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ACEH FARMERS AGRICULTURAL BUSINESS PROBLEMS (Study of Aceh Peasant Judgment in the South West Coast Agricultural Zone)

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Abstract

Agriculture is an activity carried out as a fulfillment of various human needs, so it becomes an important sector to be maintained. In the implementation of agricultural business various problems are faced by farmers in the Southwest Region of Aceh. The results of research conducted using the Judgment Study show that there are 11 problems faced by farmers with 4 problems being above the average score, including agricultural development assistance from the government such as capital, superior seeds, production inputs, counseling and program supervision are not appropriate and complete ; agricultural development programs are not planned until a good market is available; it is difficult to get fertilizer, especially subsidized fertilizer, and the prices of agricultural products tend to be low and are detrimental to farmers. While 7 problems are below the average score with the lowest score problem being the plants that are developed are difficult to care for. Solving the problem is an effort to help farmers in running their agricultural business. This problem is also an obstacle in regional development, so that it can become the basis for planning in the implementation of regional development.

KeyWords:***The problems of farmers, Acehnese farmers, agricultural development.***

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1. INTRODUCTION

According to National Geographic (2021) agriculture is the art and science of managing land, plants and livestock to produce plant and animal products for human needs which are distributed through markets, where this agricultural activity began to be carried out by humans for 11.50 centuries ago. But Islam states that agriculture has existed since the first human Prophet Adam AS through the story of the sacrifice between Abel and Qabil, where Habil was a breeder and Qabil was a farmer which ended with the killing of Abel (Haramain, 2019). Until now agriculture has become very important for humans because it provides food, for the needs of 8 billion people in the world (Made for mids, 2022), and it is estimated that global food needs will grow by 70% in the 2009-2050 range (Foley et al., 2011).

According to FAO records (2021) agricultural activities are carried out by 874 million farmers in the world with an income of USD 3.5 trillion in 2018, butRitchie and Roser (2021) estimate that the number of farmers in the world is only ± 570 million. However, the number of farmers in Indonesia has decreased from 38.30 million in 2016 to 33.40 million in 2020 (BPS, 2021). This condition shows that the farming profession is increasingly not in demand by the community (Susilowati, 2016) due to various problems faced by farmers, and this decline phenomenon generally also occurs in Asia, Europe, and America (FAO, 2021).

Even though the number of Indonesian farmers has decreased, agriculture is still an important sector in supporting national economic growth because this sector is able to survive during an economic crisis, become an economic recovery sector, create jobs (Sepriani and Yuliawati, 2022), contribute to the Gross Domestic Product (GDP). Rp. 2,115 trillion or 13.70% of the total GDP of Rp. 15,433. - trillion at current prices in 2020 (Abhipraya et al., 2020; BPS, 2021). In Aceh Province, the agricultural sector provides the largest GRDP with an amount of Rp. 51,545.

- billion at current prices or 30.98% of the total GRDP (BPS Aceh, 2021), so that for Aceh Province agriculture is a very important sector for the regional economy.

Agricultural development as an integrated system with other systems requires planning with precise and accurate supporting information so that it focuses on solving existing agricultural problems. Unfortunately, development planning so far has tended to refer to expert opinion, whereas ideal development must be carried out as a whole and not in a partial manner (Arman et al., 2019), must involve farmers as agricultural stakeholders, and make the problems faced by farmers as problems that must be resolved.

Farmers as the grass root of agribusiness are the implementer stakeholder groups who act as implementers of policies and activity target groups (Nugroho et al, 2014). As farming actors, they are very aware of the various factors that influence their farming activities, if there is a factor that encourages an increase in income, farmers will maintain or implement it, and vice versa if a factor becomes an obstacle, farmers will leave or find a solution (Sormin et al., 2012; Nasution et al., 2021). Therefore, it is very important to know the problems faced by farmers and the basic factors in preparing agricultural development strategies.

