



**ANALYSIS OF THE TILAPIA PARTNERSHIP PATTERN BETWEEN UPTD BIAT KUTASARI AND THE ASTANA MINA MANDIRI FISHERIES ASSOCIATION AND ITS INFLUENCE ON INCREASING THE INCOME OF FISH FARMER IN PURBALINGGA REGENCY**

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**ABSTRACT**

*This research aims to determine the pattern of tilapia partnerships between UPTD BIAT Kutasari and the Astana Mina Mandiri Fisheries Association and its influence on increasing the income of tilapia farmers in Purbalingga Regeancy. Using a mixed qualitative and quantitative approach (mix method) with purposive sampling. In this research there were 15 respondents, namely tilapia farmers who joined the partnership. The data analysis used is descriptive analysis and paired sample test. The research results showed that the partnership pattern implemented was a general trade partnership pattern, there was an increase in tilapia farmer's income from IDR. 7,106,533,33 to IDR. 9,655,000, increasing revenue by 36% from before the partnership. The result of the difference test on farmers' income have a significance level of 0.000 and the t count is 5.140. It can be cloncluded that there is a significant difference between farmers' income before and after the partnership, so that the partnersip has an impact on the income of tilapia farmers.*

*Keywords: Partnership; Increase income; Tilapia*

**INTRODUCTION**

Indonesia is an agricultural country, and the majority of its people work as farmers. The wealth of natural resources makes the agricultural sector one of the important sectors that has a very real role in supporting the country's foreign exchange earnings. The strategic role of agriculture is reflected in the magnitude of agricultural GDP relative to a country's GDP, which contributes 14% annually from the agriculture, livestock, forestry and fisheries sectors. This contribution is the third largest after the manufacturing sector (27%) and trade, hotels and restaurants (15%). One of

the agricultural subsectors that contributes the most to the formation of agricultural sector GDP is the fisheries subsector (Minister of Agriculture, 2013).

According to Article 1 paragraph (1) of Law of the Republic of Indonesia Number 31 Year 2004, fisheries are defined as all activities related to the management and utilization of aquatic resources and their environment, from pre-production to production, processing, and marketing. This is done in the fisheries management system. Then in paragraph (7) it is also explained, fisheries management is all efforts, including integrated processes in information collection, analysis, planning,

consultation, decision-making, allocation of fish resources, and implementation and law enforcement of fisheries legislation, carried out by the government or other authorities directed at achieving sustainable productivity of aquatic biological resources and agreed objectives. Therefore, in this case fisheries can be classified as an agribusiness.

Agricultural business partnership is one of the means of cooperation that refers to the creation of an atmosphere of balance, harmony and skills achieved through mutual trust between partner companies and mutual trust between groups and their competencies through the realization of synergies. In general, business partnerships are cooperation between two parties that have equal rights and obligations and are mutually beneficial. Business partnership relationships are generally carried out between two parties who have an equivalent position in terms of bargaining (Bargaining Position), but partnerships can also be carried out by small groups of people who are considered stronger and large groups of people who are considered weaker, especially in the economic field. Law No. 9 of 1995 defines agribusiness partnerships as mutually beneficial cooperation between two or more agribusiness parties.

One of the partnerships in Purbalingga Regency is the partnership between the Kutasari Technical Implementation Unit of the Freshwater Fish Cultivation Service (UPTD BIAT) and the Astana Mina Mandiri Fisheries Association, which began a partnership in 2023 that focuses on tilapia commodities.

Purbalingga Regency is one of the regencies that produce tilapia in Central Java. Based on statistical data from the Ministry of Maritime Affairs and Fisheries (2022), Purbalingga Regency is a regency that has tilapia aquaculture production of 1,456,098 kg with a production value of Rp 36,402,450,000, which is one of the regencies with the highest amount of production in Central Java Province.

According to data (Statistics of the

Ministry of Maritime Affairs and Fisheries, 2023) the production volume and production value of tilapia commodities in Purbalingga Regency from 2020 to 2022 have increased, namely the production volume of tilapia in 2020 was 1,294,005 kg with a production value of Rp 31,133,895,000, in 2021 it was 1,406,508 kg with a production value of Rp 35,162,700,000, and in 2022 it was 1,456,098 kg with a production value of Rp 36,402,450,000.

However, with the increasing volume and value of tilapia production in Purbalingga Regency, the income of tilapia farmers has not increased. Because there are still various problems, such as marketing by farmers is often done directly through collectors with prices that are even lower than the average market price so that farmers' income is relatively low.

