus of colocasia was 60.51 qtls/farm. The average yield was observed to be 101.68 quintals per hectare. Highest yield was found at large farms *i.e.* 115.30 quintals per hectare across the different farms. The marketable surplus was highest in case of large farms (67.88 Q) followed by Medium farm (59.61 Q), Small farm (57.13 Q) and Marginal farm (50.31 Q). Therefore the marketable surplus shows rising trend as farm size increases. The producer's share in consumer rupee was higher in case of channel-II (66.32 per cent) than in channel-I (56.97 per cent) for colocasia. There was large number of intermediateries in the channel-I followed by channel-II. Because of it, producer's share in consumer rupee was comparatively lower in channel-I and higher in channel-II *i.e.* large marketing channel reduced producer's shares in consumer rupee is accepted.

Key Words: Marketed surplus, Marketable surplus, Marketing channel, Producer's shares

Introduction

Colocasia *(Colocasia esculanta* L. Scott*)* is an important tuber crop with high nutritious value and widely accepted in the whole world. Total area under colocasia in the world is about 10.8 million hectare of which Asia's share is about 1.5 million hectares. Cultivation of colocasia is widespread in India, Burma, China, Japan, Hawaii, Egypt, Africa and the Caribbean. Colocasia is an important tuber crops of India as well as in Chhattisgarh. Its cultivation in Chhattisgarh is confined to an area of 7,627 thousand hectare with a production 102.809 thousand tones. Globally, it is grown in an area of 1.6 m ha producing 11.66 million tonnes with an average productivity of 7.25 t ha^{-1} (FAO, 2010). Taro (*Colocasia* spp) is native to Southeast Asia (Kolchar, 2006). It is a perennial, tropical plant primarily grown as a root vegetable for its edible starchy corm, and as a leaf vegetable and is considered a staple in African, Oceanic and Asian cultures. It is believed to have been one of the earliest cultivated plants (Annon, 2006) and was in cultivation in wet tropical India before 5000 B.C., presumably coming from Malaysia, and from India further transported westward to ancient Egypt, where it was described by Greek and Roman historians as an important crop. It is an important vegetable grown throughout India and is sometimes called the "potato" of the humid tropics.

Materials and Method

Chhattisgarh state consists of three well known Agro-climatic zones *i.e* Northern hills, Chhattisgarh Plains and Bastar Plateau. The study was conducted in Bastar Plateau of Chhattisgarh, out of seven districts in Bastar Plateau, Bastar and Kanker districts was selected on the basis of larger area under tuber crops. Three blocks from each district was considered randomly on the basis of highest area under tuber crop cultivation. Out of selected 6 blocks from each Bastar and Kanker districts, 50 respondents from each of the blocks was taken for the present study. In all a sample of 300 tuber growers was considered for the present study.

*Author for correspondence : E-mail : neha.lakra207@gmail.com

Analytical Tools:

Suitable analytical tools were adopted for analyzing Marketable surplus, Marketing margins, Marketing cost, Producer price, Gross margin, Net margin, Price Spread.

Results and Discussion

I. Marketing Pattern:

a. Marketable Surplus:

Table 1 shows that the highest marketable surplus was observed in case of large farms (67.88 Q) followed by Medium farm (59.61 Q), Small farm (57.13 Q), Marginal farm (50.31 Q) and Overall (60.51 Q). It can also be observed from the table that the marketable surplus shows rising trend as farm size increases. It clearly indicates that marginal and small farms have smaller marketable surplus as compared to medium and large farms.

Table 1: Marketable surplus of Colocasia of sample farms (in qtl/farm)

S.N.	Particulars	Marginal	Small	Medium	Large	Overall
A.	Colocasia					
1.	Total quantity produced	80.34 (100.00)	93.78 (100.00)	102.45 (100.00)	115.30 (100.00)	101.68 (100.00)
2.	Quantity retained for seed	8.34 (10.38)	10.45 (11.14)	12.29 (11.99)	14.25 (12.36)	11.97 (11.77)
3.	Consumption	21.69 (26.99)	26.20 (27.94)	30.55 (29.82)	33.17 (28.77)	29.19 (28.71)
4.	Total quantity utilized	30.03 (37.38)	36.65 (39.08)	42.84 (41.82)	47.42 (41.13)	41.17 (40.49)
5.	Marketed surplus	50.31 (62.22)	57.13 (60.92)	59.61 (58.18)	67.88 (58.87)	60.51 (59.51)

b. Marketing cost of Colocasia crops:-

It was observed from table 02 that the producer's share in consumer rupee was higher in case of channel-II (66.32 per cent) than in channel-I (56.97 per cent) for colocasia. It was also observed that the margins of retailers was high as compared to wholesaler and village merchant *i.e.* 9.27 per cent in channel-I and 8.10 per cent in channel-II respectively. The marketing cost paid by the different intermediateries was observed higher for wholesaler as compared to village merchant. It is evident from table that there is large number of intermediateries in the channel-I followed by channel-II. Because of it, producer's share in consumer rupee is comparatively lower in channel-I and higher in channel-II. On the basis of above results our hypothesis number I *i.e.* large marketing channel reduced producer's shares

Table 2: Price spread in marketing of Colocasia under different channels:

