

Natural Rubber Marketing in Karnataka: A Study on Costs, Marketing Channels, and Price Spread

Abstract

Karnataka ranks as the third-largest rubber-producing state in India, with natural rubber cultivation experiencing a growth rate of 8.84% between 2005-06 and 2014-15. Understanding the domestic marketing arrangements for rubber in Karnataka is essential to assess how farmers are marketing their produce and the benefits derived from various channels. This study, conducted in Dakshina Kannada and Udupi districts, involved collecting primary data from key market intermediaries. Findings indicate that 63.33% of the farmers preferred selling rubber sheets to Rubber Producers' Societies (RPS) of Type-2, and 61.81% of the total rubber produce flowed through this channel. Transportation emerged as the major cost component for farmers. The producers' share in the consumers' rupee was highest in Channel-1, at 97.94%, followed by Channel-2 (95.72%) and Channel-3 (95.03%).

Key words: Marketing Channels, Natural Rubber, Marketing Cost, Price Spread, Karnataka

Introduction

India is a leading producer of natural rubber, with Kerala topping the list, followed by Tripura and Karnataka. Compared to many other crops, rubber plants do not require irrigation and can thrive on lands unsuitable for other types of agriculture, such as in parts of Karnataka. This adaptability has contributed to a notable expansion of natural rubber cultivation in the state, with growth reaching 8.84% over the decade from 2005-06 to 2014-15.

To comprehend how rubber is marketed by farmers and the benefits they derive from different channels, this study was initiated with the following objectives:

1. To estimate the costs incurred in key marketing channels of rubber latex and rubber sheets in Karnataka.
2. To assess the price spread across major marketing channels in the state.

Methodology

Primary data for this study were collected from Dakshina Kannada and Udupi districts of Karnataka. The selected taluks included Belthangady and Sullia in Dakshina Kannada, as well

as Karkala and Kundapura in Udupi. From each taluk, 15 rubber farmers were randomly selected. Three RPS, three primary dealers, and three secondary dealers were chosen from each taluk. Since there was only one operational marketing co-operative society in Karnataka, its branches across the four taluks were included in the study. Tabular analysis and percentage calculations were used to interpret the data.

Results and Discussion

The study focused on the marketing costs of various intermediaries and the producers' share in the consumers' rupee, examining three primary marketing channels, as identified through consultations with farmers, RPS representatives, and officials from the Rubber Board.

Major Marketing Channels for Rubber in Karnataka:

1. **Channel-1:** In this channel, latex is sold by farmers to Type-1 RPS, where it is processed into rubber sheets before being sold to manufacturing companies.
2. **Channel-2:** Farmers sell rubber sheets directly to Type-2 RPS, which act as agents for marketing co-operatives. The co-operatives then sell the sheets to manufacturers.
3. **Channel-3:** Rubber sheets move from farmers to primary dealers and then to secondary dealers, who eventually sell them to manufacturing companies.

Table 1. Sample farmers' preference for intermediaries in their sales decision in Karnataka (2015-16)

(n= 60)				
Intermediary to whom farmer sells	No. of farmers	%	Quantity sold (tonnes)	%
RPS (Type- 1)	8	13.34	19.72	14.03
RPS (Type- 2)	38	63.33	86.89	61.81
Primary dealer	14	23.33	33.96	24.16
Total	60	100.00	140.57	100.00

Source: Primary data

Table 1 reveals the farmers' preferences for various market intermediaries. A majority (63.33%) of the surveyed farmers chose to sell their rubber sheets through Type-2 RPS, accounting for 61.81% of the total rubber produced by the sample group. The next most common channel involved primary dealers, selected by 23.33% of farmers and accounting for

24.16% of the rubber produce. Finally, 13.34% of farmers opted to sell latex to Type-1 RPS, with 14.03% of their produce flowing through this channel.