Since 2017, Kutasari District has established the Technical Implementation Unit of the Freshwater Fish Cultivation Service (UPTD BIAT), which is engaged in producing fish seeds. It is expected that with the Technical Implementation Unit of the Freshwater Fish Cultivation Service (UPTD BIAT), fish production in Purbalingga Regency, both marketing, prices, and volume can be guaranteed. Moreover, the Technical Implementation Unit of the Freshwater Fish Cultivation Service (UPTD BIAT) has established cooperation with fish farmers in Purbalingga Regency. Therefore, the partnership is expected to contribute to increasing farmers' income and strengthening agricultural institutions in the context of sustainable agricultural development (Koib & Simamorang, 2022).

## LITERATURE REVIEW

### Partnership

According to Eko Murdiyanto (2012), a partnership is a bond of cooperation between two or more parties based on agreement and recognition of mutual needs in order to improve their abilities in certain fields or with certain objectives, so that they

can achieve better results.

The purpose of the partnership is a "win-win partner solution" where no party is disadvantaged and both parties benefit from the partnership practice (Hafsah, 2002). Meanwhile, Martodireso (2002) states that the objectives of joint business partnerships are to increase income and business continuity, ensure quantitative supply and quality of production, improve the quality of partner groups, expand business for growth, and strengthen independent business capabilities.

The partnership pattern according to the Decree of the Minister of Agriculture Number:940/Kpts/OT.210/10/97 concerning Guidelines for Agricultural Business Partnerships is as follows:

1. Inti-Plasma partnership pattern

This pattern is a relationship between farmers, farmer groups or partner groups as plasma with core companies. The nucleus company provides land, production facilities, technical guidance, management, accommodates from processing, and markets production results. Meanwhile, the partner group is tasked with fulfilling the needs of the nucleus company in accordance with the agreed terms.

2. Subcontracting Partnership Pattern

The subcontracting partnership pattern is a partnership pattern between a business partner company and a group of business partners who produce components needed by the partner company as part of its production.

3. General Trade Partnership Pattern

The general trade partnership pattern is a partnership relationship between a partner group and a partner company, in which the partner company markets the products of the partner group or the partner group supplies the needs of the partner company.

4. Agency Partnership Pattern

The agency partnership pattern is a form of partnership in which the partner group is given special rights to market the goods and services of the partner

company's business, consisting of partner companies and partner groups or small entrepreneurs.

Large/medium enterprises are responsible for the quality and volume of products (goods and services), while their small business partners are responsible for marketing the products or services.

5. Partnership Pattern Agribusiness Operational Cooperation (KOA)

The KOA partnership pattern is a business relationship run by partner groups with partner companies. The partner group provides land, facilities, and labor, while the partner company provides costs, capital, management, and procurement of production facilities to cultivate or cultivate an agricultural commodity. The partner company also acts as a guarantor of the product market by increasing the added value of the product through processing and packaging. In the KOA there is an agreement on the sharing of results and risks in the agricultural commodity business that is partnered.

**Revenue**

Revenue is all income, both cash and non-cash, which represents the results and sales of goods and services within a certain period of time (Sholihin, 2013). According to (Putong, 2015), income is the reward for providing services to others. Everyone can earn money by helping others. Meanwhile, personal income includes all types of income, including income earned without any input or income received by residents of the country.

According to Sukirno (2006), income is the income received for the work performance of the population during a certain period of time, for example daily, weekly, monthly, or annually. Income is the difference between revenue and total expenditure. To calculate farm income, you can use the following formula:

$$\pi = TR - TC$$

Where:

$\pi$  = Tilapia farming income (Rp)

TR = Total Revenue (Rp)

TC = Total Cost (Rp)

## RESEARCH METHODS

This research was conducted at the Kutasari Technical Implementation Unit of the Freshwater Fish Cultivation Service (UPTD BIAT) located in Kutasari District, Purbalingga Regency, Central Java. The research location was determined purposively. This research was conducted at UPTD BIAT Kutasari as a partnership actor. The location was chosen as a research site because it is one of the places where partnerships between government agencies and fisheries associations take place in Purbalingga Regency and is the center of fisheries production in Purbalingga Regency. The research took place from April to June 2024.

The method used in this research is mixed methods. Mix method is a research step that combines two pre-existing forms of research, namely qualitative research and quantitative research in one study, (Creswell, 1999). The mixed methods method was used to answer the problem formulation in this study. For the question of partnership patterns using qualitative research methods and for the question of the effect on increasing farmers' income with the partnership using quantitative research methods.

