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RICE DISTRIBUTION NETWORK IN CẦN THƠ CITY

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Based on direct interviews with 165 participants in the rice distribution network in Cần Thơ City as well as descriptive statistic methods and cost-benefit analysis, the research has portrayed the distribution network and evaluated the economic efficiency of the network participants. The results show that there are six rice distribution channels in Cần Thơ City in which rice retailers gain the highest profit margin, followed by merchants, husking factories, rice-farming households, and food companies. Yet, merchants and food companies, due to their large trading quantities, are those who reap the biggest profits.

Keywords: rice distribution, profits margin, gained value

1. Introduction

Vietnam has been an agricultural country and its government is extremely concerned with developing agricultural products which are deemed as the strength of Vietnam. Particularly, rice production always plays a vital role in the national food security and the export of rice also contributes a lot to GDP. The rice market has grown busy and more competitive; and the government therefore plans to facilitate the rice production of the country in general and of the Mekong Delta in particular. However, there are a lot of setbacks in rice production. In the Mekong Delta for example, in spite of a huge rice output produced annually, very few farmers become rich thanks to their rice selling. They have to bear the high production cost while the rice price is extremely low as compared to the price paid by end users. Therefore, it is needed to investigate the current rice distribution network with a view to exploring setbacks which, if solved well, can help enhance the living standard of rice-farming households as well as facilitate the distribution of rice.

Cần Thơ City is one of the vastest rice paddies and a commercial hub in the Mekong Delta, yet its rice distribution network is also a matter of concern. This is to say, to investigate the rice distribution network in Cần Thơ City is really necessary in a hope of exploring and solving setbacks for the sake of Cần Thơ City in general and of the Mekong Delta in particular.

2. Methodology

The secondary data are collated from previous researches related to the rice distribution network, reports by the Cần Thơ Municipal Department of Agriculture and Rural Development and the Agricultural-Fishery Extension Center. Besides, the stratified random sampling will be employed to collect primary data. The research is conducted with the support of 165 participants (comprising 95 rice-farming households, 14 merchants, 46 retailers, 13 managers of husking factories, and 2 managers of food companies), and questionnaires which are suitably designed for each group of participants.

This research employs descriptive statistics such as mean, frequency, and rate to describe the rice distribution network. Simultaneously, the cost-benefit analysis is also utilized to evaluate the economic efficiency of such participants in the network.

3. Results and discussion

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a. Description of rice distribution network:

According to the data, most rice-farming households do not have a stable output market. Hence, after the harvest, around 80% of their rice output is sold to merchants, 8.4% to husking factories, 8.4% to food companies, 2.1% to retailers, and 1.1% to end users. Merchants are very mobile and have good knowledge of the local rice-farming households, and they even can reach remote areas and weave their way through a criss-cross of rivers and canals, which food companies can scarcely do. In addition, peasants often sell their rice to merchants because they do not own any means of transport. Then, merchants will classify and sell 50.5% of their rice stock to food companies, 25.2% to retailers, and around 1.1% to husking factories. Rice, after being processed in husking factories, will be sold to retailers (2.3%), food companies (7.5%), and end users (0.7%). Retailers then supply the amount of rice they have bought to local consumers. Food companies, after collecting rice from rice-farming households, merchants, and husking factories, will classify, package, label and distribute finished rice products to supermarkets and shops, just 8.6% of which is for local consumption and 60% for export.

Based on the rice distribution network map, one realizes six different distribution channels shown in Table 1:

Of six distribution channels, there are three major ones namely channels 1, 2 and 3, as they can transport enormous volumes of rice. Table 1 reveals the important role of merchants in both channels 1 and 2.

b. Transportation and payment modes in the distribution network:

The results show that merchants, food companies, or husking factories purchase and transport rice from rice-farming households with their own boats. Meanwhile, retailers acquire and transport rice by their motorbikes or vans, and food companies distribute finished rice to their customers by trucks.

Regarding payment mode, all rice transactions are paid in cash. Rice-farming households and husking factories usually do not permit their customers to pay in installments. Merchants allow 51.4% of their customers to defer payment for 7.4 days, and some 32.4% of customers of retailers can defer payment for 7.8 days.