Based on this principle, problem solving and agricultural development in the Agricultural Zone of the Southwest Region of Aceh need to involve farmers as agricultural subjects, which begins by finding out the problems facedfarmers to solve agricultural problems. Because as agricultural stakeholders, farmers have interests and are involved positively or negatively in agricultural development programs (Scheemer, 2000; Nugroho et al., 2014). The research results are expected to be a reference for the development and development of agriculture in the Southwest Coast Region of Aceh, and to be published in national and international journals as a contribution of science to the world of agriculture.

2. RESEARCH METHOD

2.1. Time and Location of Research

The research was carried out in June-August 2022 in the Southwest Coast Region of Aceh in 7 Municipal Districts namely Aceh Jaya, West Aceh, Nagan Raya, Southwest Aceh, South Aceh, Subussalam and Singkil Regencies. The selection of the research location was done intentionally or purposively with considerationthat this area is the Aceh Agricultural Zone Region and is the future Aceh with the mainstay of the agricultural sector.

2.2. Population and Sample

The population of this study were all farmers in 7 districts/cities in the Southwest Region of Aceh. Determination of the number of samples was carried out based on the Slovin formula, by taking the value of d = 5%, the number of samples was 399 and the number of samples was increased to 400. Sampling was carried out using porposive cluster random sampling with sample distribution as shown in Table 1.

Table 1. Distribution of the number of samples.

No	District/City	Number of Districts	Number of Villages	Sample District	Sample Village	Farmer Population	Sample Farmers
	Aceh Jaya	9	172	5	13	20,532	28
	West Aceh	12	322	7	24	51,122	71
	Nagan Raya	10	222	6	17	23.132	32
	Southwest Aceh	9	152	5	12	50,474	70

	South Aceh	18	260	10	20	101,647	140
	Subussalam	5	82	3	6	27,150	37
	Aceh Singkil	11	16	6	1	16024	22
	Amount	74	1.126	42	93	290,081	400

Source: PBS Aceh Jaya, 2021; West Aceh BPS, 2021; BPS Nagan Raya, 2021; BPS Aceh Barat Daya 2021; BPS Subussalam, 2021; BPS Aceh Singkil, 2021.

2.3. Research Data

The research was conducted descriptively using primary and secondary data. Primary data was obtained from the answers of the farmer respondents to the agricultural problems they faced. Farmers are asked to state freely or openly the agricultural problems they face, where 1 problem is assessed with 1 score. In addition to the need for primary data, documentation and observation are also carried out. Secondary data obtained throughliterature review, and data collection at related institutions.

2.4. Data analysis method

The analysis was carried out descriptively by tabulating the score of the respondents' answers. The results of the answers are ranked based on the score, averaged, and the median value is taken as a separator for the problem groups presented by the farmers. The results of the scoring sequence are analyzed based on the facts that have occurred, the supporting theory and the results of research that has occurred elsewhere.

Table 2. Characteristics of Research Respondents.

No	Description	Amount	Percentage	No	DDescription	Amount	Percentage
	Respondent Area				**Age of Respondents (Years)**		
	Aceh Jaya	28	7.00%		<20	7	1.75%
	West Aceh	70	17.75%		20 – 30	63	15.75%
	Nagan Raya	32	8.00%		31–40	146	36.50%
	Southwest Aceh	70	17.50%		41 - 50	87	21.75%
	South Aceh	140	35.00%		51- 60	83	20.75%
	Subussalam	37	9.25%		>60	14	3.50%
	Aceh Singkil	22	5.50%		**Amount**	400	100.00%
	Amount	400	100.00%				
	Gender				**Family Dependents (Soul)**		
	Man	345	86.25%				
	Woman	55	13.75%		<3	49	12.25%
	Amount	**400**	**100.00%**		3 – 5	219	54.75%
	Agricultural products meet household needs				6 – 8	94	23.50%
	Could	98	24.50%		> 8	38	9.50%
	Can not	302	75.50%		**Amount**	**400**	**100.00%**
	Amount	**400**	**100.00%**				
	Activities Other Than Farmers				**Level of education**		
	Only Farmers	201	50.25%		SD	33	18.60%

