



www.eprawisdom.com

Research Paper

MARKETING EFFICIENCY OF RAGI IN TUMAKURU DISTRICT

Mr. Siddappa¹

¹Research Scholar, Department of Studies and Research in Commerce,
Tumkur University, Tumakuru, Karnataka-572103, India

Dr. B.H.Devaraju²

²Research Guide and Director, Sri Siddhartha Research Centre,
Sri Siddhartha First Grade College, Tumakuru, Karnataka, India

ABSTRACT

Agriculture is the backbone of India and still rural folk is depended on agriculture for their livelihood. But at the same time many of the farmers are shifting form agriculture activities to the other activities and rural exodus is increasing in these days, due to decrease in the income from agriculture and increase in the cost of agriculture especially in marketing cost. The marketing efficiency of agriculture produce is decreasing day by day and the share of farmers in the consumers' rupee is also decreasing due to increase in the marketing cost and marketing margin, this is because of more price spread in the channels of distribution. An effort has been made through this paper to analyse the marketing efficiency of Ragi in Tumakuru district.

KEY WORDS: Marketing Cost, Price Spread, Marketing Efficiency.

INTRODUCTION

Marketing is a combination of management tasks and decisions aimed at meeting opportunities and threats in a dynamic environment in such a way that its market offerings lead to the satisfaction of consumers' needs and wants so that objectives of the enterprise the consumer and society are achieved (Cant, et.al. 2007). Marketing is managing profitable customer relations and meeting human and social needs (Philip Kotler, 2009 and 2012). Marketing means understanding and responding to customer needs (Rajan Saxena, 2009). Marketing is a total system of interacting business activities designed to plan, price, promote and distribute need-satisfying products and services to existing and potential consumers (Ramaswamy and Namakumari, 2009).

Marketing Efficiency as the ratio of the market output (satisfaction) to marketing input (cost of the resources used in the marketing). A higher the value of

this ratio indicates improved marketing efficiency and lower value denotes reduced efficiency. Improvement in the marketing efficiency is either due to reduction in the costs for the same level of satisfaction or increase in the satisfaction of services for the given marketing costs (Kohls. and Uhl., 1980).

Marketing efficiency should include three following components: (1) Effectiveness of the marketing system with which marketing service is performed (2) The cost at which the service is performed and (3) The effect of this marketing cost and the method of performing service. Of the three components, the last two are the most important because consumer get maximum satisfaction at the lowest possible cost and it should comply with the need of striking a balance between production of commodities and consumption needs of consumers (Clark, 1954).

LITERATURE REVIEW

Gauraha A.K., Banafar K.N.S., et.al. (2002) have focused on marketing strategies used in marketing of rice and the producers' share in consumers' rupee. This study has evaluated marketing pattern, marketing cost and margin and measured marketing efficiency through Shepherd's Index method. At last this study concluded that channel-I (producer-consumer) is the suitable channel to provide maximum share in the consumers' rupee. Finally this study suggested that providing infrastructural facilities, eliminating the intermediaries and establishing supportive price policy.

Birari K.S., Navadkar D.S., et.al. (2004) have concentrated on marketing effectiveness of cole vegetables namely cabbage and cauliflower in Ahmednagar, Pune and Nasik districts of Western Maharashtra. This study discussed about marketing channels, marketing cost, price spread in marketing, marketed surplus. Authors found that due to more number of intermediaries the efficiency of marketing has decreased. Finally concluded that cole vegetable are sold more in terminal markets in all the seasons and they are not having marketing efficiency in all the seasons.

Arun Pandit (2005) has discussed on efficiency of cattle marketing in West Bengal. This study has examined the costs incurred by buyers and sellers and evaluated channels of distribution. This study has employed Shepherd Index method. This study found more efficiency in channel-I (farmer-farmer). At last this study suggested that providing transportation facility, streamlining of brokerage, rationalisation of market fee and price fixation, cross breeding programme and regulation of markets.

Ghorbani M. and Darijani A. (2009) have observed the marketing process and structure of raisin in North Khorasan Province of Iran. This study has evaluated production, production cost per hectare and per tonne, supply, manufacturing, demand, market margin, marketing channels, and share of profit to producers, middlemen and manufactory/exporters. At the end authors suggested to establish rural purchasing center, improve the efficiency of extension services, training to improve the quality of product, constructing of marketing data banks and marketing research.

