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RESEARCH PAPER

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Factors affecting farmer empowerment in rice marketing

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Abstract

Rice farming in Hulu Sungai Selatan Regency has developed quite well in its production, however, in terms of marketing; farmers need a support that provides a better bargaining position and creating a promising level of profit. This research aims to analyzing the level of farmer empowerment for rice marketing and analyzing the relationship between marketing factors and farmer empowerment for rice marketing in Hamayung Village, Hulu Sungai Selatan Regency. The research results show that the level of farmer empowerment for rice marketing is classified as moderate. Apart from that, from several marketing factors analyzed, based on the results of this research, the ability to determine markets, the ability to study demand and the ability to determine prices have a significant relationship with the level of farmer empowerment. Meanwhile, the ability to plan products and promotional marketing communication does not have a significant relationship with the level of farmer empowerment.

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Introduction

Agricultural development is part of economic development. Therefore, the economic development of a region must also not exclude agricultural development, especially because almost more than 40% of national employment opportunities come from this sector. Besides that, the agricultural sector has many roles. Agriculture acts as the main provider of food needs of the Indonesian people, which is a basic need and human right, and is a very large market for manufactured products because the rural population is large and continues to increase (Fatah, 2016; Setiawati *et al.*, 2020).

In line with development progress and population growth, the need for agricultural, fisheries and forestry products continue to increase. This must be balanced with the management and development of agribusiness so that these needs can be met and farmers can be more prosperous.

The term agribusiness first appeared in the 1950s. In essence, all activities include all activities in the agricultural sector. Agribusiness is the term for an industrial cluster that revolves around the utilization of biological resources. The differences in emphasis from the agribusiness point of view itself are very diverse and this also causes the meaning to become broader and more varied in meaning (Downey and Erickson, 2019).

Background

Agriculture is a type of production activity that is based on the growth process of plants and animals. Agriculture in the narrow sense is called people's agriculture, while agriculture in the broad sense includes agriculture in the narrow sense itself, plus forestry, animal husbandry and fisheries. All of these are important things. Broadly speaking, the meaning of agriculture can be summarized as: (1) production process; (2) farmers and entrepreneurs; (3) land where the business is located; (4) agricultural business (Shen *et al.*, 2012; Casini *et al.*, 2012).

Agribusiness generally means all operations related to activities to produce and distribute production inputs, activities for agricultural production, processing and marketing. By using an understanding reference like this, agribusiness activities are no longer solely oriented towards production, as is done in traditional agribusiness. Agribusiness is thus not only in the context of meeting the needs of rural communities, but also in order to obtain greater added value, so that off-farm activities such as agroindustry and marketing become very important (Pragnell, 2006;Taket and Edmans, 2003; Gurung *et al.*, 2015).

The definition of agribusiness is agricultural business which in the narrow sense is activities that include production on agricultural land, while in the broad sense agribusiness is a system consisting of several subsystems, namely (Hassanzoy, 2019; Abdallah *et al.*, 2018; Pragnell, 2006).

- 1) Subsystem for manufacturing and distributing various agricultural facilities (input sector).
- Subsystem of production activities in farming which produces various kinds of agricultural products (farm sector).
- Subsystem for collecting, processing, grinding and distributing products or processing results to consumers (processing sector).
- Agricultural production supporting subsystems such as banking, insurance, agricultural machinery services (supporting sector)

The relationship between one subsystem and other subsystems in agribusiness is very close so that disruption to one subsystem will cause disruption to other subsystems. Agribusiness aims to utilize natural resources for the cultivation of livestock or plants which are then processed into food or can also be called agro-industrial products (Liu *et al.*, 2019; Torri, 2012).

The important role of the agricultural sector in economic development lies in several things as follows (Uwajumogu *et al.*, 2023; Abdallah *et al.*, 2018; Alim *et al.*, 2022; Lestari *et al.*, 2022; Soviana and Kuhl, 2010).

- 1) Supporting economic growth and providing national employment opportunities,
- Providing the food needs of the community or population of a country,
- 3) Earning foreign exchange,

- 4) Driving the growth of the industrial sector, and
- 5) Poverty alleviation and welfare of rural communities

Rice farming in Hulu Sungai Selatan Regency has developed quite well in its production, however, in terms of marketing, the results of preliminary observations show indications that farmers need a form of marketing that provides a better bargaining position and with a promising level of profit.

