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CONTRIBUTION OF FINANCIAL INSTITUTIONS TOWARDS THE DEVELOPMENT OF PATCHOULI AGROINDUSTRY IN ACEH JAYA DISTRICT OF INDONESIA

Nura Uswatun Hasanah^{1*}, Fajri^{1,2}, Nugroho Agus^{1,2}

¹Department of Agribusiness, University of Syiah Kuala, Banda Aceh, Indonesia

²Atsiri Research Center, University of Syiah Kuala, Indonesia

*E-mail: uswa.h.nura@gmail.com

ABSTRACT

Patchouli is one of the important livelihoods for Aceh Jaya Regency's community. It has recorded as the highest prices in Indonesia, but has continued to decline until now. One of its obstacles is lack of finance or working capital needed by farmers during the cultivation and harvest period. Financial contributions that can be given to patchouli farmers are patchouli loans from banking, cooperatives, and their personal capitals. This study aims to determine the financial contribution provided by financial institutions in patchouli agroindustry. The method is used observation and interview obtained from primary data and secondary data analyzed by descriptive qualitative and quantitative methods. The conclusion from the results of the study indicates that the contribution of financial institutions towards the development of patchouli agroindustry in Aceh Jaya Regency has not played a significant role. Also the perception of financial institutions on the risk of patchouli farming in Aceh Jaya Regency can be categorized as low. In additional, the policies of financial institutions towards the development of patchouli agroindustry are similar to other commodity agroindustry development policies.

KEY WORDS

Financial institutions, perception, credit risks, Aceh patchouli oil.

Historically, Indonesia has been supplying up to 90% of the world's patchouli oil demands, and 70% of them mainly come from Aceh; nevertheless, Aceh only supplies 15-20% of the total amount exported by Indonesia currently. Aceh Patchouli (*Pogostemon cablin* Benth), is one of the best patchoulis in the world that have contained Patchouli Alcohol (PA) with an average over 30%. Essential oils are commonly produced through the distillation process using steam. The total production of Indonesian essential oils ranges from 5,000 - 6,000 tons with a total value of USD 125 million - 150 million. Nearly 80% of Indonesia's essential oils are exported which the main commodities are clove oil, patchouli oil and nutmeg oil respectively. It consists of 60% crude essential oil, 30% derivative products, and 10% products final form; such as food, medicines, cosmetics, and others (Aceh Planning Agency, 2016).

One of the livelihoods in Aceh Jaya is patchouli farming. Farmers conducted patchouli cultivation from generation to generation until now. Patchouli cultivation is one of the businesses that they proud of; wherefore, it has been one of the commodities which have great contribution to their income. An important factor for the sustainability of this agroindustry is the capital or financial contribution of financial institutions. The need for a capital makes one have to borrow from the other parties, such as banks, cooperatives, and other partners. The development of this agroindustry in Aceh Jaya faces a lot of problems, includes both of the farmers and the industrial. Farmers often face obstacles in capital; whether in the initial capital of cultivating and in harvesting. These are due to the lack of finance owned and farmers tend to take a loan from other parties such as banks, cooperatives, and other non-partners. In addition, these financial problems are also exacerbated by the declinable prices, or the unstable harvest time. It is also happened in Patchouli industry, there are some constraints; such as raw materials' availability, qualities control, prices control, buyers and so on.

METHODS OF RESEARCH

The data used in this study are observation and interview data, so the researcher designed a questionnaire for patchouli farmers. The data were obtained from two sources, which were a primary data and secondary data. Primary data obtained from interviews and filling out questionnaires. Secondary data is obtained from library studies, relevant agencies and institutions, and literature related to the problem. After collecting data, it was analyzed using quantitative analysis.

Analysis of the Contribution of Financial Institution. The analysis equation used is as follows:

$$K_i = \frac{P_i}{P_{(Total)}} \times 100\%$$

Where: K_i = Financing Contribution (%); I = Banking, Cooperative, Personal Capital; P_i = Financing/Loan Facility Provided (Rp); $P_{(Total)}$ = Overall Financing (Rp).