Maryam Omid and Najafabadi (2011) have reported the barriers in marketing of agricultural products in Iran. This study has examined the perception of agricultural experts and identified some barriers of agricultural marketing such as inadequate market

information, presence of large number of middlemen, fluctuations in prices, lack of proper storage facilities, inadequate credit facilities, lack of grading and standardization and low literacy of farmers. At last authors concluded that inadequate market information is the major problem and availability of adequate market information from various sources leads to success of marketing in any organization.

Nizamuddin Khan and Mohammed Muqet Khan (2012) have studied the marketing of agricultural crops in rural areas in U.P. They explained the way of selling surplus of produce in rural areas and the reasons to sell their produce in rural markets. Authors concluded that rural markets are helpful to sell their surplus to get quick returns but rural markets are facing improper organizational and infrastructural facilities.

Waghmare M.N. and Shendage P.N. (2013) have reported on production, marketing and constraints in production and marketing of cut roses in Maharashtra. This study has assessed the costs relating to construction of poly houses, cultivation, marketing and channels for cut roses. This study found constraints such as higher cost, improper price fixation, delay in payment and lack of infrastructural facilities. Finally concluded that channel-III (Producer-Agent-Retailer-Consumer) gives maximum efficiency. At the end this study suggested that producing of quality roses to get higher prices and adopting of production technology.

OBJECTIVES OF THE STUDY

1. To study the price spread between the channels in marketing of Ragi
2. To measure the marketing efficiency of Ragi

RESEARCH METHODOLOGY

- ◆ **Sample Design:** 400 farmers were selected i.e. Tumakuru district has 10 taluks, from each taluk 40 farmers were taken as sample to know the cost incurred by the farmers in marketing of Ragi. 78 intermediaries were selected i.e. 20 Local Agents, 18 APMC Brokers, 20 Wholesalers and 20 Retailers from each taluk, each 2 intermediaries were taken to know the marketing cost incurred by the intermediaries in marketing of Ragi.
- ◆ **Tools for Data Collection:** Primary Data and interview with the farmers and intermediaries.
- ◆ **Tools for Data Analysis:** Tabular form has been used for analysis and Shepherd's Method and Acharya's Method has been deployed to measure the marketing efficiency.

MARKETING EFFICIENCY OF RAGI**Channels of Distribution for Ragi**

The channels of distribution are the link between producers and consumers. The Channels of distribution for Ragi are similar to the products which

are finished, because Ragi is a finished product no much processes are required and directly Ragi can be sold to the ultimate consumers.

Channel-I: Farmers \Rightarrow Consumers

Channel –II: Farmers \Rightarrow Retailers \Rightarrow Consumers

Channel –III: Farmers \Rightarrow Wholesalers \Rightarrow Retailers \Rightarrow Consumers

Channel-IV: Farmers \Rightarrow APMC Brokers \Rightarrow Wholesalers \Rightarrow Retailers \Rightarrow Consumers

Channel-V: Farmers \Rightarrow Local Agents \Rightarrow Wholesalers \Rightarrow Retailers \Rightarrow Consumers

Channel-VI: Farmers \Rightarrow Local Agents \Rightarrow APMC Brokers \Rightarrow Wholesalers \Rightarrow Retailers \Rightarrow Consumers

Channel –VII: Farmer \Rightarrow Government Agency (FCI, etc..) \Rightarrow Fair Price Shop Owner \Rightarrow Consumers

Table 4.26: Marketing Cost of Farmers- Ragi (Per Quintal)

