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Marketing Channels of Different Timber Species in Uttara Kannada District of Karnataka

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Abstract: ***The present study was conducted in Uttar Kannada district, the major timber producing district of north Karnataka. In timber trade, traders and middlemen are playing major role in marketing and consumers are sheer price follower. For this purpose three major timber depots, 5 big timber merchants, 5 saw millers, 5 retailers were selected from the study area. Two major channels were identified. Five species having different prices were selected for the analysis. Channel one included only one intermediary i.e., Big Timber Merchant and channel two included two intermediaries i.e., Saw Miller and Retailers. Total marketing cost was highest in channel-II. Producers share in consumer's rupee was highest in channel-I in all the species and marketing efficiency was also highest in channel- I as compared to channel-II.***

Keywords: Timber trade, Timber Depots, Saw Millers and Marketing cost

1. Introduction

A forest may be defined as any land that is used primarily for production of timber. For both developed and developing country forest are an important natural and renewable resource. Forests are contributing major share of growth in country's development which is evidence in many western country. Forests are expected to satisfy multi demands in the nation's economy. The forests of India are owned by publicwhich is very advantageous to meet both tangible and intangible demands of the public. So, the managers of public forests while managing the forests keep in mind some considerations like economics, people's well-being, tribal way of life, industrial needs, preservation of wild life, environment etc. In economics terms, forests have some characteristics so far as timber production is concerned. Demand for forest products is a derived demand. Price offered for a timber log will be dependent upon to what ultimate use it is put by the consumer. In India, all the forests are owned by government. The management of forest is under state forest department. Inspite of having a common national forest policy and a uniform Indian forest act, forest management and cost related to various operations are different in all the states of India.For marketing of timber in India, there exists a monopoly market. Only state forest department have right to sell the timber. So, forest department is a producer for selling of timber. For this purpose various different types of forest timber depots are established throughout the country in order to fulfil the wood requirements of people. Marketing channels plays a very important to know the government share's in consumer rupee. Hence the study was initiated with the following objective.

To study the marketing channels of timber for different species in Uttara Kannada district.

2. Limitations of the study

The present study was based on primary data collected through interview using pre-tested schedule and also based on the latest possible data from the Karnataka state forest department. Field visits were also undertaken in selected forest timber depots. Interactions were also done with forest officials, forest contractors and buyers. Lack of adequate data and information are principle shortcomings in the forest depots. However, efforts are made to minimize them through proper collection of data and by cross checks.

3. Review of Literature

Rajput and Verma (2000) reported that economics analysis of production and marketing of groundnut in Khargone district of Madhya Pradesh was studied. Marketing plays an important role in the production process of this crop. The efficient marketing provides higher returns to the producers and greater satisfaction on the consumers by reducing the marketing cost. Open auction method of sale is adopted in the mandi. The process of distribution involves all the functions in the movement of the crop right from the assembling of the produce in the market to its mandi, all the agencies engaged in assembling also take part in distribution centre. The market functionaries are the licenses and their charges are fixed by the market committee. Among the different marketing channels used by the groundnut cultivators, the most important and popular channel even today is: producer- wholesaler-retailer-consumer.

Negi *et al.* (2001) conducted the research study on marketing channels in agro-forestry products- A case study of Yamunanagar, Haryana. Results showed that for selling the tree produce the tree growers used various channels; viz. traders- industries, village level agents/contractors, traders-

saw mills- consumers and traders- other markets of the state.it was found that 73 per cent of tree growers prefer to sell through village agents, 23 per cent through traders and only 4 per cent through industries.

Acharya (2004) conducted a research study on market analysis of major products from community managed forests: a study from the foothill watershed of Nepal. The study revealed that marketing of products from community managed forests in Nepal was still in a developmental stage. Individuals were having limited harvesting and trading rights. The forest user groups mainly traded the timber amongst them only and for non- timber forest products were traded mainly through cooperatives. Various socio-economic and institutional factors were associated with marketing of timber and non timber forest products.

Namasivayam and Richard (2006) conducted a research study on Price spread in marketing of coconut in Tamil Nadu. According to their analysis the marketing cost incurred by producers per thousand nuts was maximum (₹ 630.18) in channel- II consisting of producer commission agents-wholesalers- retailers – consumers, followed by ₹ 610.00 in channel- III i.e. producer – wholesaler – retailers – consumers. No marketing cost was incurred by producers in channel- I consisting of producers– pre-harvest contractors-commission agents- wholesalersretailers – consumers, because the marketing cost was met by the pre-harvest contractors. Commission agents incurred no marketing cost because of their non-performance in the field of cutting, loading, counting, grading and transportation. It was also found that under channel- III, the producers realized the maximum share of 58.73 percent in consumer's price. Their share in channel- II and channel- I was 58.32 percent and 50.20 per cent respectively. Commission agents got very meagre margin with a small effort.