S.N.	Particular	I	II
A.	**Producer**		
1.	Price received by producer	737.03	737.03
2.	Transporting charges	10.00	50.00
3.	**Net price received by producer**	727.03	687.03
B.	**Village Trader**		
1.	Expenditure incurred VT		
a.	Transporting charges	20.33	-
b.	Loading un-loading	25.50	-
c.	Miscellaneous	16.20	-
d.	**Sub-total**	**62.03**	-
e.	Price paid	737.03	-
f.	**Marketing Cost**	62.03	-
2.	Total cost incurred by village Trader	799.06	-
3.	Price received by VT	880.00	-
4.	Net margin of VT	80.94	-
C.	**Wholesaler**		
1.	Expenditure incurred		
a.	Transporting charges	20.50	60.00
b.	Mandi commission	15.75	20.15
c.	Loading un-loading	25.75	25.45
d.	Weighing and packing	24.75	24.59
e.	Miscellaneous	18.20	17.56
f.	**Sub-total**	**104.95**	**147.75**
g.	Price paid by WS	880.00	687.03
e.	Marketing Cost	104.95	114.75
2.	TC incurred by WS	984.95	834.78
3.	Price received by WS	1084.95	924.83
4.	Net margin of WS	100.00	90.05
D.	**Retailers**		
1.	Expenditure incurred		
a.	Transporting charges	30.20	25.36
b.	Loading un-loading	15.75	18.23
c.	Packing	25.75	24.23
d.	Other charges	17.00	18.26
e.	Sub-total	**88.70**	**86.08**
f.	Price paid by retailer	1084.95	924.83
e.	Marketing Cost	88.70	86.08
2.	Total cost incurred	**1173.65**	**1010.91**
3.	Price received	1293.65	1111.21
4.	Net margin of retailer	120.00 (9.28)	100.30 (9.03)
E	**Consumer price**	**1293.65** (100.00)	100.30 **(100.00)**
	Producer's share in consumer rupees	56.97%	**66.32%**

in consumer rupee is accepted.

Conclusion and Suggestions

The study concludes that the average yield of Colocasia was estimated 101.68 quintal per hectare. The average marketed surplus is estimated as 60.51 quintal per farm (59.51 per cent) of Colocasia respectively at different farms. It was observed that yield variation for marketable surplus shows rising trend as farm size increases. It clearly indicates that marginal and small farms have smaller marketable surplus as compared to medium and large farms. The producer's share in consumer rupee was higher in case of channel-II (66.32 per cent) than in channel-I (56.97 per cent) for colocasia. It is evident that there is large number of intermediateries in the channel-I followed by channel-II. Because of it, producer's share in consumer rupee is comparatively lower in channel-I and higher in channel-II. It was suggested from this study that yield potential can be increased by providing technical knowledge, facilitating quality seed and fertilizer inputs timely to increase the production of colocasia. Arrangements should be made for the marketing of this crop at least at block levels so that farmers can easily sell their produce at remunerative prices. This will encourage the farmers to grow it at large scale in the area which will help the farmers to receive better prices of the crops.

References

Adenegan, K.O., S.O. Olorunsomo and L.O.E. Nwauwa (2013). Determinants of Market Orientation among Smallholders Cassava Farmers in Nigeria. *Global Journal of Management and Business Research Finance,* **13(6)**.

Asogwa, B.C., J.A.C. Ezihe and P.I. Ater (2013). Socio-economic Analysis of Cassava Marketing in Benue State, Nigeria. *International Journal of Innovation and Applied Studies,* **2(4)**: 384-391.

Chavda, H., P.B. Marviya, V.D. Tarpara and V.A. Savalia (2016). Marketing and Estimation of Post Harvest Losses of Potato in Banaskantha District of Gujarat. *International Journal of Agriculture Sciences,* **8(52)**: 2420-2422.

Nzeh, E.C. and J.N. Ugwu (2014). Economic analysis of production and marketing of cassava in Akoko North-West Local Government Area of Ondo State. *International Journal of Agricultural Policy and Research,* **2(6)**: 234-237.

Obasi, P.C., A. Henri-Ukoha, O.N. Anosike and U.C. Ibekwe (2015). Net returns to cassava-based crop mixtures in imo state, Nigeria. *European Journal of Agriculture and Forestry Research,* **3(1)**: 15-21.

Okoye, B.C., A. Abass, B. Bachwenkizi, G. Asumugha1, B. Alenkhe, R. Ranaivoson, R. Randrianarivelo, N. Rabemanantsoa and I. Ralimanana (2016). Effect of transaction costs on market participation among smallholder cassava farmers in Central Madagascar. Okoye *et al., Cogent Economics & Finance,* **4**: 1143597.

Onubuogu, G.C. and R.U. Onyeneke (2012). Market Orientation of Root and Tuber Crops Production in Imo State. *Agricultural Science Research Journals,* **2(5)**: 206-216.

Regina, H.Y.F.U., H. Kikuno and M. Maruyama (2011). Research on yam production, marketing and consumption of Nupe farmers of Niger State. *African Journal of Agricultural Research,* **6(23)**: 5301-5313.

Sahu, P.K. and A.K. Kosta (2013). An Economic analysis of production and marketing of colocasia crop in kabirdham district of Chhattisgarh. M.Sc.(Ag.) Thesis, Indira Gandhi Agricultural University, Raipur (C.G.) p. 75.

Salam, S.R. and K.N.S. Banafar (2005). Production and marketing of tuber crops in Baster districts of Chhaattisgarh. M.Sc.(Ag.) Thesis, Indira Gandhi Agricultural University, Raipur (C.G.) p.115-116.

Tadesse, T., G. Degu, E. Shonga, M. Mekonen, T Addis and B. Yakob (2013). Current status, Potentials and challenges of Cassava production, processing, marketing and utilization: Evidence from Southern Ethiopia. *Greener Journal of Agricultural Science,* **3(4)**: 262-270.