Sl. No.	Cost	Producers-Consumer	Producer-Local Agent	Producer-APMC Broker	Producer-Wholesaler	Producer-Retailer	Producer-Govt. Agency
1	Storage	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2	Transportation	67.85 (72.85)	11.44 (36.24)	67.13 (52.67)	25.67 (57.21)	41.04 (58.96)	65.31 (73.95)
3	Loading Charges	6 (6.44)	3 (9.51)	9.09 (7.133)	4 (8.915)	5.2 (7.47)	10 (11.32)
4	Unloading Charges	6 (6.44)	3 (9.51)	9.09 (7.133)	4 (8.915)	5.2 (7.47)	10 (11.32)
5	Weighing Charges	0 (0)	3 (9.51)	3 (2.354)	3.33 (7.421)	5 (7.18)	3 (3.40)
6	Market Fees	0 (0)	0 (0)	17 (13.34)	0 (0)	0 (0)	0 (0)
7	Commission	0 (0)	0 (0)	22.13 (17.37)	0 (0)	0 (0)	0 (0)
8	Free Offerings	13.29 (14.27)	11.12 (35.23)	0 (0)	7.87 (17.54)	13.17 (18.92)	0 (0)
	Total	93.14 (100)	31.56 (100)	127.44 (100)	44.87 (100)	69.61 (100)	88.31 (100)

Source: Field Survey, Figures in parentheses are percentage to total.

Table 4.27: Marketing Cost of Intermediaries- Ragi (Per Quintal)

Sl. No.	Cost	Local Agent	APMC Broker	Wholesaler	Retailer	Govt. Agency
1	Transportation	5.5 (5.8)	8.35 (6.72)	8.8 (11.3)	10 (15.3)	-
2	Loading Charges	5.75 (6.07)	6 (4.83)	3.5 (4.48)	3.25 (4.97)	-
3	Unloading Charges	5.75 (6.07)	6 (4.83)	3.5 (4.48)	3.25 (4.97)	-
4	Weighing Charges	2.2 (2.32)	2.85 (2.29)	4 (5.12)	3 (4.59)	-
5	Market Fees	13.075 (13.8)	24.225 (19.5)	8.24 (10.55)	0 (0)	-
6	Commission	29.9 (31.5)	32.3 (26)	11.05 (14.2)	0 (0)	-
7	Storage Cost	8 (8.44)	8.25 (6.64)	0 (0)	0 (0)	-
8	Reduction Weight	2.35 (2.48)	9 (7.24)	15.95 (20.4)	16.65 (25.5)	-
9	Processing Cost	11.75 (12.4)	15.5 (12.5)	6.7 (8.58)	5 (7.65)	-
10	Standardising & Grading	5 (5.28)	6.5 (5.23)	2.25 (2.88)	0 (0)	-
11	Packing Cost	5.5 (5.8)	5.25 (4.23)	14.10 (18.06)	24.25 (37.08)	-
Total		94.775 (100)	124.225 (100)	78.09 (100)	65.4 (100)	-

Source: Field Survey, Figures in parentheses are percentage to total.

PRICE SPREAD BETWEEN THE CHANNELS

Sl. No.	Particulars	Channel-I		Channel-II		Channel-III		Channel-IV		Channel-V		Channel-VI		Channel-VII	
		Amount (Rs.)	%	Amount (Rs.)	%	Amount (Rs.)	%	Amount (Rs.)	%	Amount (Rs.)	%	Amount (Rs.)	%	Amount (Rs.)	%
1	Net Price received by the Producer	1469.76	94.04	1567.09	79.10	1481.83	70.42	1118.86	54.58	1125.8	58.73	1125.8	52.53	1461.69	94.3
1.1	Marketing Cost incurred by the Producer	93.14	5.96	69.61	3.51	44.87	2.13	127.44	6.22	31.6	1.65	31.6	1.47	88.31	5.7
1.2	Gross Price received by the Producer	1562.9	100	1636.7	82.59	1526.7	72.55	1246.3	60.80	1157.4	60.38	1157.4	54.01	1550	100
2	Purchase Price of the Local Agent	-	-	-	-	-	-	-	-	1157.4	60.38	1157.4	54.01	-	-
2.1	Marketing Cost incurred by the Local Agent	-	-	-	-	-	-	-	-	94.78	4.94	94.78	4.42	-	-
2.2	Local Agent's Margin	-	-	-	-	-	-	-	-	87.23	4.55	87.23	4.07	-	-
3	Purchase Price of the APMC Broker	-	-	-	-	-	-	1246.3	60.80	-	-	1339.41	62.50	-	-
3.1	Marketing cost incurred by the APMC Broker	-	-	-	-	-	-	124.22	6.06	-	-	124.22	5.80	-	-
3.2	APMC Broker's Margin	-	-	-	-	-	-	101.8	4.97	-	-	101.8	4.75	-	-