Farmer empowerment concept

In relation to empowering farmers to market their rice farming products, it is also inseparable from implementing an agribusiness approach so that their farming can provide good profits.

The concept of empowerment in community development discourse is always linked to the concepts of independence, participation, networking and justice (Mohapatra, 2016). Basically, empowerment is placed on individual and social level Empowerment is strengths. а psychological understanding of the influence of individual control over social conditions, political power and statutory rights. People who have achieved collective goals are empowered through their own efforts and the accumulation of knowledge, skills and other resources in order to achieve their goals without depending on help and external relationships (Ras and Vermeulen, 2012; Mandlik and Kadirov, 2020).

Empowerment is an effort to free someone from rigid control, and give people the freedom to be responsible for their ideas, decisions and actions, able to control their own lives and try to shape the future according to their wishes (Raheel and Ejaz, 2022;Papaioannou *et al.*, 2012).

Conceptually there are 6 factors or components of the framework of thought that must be considered in agricultural empowerment. The first factor is access to resources (covering land, beaches, sea and forests. The second factor is agricultural modernization (covering technology and human resources). The third factor is agricultural business systems (covering agriculture, industry and business institutions). The fourth factor is agricultural financing (covering various government projects). Finally, the fifth factor is development of rural financial institutions (including village cooperative, rural-based banks). Sixth, investment and the establishment of farmer empowerment models (Ras and Vermeulen, 2012; Nielsen *et al.*, 2005; W. Liu *et al.*, 2023; Raheel and Ejaz, 2022; Shen *et al.*, 2012).

The empowerment process contains two tendencies. Firstly, the empowerment process emphasizes the process of giving or transferring some power, strength or ability to the community so that the individual concerned becomes more empowered (survival of the fittest). Secondly, the empowerment process emphasizes the process of stimulating, encouraging and motivating so that individuals have the ability or empowerment to determine their life choices through a dialogue process (Alim *et al.*, 2022; Mohapatra, 2016; Edward and Kumar, 2017).

Various definitions of empowerment explain that empowerment is a process and goal, as a process empowerment is a series of activities to strengthening of weak groups in society. As a goal, empowerment refers to the conditions or results to be achieved by social change. In this case, poor people who are successfully empowered will have power or knowledge and ability to meet their life needs, both physical and social (Ras and Vermeulen, 2012;Raheel and Ejaz, 2022; Mandlik and Kadirov, 2020).

Research problems and objectives

Based on the description above, the problem faced is to understand the level of farmer empowerment in rice marketing in Hulu Sungai Selatan Regency, and whether there is a relationship between marketing factors (in the form of market determination ability, ability to study demand, product planning ability, determination ability prices, and marketing/promotional communications) by empowering farmers in marketing rice in Hamayung Village, Hulu Sungai Selatan Regency.

Based on the problem formulation, the objectives of this research are:

- 1) To analyze the level of farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency.
- 2) To analyze the relationship between marketing factors (in the form of market determination ability, demand analysis ability, product planning ability, pricing ability, and promotion ability) and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency.

Materials and methods

Research location and time

This research was carried out using a survey in the Hamayung Village area, Daha Utara Hulu Sungai Selatan Regency, from May to November 2023. The research stages included: consolidation of the Research Team, preparation of questionnaires, recruitment and training of enumerators, implementation of the survey, data processing and analysis and preparation of research reports.

Data used and how to obtain

For data analysis to answer the research objectives, primary data and secondary data were used. Primary data was obtained by interviewing selected respondents and by direct observation of the research location. Secondary data was collected from departments/agencies and other informants who know about marketing and farmer empowerment for rice marketing and also, from several relevant previous research publications.

Respondents for primary data were selected purposively from the residents of Hamayung Village with a total of 48 people. The purposive sample selection was intended so that the selected respondents could cooperate and be willing to provide the necessary information regarding rice cultivation, rice marketing and empowering farmers for rice marketing.

Analysis method

The first objective of this research is to analyze the level of farmer empowerment in rice marketing, quantitative analysis using an ordinal scale, calculated using the following formula (Djarwanto, 2001).