4. Methodology

The study was conducted in Uttar Kannada district of Karnataka.The study was based on primary data. Primary data was collected through personal interview from the forest depots were collected with the help of well-structured and pretested schedule exclusively designed for the study.

The sampling technique followed by multistage random sampling was used for the selection of study area. In first stage, Uttara Kannada district was purposively selected to investigate the objectives of the study because of highest forest cover in this district.In second stage, Canara circle was selected from Uttara Kannada district because revenue realised from timber after sales in this circle is highest.In third stage three divisions that is Yellapur, Haliyal and Sirsi was purposively selected from Canara circle because of highest transaction of timber in these divisions.In fourth stage one forest timber depot from each selected divisions i.e. Dandeli from Haliyal division, Kirwatti from Yellapur division and Chipgi from Sirsi division was purposively selected because revenue realised from timber after sales in these depots is highest..From each depot five forest officials, were randomly selected in this stage. Similarly, to elicit marketing information about timber, 5 retailers, 5 wholesalers, 5 big timber merchants from each depot were selected randomly.Thus the total sample size was 60. Tabular analysis was done for better interpretation of the results.

Two main channels in the marketing of timber are identified they include,

Channel-I: Forest depot →Big timber merchants →Consumers

Channel-II: Forest depot →Saw millers →Retailers →Consumers

Producer's Share in Consumer's Rupee

It is the price received by the forest depot expressed as a percentage to the retail price (i.e., price paid by the consumer). If pr is the retail price and pf is the producer's price, then the producer's share in consumer's rupee (PS) may be expressed as follows:

$$PS = \frac{pf}{pr} \times 100$$

Marketing Efficiency

Shepherd has suggested that the ratio of total value of goods marketed to the marketing cost may be used as a measure of efficiency. The higher the ratio, the higher the efficiency and vice-versa.

A better expression for shepherd's idea is: $ME = \frac{V}{I} - 1$

Where, ME = Index of Marketing Efficiency

V = Value of timber sold (consumer's price)

I = Total marketing cost

5. Results and Discussion

Table 1: Price spread in marketing of different timber species in channel- I (₹perm^3)

S. No.	Particulars	Sissum	Teak	Matti	Nandi	Acacia
1	**Net price received by the government**	1,11,787.06 (70.48)	91,847.06 (70.07)	25,197.06 (64.17)	20,997.06 (62.93)	28,234.06 (65.33)
2	**Cost incurred by forest depot**					
a	Stacking cost	219.5 (0.14)	219.5 (0.17)	219.5 (0.56)	219.5 (0.66)	219.5 (0.51)
b	Transportation cost	967.56 (0.61)	967.56 (0.74)	967.56 (2.46)	967.56 (2.90)	967.56 (2.24)
c	Unloading cost	106.1 (0.07)	106.1 (0.08)	106.1 (0.27)	106.1 (0.32)	106.1 (0.25)
d	Average dragging cost	197.77 (0.12)	197.77 (0.15)	197.77 (0.50)	197.77 (0.59)	197.77 (0.46)
	Sub-total	**1,490.93 (0.94)**	**1,490.93 (1.14)**	**1,490.93 (3.80)**	**1,490.93 (4.47)**	**1,490.93** (3.45)
3	**Big timber merchant purchasing price (1 + 2)**	1,13,278 (71.42)	93,338 (71.21)	26,688 (67.97)	22,488 (67.40)	29,725 (68.79)
4	**Cost incurred by big timber merchant**					
a	Transportation	1250 (0.79)	1200 (0.92)	990 (2.52)	980 (2.94)	1000 (2.31)
b	Loading and unloading	500 (0.32)	450 (0.34)	360 (0.92)	400 (1.20)	410 (0.95)