4	Purchase Price of the Wholesaler	-	-	-	-	1526.7	72.55	1472.32	71.83	1339.41	69.87	1565.43	73.05	-	-
4.1	Marketing cost incurred by the Wholesaler	-	-	-	-	78.09	3.71	78.09	3.81	78.09	4.07	78.09	3.64	-	-
4.2	Wholesaler's Margin	-	-	-	-	154.4	7.34	154.4	7.53	154.4	8.05	154.4	7.20	-	-
5	Purchase Price of the Retailer	-	-	1636.7	82.59	1759.19	83.60	1704.81	83.17	1571.9	82.00	1797.92	83.90	-	-
5.1	Marketing cost incurred by the Retailer	-	-	65.4	3.30	65.4	3.11	65.4	3.19	65.4	3.41	65.4	3.05	-	-
5.2	Retailer's Margin	-	-	279.6	14.10	279.6	13.29	279.6	13.64	279.6	14.59	279.6	13.04	-	-
6	Purchase Price of the Govt. Agency	-	-	-	-	-	-	-	-	-	-	-	-	1550*	100
6.1	Marketing Cost incurred by the Govt. Agency	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.2	Govt Agency's Margin	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Consumer's Price	1562.9		1981.7	100	2104.19	100	2049.81	100	1916.9	100	2142.92	100	-	-
	Price Spread	93.14		414.61		622.36		930.95		791.1		1017.12		88.31	
	Producer's Share in Consumers' Rupee	94.04 Percent		79.10 Percent		70.42 Percent		54.58 Percent		58.73 Percent		52.53 Percent		94.3 Percent	

*To give support to the farmers government fixes Minimum Support Price (MSP) as per the recommendations of Commission for Agricultural Costs and Prices (CACP) when farmers are unable to meet the costs incurred for agriculture and their cost of living. The Minimum Support Price (MSP) for the Ragi in the year 2014-15 was Rs.1550.

The cost incurred and the marketing margin of government cannot be estimated, because it purchases the agricultural produce from the farmers at higher prices i.e. Minimum Support Price (MSP) and sells to the public at lower prices through Public Distribution System (PDS). So in the above table the cost incurred and marketing margin of government agencies was not mentioned.

Table 4.35: An Overview of Price Spread- Ragi

Sl. No.	Particulars	Channel						
		I	II	III	IV	V	VI	VII
1	Marketing Cost	93.14	135.01	188.36	395.15	269.87	394.09	88.31
2	Marketing Margin	-	279.60	434.00	535.80	521.23	623.03	-
3	Producer's Price	1469.76	1567.09	1481.83	1118.46	1125.80	1125.80	1461.69
4	Consumer's Price	1562.90	1981.70	2104.19	2049.81	1916.90	2142.92	1550
5	Price Spread	93.14	414.61	622.36	930.95	791.10	1017.12	88.31

Source: Field Survey

Marketing Cost

Among seven channels through which Ragi can be sold, Channel-IV (Producer-APMC Broker-Wholesaler-Retailer-Consumer) is has incurred high marketing cost i.e. Rs. 395.15 due to more number of intermediaries as well as market fees and commission has led to increase in the marketing cost compared to other channels. Similarly, Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer) has incurred Rs. 394.09 as marketing cost, Channel-V (Producer-Local Agent-Wholesaler-Retailer-Consumer) has incurred Rs.269.87 as marketing cost, Channel-III (Producer- Wholesaler-Retailer-Consumer) has incurred Rs. 188.36 as marketing cost, Channel-II (Producer-Retailer-Consumer) has incurred Rs. 135.01 as marketing

cost, Channel-I (Producer-Consumer) has incurred Rs. 93.14 as marketing cost. Only Channel-VII (Producer-Govt. Agencies-FCI-Consumer) has incurred less marketing cost i.e. Rs. 88.31, due to no intermediaries and no market fees and no commission only transportation cost has been incurred in this channel.