Marketing Costs:

Table 2. Costs incurred in major marketing channels of rubber latex/ sheets in Karnataka

(Rs./ q)							
Sl. No.	Particulars	Channels	Producers	RPS	Marketing cooperatives	Primary dealers	Secondary dealers
1	Weighing	Channel- 1	2.05	3.52	-	-	-
		Channel- 2	3.11	3.67	5.17	-	-
		Channel- 3	4.50	-	-	3.00	5.83
2	Packaging	Channel- 1	-	11.60	-	-	-
		Channel- 2	-	12.00	20.67	-	-
		Channel- 3	-	-	-	9.67	14.00
3	Storing	Channel- 1	5.37	26.65	-	-	-
		Channel- 2	7.55	19.50	35.17	-	-
		Channel- 3	10.25	-	-	16.60	43.33
4	Loading and unloading	Channel- 1	8.25	24.95	-	-	-
		Channel- 2	11.50	22.50	52.00	-	-
		Channel- 3	15.75	-	-	25.00	35.83
5	Transportation	Channel- 1	15.22	78.38	-	-	-
		Channel- 2	16.61	51.83	118.50	-	-
		Channel- 3	23.50	-	-	57.00	92.00
6	Sales tax	Channel- 1	-	-	-	-	-
		Channel- 2	-	-	13.00	-	-
		Channel- 3	-	-	-	6.25	10.50
7	Miscellaneous	Channel- 1	4.11	8.90	-	-	-
		Channel- 2	5.23	10.50	15.50	-	-
		Channel- 3	8.00	-	-	7.48	8.51
8	Total	Channel- 1	35.00	154.00	-	-	-
		Channel- 2	44.00	120.00	260.00	-	-
		Channel- 3	62.00	-	-	125.00	210.00

Source: Primary data

Table 2 presents the costs incurred by farmers and intermediaries across different marketing channels. The total marketing costs borne by farmers amounted to Rs.35 per quintal in Channel-1, Rs.44 in Channel-2, and Rs.62 in Channel-3. Transportation expenses represented the largest cost for farmers, with Rs.15.22 per quintal in Channel-1, Rs.16.61 in Channel-2, and Rs.23.50 in Channel-3.

The marketing costs for RPS were Rs.154 in Channel-1 and Rs.120 in Channel-2, with transportation expenses accounting for Rs.78.38 and Rs.51.83 per quintal, respectively. The marketing co-operatives involved in Channel-2 incurred a total cost of Rs.260 per quintal, with Rs.118.50 attributed to transportation. Primary and secondary dealers in Channel-3 had marketing costs of Rs.125 and Rs.210 per quintal, with transportation being a significant component, at Rs.57.00 and Rs.92.00 per quintal, respectively.

Price Spread and Producers' Share in Consumers' Rupee:

Table 3. Price spread in major marketing channels of rubber latex/ sheets in Karnataka

(Rs./ q)				
Sl. No.	Particulars	Channel- 1	Channel- 2	Channel- 3
1	Price received by producer	13,075	11,180	11,100
2	Marketing cost of producer	35	44	62
3	Net price received by the producer	13,040	11,136	11,038
4	Price paid by RPS	13,075	11,180	-
5	Marketing cost of RPS	154	120	-
6	Margin of RPS	120	40	-
7	Sale price of RPS	13,349	11,340	-
8	Purchase price of marketing co-operative	-	11,340	-
9	Marketing cost of marketing co-operative	-	260	-
10	Margin of marketing co-operative	-	80	-
11	Sale price of marketing co-operative	-	11,680	-
12	Purchase price of primary dealers	-	-	11,100
13	Marketing cost of primary dealers	-	-	125
14	Margin of primary dealers	-	-	95
15	Sale price of primary dealers	-	-	11,320

16	Purchase price of secondary dealers	-	-	11,320
17	Marketing cost of secondary dealers	-	-	210
18	Margins of secondary dealers	-	-	150
19	Sale price of secondary dealers	-	-	11,680
20	Purchase price of companies	13,349	11,680	11,680
21	Price spread	274	500	580
22	Producers' share in consumers' rupee (%)	97.94	95.72	95.03

Source: Primary data

Table 3 shows the price spread across the three major marketing channels. Channel-1, which involves Type-1 RPS, had the lowest price spread of Rs.274 per quintal. Channel-2, involving Type-2 RPS, had a price spread of Rs.500 per quintal, while Channel-3, which includes primary and secondary dealers, had the highest price spread of Rs.580 per quintal. Consequently, the producers' share in the consumers' rupee was highest in Channel-1 at 97.94%, followed by Channel-2 at 95.72%, and Channel-3 at 95.03%.

