



Research project of counterparts funded at UNJA

Name	Counterpart	Title
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Background and Methods

Rubber is the most valuable export crop produced by small scale agriculture in Jambi province and plays a key role in inclusive economic development. Jambi province is also the third most important rubber producing region in Indonesia. Rubber is also favoured by farmers because it is easy to cultivate and process and because farmers directly receive the economic value from producing it. Although rubber plays an important role as a source of farm income, the price they receive is always low. It also differs between regions within Jambi. The objectives of this study were therefore two fold. First to describe the pattern of rubber marketing from farmers to crumb rubber factory in Jambi and, second to analyze the differences in the rubber price within Jambi. We used a survey method for our investigation concentrating on Sarolangun District, the region with the highest price and Muaro Jambi District, the region with the lowest price. We collected data from both primary and secondary sources.

Results

The pattern of rubber marketing from farmers to crumb rubber factories

The marketing channel consists of several marketing chains depending on several marketing agencies involved in marketing the bokar (rubber pre processed by the small holders producing it). Marketing channels in Bukit Baling Village, Sakernan Subdistrict, for rubber products include several interacting components (Figure 1).

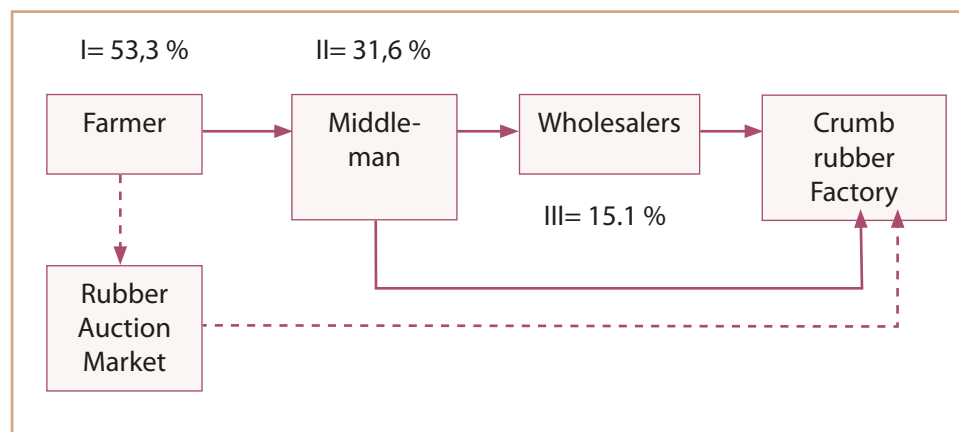


Figure 1. Chain of Rubber (Bokar) Marketing in Bukit Baling Village

Based on the marketing chain (Figure 1), there are three marketing channels for bokar in Bukit Baling Village. One is marketing channel I, used by as many as 32 (53.3%) of farmers. The others are marketing channel II (used by 19 farmers, 31.6%) and marketing channel III (9, 15.1%) of all farmers. Marketing channel I involves large traders in the process of marketing bokar to the rubber processing factory. These channels are traditional marketing patterns. The marketing patterns for bokar are not generally well coordinated. The marketing chain is also relatively long and the rubber produced by the community is of low and varied quality.

The area with high rubber prices is the Mandiangin subdistrict of the Sarolangun district. This subdistrict is the largest rubber planting area in the District and has the most rubber farmers. In this subdistrict we selected Jati Baru village for our survey. The rubber sold in this village is not as rectangular as usual in other villages. Instead, the rubber is moulded and sacked up (Figure 2).



Figure 2. Bokar stored in the Sacks in Jati Baru village, Merangin subdistrict

This marketing channel is used by quite a lot of farmers in the high price region. This channel is divided into two. As much as 73.3% of farmers used the first channel and sold rubber through village traders. The remaining farmers used the second channel. They sell their bokar to a large warehouse in the city (Figure 3).