The sum of overall finances are financing from banking, financing from cooperatives, and financing from personal capital; mathematically, it can be written as follows:

$$P_{(Total)} = P_b + P_{kop} + P_{mp}$$

Where: $P_{(Total)}$ = Overall Financing (Rp); P_b = Bank Financing (Rp); P_{kop} = Cooperative Financing (Rp); P_{mp} = Personal Capital Financing (Rp).

Widodo (2003) in Fahrudin (2011) suggested that to determine the contribution of financial institutions towards the development of patchouli agroindustry, the following criteria are used:

- If the contribution of financial institutions is <35% of the total patchouli financing, it is categorized as low;
- If the contribution of financial institutions is 35% - 70% of the total patchouli financing, it is categorized as medium;
- If the contribution of financial institutions is >70% of the total patchouli financing, it is categorized as high.

An Analysis of Financial Institutions' Point of Views on Patchouli Risk. The analytical method used is qualitative analysis which is presented descriptively based on the results of interviews guided by the questionnaire. First, the study was conducted by searching and collecting data, while the data was obtained from the results of the implementation study's report, then identified the risks. The data includes a data from financial institutions in addressing the risks that occurred, as well as other related data.

Table 1 – Variables and Risk Perception Indicators of Financial Institutions

Description	Indicators
Risk profile of banking institutions in patchouli business	High Low
Risk for patchouli	Fail to Harvest Not Paying Bad Loan Passed Away
Loan payment rate	Smooth Not Smooth
Government contribution to risk reduction (accommodation)	There is There is Nothing

Source: Primary data, processed, (2018).

RESULTS AND DISCUSSION

This study was conducted in Aceh Jaya Regency. The population of this study was all parties involved in the development of patchouli agroindustry in Aceh Jaya. The sample of this study were 6 banking institutions, 2 patchouli cooperatives, and 40 patchouli farmers in the study area, while the sampling techniques was using *purposive sampling* technique.

Table 2 – Characteristics of Patchouli Oil Production in Aceh Jaya Regency, 2018

No	Description	Unit	Frequency	Percentage (%)	Average
1	Land Area	Ha			1,22
	<1		6	15	
	1		25	62,5	
	2		6	15	
2	Production	Kg			140,75
	< 100		12	30	
	100 – 200		21	52,5	
	201 – 300		4	10	
	301 – 400		2	5	
3	Price	Rp			396.500
< Rp. 400.000	18		45		
Rp. 400.000	10		25		
> Rp. 400.000	12		30		

Source: Primary data, processed, (2018).

Table 3 – Characteristics of Patchouli Farmers in Aceh Jaya Regency, 2018

No	Description	Unit	Frequency	Percentage (%)	Average
1	Gender	Man			Man
	Male		38	95	
2	Age	Years Old			43
	Not Productive yet: <15		-	0	
	Productive: 15 - 64		38	95	
3	Last Education	Year			Senior High School
	Elementary School		9	22,5	
	Junior High School		6	15	
	Senior High School		24	60	
	Undergraduate		1	2,5	
4	Work Experience	Year			17
	1 – 10		16	40	
	11 – 20		13	32,5	
	21 – 30		7	17,5	
	31 – 40		4	10	
5	The Number of Dependents	Life			4
1 – 3	12		30		
4 – 6	22		55		
7 – 10	2		5		

Source: Primary data, processed, (2018).

Table 4 – Characteristics of Financial Institutions in Aceh Jaya Regency, 2018

No	Location	Bank	Sum	Cooperative	Sum
1	Lamno	BRI BPD	2	KINA Jaya	
				Member	120
				Management	15
				Educational Management	Senior High School
				Total Assets	Rp. 338.000.000
2	Calang	BRI BPD Mandiri	3	KKMB	
Member	> 100				
Management	60				
Educational Management	-				
Total Assets	Rp. 3 Billion				
Average Loan	Rp. 2.000.000 – Rp. 5.000.000				
3	Krueng Sabe	Bank BPD	1	The Total of Cooperative	2
The Total of the Bank			6		

Source: Primary data, processed, (2018).