SD = Standard deviation of all respondents scores

1. TPP is high if TPP > (median + $\frac{1}{2}$ SD)

To determine high, medium or low levels of farmer

empowerment, the level of farmer empowerment is

grouped by taking the median as a benchmark. In this research, it is divided into three categories as follows:

TPP is moderate if (median - 1/2SD) <TPP<

To determine the second objective, namely the relationship between marketing factors and farmer empowerment in peanut marketing, the Spearman rank correlation test was used with the following formula (Djarwanto, 1987).

$$r_{3} = 1 - \frac{6\sum_{i=1}^{n} d_{i}^{2}}{n(n^{2}-1)}$$

 $TPP = \frac{SrD}{SrI} \times 100 \%$

SrD: Score obtained

SrI: Ideal score

TPP: Farmer Empowerment Level

Where: rs = Spearman correlation coefficient value n = Number of samples di = Difference in ranking values

Results and discussion

Brief description of Hamayung village

Hamayung Village is one of the villages in the North Daha sub-district, Hulu Sungai Selatan Regency, South Kalimantan province. The area is 24,940 Ha. This village is located at coordinates 115.14065 LS/LU -2.613266 BT/W. To the north it borders North Hamayung Village. To the south it borders Taluk Labak Village. To the east it borders Mantaas Village (Hulu Sungai Tengah Regency). To the west it borders Hakurung Village. Hamayung Village consists of 5 RT and 2 RW.

The distance from the sub-district capital is around 7 km. from the Regency Capital (Kandangan) 36 Km, and 170 Km from the Provincial Capital (Banjarmasin).

This distance, if traveled by car or vehicle from the Provincial Capital, will take around 4-5 hours. To get to Hamayung village, apart from land transportation, you can also use water transportation (boat or klotok) across the Negara River.

In general, the geographical condition of Hamayung village is swamp land surrounded by water during the rainy season and dry during the dry season. This condition is used by residents to grow crops during the dry season and to become fishermen or fish finders when the high tide season arrives.

The population based on the latest data collection in 2023 is 2,637 people consisting of 1,214 men and 1,423 women. Residents' livelihoods apart from farming and fishing, many are also traders who migrate outside the region, civil servants, workers, drivers, self-employed people, and others.

Facilities and infrastructure in Hamayung village include the Village Office, Assistant Community Health Center, 1 Mosque (Nurul Muslimin), 5 Mushalla or Langgar, PDAM, 1 Elementary School, 1 State Ibtidaiyah Madrasah, 1 Tsanawiyah Madrasah. Agricultural development in Hamayung village is quite good. The main agriculture is rice, followed by other crops, both secondary crops and vegetables. However, the area of other types of crops lags far behind the area of land used for rice cultivation.

This village has a food barn which can be used to store excess production before use or before being sold. This food barn infrastructure is intended for post-harvest services to maintain the quality of grain so that it can be stored properly, in order to anticipate a drop in grain prices and sell it when prices start to improve.

Hamayung Village has also succeeded in implementing the floating rice system as an effort to increase production as well as to efficiently use resources, especially land. During this time, during the rainy season and the water surface is very deep, a certain amount of land cannot be used for planting 2024

and is only left as idle land. With this floating rice system, watery land can be planted with rice plants.

With the existence of this floating rice field, the Cinta Maju Farmers Group in Hamayung Village, North Daha District, Hulu Sungai Selatan Regency is like getting "rain in the dry season", meaning it has gained new hope by increasing the land it can cultivate, which previously could not be used due to conditions. Water is always stagnant. Planting area can be optimized by producing rice on a land area of 0.6 ha using as many as 1,500 Styrofoam.

Currently, Hulu Sungai Selatan Regency, including Hamayung Village, is trying to meet the basic needs of its people, especially the need for local rice. This floating rice is an extraordinary breakthrough or innovation and can run successfully, so that in the future it can continue to be developed even more, especially in swamp areas.

The potential for swamp land in South Kalimantan can be categorized as very extraordinary, where the raw area of swamp land reaches more than 290 thousand hectares. Meanwhile, only a small portion can be used continuously, due to various reasons, such as floods for example. Therefore, the floating program which has been successfully rice implemented in Hamayung Village, can be an example to be developed in watery lands in other areas, which so far, we have not been able to utilize optimally.

The floating rice method is a way to manage the land environment where the water is always deep and the land is idle. With the floating rice, it can continue to produce optimal rice production and generate economic benefits for farmers, and gave an example. and motivate farmers to implement floating rice cultivation.