c	Total Tax	39,601.97 (24.97)	32,631 (24.89)	9,329.56 (23.76)	7,861.8 (23.56)	10,391.86 (24.05)
d	Weighing	60 (0.04)	50 (0.04)	35 (0.09)	46 (0.14)	48 (0.11)
e	Cutting charges	250 (0.16)	200 (0.15)	150 (0.38)	100 (0.30)	60 (0.14)
f	Finishing charges	658 (0.41)	625 (0.48)	530 (1.35)	420 (1.26)	350 (0.81)
g	License fees	500 (0.32)	500 (0.38)	500 (1.27)	500 (1.50)	500 (1.16)
h	Market fees	2,265.56 (1.43)	1,866.76 (1.42)	533.76 (1.36)	449.76 (1.35)	594.5 (1.38)
i	Miscellaneous cost	250 (0.16)	215 (0.16)	150 (0.38)	120 (0.36)	135 (0.31)
	Sub-total	**45,335.53 (28.58)**	**37,738 (29)**	**12,578.32 (32.03)**	**10,877.56 (32.60)**	**13,489.36** (31.21)
5	**Consumers purchasing price**	1,58,613.53 (100.00)	1,31,076 (100)	39,266.32 (100.00)	33,365.56 (100.00)	43,214.36 (100)

(Figures in the parentheses indicate percentage to total)

Price spread in marketing of timber

Thedetailed analyses of price spread in channel- I are given in Table 1. Net prices received by the forest depot in transacting Sissum, Teak, Matti, Nandi and Acacia wood were ₹1,11,787.06, ₹91,847.06, ₹ 25,197.06, ₹ 20,997.06 and ₹28,234.06 per m^3respectively. The overall marketing costs were ₹ 46,826.46, ₹39,228.93, ₹ 14,069.25, ₹ 12,368.49 and ₹ 14,980.29 per $m^3$for Sissum, Teak, Matti, Nandi and Acacia wood respectively. In percentage terms, the marketing costs accounted 29.52, 30.14, 35.83, 37.07 and 34.66 per cent respectively. Big merchants selling prices for Sissum, Teak, Matti, Nandi and Acacia wood were ₹ 1,58,613.53, ₹1,31,076, ₹ 1,58,613.53, ₹ 33,365.56 and ₹ 43,214.36 per m^3 respectively.These costs were different for all the timber species. In Sissum it is highest (₹45,335.53 per m^3) among all five species because the quality of Sissum wood is much better than other species and therefore fetches higher cost followed by Teak, Acacia, Matti and Nandi has lowest total marketing cost because of the reason, that net selling price of timber depot was very less (₹ 22,488 per m^3) and the consumer purchasing price was also very less as compared to other species.The similar result was reported by **Anonymous (2006).**

Table 2: Price spread in marketing of different timber species in channel-II (₹perm^3)

Sl. No.	Particulars	Sissum	Teak	Matti	Nandi	Acacia
1	**Net price received by the government**	1,11,787.06 (69.18)	91,847.06 (68.61)	25,197.06 (60.91)	20,997.06 (59.03)	28,234.06 (61.91)
2	**Cost incurred by forest depot**					
a	Stacking cost	219.5 (0.14)	219.5 (0.16)	219.5 (0.53)	219.5 (0.62)	219.5 (0.48)
b	Transportation cost	967.56 (0.60)	967.56 (0.72)	967.56 (2.34)	967.56 (2.72)	967.56 (2.12)
c	Unloading cost	106.1 (0.07)	106.1 (0.08)	106.1 (0.26)	106.1 (0.30)	106.1 (0.23)
d	Average Dragging cost	197.77 (0.12)	197.77 (0.15)	197.77 (0.48)	197.77 (0.56)	197.77 (0.43)
	Sub-total	**1,490.93 (0.92)**	**1,490.93 (1.11)**	**1,490.93 (3.60)**	**1,490.93 (4.19)**	**1,490.93 (3.27)**
3	**Saw millers purchasing price (1+2)**	1,13,277.99 (70.10)	93,338 (69.72)	26,688 (64.51)	22,488 (63.22)	29,725 (65.18)
4	**Sawmillers costs**					
a	Transportation	1,250 (0.77)	1,200 (0.90)	990 (2.39)	980 (2.76)	1000 (2.19)
b	Loading and unloading	500 (0.31)	450 (0.34)	360 (0.87)	400 (1.12)	410 (0.90)
c	Tax	39,601.97 (24.51)	32,630.96 (24.38)	9,329.56 (22.55)	7,861.80 (22.10)	10391.86 (22.79)
d	Weighing	60 (0.04)	50 (0.04)	35 (0.08)	46 (0.13)	48 (0.11)
e	Cutting charges	250 (0.15)	200 (0.15)	150 (0.36)	100 (0.28)	60 (0.13)
f	License fees	500 (0.31)	500 (0.37)	500 (1.21)	500 (1.41)	500 (1.10)
g	Miscellaneous cost	250 (0.15)	215 (0.16)	150 (0.36)	120 (0.34)	135 (0.30)
	Sub-total	**42,411.97 (26.25)**	**35,245.96 (26.33)**	**11,514.56 (27.83)**	**10,007.80 (28.14)**	**12,544.86** (27.51)
5	**Saw miller selling price or retailers purchase price**	1,55,689.96 (96.35)	1,28,583.96 (96.05)	38,202.56 (92.35)	32,495.80 (91.36)	42,269.86 (92.69)
6	**Cost of retailers**					
a	Transportation	1000 (0.62)	985 (0.74)	926 (2.24)	940 (2.64)	945 (2.07)
b	Loading and unloading	450 (0.28)	443 (0.33)	340 (0.82)	365 (1.03)	395 (0.87)
c	Finishing	648 (0.40)	600 (0.45)	500 (1.21)	520 (1.46)	535 (1.17)
d	Licence fees	500 0.31	500 (0.37)	500 1.21	500 1.41	500 1.10
e	Market fees	3104.39 (1.92)	2561.98 (1.91)	763.95 (1.85)	649.59 (1.83)	844.94 (1.85)
f	Miscellaneous cost	200 (0.12)	195 (0.15)	135 (0.33)	100 (0.28)	115 (0.25)
	Sub-total	**5,902.39 (3.65)**	**5,284.98 (3.95)**	**3,164.95 (7.65)**	**3,074.59 (8.64)**	**3,334.94** (7.31)
7	Retailers selling price or consumers purchasing price	1,61,592.35 (100.00)	1,33,868.94 (100.00)	41,367.51 (100.00)	35,570.39 (100.00)	45,604.80 (100.00)

