A Study on Marketing of Betel leaves through Different Marketing Channels in Bhograi Block, Balasore District of Odisha

ABSTRACT

The present study was conducted in the year 2022-23, to identify the different marketing channels in the study area and to analyse total marketing cost, producer's share in consumer rupee, marketing margins, marketing efficiency and price spread in different marketing channels. Stratified multistage random sampling procedure was adopted to take a sample of 120 respondents from Bhograi block, Balasore, Odisha. The data was collected by personally interviewing the selected respondents with the help of a questionnaire. Four marketing channels were identified for marketing of betel leaves, channel I(Producer-Consumer), Channel II (Producer-Village Trader-Retailer-Consumer), channel III (Producer-Wholesaler-Retailer-Consumer) and channel IV (Producer–Village Trader–Wholesaler-Retailer-Consumer). The price spread was highest in case of channel-IV that was 2850 and lowest in case of channel I that was 400 as there are more middle men in channel IV than channel I. The marketing channel I was more efficient than the other channels but it was not used by the farmers more efficiently as they lack market information so channel II was mostly used by them. Marketing cost was highest in case of Channel IV (Rs.1550) and lowest in case of Channel I (Rs. 400).

Keywords*: Betel leaves, Marketing channels, Price spread, marketing efficiency, marketing cost, village trader.*

1. INTRODUCTION

Betel leaf (*Piper betel L*.) is a medicinal plant. It is also known as Paan in most of the places. It acts as a stimulant, Blood purifier, improves immunity, it has anti-microbial and anti-diabetic activities. Betel leaf is a cash crop having high capacity to earn reasonably good returns. For developing country like India study of marketing channel and price spread is important to increase producer's share in consumer's rupee, a smaller number of middlemen present in between producer and consumer causes increase in producer's share. Betel leaf is a highly perishable crop so producers are forced to sell the product immediately after harvesting.

Betel leaves are cultivated in the states of Assam, Andhra Pradesh, Bihar, Gujrat, Bihar, Karnataka, Madhya Pradesh, Rajasthan, West Bengal and Maharashtra (APEDA). In Odisha, betel leaves are cultivated in the coastal areas, mainly in districts – Balasore, Bhadrak, Jagatsinghpur, Jaipur, Kendrapara, Puri, Cuttak, Ganiam and are sold in Pana, one Pana contains 80 koda, and one koda contains 50 leaves thus one pana contains 4000 leaves.

Betel vine cultivation provides fruitful amount of employment to a large number of farmers and is also the source of livelihood for majority of the farmers, the current study focuses on analysing the different marketing channels that are present in the study area, to understand the disposing patterns adopted by the betel leaf growers and to analyse marketing cost, marketing margin, producer's share in consumer rupee, price spread and marketing efficiency of different marketing channels. According to Rashtriya Krishi Vikas Yojana 2018-19, betel leaf covered an area of 2046 hectares and about 99765 lakh number of leaves were produced in Odisha.

According to APEDA (Agricultural and Processed Food Products Export Development Authority), 6517.26 Metric Tonne of betel leaves were exported worth Rs. 45.97 crores in 2021-22. In an earlier study by (Kumar, Yadav, Jangid, & Gupta, 2023) betel vine prefers a tropical climate with cool humid weather. Both wetlands and uplands are suitable for its cultivation. Highlands and especially fertile sandy or sandy clay or sandy loam soil with a well drainage system and a pH range of 5.6-8.2 are the best choices for betel cultivation while, saline and alkali soils where logging is a problem are not suitable. The congenial weather requires for optimum cultivation 2250-4750 mm rainfall, relative humidity 40-80%, and temperature range 15-40^0 C. To successfully cultivate this crop, adequate irrigation and shade are required. It can tolerate temperatures ranging from -10^0 C to 40^0 C. Leaf fall is caused by abnormally low air temperatures and hot dry winds are also dangerous for its cultivation.