The population in the study was targeted at the UPTD BIAT Kutasari and all farmers who are members of the association as many as 150 farmers. Determination of the sample in this study using purposive sampling technique. Purposive sampling is a data source sampling technique by considering certain things, such as people who know the ins and outs of the contents in the industry, or maybe he is the highest authority in the industry so that it will make it easier for researchers to explore the object under study (Sugiyono, 2013: 53). The sample of this study was taken by purposive sampling, which is a method of drawing

samples made with certain criteria. In this study the criteria used are farmers who use the biofloc pond system. Based on these criteria, there were 15 farmers who used the biofloc pond system, so the number of samples used in this study was 15 farmers. This study also used key informants totaling two people, namely the head of UPTD BIAT Kutasari and the head of the association.

## RESULTS AND DISCUSSION

Purbalingga Regency is geographically located at coordinates 101011" WEST - 109035" WEST AND 7010" LS - 7010" LS - 7029 LS". Purbalingga Regency has diverse contours ranging from lowlands to highlands by 40%.

Administratively, Purbalingga Regency consists of 18 sub-districts with an area of 777.6 km<sup>2</sup>. The area of aquaculture land in Purbalingga Regency in 2020 according to data from the Food Security and Fisheries Service (DKPP) is 1,030,00. The main occupation of the population is industry followed by the plantation and agriculture sectors.

### Characteristics of Respondents

Table 1. Characteristics of Respondent Farmers

No	Respondent Characteristics	Total	
		Person	Percentage (%)
1.	Gender		
	Male	13	86,7%
	Female	2	13,3%
2.	Age (year)		
	<30	1	6,7%
	31-40	3	20%
	>41	11	73,3%
3.	Education		
	Elementary	3	20%
	Junior High	2	13,3%
	High School	8	53,7%
	S1	2	13,3%
4.	Farming experience (years)		
	<5	10	66,7%
	5-10	3	20%

>10	2	13,3%
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Source: primary data processed 2024

Based on table 1 above, this study used 15 tilapia farmers as respondents. Judging from the overall gender of male respondents as much as 86.7% and the remaining women as much as 13.3%. Where from the table above shows most farmers are male.

There were three age groups among the respondents. The most common age group was >41 years, accounting for 73.3% of the total respondents. Next, the age group 31-40 years old accounted for 20%. Then, the age group < 30 years old is the smallest, accounting for only 6.7%. From this data, it can be concluded that farmers are in the productive age category because they are in the age range of 15-64 years.

The distribution of the education level of the majority of respondents, namely SMA with a percentage of 53.7%. This shows that the average education of respondent farmers is at the high school level.

However, there are also a number of farmers who have lower and higher levels of education. Among them, 20% of the respondents have a primary education background, while 13.3% of the respondents have a junior high school education and a bachelor's degree respectively.

### Partnership Pattern Analysis

According to Robinson 1998 in Azhari 2000 the partnership process emerges through an evolutionary process and is the result of the efforts of partners who are equal and have the same commitment.

The partnership between UPTD BIAT Kutasari and tilapia farmers is a partnership between a company that provides seeds and tilapia farmers. UPTD BIAT Kutasari focuses on providing quality seeds, thus encouraging companies to partner with tilapia farmers around the Purbalingga Regency area to meet the needs of farmers.

The characteristics of the partnership pattern established between UPTD BIAT Kutasari and partner farmers based on the partnership pattern according to the Decree of the Minister of Agriculture Number: 940/Kpts/OT.210/10/97 run by UPTD BIAT Kutasari with tilapia farmers are included in the General Trade partnership pattern where the partner group supplies the needs of the partner company, namely tilapia and the partner company is in charge of marketing the production of the partner group.

From the results of interviews with respondents, it can be explained that the partnership cooperation carried out by UPTD BIAT Kutasari with tilapia farmers is Partner farmers provide ponds, seeds, labor and capital needed in tilapia cultivation. The partner company in this case UPTD BUAT Kutasari provides guidance and assistance so that partner farmers can cultivate tilapia to the maximum. From the fish produced by farmers, UPTD BIAT Kutasari will assist in marketing.

The scope of cooperation between UPTD BIAT Kutasari and partner farmers is as follows:

1. Partner farmers provide ponds, seeds, labor and capital needed for tilapia farming.
2. UPTD BIAT Kutasari as a partner company provides seeds and guidance to partner farmers.
3. Partner farmers produce tilapia
4. UPTD BIAT Kutasari helps carry out marketing activities for tilapia cultivated by partner farmers
5. Selling price is agreed at the beginning

### Analysis of Increased Farmer Income

- a. Normality Test

Table 2. Normality Test Results

	Statistic	df	Sig.
Before Partnership	0.907	15	0.121

After Partnership	0.917	15	0.174
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Based on table 2 above, it is known that the significance value for before the partnership is 0.121. This value is greater than the expected significance value of 0.05 and the significance value after the partnership is 0.174. The value is also greater than the expected significance value of 0.05, so it can be concluded that the farmer's income data before and after the partnership is normally distributed. Therefore, the difference test used is the Paired Sample T-test.