(Figures in the parentheses indicate percentage to total)

In case of channel-II, the price spread is presented in Table 2. Net prices received by the forest depot in transacting ofSissum, Teak, Matti, Nandi and Acacia wood were ₹ 1,11,787.06,₹91,847.06,₹ 25,197.06, ₹ 20,997.06 and ₹ 28,234.06 per m^3respectively.The total marketing cost incurred by forest depot was included stacking, transportation, unloading and average dragging cost for all the timber species. These costs were same for all the timber species.The total marketing cost incurred by saw millers was highest in Sissum (42,411.97) followed by Teak, Acacia, Matti and Nandi had lowest total marketing cost (₹ 10,007.80). The overall marketing costs were ₹ 49,805.29, ₹42,021.87, ₹ 16,170.44, ₹ 14,573.32 and ₹ 17,370.73 per $m^3$for Sissum, Teak, Matti, Nandi and Acacia wood respectively. In percentage terms, the marketing costs accounted 30.82, 31.39, 39.08, 40.97and 38.09 per cent respectively. The total marketing cost incurred by retailers was included transportation, loading and unloading, finishing, licence fees, market fees and miscellaneous cost. These costs were different for all the timber species. In Sissum it is highest (₹ 5,902.39 per m^3) among all five species because the quality of Sissum wood is much better than other species and therefore fetches higher cost followed by Teak, Acacia, Matti and Nandi has lowest total marketing cost because of the reason, the operations done in Nandi was very easy and less work forces is required for these activities The similar result was reported by **Negi *et al.* (2001).**

Table 3: Producer's share in consumer's rupee in channel-I

Species	Net price received by the government (₹ per m^3)	Consumers purchasing price(₹per m^3)	Producer's share in the consumer price (%)
Sissum	1,11,787.06	1,58,613.53	70.48
Teak	91,847.06	1,31,076	70.07
Matti	25,197.07	39,266.32	64.17
Nandi	20,997	33,365.56	62.93
Acacia	28,234.06	43,214.36	65.33

Table 4: Producer's share in consumer's rupee in channel-II

Species	Net price received by the government (₹ per m^3)	Consumers purchasing price (₹ per m^3)	Producer's share in the consumer price (%)
Sissum	1,11,787.06	1,61,592.35	69.18
Teak	91,847.06	1,33,868.94	68.61
Matti	25,197.06	41,367.51	60.91
Nandi	20,997.06	35,570.39	59.03
Acacia	28,234.06	45,604.8	61.91

Producer's share in consumer's rupee

From the Table 3 and 4 it is seen that, the producer's share in consumer's rupee for the marketed wood were more in case of channel-I i.e., Sissum (70.48%), Teak (70.07%), Matti (64.17%), Nandi (65.33%) and Acacia (65.33) whereas, it was low in case of channel- II i.e., Sissum (69.18%), Teak (68.61%), Matti (60.91%), Nandi (59.03%) and Acacia (61.91%). This infers that, transacting wood through channel-I has significantly improved the producer's share in consumer's rupee for all the selected commodities. The producer's share in consumer's rupee for the marketed wood was more in case of channel-I as compared to channel-II.Because of the reason that, in channel- I the involvement of intermediary was only one due to this the total marketing cost was also less as compared to channel- II in all the five species. The producer's share in the consumer price was highest in channel-I.The similar result was reported by **Anchal and Sharma (2009)**.