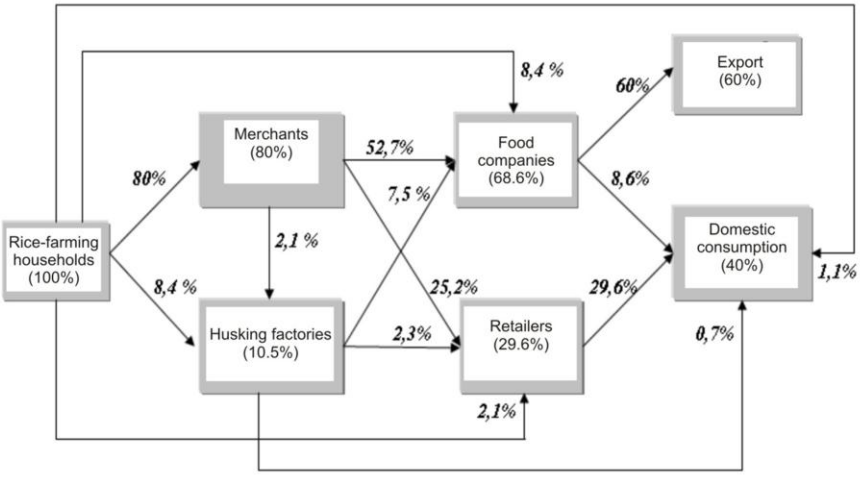

Figure 1: Rice distribution network in Cần Thơ City

Table 1: Rice distribution channels in Cần Thơ City

Channel		Participants				
1	1A	Rice-farming households	Merchants	Husking factories	Retailers	Consumers
	1B				Food companies	
2	2A	Rice-farming households	Merchants		Retailers	Consumers
	2B				Food companies	
3	3A	Rice-farming households		Husking factories	Retailers	Consumers
	3B				Food companies	
4		Rice-farming households		Husking factories		Consumers
5	5A	Rice-farming households			Retailers	Consumers
	5B				Food companies	
6		Rice-farming households				Consumers

Table 2: Payment modes in the distribution network

Participant	Ratio of immediate payments	Deferred payment	
		As %	Deferral period (day)
Rice-farming households	100.0	0.0	0
Merchants	48.6	51.4	7.4
Husking factories	100.0	0.0	0
Retailers	67.6	32.4	7.8

Source: Author's survey (2010)

Table 3: Sale price and profits for participants in distribution channels (VND/kg)

Channel		1A	1B	2A	2B	3A	3B	4	5A	5B	6
Rice-farming households	Sale price	4,107	4,107	4,107	4,107	4,137	4,137	4,137	4,265	4,201	4,313
	Profit margin	1,407	1,407	1,407	1,407	1,437	1,437	1,437	1,565	1,501	1,613
Merchants	Sale price	4,717	4,717	6,945	6,906						
	Profit margin	481	481	642	618						
Husking factories	Sale price	6,897	6,872			6,951	6,912	7,032			
	Profit margin	536	527			665	654	1,007			
Retailers	Sale price	8,284		8,284		8,284			8,284		
	Profit margin	792		801		823			1,265		
Food companies	Sale price		8,000		8,000		8,000			8,000	
	Profit margin		625		682		678			1,196	

Source: Author's survey (2010)

Table 4: Proportion of value gained by participants in distribution channels (%)

Channel	1A	1B	2A	2B	3A	3B	4	5A	5B	6
Rice-farming households	43.7	46.3	49.4	52.0	49.1	51.9	54.3	55.3	55.7	100.0
Merchants	15.0	15.8	22.5	22.8						
Husking factories	16.7	17.3			22.7	23.6	45.7			
Retailers	24.6		28.1		28.2			44.7		
Food companies		20.6		25.2		24.5			44.3	

Source: Author's survey (2010)

c. Value gained by participants in distribution channels:

Gained value of rice-farming households in channel 6 reaches 100% due to the fact that they directly sell their products to consumers, bypassing middlemen, and their sales do not incur transport cost because their consumers are the locals. Additionally, their gained values are rather high in channels 5B, 5A, 4, 2B, and 3B, reaching 55.7%, 55.3%, 54.3%, 52% and 51.9% respectively.