The Cinta Maju Farmers Group, Hamayung Village, felt helped by the floating rice innovation, apart from easier maintenance, the method used also increased harvest yields; this is because the rice harvested is not

affected by the condition of the land which is often affected by flooding, and is protected from rat pests and also weeds. With the previous planting method, with a land area of 80 hectares only 30% could be planted, this was because the water discharge was too high, so rice could not grow, but with the floating rice method, 100% of the land could be planted.

Level of farmer empowerment in rice marketing

Empowerment concepts generally include the following activities: (Lestari *et al.*, 2022; Nandan and Kushwaha, 2023; W. Liu *et al.*, 2023; *Papaioannou et al.*, 2012; Schafer *et al.*, 2009; Pragnell, 2006).

- 1) Formulate partnership relationships
- 2) Articulate the challenges and identify existing strengths
- 3) Identify the direction set
- 4) Explore source systems
- 5) Analyze source capabilities
- 6) Develop alternative problem solutions
- 7) Optimize resource utilization and expand opportunities
- 8) Acknowledge the findings
- 9) Integrate the progress that has been achieved

Since the beginning, the problem-solving community empowerment process was based on the principle of collaborating with the community and realizing that the community has rights that must be respected (Casini *et al.*, 2012; chafer *et al.*, 2009).

According to Suharto (2005) the implementation of the process and achievement of the above empowerment goals are achieved through the application of an empowerment approach which comprises of: Enabling, Strengthening, Protecting, Supporting and Maintaining (Torri, 2012; Ras and Vermeulen, 2012; Mandlik and Kadirov, 2020; Jahri *et al.*, 2016; Irvine and Brna, 2003). Brief descriptions of ESPSM are as the followings;

Enabling: creating an atmosphere or climate that allows the potential of society to develop optimally. Empowerment must be able to free society from cultural and structural barriers that hinder it. Strengthening: strengthening the knowledge and abilities of the community in solving problems and meeting needs. Empowerment must be able to develop all people's abilities and self-confidence that support their independence.

Protecting: protecting society, especially weak groups, from being oppressed by strong groups, avoiding unequal (unfair) competition between the strong and the weak, and preventing the exploitation of strong groups against weak groups. Empowerment must be directed at eliminating all types of discrimination and domination that do not benefit the poor.

Supporting: providing guidance and support so that people are able to carry out their roles and life tasks. Empowerment must be able to support society so that it does not fall into a situation and position that is increasingly weak and marginalized.

Maintaining: maintaining conducive conditions so that there continues to be a balance in the distribution of power between various groups in society. Empowerment must be able to ensure harmony and balance that allows everyone to have the opportunity to do business.

The development of several methods and technologies that are actually considered good by farmers can in fact be hampered because these methods and technologies are transferred in ways that are not in accordance with the culture of the local community. Development agents tend to offer new technology as a "replacement" for existing technology. This causes people to be reluctant to use this technology. This is where empowerment plays a very important role in bridging sources of innovation with target farmers, including in terms of marketing their agricultural products, as well as from the rice farming, they carry out in their wetlands (Hassanzoy, 2019; Alim *et al.*, 2022; Mohapatra, 2016).

A total of 20 (twenty) respondents were in the low category of empowerment, namely 41.67%, but there were also quite a lot in the high category, namely 15 (fifteen) respondents with a percentage of 31.25 (Table 1).

Table 1. Number of farmers by empowerment level

No	Empowerment level	Number (people)	(%)
1	High	15	31,25
2	Moderate	13	27,08
3	Low	20	41,67
Sum		48	100 %

The rest 27.08% of farmers are in the moderate category of empowerment. With the positive viewpoint farmer empowerment for rice marketing in Hamayung Village in Hulu Sungai Selatan Regency, could be regarded as in a good condition because 58,33% of respondents are in the category of high to moderate empowerment.

There are 5 indicators used to determine the level of farmer empowerment in this research, which can be seen in detail in Table 2 above. Based on the research results, the value of farmer empowerment level (TPP) varies between indicators. It ranges from 33.33 (for supporting) to 92.71 (for Maintaining) with an average of 67.99 for the whole indicators. The calculation of (median - $\frac{1}{2}$ SD) is 64.49 and (median + $\frac{1}{2}$ SD) is 72.01. The research results place TPP as moderate in empowerment status as its value of 67.99 stand on 64.49 ≤ (Whole TPP=67.99) ≤ 72.01.

