

Level of Motivation of Local Farmers in Running Rice Farming, Case Study in Semangga District, Merauke Regency

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Abstract: *This study aims to analyze the characteristics of farmers and the level of motivation and analyze the relationship between the characteristics of the motivation of local farmers in carrying out farming in the district of Merauke district. Data were analyzed quantitatively using a Likert scale and correlation. The results showed that the variables of farmer characteristics were quite high, the level of motivation level of farmers was high, the relationship between characteristics of motivation was significantly correlated.*

Keywords: farmer characteristics, level of motivation, motivation

1. Introduction

Indonesia is an agricultural country, where most people live from farming. Therefore, the development of the agricultural sector is a driving sector of economic development and the rate of economic growth. In this case the agricultural sector is still one of the support sectors which is expected in its growth process to meet the consumption needs of the people which tend to increase. This is indicated by the large number of people or labor who live or work in the agricultural sector, as well as national products derived from agriculture, meaning that agriculture plays an important role in the overall national economy (Mubyarto, 1986).

In response to food security in this country, it is necessary to have a government policy on agricultural potential specifically rice commodities. Some government policies on rice include policies on production, distribution, import and control of production prices and maintaining national food security. The policy of food production, especially rice, has been stated in Presidential Instruction No. 9 of 2002 concerning support in order to increase rice productivity.

In conducting farming, the beginning is based on the desire of individuals (farmers) to do something that brings purpose, the concept is motivation. Motivation is a process where the needs encourage someone to carry out activities that lead to the achievement of certain goals. Individuals who successfully achieve these goals mean that needs can be met or satisfied (Munandar, 2001).

Rice farmers in Papua Province are dominated by non-Papuan farmers or non-indigenous Papuan farmers, the dominant of whom is the transmigrant community in the village area. Secondary data on the percentage of non-Papuan population in the past seven years shows that there are five regions / districts whose population is dominated by non-Papuan residents.

Table 1: Number of Non-Papuan Population

No	District	Percentage of Non-Papuan Population
1.	Jayapura	65,09%
2.	Merauke	62,73%
3.	Keerom	58,68%
4.	Mimika	57,49%
5.	Nabire	52,46%

Source: BPS Province Papua Province 2010.

The presence of the transmigrant population brought the farming culture of the island of Java and the farming culture to be carried out again in Merauke Regency, one of which was the cultivation of lowland rice which from the beginning until now is still being cultivated by non-Papuan farmers. The culture of rice farming has now been adopted by local communities in the Merauke region and to date there are local Papuan rice farmers and non-Papuan rice farmers in the Merauke Regency who are cultivating rice crops.

Merauke Regency is the region that has the highest rice production in Papua Province, which is as much as 153,661.09 tons with productivity of 4.73 tons / ha (BPS, Papua Province, 2016).

Very high food potential in Merauke Regency, reinforced by food production data from the BPS of Merauke Regency in 2016 which shows potential districts that are the centers of food producers of rice commodities from 20 existing districts. The following are District Names and rice production / tonnes of BPS Merauke Regency in 2016.

Table 2: District Name and Production

No.	District Name	Production (tons)
1.	Tanah Miring	44. 792, 70
2.	Kurik	43. 777, 80
3.	Semangga	32. 015, 18
4.	Malind	16. 294, 30
5.	Merauke	5. 791, 80
6.	Jagebob	5. 563, 99

7.	Ulilin	1.435,20
8.	Elikobel	1.382,39
9.	Naukenjerai	595,40
10.	Muting	522,10
11.	Okaba	365,00
12.	Tabonji	330,00
13.	Kimam	320,70
14.	Waan	315,00
15.	Sota	74,58
16.	Tubang	44,00
17.	Animha	40,95
18.	Ilwayab	0,00
19.	Ngguti	0,00
20.	Kaptel	0,00

Source: BPS Merauke Regency Year 2016.

Local farmers in Semangga District number 470 people. The participation of local farmers in the cultivation of rice farming is very minimal compared to non-local farmers who dominate rice farming in Merauke Regency. For this reason, there is a need for further studies to analyze the characteristics of local farmers and analyze the level of motivation of local farmers in cultivating rice farming in the district of Merauke district to find out and measure any influential indicators in rice farming run by local farmers (Papua).