	Entrepreneur /Trade	86	21.50%		junior high school	65	29.30%
	civil servant	87	21.75%		SMA/SMK	176	41.93%
	Keuchik	11	2.75%		Diploma	11	1.93%
	Sekdes	7	1.75%		S1	112	7.89%
	Fishermen / Other Businesses	8	2.00%		S2	3	0.35%
	Amount	**400**	**100%**		Amount	400	100.00%
Experience in the Agricultural Sector (Years)							
	< 10	32	8.00%				
	10 – 15	89	22.25%				
	16 – 20	154	38.50%				
	>20	125	31.25%				
	Amount	**400**	**100.00%**				

Source: Research Data (2022).

3. RESULTS AND DISCUSSION

3.1. Characteristics of Respondents

Onbasically the respondents are a description of the population or farmers in the Southwest region of Aceh. This descriptive information is needed in connection with the research being conducted to discuss various problems faced by farmers in carrying out their agriculture. Agriculture that produces agricultural products cannot be separated from the factors of production that are inherent in the farmer, including the individual characteristics of the farmer's personality that underlies the behavior of farmers in various situations including in carrying out agricultural business (Damihartini and Jahi, 2005). The characteristics of the research respondents who are the primary research data source are shown in Table 1.

Table 2 shows that 35.00% of respondents or the most are in South Aceh District, the most age group is 36.50% or aged 31-40 years, 86.25% are men, 75.50% of respondents cannot meet household needs from agricultural activities, 54.75% have 3-5 family dependents, 50.25% only work as farmers or have no side work, 41.93% have a high school/vocational high school education, and 38.50% have farming experience 16- 20 years.

The large number of respondent farmers aged 41-50 years are of productive age which is in the range of 15-64 years (Law No.13 of 2003). A person's age is an indicator that can be used to measure productivity (Soekartawi, 2001) where increasing the age of farmers will reduce human physical and thinking abilities (Isyanto, 2011). Likewise, there are more men, where male farmers are more productive in farming (Sujaya, et al., 2018). Most of the education levels of farmers are at the high school/vocational school level, this level allows farmers to manage their farming business well (Damihartini and Jahi, 2005), especially with the support of long experience so that farmers are more skilled in farming (Sujaya, et al., 2018).

3.2. Conditions in the Southwest Region of Aceh.

The South West Region of Aceh is the coastal area of the southern part of Aceh Province which borders the Indonesian Ocean, has land ranging from the lowlands in the coastal areas to the Barisan Hills which borders the Gayo highlands or the Central Region of Aceh. Geographically this area is located at 020 02'- 05016' North Latitude and 95000' - 980 10' East Longitude with an area of 19,234 Km2 or 1,923,400 Ha or 33.88% of Aceh Province which covers 5,677,081 Ha as shown in Figure 1.

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Figure 1. Research Locations in the Southwest Region of Aceh
Source: Aceh Bappeda (2018)

As an agricultural area, this area has various types of soil, including 59.26% Ultisols, 16.78% Inceptisols, 12.26% Histosols, 11.16% Entisols and 0.54% Andisols (Bappeda Aceh, 2018), where In general, these types of land are suitable for agricultural use, but management must be adjusted to the nature of these soils (Hardjowigeno, 2007; Hanafiah, 2012). In addition to supporting soil types, this region is supported by good climatic conditions for agricultural development. Based on the division of the Oldeman climate type, this area has the following climate types: 1) Aceh Jaya type B2, C1, C2, C3 and C4; 2) Aceh Barat type B2 and C1; 3) Nagan Raya types A1, A2, B1, B2, and C1; 4) Aceh Barat Daya types B1, B2, and C1; 5) South Aceh types A1, A2, B1, and C1; 6) City of Subussalam type B1 and B2; 7) Aceh Singkil type B1 (Bappeda Aceh, 2018). The division of the Oldeman climate type is based on the occurrence of wet months or rainfall > 200 mm/month. Type A climate has a wet month of more than 9 months, type B 7-9 months, type C 5-6 months, type D 3-4 months and type E less than 3 months (Harahap et. al., 2021).