The high-quality rubber sheets produced in Channel-1 allowed for higher prices in the market, resulting in a larger share for farmers. These findings align with a 2012 study by Anuja et al., which similarly concluded that marketing channels involving Rubber Producers' Societies were more efficient. Additionally, the Rubber Board's efforts to provide updated market information, regulate trade, and ensure transparency have contributed to enhanced efficiency and price discovery, explaining the high share received by producers across all channels.

Improvements in rubber quality and bargaining power, as observed in this study, have enabled Rubber Producers' Societies to secure better prices compared to individual farmers selling lower-grade rubber sheets.

Conclusion:

Natural rubber cultivation in Karnataka has grown significantly, with farmers relying heavily on well-structured marketing channels, particularly RPS, to market their produce. The study found that farmers achieve the highest share of consumers' rupees through Channel-1, followed closely by Channels-2 and 3. Transportation costs are a major contributor to the overall marketing expenses across all channels.

The study's findings emphasize the importance of marketing arrangements in ensuring fair prices for farmers, while also highlighting the role of co-operatives and market intermediaries

in optimizing rubber trade. With continued support from the Rubber Board and improvements in infrastructure, Karnataka's rubber producers are well-positioned to enhance their market efficiency and profitability.

REFERENCES

Acharya, S. P., Basavaraja, H., Kunnal, L. B., Mahajanashetti, S. B. and Bhat, A. R. S., 2012, Growth in area, production and productivity of major crops in Karnataka. *Karnataka J. Agric. Sci.*, 25 (4): 431-436.

Anonymous, 2016a, Indian rubber statistics. The Rubber Board, Kottayam, Kerala (India), pp. 5-38.

Anonymous, 2016b, District at a glance (2014-15), District Statistical Office, Dakshina Kannada, Karnataka (India), pp. 7-13.

Anonymous, 2016c, District at a glance (2014-15), District Statistical Office, Udupi, Karnataka (India), pp. 8-14.

Avinashkumar, H. S., 2011, An economic analysis of production and marketing of coffee in Chikmagalur district of Karnataka. M. Sc. (Agri.) Thesis, Univ. Agric. Sci., Dharwad, Karnataka (India).

Anuja, A. R., Amit, K., Mathur, V. C. and Jha, G. K., 2012, Input delivery, processing and marketing of natural rubber: The role of producers' cooperatives in Kerala. *Agric. Econ. Res. Rev.*, 25 (1): 379-386.

Awaradi, K. M., 1991, Performance of primary service cooperative societies in Uttara Kannada district, Karnataka state. M. Sc. (Agri.) Thesis, Univ. Agric. Sci., Dharwad, Karnataka (India).

Babu, K. R., 1989, An economic evaluation of investment and resource use efficiency in rubber plantation in Dakshina Kannada district of Karnataka. M. Sc. (Agri.) Thesis, Univ. Agric. Sci., Bangalore, Karnataka (India).

Basarigidad, 1983, An economic appraisal of two agricultural cooperative societies in Gadag Taluka, Dharwad District, Karnataka state- A comparative study. M. Sc. (Agri.) Thesis, Univ. Agric. Sci., Bangalore, Karnataka (India).

Bhat, B. S., 2011, Production and marketing management of ginger in Uttara Kannada district. M. Sc. (Agri.) Thesis, Univ. Agric. Sci., Dharwad, Karnataka (India).

Chennakrishnan, P., 2012, Natural rubber production in India. *Int. J. Res. Comm. IT Mgt.*, 2 (11): 151-156.

Dey, S. R., 2011, An economic analysis of production and marketing of rubber in Tripura. M. Sc. (Agri.) Thesis, Univ. Agric. Sci., Dharwad, Karnataka (India).

George, J. G. and Chandrashekar, H. M., 2014, Growth and trends in production and marketing of natural rubber in Kerala and India. *Int. J. Curr. Res. Acad. Rev.*, 2 (8): 53-61.

Jari, B. and Fraser, G. C. G., 2013, An analysis of institutional and technical factors influencing agricultural marketing amongst small holder farmers in the Kat river valley, Eastern Cape Province, South Africa, *African J. Agric. Mktg.*, 1 (1): 16-23.

Viju, I. C., 1986, A study on the supply response and marketing of natural rubber in Kerala. M. Sc. (Agri.) Thesis, Kerala Agric. Univ., Vellanikkara, Kerala (India).

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