Purpose this study is:

- 1) Analyzing the characteristics of local farmers who run rice farming.
- 2) Analyzing the level of motivation of local farmers in carrying out rice farming.
- 3) Analyzing the relationship between characteristics with the level of motivation of local farmers in running rice farming

2. Review of Literature

2.1 Definition of Motivation

According to Robbin (2003), motivation is a process that produces an intensity, direction and individual perseverance in an effort to achieve one goal. While general motivation is concerned with efforts towards each goal. According to Nimran (2004) Motivation is a state in which one's efforts and strong will are directed towards achieving certain results. The intended results can be in the form of productivity or creative work behavior. The existence of several definitions above shows that motivation is important. Motivation is an encouragement or reason underlying the spirit of doing a concept, a concept that describes the strengths that exist within each individual to initiate and direct behavior. This concept is used to explain differences in the intensity of behavior where vibrant behavior is the result of a strong level of motivation.

2.2 Characteristics of Farmers

Farmer Characteristics are characteristics possessed by farmers which are displayed through mindset, attitude patterns and patterns of action towards the farming environment they are engaged in. According to Soekartawi 1993 Farmer characteristics are divided into two, namely

internal and external:

a) Internal Characteristics of Farmers

(1) Age, Farmer's age can be used as a benchmark or benchmark in seeing a person's activities in work where with age conditions that are still productive, most likely someone can work well and optimally. (2) Farming Experience, If farmers have experiences that are relatively successful in working on their farms, they usually have better knowledge, attitudes and skills compared to less experienced farmers. (3) Land area, the area of agricultural land will affect the scale of business and ultimately affect the efficiency of an agricultural business. (4) Farmer income, is the income of individuals or groups obtained from agricultural production activities.

b) External Characteristics of Farmers

(1) Availability of Sarpras, Sarpras on farming activities are a number of factors supporting farming activities as well as in rice cultivation are irrigation, agricultural equipment and machinery, whose purpose is to influence the effectiveness of agricultural activities and time efficiency. (2) Capital, In the context of this study is the amount of money used to buy production factors, such as fertilizers, pesticides, labor wages and other agricultural production facilities. (3) Marketing, is the process of distributing products from producers to consumers through its channels. (4) Information intensity, the higher the frequency of farmers participating in counseling, the higher the success of agricultural extension workers.

2.3 Definition of Farming

Business is an activity by mobilizing mind power or body to achieve a purpose. Farmers are a livelihood in the form of farming or livelihood in the form of cultivating land with planting. Farming is an organization of production in agricultural fields where there are elements of land that represent nature, elements of labor that are based on family members of the farmer, elements of capital of various types and elements of management or management whose role is brought by someone called a farmer to meet the needs of his family and looking for profit or profit. Moehar (2001), Farming is an effort that is carried out patani in obtaining income by utilizing natural resources, labor and capital in which a portion of the income received is used to finance expenditures related to farming.

3. Materials and Methods

This research was conducted at Semangga District, Merauke Regency. Time of research was from March to July 2018 with total of 85 respondents.

Objectives 1 and 2 Using Likert Scale Techniques and Descriptive Analysis. According to Sugiyono (2012) Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena. Descriptive analysis is used to examine the variables / indicators in the study by looking at the distribution of respondents' answers to the variables / indicators measured, from the distribution of the respondents will be obtained a tendency from the answers.

Objective 3 To find out whether there is a relationship between the two variables how closely the relationship between the two variables, measuring the closeness of the relationship with the scale of ordinal measurements can be known by using the Spearman correlation formula.

4. Results and Discussions

4.1 Characteristics of Local Farmers

The results show that the distribution of respondents' answers to the characteristics of local farmers from a sample of 85 respondents of local rice farmers in the district of Merauke district is as follows:

Table 3: Characteristics of Farmers

No.	Characteristics of Farmers	Level
1.	Age	Quite High (21-25 years)
2.	Farming Experience	Quite High (5-7 Years)
3.	Land Area	Quite High (1.1 - 2 Ha)
4.	One Harvest Income	High (20.1 - 40 Million)
5.	Facilities and Infrastructure	Quite High (Available)
6.	Capital	Quite High (5.1 - 10 Million)
7.	Marketing	Quite High (2 Partnerships)
8.	Information Intensity	Low (2 Sources)

Source: Primary Data, 2018.

The results show that, the indicator of the age of farmers at the beginning of running rice farming is dominant in the age range of 21-25 years and that age is productive age and is categorized quite high. In the indicator of farming experience shows that the dominant farmers do rice farming in the range of approximately 5-7 years which is categorized quite high, but previously the farmers have also carried out farming on other types of commodities. In the indicator of land area shows that the dominant area of rice fields cultivated by farmers ranges from 1.1 to 2 Ha which is categorized as high land area. The income indicator shows that the dominant income earned by farmers in one harvest ranges from 21.1 - 40 million rupiah, which is categorized as that income is high.