This moderate level of farmer empowerment proves that farmers' power in marketing rice has the potential to develop further; farmers have begun to be able to develop the potential of existing resources to support rice farming, especially in terms of product marketing.

Enabling

Based on research results, the percentage is relatively low; this is influenced by several things, such as only a small portion of the land owned by farmers is used for planting rice. Based on research results, only 8.33% of respondent farmers planted 0.6 ha and above and 62.50% of respondent farmers which uses 0.1-0.3 ha of land. This illustrates that the potential of the land has not been used optimally.

Most of the potential workforce itself is involved in land management, maintenance and harvesting, but when it comes to product marketing; husbands or sons play a role in selling the product. In fact, this workforce potential can be optimized so that farmers get better results. The capital used by farmers is mostly their own capital.

Strengthening

Based on the research results, the percentage is classified as moderate; this is influenced by several things, such as farmers' confidence in their success in marketing products on the market is quite high, because they remain optimistic that rice products will sell well on the market. If they experience problems in marketing, they will prepare a new strategy, they will discuss with other farmers to determine which market is better to target in order to sell goods at a high price. Even though the relationship between farmers and extension workers looks very good, they rarely discuss the problems they face with local agricultural extension agents. In fact, it is necessary to carry out more intensive and sustainable extension activities, so that it can help farmers strengthen their position as farming entrepreneurs.

Protecting

Based on research results, the percentage is relatively high; this is influenced by several factors such as the ability of farmers to protect themselves from powerful groups, such as their ability to determine the price of rice. For example, when the price of rice on the market falls, middlemen immediately offer goods at very high prices. Cheap, farmers with strong marketing networks don't want to be oppressed, they will look for other buyers or they will survive by not selling the goods, while the goods are stored until prices rise again.

Supporting

Based on research results, the percentage is relatively low, this is influenced by several things, such as the fact that in the field where farmers independently face the problems they experience, government officials are less sensitive to the conditions faced by farmers, the absence of intervention from local officials certainly weakens the position of farmers. Motivation and support from extension workers and village officials are really needed by farmers, so that there is

input if problems occur, this is what sometimes makes farmers weak. If there was assistance from the local government, farmers would be more advanced and motivated, because usually they have the authority if injustice occurs in the market.

Maintaining

Based on research results, the percentage is relatively high, this is influenced by several things, such as, if a group of farmers finds effective and efficient marketing techniques, other farmers will recognize this success and follow suit by applying the same method. This information transfer proves that there is cooperation, harmony and balance, which allows everyone the same opportunity to succeed in farming without being dominated by just one party.

Marketing factors related to farmer empowerment

Based on the results of research on several marketing factors related to farmer empowerment in rice marketing in Hamayung village, Hulu Sungai Selatan Regency, there are three marketing variables that show a real relationship, and there are two variables that do not have a relationship, to be clearer, you can see in the Table 3.

The relationship between market determination and farmer empowerment in rice marketing in Hamayung village, Hulu Sungai Selatan regency

Based on the results of calculating the Spearman rank correlation coefficient of the relationship between market determination and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency, it is 2.46 with a t-table of 2.00 at a confidence level of 90% ($\alpha = 0.1$) because t -count is greater than the t-table, meaning that H1 is accepted and Ho is rejected. According to the results of these statistical tests, it can be concluded that there is a real relationship between market determination and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency. This is because farmers are able to determine the right market, farmers market their products to the nearest market, both in the sub-district market and the district central market, without depending on middlemen, and there are even farmers who market their goods to regular shops.

An understanding of good market determination can increase farmers' information about direct buyer behavior, what products consumers expect, the price they can afford, the magnitude of consumers' need for rice, and with good market determination farmers know the competition that may occur with other rice sellers, making it easier to determine an appropriate sales strategy. This is what influences the empowerment of farmers in marketing rice in Hamayung Village, Hulu Sungai Selatan Regency.