In this study, the profit meant the number of receipts reduced by the costs spent by patchouli farmers. The quality and the oil amount produced, is different in each distillation area which depends on how much Patchouli Oil (PA) contained within the patchouli oil itself. The rate of production and price quality highly affects the receipts and the profits that patchouli farmers will get.

Table 5 – Receipts and Profits of Patchouli Farmers in Aceh Jaya Regency, 2018

Description	Average
The amount of patchouli oil production (Kg/Ha)	140,75
Price (Rp/Kg)	396.500
Receipt (Rp/Kg)	55.695.000
Cost per harvest (Rp)	24.350.000
Profit (Rp/Ha)	31.345.000

Source: Primary data, processed, (2018).

Table 5 shows that the average of patchouli farmers' receipts is Rp. 55,695,000 per kg, and the average of profit is Rp. 31,345,000 per Ha obtained from 40 farmers of the sample. From the receipts that were obtained, the farmers had only gotten a small profit; furthermore, they have had to reduce for the costs spent. They used profits to cover the costs, to meet family needs and be to save for saving. Other farmers chose to store the oil to sale when it needs in high prices.

According to Ginting (2012) contributions have a meaning, which are participation, involvement, and accomodation. As the one contribute, it means an individual tries to improve the efficiency and effectiveness in his life. Whilst Fatriani (2010) said the magnitude of the contributions or the accomodation of each business towards overall income, can be seen by the number of income. In this study, the contributions of financial institutions is the total number received by the farmers from the cultivation period to the harvest period. It comes from banking institutions, cooperatives and personal capital of the farmers.

Table 6. The Contributions of Financial Institutions towards Patchouli Agroindustry Development in Aceh Jaya Regency, 2018

No	Description	Contribution	Percentage (%)
1	Banking	0	0
2	Cooperative	500.000	2,01
3	Personal Capital (Farmer)	24.350.000	97,99
	Total Financing	24.850.000	-
	Sum		100

Source: Primary data, processed, (2018).

Table 6 shows that the contributions of patchouli farmers along with personal capital is the highest contributions, which is 97.99% of the total. This means the contributions of financial institutions towards the development of patchouli agroindustry in Aceh Jaya is low. This is due to a lot of farmers used personal capital to conduct the businesses. They did not take a loan at all at banking, while only some farmers borrowed from cooperatives. Farmers who did not take a loan assumed the terms and conditions provided by banks and cooperatives were difficult, and others did not take it because they still had personal capital. If there was an urgent situation, the farmer would borrow from their relatives and neighbors.

The policy refers to the response of banking institutions and cooperatives towards patchouli farmers to face various terms and conditions in taking the loan.

According to Swandari (2002), the main function of a bank is as an intermediary institution. It means its act as an intermediary from parties whose excess funds can temporary given to other parties who are underfunded. Whereas according to Astohar (2009), the banking industry as an intermediary, plays an important role in the economic matters which 80 percent financing by the institutions is carried out by banks through loan.

The results of the study indicated that the banking policies are as follows: 1) Based on analysis of the appropriateness; 2) Loan Interest; 3) Compatibility between loan amounts and

funding requirements. Banks provided the loan to the farmers who agreed to the existing terms and conditions. Only 1 bank provided loans to farmers out of 6 institutions in the study area. The other 4 had not provided the loan, because there were no farmers who had come to borrow, and the other one refused to confirm. Banking provided general loan interest, by 14% per year, and 7% per year for KUR loan. Loaning was given and adjusted to the capabilities also the needs to be carried out by a survey. There was a restriction on the maximum amount of loans given to farmers, not only patchouli, but also other commodities such as palm oil, rice and so on.