Marketing Margin

With respect to the marketing margin of the intermediaries by selling Ragi, Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer) is having high marketing margin i.e. Rs. 623.03 compared to other channels due to more number of intermediaries in the channels. Likewise, Channel-IV (Producer-APMC Broker-Wholesaler-Retailer-Consumer) is having Rs. 535.80; Channel-V (Producer-

Local Agent-Wholesaler-Retailer-Consumer) is having Rs. 521.23, Channel-III (Producer- Wholesaler-Retailer-Consumer) is having Rs. 434.00 and Channel-II (Producer-Retailer-Consumer) is having of marketing margin Rs. 279.60. Finally, Channel-I (Producer-Consumer) and Channel-VII (Producer-Govt. Agencies-FCI-Consumer) are not having any marketing margin due to no interference of middlemen.

Producers' Price

Out of seven channels, the net price received by the farmers in Channel-I (Producer-Consumer) i.e. Rs.1469.76 is having more price spread compared to other six channels like Channel-VII (Producer-Govt. Agencies-FCI-Consumer) Rs. 1461.69, Channel-II (Producer-Retailer-Consumer) Rs.1567.09, Channel-III (Producer-Wholesaler-Retailer-Consumer) Rs. 1481.83, Channel-V (Producer-Local Agent-Wholesaler-Retailer-Consumer) and Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer) Rs. 1125.8 and through Channel-IV (Producer-APMC Broker-Wholesaler-Retailer-Consumer) Rs. 1118.86 farmers have got less price.

Consumers' Price

Similarly, with respect to the Consumer's Price, Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer), the marketing cost like market fees, commission and transportation costs have elevated the consumer's price i.e. 2142.92 compared to other channels. Likewise, Channel-III (Producer-Wholesaler-Retailer-Consumer) Rs.2104.19, Channel-IV (Producer-APMC Broker-Wholesaler-Retailer-Consumer) Rs. 2049.81, Channel-II (Producer-Retailer-Consumer) 1981.70, Channel-V (Producer-Local Agent-Wholesaler-Retailer-Consumer) Rs. 1916.90 and due to no interference of middlemen and less in other costs, Channel -VII (Producer-Govt. Agency-Food Corporation of India (FCI)-Consumer) has provided Rs. 1550, and finally, Channel-I (Producer-Consumer) has received less Consumer's Price i.e. Rs.1469.76.

Price Spread

With respect to Price Spread among the different channels, due to more intermediaries and more marketing costs, it is found much amount of price spread in Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer) i.e. Rs.1017.12. Similarly, Channel-IV (Producer-APMC Broker-Wholesaler-Retailer-Consumer) has a price spread of Rs. 931.35; Channel-V (Producer-Local Agent-Wholesaler-Retailer-Consumer) has Rs.791.10, Channel-III (Producer-Wholesaler-Retailer-Consumer) has Rs. 622.36 and

Channel-II (Producer-Retailer-Consumer) has a price spread of Rs. 414.61, Channel-I (Producer-Consumer) has a price spread of Rs. 93.14 and at last Channel -VII (Producer-Govt. Agency-Food Corporation of India (FCI)-Consumer) has provided lowest price spread i.e. Rs. 88.31.

The increase or decrease in the Producer's Price, Marketing Margin, Price Spread and Consumer's Price is depended on number of intermediaries in the flow of produce from the producer to consumer and the marketing cost incurred by the different channels. If increase in the number of intermediaries in flow of produce from producer to consumer lead to increase in the marketing cost, increase in the marketing cost lead to increase in the price of the produce and lead to increase in the price spread.

Marketing Efficiency

This study has deployed the Shepherd's and Acharya and Agarwal's Methods to analyse the marketing efficiency of Ragi.

Marketing Efficiency of Ragi under Shepherd's and Acharya's Method

Shepherd suggested that the ratio of the total value of goods marketed and marketing cost incurred in marketing of that goods may be used as a measure of marketing efficiency. Shepherd says that higher the ratio higher the marketing efficiency and lower the ratio lower marketing efficiency. The following is the formula used under Shepherd's method:

$$ME = (V/I) - 1$$

Where, ME=Marketing Efficiency, V=Value of goods sold or consumer price and I=Total marketing cost or marketing cost per unit.