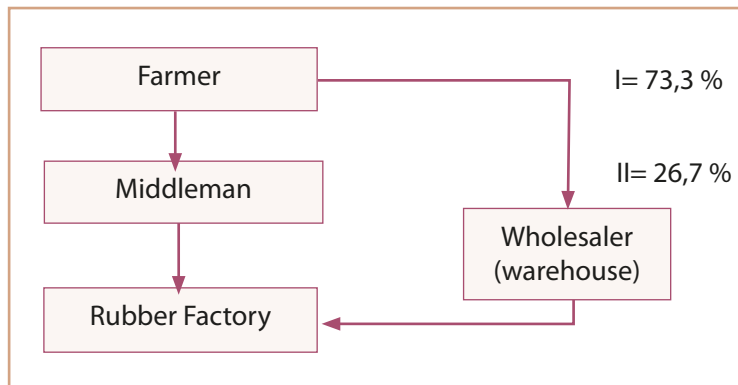


Figure 3. The Marketing Channel in the Region with High Price

Margin and marketing efficiency in rubber marketing to crumb rubber factories

The lowest marketing margin, Rp. 1375 per kilogram, is for marketing channel I. This is because farmers directly sell bokar to wholesalers thereby reducing the involvement of middlemen. The margin for marketing channel II is Rp. 1750 per kilogram and that for channel III Rp 1575 per kilogram. Marketing channel II is the marketing channel which has the highest marketing margin because in marketing channel II farmers sell bokar to middlemen. The middlemen sell to wholesalers and the wholesalers sell to the rubber processing factory. The length of the marketing chain causes the high margin on the marketing channel II. The efficiency of marketing institutions for bokar differs between marketing channels (Table 1).

Table 1. Efficiency of Rubber Institutions in each Marketing Channel in Bukit Baling Village, Sakernan District, 2018

No	Marketing institution	Marketing Efficiency		
		Channel I	Channel II	Channel III
1	Middleman		4.43	11.47
2	Wholesaler	9.85	11.10	

All institutions involved in the bokar marketing channel are classified as efficient because the efficiency value is below 33%. However, the most efficient marketing institutions are collector traders with an efficiency value of 4.43% percent in marketing channel II, followed by wholesalers in marketing channel I (9.96%), wholesalers in marketing channel II (11.10%) and middlemen in the marketing channel III (11.42%).

There are differences in marketing margins at the level of the middlemen and wholesalers in Jati Asih Village. The marketing margin at the level of the middlemen is IDR. 1725 for every one kilogram of processed rubber and for the wholesaler the marketing margin is IDR. 1400 per kilogram. Furthermore, the marketing costs at the level of the middlemen are IDR. 570 per kilogram with a profit margin of IDR. 1155 per kilogram, followed by marketing costs for the wholesaler of IDR. 400 per kilogram and profit margins of IDR. 1000 per kilogram. The marketing efficiencies of the institutions involved in rubber marketing activities in Jati Asih Village, Mandiangin sub-district are summarized (Table 2).

Table 2. Marketing efficiency institution in Jati Asih, Village 2018

	Rubber Selling Price	Amount of Rubber Marketed	Total Value of Sold	Total Marketing Cost	Marketing Institution efficiency
	(IDR/kg)	(Kg)	(IDR)	(IDR)	(%)
Wholesaler	9.050	14,000	126,700,000	5.600.000	4.42
Middlemen	8.875	39,000	346,125,000	22.230.000	6.42

The efficiency in Jati Asih Village is less than 33% so the most efficient channel is from the farmer straight to loading or warehouse on the way to the factory.

Identification of the causes of inter-regional price differences in Jambi Province

Based on the results of research conducted in Muaro Jambi and Sarolangun Districts, several causes of price disparity can be identified (Table 3).

Table 3. Factors causing price differences for smallholder Bokar in Jambi Province

No.	Component	Muaro Jambi District	Sarolangun District
1	DRC (%)	40-45	50-60
2	Bokar Size (cm)	40x70 (sack 20 kg)	56x90 (sack 50 kg)
3	Bokar Price (IDR/kg)		
	- Auction Market	No more	
	- Non Auction Market	8.760	11.110
4	Bokar Handling	Giving Tatal and other ballast	Soak and dried
5	Depreciation (%)	10	5
6	Freezing Material	Chemical liquid	Chemical liquid
7	Selling frequency	3 days and one a week	One and twice a month
8	Tapping Frequency	Every day	Once every 2 days

The factors causing price differences group into three main categories: (1) the quality of bokar produced, (2) the marketing mechanism of the farmers and (3) the frequency of bokar sales (Table 3).

Conclusion

The pattern of marketing rubber both in regions with low and high prices of bokar has three marketing channels but in regions with high prices there are only two

Marketing institutions involved in marketing bokar produced by farmers are middlemen, wholesalers and crumb rubber factories where efficient marketing channels are the shortest channel, both in areas with high and low prices. The reason for the high difference in rubber prices between the two districts is the difference in the quality of rubber materials, the marketing mechanism and the frequency of bokar sales.