Indicators of facilities and infrastructure show that the dominant facilities and infrastructure owned by farmers are manual, but farmers are able to be able to rent modern agricultural equipment and machinery such as tractors, combains, dryers and rice grinders, the availability of facilities and infrastructure is categorized quite high. In the capital indicator shows that the dominant capital owned by farmers at the beginning of running rice farming ranges from 5.1 - 10 million rupiahs, farmers' capital is categorized quite high. The marketing indicator shows that the dominant partnership of farmers is with 2 partnerships, namely rice milling entrepreneurs, with the category that marketing is quite high. In the intensity of information shows that the dominant intensity of information comes from 2 sources

with the category that information intensity is still low.

4.2 Farmer Motivation Level

The results show that the distribution of respondents' answers to the characteristics of local farmers from a sample of 85 respondents of local rice farmers in the district of Merauke district is as follows:

Table 4: Level of Motivation of Local Farmers

No.	Category Motivation	Level
1.	Individual Perceptions	Are Good
2.	Self-esteem	Quite High
3.	Hope	High enough
4.	Job Satisfaction	Quite satisfied
5.	Type and Nature of Work	Good
6.	Working Group	Good
7.	Technology Development Demands	Low
8.	Encouragement / Guidance	Low

Source: Primary Data, 2018.

The data shows that the individual perception indicators of farmers in this study are interpreted as a sense of pride of the farmer in his work as a farmer and rice farming has a good method to develop and can pass on the rice farming to the next generation. Based on the results in the field, it shows that the perception of local farmers in the Semangga district is categorized quite well.

In the indicator of self-esteem in this study, it means that self-esteem is defined as a sense of satisfaction obtained as a farmer because it can meet the consumption needs of household needs, making rice commodities more profitable than other commodities and having a comfortable feeling in doing rice farming, although not comes from their own culture. Based on the results in the field, it shows that the self-esteem of local farmers in the Semangga district is categorized quite high.

In the expectation indicator in this study, it is interpreted as a farmer's expectation as a farmer's expectation to expand the business scale by adding factors of production and longing to be able to invite many local people to cultivate rice. The results in the field show that the expectations of local farmers in the Semangga district are quite high.

In the job satisfaction indicator in this study is interpreted as satisfaction with the income obtained from rice farming, satisfaction because it can compete with similar farmers, satisfaction because it can cultivate rice commodities well so that production continues to increase. The results in the field show that the job satisfaction of local farmers in the Semangga district is quite high.

In the indicator of the type and nature of work in this study is interpreted as the convenience of working as a rice farmer because according to the ability and skills, rice commodities become the main commodities cultivated and make the main work as rice farmers. The results in the field show that the type and nature of the work of local farmers in the Semangga district is good.

In the working group indicator in this study is defined as a cooperative relationship between farmers, has the

responsibility of fellow farmers and has the same goals. The results in the field show that the working group of local farmers in the Semangga district is good.

In the indicator of technological development in this study is interpreted as the availability of sophisticated tools and machines, satisfaction felt by farmers by the presence of tools and machines, as well as the assumption of farmers who always want to keep abreast of technology in carrying out their farming. The results in the field show that technological developments in local farmers in the Semangga district are still low.

In the indicators of encouragement and guidance in this study interpreted as that work as a rice farmer is due to encouragement / guidance from other parties such as neighbors, family, extension workers, government and so forth. The results in the field show that, encouragement / guidance to local farmers in the Semangga district is still low.

4.3 Relationship Between Characteristics with Motivation Level

The relationship between the characteristics of farmers with the level of motivation in carrying out rice farming has determinant indicators such as:

- 1) Age of farmer at the beginning of running rice farming
- 2) Farming experience
- 3) The area of land cultivated by farmers
- 4) One harvest income
- 5) Facilities and infrastructure to support farming
- 6) Initial capital to run a farm
- 7) Marketing or special partnerships
- 8) Information intensity.

The following are the results of the correlation test of each indicator on the motivation of local farmers in running rice farming in the Semangga district.

Table 5: Correlation Characteristics of Farmers

Characteristics of Farmers	Koef	Sig	Level Correlation
Age	0.349	0.001	Low
Farming Experience	0.773	0.000	Strong
Land Area	0.733	0.000	Strong
One Harvest Income	0.608	0.000	Enough
Facilities and Infrastructure	0.866	0.000	Strong
Capital	0.755	0.000	Strong
Marketing	0.507	0.000	Enough
Information Intensity	0.372	0.000	Low

Source: Primary Data, 2018.