The relationship between studying demand and farmer empowerment in rice marketing in Hamayung village, Hulu Sungai Selatan regency Based on the calculation results, the Spearman rank correlation coefficient of the relationship between Studying demand and Farmer Empowerment in Rice Marketing in Hamayung Village, Hulu Sungai Selatan Regency is 2.53 with a t-table of 2.00 at a confidence level of 90% (α = 0.1) because t -count is greater than the t-table, meaning that H1 is accepted and H0 is rejected.

The results of these statistical tests prove that there is a real relationship between studying demand and empowering farmers in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency. The ability of farmers to study demand can influence farmer empowerment in rice marketing because farmers are able to know the demand for their products.

Demand for products is basically quite large, regardless of how many products produced can be accommodated by consumers, according to local farmers demand is greater than supply. However, by knowing consumer tastes for goods, farmers are able to adjust the product quality expected by the market. Farmers are also able to market their products in suitable places. If the demand in one place is very small, they will move to a place where there is higher demand. This is what can influence the empowerment of farmers in marketing rice in Hamayung Village, Hulu Sungai Selatan Regency.

The relationship between product planning and farmer empowerment in rice marketing in Hamayung village, Hulu Sungai Selatan regency **Table 2.** Level of farmer empowerment in rice marketing

No	Indicator for farmer empowerment	Obtained score (SrD)	Ideal score (SrI)	Farmer empowerment level per indicators (TPP)	Empowerment status
1	Enabling	668	1,008	66.27	Low
2	Strengthening	716	1,008	71.03	Moderate
3	Protecting	331	432	76.62	High
4	Supporting	96	288	33.33	Low
5	Maintaining	267	288	92.71	High
Whole TPP			67.99	Moderate	

Table 3. Marketing factors associated with the level of farmer empowerment

No	Marketing Factor	Correlation		
		t-counted	t-tabel (0,1)	
1	Market determination	2,46*	2,00	
2	Study on Demand	2,53*	2,00	
3	Product Planning	1,60	2,00	
4	Pricing	4,13*	2,00	
5	Promotion	0,96	2,00	

Based on the calculation results, the Spearman rank correlation coefficient of the relationship between product planning and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency is 1.60 with a t-table of 2.00 at a confidence level of 90% ($\alpha = 0.1$) because the t-count is smaller than the t-table, meaning that H₁ is rejected and H₀ is accepted. The results of the statistical tests prove that there is no real relationship between product planning and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency.

Farmers' ability in product planning is not related to farmer empowerment in rice marketing because farmers have not been able to create products that are more popular on the market (Riza, 2006).

Rice is sold when the harvest arrives, even though if it is stored and sold when prices rise it will be more profitable for farmers. To ensure that rice lasts longer, it is dried in the sun for 7-10 days until the water content is 9% -12%, and stored in burlap sacks or tightly closed cans and stored in a storage warehouse in a shady and dry place.

The relationship between price determination and farmer empowerment in rice marketing in Hamayung village, Hulu Sungai Selatan regency Based on the calculation results, the Spearman rank correlation coefficient of the relationship between price determination and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency is 4.13 with a t-table of 2.00 at a confidence level of 90% ($\alpha = 0.1$) because t -count is greater than the t-table, meaning H1 is accepted and H0 is rejected.

The results of these statistical tests prove that there is a real relationship between price setting and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency, this is because farmers are able to set prices according to their wishes.

Pricing is adjusted to production costs and transportation costs, so that farmers do not suffer losses. Apart from that, if there is information about rising prices, they will also raise prices, but if prices fall, they will stay for a while without selling goods (Luthfi, 2016, Hikmat 2010). This is what influences the relationship between price determination and farmer empowerment in rice marketing.

Relationship between marketing communication (promotion) and farmer empowerment in rice marketing in Hamayung village, Hulu Sungai Selatan regency

Based on the results of calculating the Spearman rank correlation coefficient between marketing communication (promotion) and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency, it is 0.96 with a t-table of 2.00 at a confidence level of 90% ($\alpha = 0.1$), because the t-count is smaller than the t-table, it means that H1 is rejected and H0 is accepted. The

results of these statistical tests prove that there is no real relationship between marketing communication (promotion) and farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency. Farmers' ability in marketing communication (promotion) does not affect farmer empowerment in rice marketing because farmers have not been able to create good promotional techniques, where farmers mostly carry out promotions only verbally (Luthfi, 2013).