Acharya's Method

However, Shepherd's method does not explicitly take into account the net margins retained by the intermediaries and net price received by the farmers in assessing the marketing efficiency. Therefore, Acharya suggested following equation for estimation of efficiency indicator as follows:

$$MME = FP / (MC + MM)$$

Where, MME is the measure of marketing efficiency and MC and MM are marketing costs and marketing margins respectively. FP means price received by the farmer.

Table 4.36: Marketing Efficiency- Ragi

Sl. No.	Particulars	Channel						
		I	II	III	IV	V	VI	VII
1	Consumer's Price (V)	1562.90	1981.70	2104.19	2049.81	1916.90	2142.92	1550*
2	Marketing Cost (I)	93.14	135.01	188.36	395.15	269.87	394.09	88.31
	Producer's Price (FP)	1469.76	1567.09	1481.83	1118.46	1125.80	1125.80	1461.69
3	Price Spread (MC+MM)	93.14	414.61	622.36	930.95	791.10	1017.12	88.31
4	Shepherd's Method ME= (V/I)-1	15.78	13.68	10.17	4.19	6.10	4.44	16.55
5	Acharya's Method MME= FP/ (MC+MM)	15.78	3.78	2.38	1.20	1.42	1.11	16.55
6	Producer's Share in Consumers' Rupee	94.04 Percent	79.10 Percent	70.42 Percent	54.58 Percent	58.73 Percent	52.53 Percent	94.30 Percent

Source: Field Survey

*Channel-VII -Govt. Agency-Food Corporation of India (FCI)-Consumer channel. Government purchases at higher prices from the farmers and sells at lower prices to the consumers through Public Distribution System (PDS). So in this channel marketing cost of Government was not considered and the price paid by Govt. Agency was considered as the price paid by consumers.

So, it is proved that the channel which is having no intermediaries gives maximum efficiency. In case of Ragi, in Shepherd's method Channel -VII (Producer-Govt. Agency-Food Corporation of India (FCI)-Consumer) has given maximum efficiency i.e. 16.55 and in Acharya's method also the same channel has given highest marketing efficiency i.e. 16.55. Here, no intermediaries involved, farmers sell Ragi to the government agency and usually it does not involve any commission and market fees at the same time to support the farmers government buys at Minimum Support Price (MSP) and usually it will be more than the intermediaries' price.

The next channel which has given maximum efficiency, in Shepherd's method Channel-I (Producer-Consumer) i.e. 15.78 and in Acharya's method also the same channel has given the same marketing efficiency i.e. 15.78, because there are no intermediaries involved in Channel-I.

In Shepherd's method the next channel is Channel-II (Producer-Retailer-Consumer) has given the marketing efficiency of 13.68 and in Acharya's method also the same channel has given 3.78 and it has occupied the same place. This channel is having only one intermediary i.e. Retailer, so, in local places or in nearest places farmers can find them and sell their produce and selling through this channel the cost is very less.

In Shepherd's method the next place is occupied by Channel-III (Producer- Wholesaler-Retailer-Consumer) has given the efficiency of 10.17 and

in Acharya's method also same channel has occupied this place by giving the marketing efficiency of 2.38. In this channel two intermediaries have involved, compared to other channels the marketing cost is little less compared to channels which have given low marketing efficiency.

The next place is occupied by Channel-V (Producer-Local Agent-Wholesaler-Retailer-Consumer) i.e. 6.10 in Shepherd's method and in Acharya's method also same channel has occupied this place by giving the efficiency of 1.42. In this channel three intermediaries are involved and the marketing cost has increased gradually.

Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer) has occupied the next place in efficiency i.e. 4.44 in Shepherd's method but Channel-IV (Producer-APMC Broker- Wholesaler-Retailer) has occupied this place in Acharya's method i.e. 1.20. Due to increase in the marketing cost, the efficiency has decreased.

Channel-IV (Producer-APMC Broker-Wholesaler-Retailer) has given lowest efficiency among all the channels i.e. 4.19 in Shepherd's method and Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer) has given lowest marketing efficiency in Acharya's method i.e. 1.11. This is due to increase in the marketing cost in case of Shepherd method and due to increase in the number of intermediaries and increase in the both marketing cost and marketing margin resulted in low marketing efficiency in case of Acharya's method.