1) Age

Correlation age is 0.001 and has a low correlation to motivation with a coefficient of 0.349. Field results show that local farmers of productive age 26-45 years have better physical strength than non-productive age farmers. In addition, productive age farmers also have a more innovative and creative mindset and can communicate properly and correctly so that those who usually become the mouthpiece of the aspirations of local rice farmers to the government so that the age of farmers is said to be related to the motivation of farmers in carrying out rice farming in the

Semangga district.

2) Farming Experience

Farming experience correlates at 0.000 and is strongly related to motivation with a coefficient of 0.773. Field results indicate that most local farmers have run rice farming for more than 5 years, 10 years and also more than 15 years. This proves that the experience of rice farming in local farmers is related to the motivation of farmers in carrying out farming so that now local farmers still exist to run rice farming in the Semangga district.

3) Land Area

The area of land is correlated at 0.000 and is strongly related to motivation with a coefficient of 0.733. Field results show that land ownership by local farmers is their own land or customary land rights. The area of paddy fields cultivated by local farmers ranges from 1-3 hectares. Harvesting of 1 ha of rice farming results can produce 3 tons of rice with a selling price of Rp. 7000 / Kg. The existence of own land ownership by local farmers in the Semangga district is related to the motivation of farmers in carrying out farming, because they already have their own land to do rice farming. The more land area that is cultivated, the higher the productivity will be produced, so that the income gained by farmers increases, which can be used to prosper family life.

4) Income

Income correlates to 0.000 and relates quite high to motivation with a coefficient of 0.608. The results in the field show that the income of the farmers studied mostly has an income ranging between Rp. 10,000,000 - Rp. 40,000,000, and some even more than Rp. 40,000,000 income earned by local farmers in one harvest in the Semangga district. 1 Ha of land is able to produce 3 tons of rice with a selling price / kg of Rp. 7000, so that the gross income of one harvest for a land area of 1 ha reaches Rp. 21,000,000. The income earned by farmers is determined by the area of paddy fields cultivated so that the larger the area of rice fields, the greater the income earned, so that the higher the income, the greater the motivation of farmers in carrying out rice farming in the Semangga district.

5) Facilities and Infrastructure

Facilities and infrastructure correlate as 0,000 and are strongly related to motivation with a coefficient of 0.866. Field results indicate that most local farmers have carried out farming using modern agricultural equipment and machinery both rent and joint ownership, such as water machines for irrigation systems, tractors to plow fields, combines to harvest and dryer boxes for dryers and grain grinders, vehicles transporters of crops and access to locations that can be taken by farmers. This proves that the availability of infrastructure for local farmers is strongly related to the motivation of farmers in carrying out farming so that the more complete facilities are available, the higher the motivation of farmers in carrying out rice farming in the Semangga district.

6) Capital

Capital correlates as 0,000 and is strongly related to motivation with a coefficient of 0.755. Field results show that most local farmers have capital at the beginning of

farming ranging from Rp. 2,000,000 - Rp. 10,000,000 ., The source of the availability of initial capital comes from loans or private property. The small amount of initial capital is usually due to several factors of production such as seeds, fertilizers, which the government provides for free or subsidies, and there are also print lands provided by the government to local farmers. Capital is also needed to finance medicines, rent equipment and machinery, hire labor, transport costs and milling costs. This proves that the availability of capital for local farmers is strongly related to the motivation of farmers in carrying out farming so that the greater the available capital, the higher the motivation of farmers in carrying out rice farming in Semangga District.

7) Marketing

Marketing correlates as 0,000 and relates strongly to motivation with a coefficient of 0.507. Field results show that there are 1 - 3 marketing channels that partner with farmers. The partnership is a milling effort that has a certain kinship or closeness to local farmers. In this case the milling business often promotes businesses to attract sympathy from the farmers. This proves that the more marketing channels available, the greater the motivation of farmers in carrying out rice farming in the Semangga district.

8) Information intensity

Field results show that there are 1-3 distributors (sources of information) in this case, agricultural extension agents, food crop agencies and Mertuke district holtihulkura, private parties, universities, and babinsa from TNI officers who have been or are often involved in providing information, socialization or education related to agriculture. The existence of information intensity can provide new and more creative and innovative descriptions and knowledge about, the latest varieties, application of machinery and agricultural equipment, field practices, handling pests and diseases and many others to be adopted by local rice farmers. This proves that the more information available, the greater the motivation of farmers in carrying out rice farming in the Semangga district.

5. Conclusions

Based on the distribution of respondents' answers the characteristics of farmers and the level of motivation of the average farmer is quite high. Correlation test of the variables of farmer characteristics, namely: age, farming experience, land area, income once harvest, availability of sarpras, capital, marketing and information intensity have significance and are related to the motivation of farmers.

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