In another study by (Dey, Sharma, Gautam, & Swain, 2022) betel leaf cultivation in India is majorly done by small and marginal farmers as part of their heritage. In the initial year the one time cost of cultivation was Rs. 289300. The annual cost of cultivation was Rs. 90007 and the net returns earned was Rs. 146072 signifying the crop in profitable venture for the respondents.

2. METHODOLOGY

For the selection of the sample or respondents, multi stage stratified random sampling was adopted. In first stage, out of the 30 districts in Odisha Balasore District was selected purposely for the study considering the large bitter leaf production area. In second stage out of the total blocks in the district, the Bhograi block was selected purposively on the basis of large amount of production, in third stage a sample of 10 villages was taken out of total 339 villages randomly from the block on the basis of high betel leaf production. In fourth stage, a sample of 120 respondents were selected randomly from the selected villages. In fifth stage the Suhuria market was selected for the study as the majority of exchange is done in the market. And in sixth stage, a sample of 30 market functionaries was selected for the study out of the total market functionaries of both primary and secondary market, the data regarding Marketing cost and other charges in different marketing channel was collected. For collection of data a pre tested schedule was used and the respondents were personally interviewed through survey method.

2.1 Analytical tools and techniques

2.1.1 Marketing cost

$C = C_f + C_{m1} + C_{m2} + . . . + C_{mn}$

Where,

C= Total cost of marketing of the commodity

C_f = Cost paid by the producer from the time the produce leaves till he sells it.

C_{mn}= Cost incurred by the ith middlemen in the process of buying and selling the products.

2.1.2 Producer's share in Consumer rupee

Ps = PF / PR x 100

Where, Ps = Producer's share

PF = Price received by the farmer

Pr = Retail price paid by the consumer

2.1.3 Marketing margin of Middlemen

Absolute margin = PRi Ppi + Cmi

Where, PRi= Total value of receipt per unit (sale price)

Ppi= Purchase value of goods per unit

Cmi= Cost incurred on marketing per unit

2.1.4 Price spread

Price spread = Total Marketing Cost+ Total Marketing Margin

2.1.5 Marketing efficiency

Shepherd's formula

ME = (V/ I) - 1

ME = Index of marketing efficiency

V = Value of the goods sold or price paid by the consumer (Retail price) I = Total marketing cost or input of marketing.

3. RESULTS AND DISCUSSION

3.1 Identifying the existing marketing channels

There were four existing marketing channels that were identified in the study area as

Channel I (Producer – Consumer),

Channel II (Producer – Village trader – Retailer – Consumer),

Channel III (Producer – Wholesaler – Retailer – Consumer),

Channel IV (Producer – Village trader – Wholesaler – Retailer – Consumer).

3.2 Marketing cost and Marketing margin incurred in different marketing channels

Table 1. shows the marketing cost incurred in different marketing channels, the Channel IV had the highest (Rs.1550) total marketing cost among other channels. Followed by the Channel III with Rs. 1350 total marketing cost, Channel II with Rs. 1100 total marketing cost and least in Channel I Rs. Rs. 400. The marketing margin of Channel I was 0 which is lowest, marketing margin of Channel II, Channel III, Channel IV, were Rs. 800, Rs. 1000, Rs. 1300 respectively. The consumer price or the selling price was also highest in the Channel IV (Rs. 4950), then followed by Channel III (Rs. 4450), Channel II (Rs. 4000) and least in Channel I (Rs. 2500).

Table 1. Marketing cost and marketing margin incurred in different marketing channels.