Promotion occurs after the buyer is in front of them, verbally without using the media, due to their lack of knowledge and weak access to technology, although there are some experienced farmers who use mobile phones if they have a product to sell to the known middlemen. Promotional planning is poor and the system they use does not create strong farmer empowerment, and there is no evaluation of the promotional techniques they have implemented.

Conclusion

The level of farmer empowerment in rice marketing in Hamayung Village, Hulu Sungai Selatan Regency is at 69.38 so the TPP is classified as moderate because $64.49 \ \% \le 69.38 \le 72.01 \ \%$. As many as 31.25% of respondent farmers were in the high category, in the medium category there were 27.08% of respondent farmers, and in the low category there were 41.67%.

Based on the research results, there are three marketing variables that are closely related to the level of farmer empowerment in rice marketing, namely ability in market determination, studying demand and price determination, and there are two marketing variables that are not related to the level of farmer empowerment in rice marketing, namely ability in product planning and marketing communications (promotions).

References

Abdallah, Abdul-Hanan, Ayamga M, Awuni JA, Donkoh SA. 2018. The Reality of Market Inefficiencies and Technology Adoption Nexus: Evidence from Sub-Saharan Africa. International Journal of Agricultural Resources, Governance and Ecology 14(3), 287–307.

DOI: 10.1504/IJARGE.2018.097471.

Alim, Abdul M, Ray R, Rahman MH, Hossain MJ, Shabbir R, Kabir MAR. 2022. The Role of Tourism Supply Chain Management in Developing Informal Empowerment of Rural Communities in Bangladesh. International Journal of Agile Systems and Management **15**(4), 349–66. DOI: 10.1504/IJASM.2022.128229.

Casini, Leonardo, Contini C, Romano C. 2012. Paths to Developing Multifunctional Agriculture: Insights for Rural Development Policies. International Journal of Agricultural Resources, Governance and Ecology **9**(3–4), 185–203. DOI: 10.1504/IJARGE.2012.050347.

Djarwanto. 1987. Kumpulan Soal dan Penyelesaiannya Statistik Non Parametrik. BPFE. Yogyakarta.

Djarwanto. 2001. Statistik Non Parametrik, Bagian I Edisi 3 : BPFE-UGM. Yogyakarta,

Downey WD, Erickson SP. 2019. Manajemen Agribisnis, Jakarta : Penerbit Erlangga.

Edward M, Kumar RR. 2017. Ecotourism in Kerala - a Case Study on Empowering the Indigenous Community. International Journal of Qualitative Research in Services **2**(4), 295–307. DOI: 10.1504/IJQRS.2017.088128.

Gurung MB, Partap U, Choudhary D. 2015. Empowering Mountain Women through Community-Based High Value Product Value Chain Promotion in Nepal. International Journal of Agricultural Resources, Governance and Ecology 11(3–4), 330–45.

DOI: 10.1504/IJARGE.2015.074101.

Hassanzoy N. 2019. What Is Agribusiness? DOI:10.13140/RG.2.2.23776.33285

Irvine P, Brna P. 2003. Growing an Internet-Based Community for Lifelong Self-Learners: Empowering the Community. International Journal of Continuing Engineering Education and Life Long Learning **13**(1-2), 5–21. DOI: 10.1504/IJCEELL.2003.002150.

Jahrl I, Moschitz H, Stolze M. 2016. Growing under the Common Agricultural Policy: The Institutional Development of Organic Farming in Central and Eastern European Countries from 2004 to 2012. International Journal of Agricultural Resources, Governance and Ecology **12**(4), 357–80. DOI: 10.1504/IJARGE.2016.080888.

Lestari F, Azwar B, Jonnius, Abduh MA. 2022. Partner Engagement on University's Community Service Program in Indonesia. International Journal of Public Sector Performance Management **10**(2–3), 396–407. doi: 10.1504/IJPSPM.2022.126241.

Liu M-H, Lee T-R, Mendy LL, Debbarma S, Ulhas KR. 2019. To Determine the Key Success Factors for Paperware Packaging Machinery Industry by Using AHP-Based Approach. International Journal of Agriculture Innovation, Technology and Globalisation 1(1), 4–19.

DOI: 10.1504/IJAITG.2019.099601.

Liu W, Liang Y, Shen X. 2023. Decentralised or Collaborative? Cooperation Strategy Choice of the Supply Chain under Logistics Service Integrator Empowerment and Market Size Fluctuation. European Journal of Industrial Engineering **17**(3), 343–78.