#### b. Descriptive Test

Based on descriptive tests, before the partnership, the average income of fish farmers was Rp. 7,106,533.33 in two harvest seasons in one year.

Then, after the partnership, the average income of farmers increased by 36%, reaching Rp. 9,665,000.00 in two harvest seasons in one year. These results show that partnerships make a positive contribution to increasing the income of tilapia farmers.

#### c. Paired Sample Test

Based on the results of the Paired Sample Test using SPSS software, the Sig. 2-tailed test of differences in farmer income after and before the partnership of 0.000 means  $0.000 < 0.005$  has a high significance value. From these results it can be concluded that there is a significant effect on the difference in farmers' income before and after the partnership.

## CONCLUSIONS AND SUGGESTIONS

### CONCLUSIONS

1. The role of the partnership between UPTD BIAT Kutasari and the Astana Mina Mandiri Fisheries Association is

implemented with a general trading pattern because tilapia farmers meet all farming needs both in terms of capital and operations from the farmers themselves and UPTD BIAT only plays a role to help market with guaranteed price stability and consumers.

2. There was an increase in farmers' income before and after the partnership, where the average income of tilapia farmers before the partnership was Rp. 7,106,533 while the average income of tilapia farmers after the partnership was Rp. 9,665,000 in two harvest seasons in one year. There is a difference in farmers' income before and after the partnership of Rp. 2,558,466.67, increasing income by 36% from before the partnership between UPTD BIAT Kutasari and Astana Mina Mandiri Fisheries Association. The results of the difference test on farmer income have a significance level of 0.000 and t count of 5,140, so that the partnership between UPTD BIAT Kutasari and Astana Mina Mandiri Fisheries Association has an impact on the income of tilapia farmers.

### SUGGESTIONS

1. UPTD BIAT Kutasari and Astana Mina Mandiri Fisheries Association should maintain the partnership cooperation that has taken place. UPTD BIAT Kutasari and partner farmers should make a written agreement so that partnership cooperation can have clear legal ties.
2. It is expected that farmers can continue to apply the knowledge and experience gained from the technical guidance provided by UPTD BIAT Kutasari, this is able to have an impact on changes in terms of farmer income.
3. This research is also expected to be useful for Perwira Purbalingga University in general as a scientific development, especially in the Faculty of Science and Engineering. In addition, this research is also expected to be used as a reference for future studies, especially those related to partnership

patterns in increasing the income of fish farmers in Purbalingga Regency.

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Sukirno, Sadono, 2006. Microeconomics (Introductory Theory). PT Raja Grafindo Persada, Jakarta.

## REFERENCES

- Creswell, J. W. (1999). 580599\_6.Pdf (pp. 455-560).  
[http://cachescan.bcub.ro/e-book/V/580599\\_6.pdf](http://cachescan.bcub.ro/e-book/V/580599_6.pdf)
- Decree of the Minister of Agriculture Number: 940/Kpts/OT.210/10/97 concerning Guidelines for Agricultural Business Partnerships.
- Eko, M., & Muhammad, K. (2012). Building Agribusiness Partnerships Corporate Social Responsibility (CSR) Program Innovation.
- Hafsah, Mohammad Jafar, 2002. Business Partnership: Conception and Strategy. Jakarta: PT Sinar Harapan Library.
- Koib, Y., & Simamora, L. (2022). Farmers' Perception of the Importance of Agricultural Cooperatives. *Jambura Agribusiness Journal*, 3(2), 56-68.
- Martadireso, Sudadi. 2002. Agribusiness Partnership, Yogyakarta: Kanisius.
- Putong, I. (2015). *Microeconomic Theory: Conventional and Sharia (Vol. 1)*. Books & Articles by Iskandar Putong.
- Sholihin, A. I. (2013). *The smart book of Islamic economics*. Gramedia Pustaka Utama.
- Statistics - KKP. (2023). Production value of aquaculture farming enlargement commodity Tilapia Quiet Water Pond Regency/City (Rp). Retrieved from [statistik.kkp.go.id](http://statistik.kkp.go.id); [https://statistik.kkp.go.id/home.php?m=prod\\_ikan\\_budidaya\\_kab#panel-footer](https://statistik.kkp.go.id/home.php?m=prod_ikan_budidaya_kab#panel-footer)
- Statistics - KKP. (2023). Volume of Production of Aquaculture Raised Tilapia Commodity Quiet Water Ponds Regency/City (Kg). Retrieved from [statistik.kkp.go.id](http://statistik.kkp.go.id); <https://statistik.kkp.go.id/home.php>