Finally, with respect to the share of farmers in consumers' rupee, Channel -VII (Producer-Govt. Agency-Food Corporation of India (FCI)-Consumer) has provided highest share to the farmers in consumers' rupee i.e. 94.30 Percent, due to non-interference of middlemen. The next channel is Channel-I (Producer-

Consumer), it has provided 94.04 percent of share. Similarly, Channel-II (Producer-Retailer-Consumer) has provided 79.10 Percent, Channel-III (Producer-Wholesaler-Retailer-Consumer) has provided the share of 70.42 Percent, Channel-V (Producer-Local Agent-Wholesaler-Retailer-Consumer) has provided the share of 58.73 Percent, Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer) has provided 58.73 Percent, Channel-IV (Producer-APMC Broker-Wholesaler-Retailer-Consumer) has provided the share of 54.58 Percent and finally Channel-VI (Producer-Local Agent-APMC Broker-Wholesaler-Retailer-Consumer) has provided the lowest share to the farmers in the consumers' rupee i.e. 52.53 Percent, due to more interference of middlemen.

So, Channel –VII (Producer-Govt. Agency-Food Corporation of India (FCI)-Consumer) is the suitable channel for Ragi, when Commission for Agricultural Costs and Prices (CACP) provides Minimum Support Price (MSP) more than the price fixed by the intermediaries. Apart from this channel, Channel-I (Producer-Consumer) is the best channel for marketing of Ragi, because it does not involve any intermediaries, so, marketing cost and marketing margin can be reduced and consumers also can enjoy the agriculture produce at lower prices.

REFERENCES

1. Arun Pandit (2005). *Efficiency of Dairy Cattle Markets in Central Alluvial Plains of West Bengal. Agricultural Marketing, Vol. XLVIII, No.1, 44-50.*
2. Birari K.S., Navadkar D.S. and Dorge J.T. (2004). *Marketing Efficiency of Cole Vegetables in Western Maharashtra. Agricultural Marketing, Vol. XLVII, No.3, 23-28.*
3. Cant M.C., Strydon J.W., Jooste C.J. and Duplessis P.J. (2007). *Marketing Management. South Africa: Juta and Co.*
4. Clark (1954). *Principles of Marketing. New York: Macmillan Pub. Co. Inc.*
5. Gauraha A.K., Banafar K.N.S., et.al. (2002). *Marketing Strategies of Rice in Chattisgarh-A Case Study. Agricultural Marketing, Vol.XLV, No.3, 22-26.*
6. Ghorbani M. and Darijani A. (2009). *The Survey of Raisin Marketing Process and Structure in North Khorasan Province. Asian Journal of Plants and Sciences, Vol.8 (2), 178-182.*
7. Kohls R.L. and J.N. Uhl (1980). *Marketing of Agricultural Products. New York: Macmillan Pub. Co. Inc.*
8. Maryam Omid and Najafabadi (2011). *Agricultural Marketing Challenges and Barriers in Iran. African Journal of Business Management, Vol.5 (35), 13580-13581.*
9. Nizamuddin khan and Mohammed Muqeet Khan (2012). *Marketing of Agricultural Crops in Rural Indian Economy: A Case Study. Journal of Economics and Sustainable Development, Vol.3, No.2, 1-9.*
10. Philip Kotler and Gray Armstrong (2009). *Principles of Marketing. New Delhi: Darling Kindersley Publishing Inc.*
11. Philip Kotler and Kevin Lane Keller (2012). *Marketing Management. New Delhi: Pearson Education Inc.*
12. Rajan Saxena (2009). *Marketing Management. New Delhi: Tata McGraw Hill Publications.*
13. Ramaswamy V.S. and Namakumari S. (2009). *Marketing Management. New Delhi: Macmillan Publishers India Ltd.*
14. Waghmare M.N. and Shendage P.N. (2013). *Profitability of Cut Roses Grown Under Hi-Tech Cultivation. Agriculture Situation in India, Vol.LXX, No.2, 15-21.*