DOI: 10.1504/EJIE.2023.130607.

Luthfi. 2016. Politik Pertanian, Dasar Teori dan Tinjauan Penerapan Kebijaksanaan Pembangunan Pertanian. Bina Prestasi. Jakarta.

Mandlik MA, Kadirov D. 2020. Towards a Theory of Integrated Empowerment: A Service Ecosystems Agenda for Future. International Journal of Qualitative Research in Services **4**(1), 56–76. DOI: 10.1504/IJQRS.2020.109705.

Mohapatra S. 2016. Empowerment of Women through Participation - a Case Study of Microfinance Program. International Journal of Gender Studies in Developing Societies 1(3), 207–18.

DOI: 10.1504/IJGSDS.2016.076048.

Nandan S, Kushwaha A. 2023. Interventions of Non-Governmental Organisations for Women's Empowerment through Micro-Entrepreneurship: Evidences from India. International Journal of Indian Culture and Business Management **29**(1), 96–113. DOI: 10.1504/IJICBM.2023.130929.

Nielsen, Flohr J, Blandfort J, Langer F, Aarestrup K. 2005. Technology and Empowerment in Danish Insurance Companies. International Journal of Financial Services Management 1(1), 118–40. DOI: 10.1504/IJFSM.2005.007988.

Papaioannou A, Kriemadis T, Alexopoulos P, and Vrondou O. 2012. An Analysis of Human Resource Empowerment and Organisational Performance in Greek Sport Federations. World Review of Entrepreneurship, Management and Sustainable Development **8**(4), 439–55. DOI: 10.1504/WREMSD.2012.050299.

Pragnell M. 2006. Agriculture, Business and Development. International Journal of Technology and Globalisation **2**(3–4), 289–99. DOI: 10.1504/IJTG.2006.011917.

Raheel S, Ejaz SS. 2022. Appraisal of Existing Empowerment Model in Local Organisations. Middle East Journal of Management **9**(4), 395–416. DOI: 10.1504/MEJM.2022.123720.

Ras PJ, Vermeulen WJV. 2012. Innovative Business Cases in the South Africa Table Grape and Wine Industries: Developing the Concept of Empowerment Entrepreneurship. World Review of Entrepreneurship, Management and Sustainable Development **8**(4), 456–77.

DOI: 10.1504/WREMSD.2012.050301.

Schafer M, Nolting B, Engel A. 2009. Organic Agriculture as a New Player in Sustainable Regional Development? Case Studies of Rural Areas in Eastern Germany. International Journal of Agricultural Resources, Governance and Ecology **8**(2–4), 158–79. DOI: 10.1504/IJARGE.2009.026224. Setiawati A, Wijaya M, Setyowati R. 2020. Empowerment of marketing aspects in increasing organic rice farmers' income in sawangan, magelang, central Java of Indonesia. Russian Journal of Agricultural and Socio-Economic Sciences **106**(10), 176–83.

DOI: 10.18551/rjoas.2020-10.19.

Shen Z, Mizunoya T, Higano Y. 2012. Agriculture and Sustainable Development: Policies Analysis of the Taihu Economic Circle in China. International Journal of Foresight and Innovation Policy **8**(2–3), 210–35.

DOI: 10.1504/IJFIP.2012.046111.

Soviana S, Kuhl R. 2010. Towards a Sustainable Community-Based Management: An Assessment of Community Participation Level. International Journal of Sustainable Society **2**(4), 341–54. DOI: 10.1504/IJSSoc.2010.03694. Taket A, Edmans T. 2003. "Community Led Regeneration - Experiences from London." International Journal of Healthcare Technology and Management 5(1–2), 81–95. DOI: 10.1504/IJHTM.2003.003334.

Torri MC. 2012. The Jamu System: Linking Small-Scale Enterprises, Traditional Knowledge and Social Empowerment? International Journal of Entrepreneurship and Small Business **15**(4), 488–501. DOI: 10.1504/IJESB.2012.046477.

Uwajumogu NR, Uma KU, Ojike RO. 2023. The Price of Inequality in Africa. African Journal of Economic and Sustainable Development **9**(2), 101–15. DOI: 10.1504/AJESD.2023.129021.