Table 5: Marketing efficiency in channel- I and II

Species	Channel- I		Channel- II		Marketing efficiencyindex	
	Value of timber sold (₹/m^3)	Total marketing cost (₹/m^3)	Value of timber sold (₹/m^3)	Total marketing cost (₹/m^3)	Channel-I	Channel-II
Sissum	1,58,613.53	46,826.46	1,61,592.35	49,805.29	2.39	2.24
Teak	1,31,076	39,228.93	1,33,868.94	42,021.87	2.34	2.19
Matti	39,266.32	14,069.25	41,367.51	16,170.44	1.79	1.56
Nandi	33,365.56	12,368.49	35,570.39	14,573.32	1.70	1.44
Acacia	43,214.36	14,980.29	45,604.8	17,370.73	1.88	1.63

Marketing efficiency

From the Table 5, it is seen that the lower total marketing cost in transacting the wood through channel-I, resulted in higher index of marketing efficiency in selected species i.e., Sissum, Teak, Matti, Nandi and Acacia whereas, the channel-II was less efficient in marketing of all the selected species.For all the species the channel-I was more efficient as compared to channel-II.The similar result was reported by **Namasivayam and Richard (2006).**

6. Conclusion

The total marketing cost incurred in the transaction of different timber species in channel-I was less as compared to the channel-II because the involvement of intermediaries were less in channel-I, whereas in channel-II the involvement of intermediaries were more.The producer's share in consumer's rupee for the marketed wood was more in case of channel-I as compared to channel-II. In channel-I the involvement of numbers of intermediaries was only one due to this the total marketing cost was also less as compared to channel- II in all the five species.For all the species the channel-I was more efficient as compared to channel-II because the lower total marketing cost in transacting the wood through channel-I resulted in higher index of marketing efficiency in selected species.

References

[1] Acharya, B. M., 2004, Market analysis of major products from community managed forests: a study from the foothill watershed of Nepal. *M. Sc. Thesis*, Asian Institute of Technology, School of Environment, Resources and Development, Thailand.
[2] Anonymous, 2006, Study report on tropical timber trade and prospects in India. National Status Report on Forests and Forestry in India by Ministry of Environment andForests Government of India, New Delhi, pp. 143-172.
[3] Anchal, D. and Sharma, V. K., 2009, Price spread of Litchi in Punjab, *Ind. J. Agril. Mktg.*, **23**(2): 147-153.
[4] Chinnappa, B., 2001, Price spread analysis in Arecanut marketing. *J. Plantation Crops*,**29** (3): 38-41.
[5] Negi, M. S., Anasari, M. Y. and Singh, H. P., 2001, Market channels in Agro-forestry products- A case study of Yamunanagar, Haryana. *Indian Forester*, **127**(5): 519-525.
[6] Namasivayam, N. and Richard, P. V., 2006, Price spread in marketing of Coconut in Tamil Nadu. *Indian J. Mktg.*,**34**(7): 67-68.
[7] Pandit, A., Rajesh, K., Rana, Pandu, N. K and Kumar, N. R., 2003, Potato marketing in India. *Karnataka J. Agric. Sci.*,**2**(3): 35-36.
[8] Rajput, A. M. and Verma, A. R., 2000, Economics analysis of production and marketing of groundnut in Khargone district of Madhya Pradesh. *Indian J. Agric. Mktg.*, **14**(1): 65-72.
[9] Sundar, A. and KombaiRaju, S., 2005, Price spread analysis on marketing of *Gloriosasuperba* in Tamil Nadu.*Indian J. Arecanut, Spices & Medicinal Plants*,**7**(3): 107-112.
[10] Talathi, J. M., Wadkar, S. S., Veerkar, P. D. and Vaidya, K. P., 2005, Marketing of Sapota in Konkan Region. *Indian J. Agric. Mktg.*, **48**(2): 53-64.