The performance of merchants in channel 2 is more efficient than in channel 1. The gained values in channel 1 and 2 are 15% (channel 1A), 15.8% (channel 1B), 22.5% (channel 2A), and 22.8% (channel 2B). Due to the fact that merchants in channels 2A and 2B directly sell their stock to retailers and food companies without needing a husking factory, their gained values are higher.

Husking factories perform better in channel 4 and 3, gaining 45.7% of the value generated in channel 4, some 22.7% in channel 3A, and 23.6% in channel 3B. In channel 1, because they have to depend on rice supplied by merchants, the values for husking factories are not high, just around 16.7% in channel 1A and 17.3% in channel 1B.

Although the stock they buy is not as large as that of merchants, husking factories and food companies, the retailers still receive a higher value than others apart from rice-farming households. They gain some 25% of the value generated in the channel on average, and the highest level (44.7%) is found in channel 5A

Concerning food companies, their gained values in channels 1B, 2B, 3B and 5B are 20.6%, 25.2%, 24.5% and 44.3% respectively. In channel 5B alone, their value is higher than that in other channels due to the fact that they directly acquire rice from rice-farming households without needing any middlemen.

d. Performance of participants in distribution channels:

It is apparent that the profit margin of retailers is the highest in comparison with the remainder, reaching 32% per month. They are followed by merchants and husking factories whose monthly profit margins are 18.9% and 18% respectively. Rice-farming households, though directly producing rice, are placed fourth among five participants in the network with 17.6% in terms of profit margin. Food companies receives the lowest profit margin (around 14.2%); yet instead, a majority of rice volumes in most channels falls into their hands, and thus their real profits are very high.

Table 5: Profit margins of participants in distribution channels

Subjects	Monthly profit ratio (%)	Rank
Rice-farming households	17.6	4
Merchants	18.9	3
Husking factories	18.0	2
Retailers	32.0	1
Food companies	14.2	5

Source: Author's survey (2010)

4. Conclusion and policy implications

The research on the rice distribution network in Cần Thơ City shows that although rice-farming households directly produce rice, their profit margin is just placed fourth among five players in the network. This implies the production efficiency of rice-farming households does not correspond to their investments, and thereby adversely affecting the sustainable development of rice production. Therefore, the important goal is to enhance the proportion of value distributed among rice-farming households.

Based on the empirical study, the author pinpoints the reasons for the low value gained by rice-farming households as follows: (1) the rice distribution network has not been perfected and market for rice from peasants is not stable, (2) rice-farming households lack market information and cannot get access to governmental backups, (3) the relationship between rice-farming households and other participants, especially food companies, is not sufficiently close, and (4) rice-farming households lack resources for development, especially capital and technologies.

The following are some suggestions about ways to tackle these problems in Cần Thơ in particular and in the Mekong Delta in general:

Firstly, the rice distribution network should be restructured to assure a stable output market for rice-farming households and national food security as well as to avoid a virtual food crisis.

Secondly, information about market supply and demand and governmental supportive policies should be disseminated among rice-farming households. At the same time, the execution of the government's rice price stabilization policy should be stringently manipulated in a hope of assuring a stable output market and boosting economic efficiency of rice-farming households. Additionally, it is crucial to attend to the flexibility and sensitiveness of the stabilization policy.

Thirdly, continue to consolidate and promote the linkage between four parties (peasants, scientists, businesspersons, and government) in rice production, consumption and processing as directed by Decree 80/2002/QĐ-TTg, espeically the reciprocity between rice-farming households and food companies.

Fourthly, financial aids, technical advances and scientific application models are urgent for the sake of rice-farming housholds, and thereby need promoting.

In brief, it is urgent to enhance the gained value for rice-farming households in order to assure a sustainable development of agriculture and the national food security■

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