S. No.	Particulars	Channel I n=8	Channel II n=52	Channel III n=44	Channel IV n=16
A	**Marketing cost incurred by the producer**				
I.	Packing charges	50	50	50	50
II.	Loading charges	60	60	60	60
III.	Transportation charge	70	70	70	70
IV.	Unloading charges	20	20	20	20
V.	Commission	50	50	50	50
VI.	Miscellaneous cost	100	100	100	100
VII.	Counting charges (leaves)	50	50	50	50
VIII.	Total marketing cost	400	400	400	400
B	**Marketing cost incurred by village traders**				
I.	Purchasing price of village trader	-	2500	-	2500
II.	Loading charges	-	60	-	60
III.	Transportation charges	-	70	-	70
IV.	Unloading charges	-	20	-	20
V.	Packing	-	50	-	50
VI.	Total marketing cost	-	200	-	200
VII.	Village trader's margin	-	300	-	300

VIII.	Selling price of village trader	-	3000	-	3000
C	**Marketing cost incurred by Wholesaler**				
I.	Purchase price of wholesaler	-	-	2500	3000
II.	Charges of empty petara	-	-	70	70
III.	Packing of betel leaf	-	-	60	60
IV.	Labelling	-	-	70	70
V.	Transportation	-	-	150	150
VI.	Commission charges	-	-	100	100
VII.	Total marketing cost	-	-	450	450
VIII.	Wholesaler's margin	-	-	500	500
IX.	Selling price of wholesaler	-	-	3450	3950
D	**Marketing cost incurred by Retailer**				
I.	Purchase price of retailer	-	3000	3450	3950
II.	Shop rent	-	2000	2000	2000
III.	Transportation charges	-	250	250	250
IV.	Weighing charges	-	70	70	70
V.	Loading and unloading charges	-	60	60	60
VI.	Grading	-	60	60	60
VII.	Packing charges	-	60	60	60
VIII.	Miscellaneous charges	-	100	100	100
IX.	Total marketing cost	-	500	500	500
X.	Retailer's margin	-	500	500	500
XI.	Selling price of the retailer	-	4000	4450	4950
E	**Consumer price**	2500	4000	4450	4950
F	**Total marketing cost incurred by different middlemen's**	400	1100	1350	1550
G	**Total marketing margin**	0	800	1000	1300

(Cost in Rs., cost per pana (1 pana = 4000 leaves))

3.3 Marketing efficiency, price spread, producer's share in consumer rupees in different marketing channels

Table 2. shows the marketing efficiency of different marketing channels, the efficiency of marketing channel I was the highest (6.25), then followed by channel II (3.63), channel III (3.29) and lowest in channel IV (3.19). The producer's share was also highest in channel I (100%), then followed by channel II (62.50%), channel III (56.18%) and was lowest in channel IV (50.50). The price spread was highest in the channel IV (Rs. 2850), followed by channel III (Rs. 2350), channel II (Rs. 1900) and least in channel I (Rs. 400).

Table 2. Marketing efficiency, Producer's share in consumer price and price spread in different marketing channels (per Pana)

Particulars	Channel I n=8	Channel II n=52	Channel III n=44	Channel IV n=16
Producer's Price (Rs.)	2100	2100	2100	2100
Marketing Efficiency	6.25	3.63	3.29	3.19
Producer's share in Consumer rupee (%)	100	62.50	56.18	50.50
Price spread (Rs.)	400	1900	2350	2850

From the study it was revealed that, the marketing cost was highest in Channel IV (Rs. 1550), followed by Channel III (Rs. 1350), Channel II (Rs. 1100) and Channel I (Rs. 400), the marketing margin was also highest for Channel IV (Rs. 1300), followed by Channel III (Rs. 1000), Channel II (Rs. 800) and there was no margin in the Channel I. The study also revealed that, producer's share in consumer rupee was 100% in Channel I, followed by Channel II (62.50%), Channel III (56.18%) and lowest in Channel IV (50.50). The marketing efficiency was highest in Channel I (6.25), followed by Channel II (3.63), Channel III (3.29) and lowest efficiency in Channel (3.19).

4. Conclusion

On comparing the marketing channel- I, II, III and IV; it can be observed that the marketing channel I (Farmer - Consumer) was more efficient. But it is not possible always, hence the marketing channel – II (Farmer – Village trader – Retailer - Consumer) can be employed. Fluctuation in market price and high involvement of middlemen were the serious constraints that pose threat to marketing of betel leaves. Hence, reasonable market price should be fixed for sale and the intermediaries should be abolished.

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