Cooperatives are an institution originating from the community for the community. It can be seen from the number of established cooperatives aims to help the surrounding community, especially farmers. According to Peterson (2005) cooperatives must have competitive advantages compared to other business organizations to win the competition in globalization and free trade era.

The results of the study indicated that the Cooperative policies are as follows: 1) Based on analysis of the appropriateness; 2) Loan Interest; 3) Compatibility between loan amounts and funding requirements. KINA Jaya Cooperative did not have the conditions in providing loan to the farmers, while the KKMB has had obligations that have to be completed, which is identity card, family card and farmer group documents. The KINA Jaya Cooperative and KKMB did not take the loan's interest from the farmers. If a crop failure happened, the farmer could pay the loan installments on the next harvest. The number of loans given was adjusted to the needs of farmers when taking a loan with the maximum amount that determined by the cooperatives.

According to Stanton (2003) perceptions can be interpreted as a meaning that can be considered based on one's experiences, and there is stimuli received through the five senses of human. Setiadi (2003) defines perception as a process of how the stimuli given are selected, then organized, and interpreted.

The most common thing about loan is how big the risk that must be faced by the loan provider, because there are almost no loans that have no risk, especially against bad loans. Then, the loan provider carries out various efforts to minimize the risks, such as conduct location surveys, make a specified terms and conditions, and cooperate with the government in giving the interest or compensation. The explanation can be seen in the following table.

Table 7. The Risk Perception of Banking and Cooperative Institutions towards Patchouli Farmer Loans in Aceh Jaya Regency, 2018

Description	Indicators	Banking	Cooperative
Risk profile of banking institutions in patchouli business	1. High 2. Low	Low	Low
Risk for patchouli	1.Fail to Harvest 2.Not Paying 3.Bad Loan 4.Passed Away	Fail to Harvest Not Paying Bad Loan Passed Away	Fail to Harvest Bad Loan
Loan payment rate	1.Smooth 2.Not Smooth	Smooth	Smooth
Government contribution to risk reduction (accommodation)	1.There is 2.There is Nothing	There is	There is Nothing

Source: Primary data, processed, (2018).

Patchouli business was considered having a low risk. The risks that often occurred were crop failure and bad loan. If farmers were unable to pay the credit at the harvest or at the due date, farmers could pay at the next installment. Banking provided KUR loan for the farmers, which is 7% per year, and provided general loan interest, which is 14% per year. KUR loan was one of the government policies, which was expected to be able to help and to facilitate farmers in paying off or repaying credit of loans.

According to the cooperative (KINA Jaya), the risk often faced was crop failure. Patchouli business had a low risk, it was because the cost of patchouli cultivation loan usually can be paid on harvest time. If the crop fails which was caused by disease or other

natural disasters, it can be paid on the next period of patchouli harvest. For the refunds, it was still going smoothly because there was no loan interest. Without the loan interest and any terms and conditions applied, it was help and support of cooperatives for patchouli farmers, which were expected to help farmers in fulfilling their needs in loan capital. For contributions (accomodation) from the government, there has been no help or support given to the farmers through cooperatives until now.

In the contrary, according to the KKMB (Koperasi Kredit Maju Bersama), the loans given to patchouli farming have a risk, it was because a lot of bad loans occurred which causes the cooperatives cannot run a smooth system, and the capital given did not return. The main causes of bad credit were when the crop failures happen, farmers' awareness in paying or repaying the loan, and followed by the cooperatives which did not collect the bill from farmers or borrowers.

CONCLUSION

Based on the results of this study, the following conclusions are obtained as the following statements:

- The contribution of financial institutions towards the development of patchouli agroindustry in Aceh Jaya Regency has not played a significant role. The highest contribution comes from personal capital which is equal to 97.99%;
- Financial institutions' perceptions on the risk of patchouli farming in Aceh Jaya Regency can be categorized as low. Additionally, the policies of financial institutions towards the development of patchouli agroindustry were similar to other commodity agroindustry development policies. Banking policies were given in terms of providing a loan to patchouli farming by applying the same interest rate as other farms.

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