3.3. Agricultural business problems

Farmers as agribusiness actors are people who know in detail the various factors that affect their agricultural business. If a factor can encourage an increase in income, then farmers will maintain or implement this factor (Sormin et al., 2012), and vice versa if there is a factor that becomes an obstacle, farmers will leave or seek solutions to these problems. Referring to this principle, the handling of agricultural development issues needs to involve the opinions of farmers as agricultural subjects, starting with finding out the problems faced by farmers to solve these problems. The problems faced by farmers in the Southwest Region of Aceh regarding the conditions and development of agriculture as a result of the research are sorted by score as shown in Table 3.

Table 3. Farmers' Problems in Farming in the Southwest Region of Aceh.

No	Farmer Problems	Score
	Southwest Coast Region	
1	Agricultural development assistance from the government such as capital, superior seeds, production inputs, counseling and program supervision are not appropriate and complete	178
2	Agricultural development programs are not planned until a good market is available.	161
3	It is difficult to get fertilizer, especially subsidized fertilizer	112
4	Prices of agricultural products tend to be low and are detrimental to farmers	96
	Average	72,73
5	Attacks by pests and large pests such as elephants, pigs and bears	55
6	The plants developed do not adapt to land conditions and pay little attention to the economic value of plant products.	50
7	Difficult to get new agricultural land	43
8	Road infrastructure that is still damaged/poor	30
9	Agricultural infrastructure such as irrigation is still poor in providing water	29
10	Land optimization programs such as draining swamps and improving irrigation cannot be utilized properly	25
11	Developed plants are difficult to care for	21
	Total score	**800**
	Average	**72,73**

Source: Research Results (2022).

The results of the research analysis Table 3. shows that of the 11 farmer problems that were obtained 4 problems were above the average score, sequentially namely agricultural development assistance from the government such as capital, superior seeds, production inputs, counseling and program supervision were not appropriate and complete; agricultural development programs are not planned until a good market is available; it is difficult to get fertilizer, especially subsidized fertilizer, and the prices of agricultural products tend to be low and are detrimental to farmers. While 7 problems are below the average score with the lowest score problem being the plants that are developed are difficult to care for.

In an effort to improve the economy, the government is carrying out development in the agricultural sector which involves many farming communities (Insaniyati, 2008; Sabrina, 2021). However, according to farmers, the agricultural development program carried out through the provision of capital, superior seeds, production inputs, counseling and supervision of the program is still not appropriate and complete because it does not solve the problems faced by farmers as a program goal. Meanwhile, program objectives will be achieved if the criteria for effectiveness, efficiency, equity, responsiveness of the beneficiaries are met, and these objectives can be evaluated in the beneficiary group (Dehani et al., 2018; Wahyuni and Shaliza, 2021).Evaluation is important because the results of the evaluation will provide information on the level of achievement of program objectives, and become input for decision makers in planning the next program (Dewi et al., 2020).

On the other hand, agricultural conditions continue to develop following technological developments, where farmers need the assistance of quality extension workers who are able to follow developments and teach the application of technological developments (Darmawan and Mardikaningsih, 2021). Through quality counseling, it will increase agricultural production, farmers' income and independence, as well as economic growth (Mardikaningsih, 2019; Sabrina, 2021). Therefore, the unavailability of qualified instructors who assist farmers in carrying out

farming is one of the causes of failure of farmers in increasing productivity, and as a driving force for rural economic growth.

In addition to the problem of inappropriate and incomplete agricultural development, farmers also think that agricultural development programs are not planned until a good market is available. Basically, agricultural development as an integral part of national development is very important to plan well so that it can encourage regional economic growth (Nasution, et al., 2020; Kholodov et al., 2020). This is because the agricultural sector is a place where most people in poor or developing countries depend for their lives (Ramlawati, 2020), including in the southwestern region of Aceh. Technically a good plan is not only limited to physical development planning,

Another problem faced by farmers and also very important to be resolved is the difficulty for farmers to obtain fertilizer, especially subsidized fertilizer. As one of the production input factors, fertilization is carried out to add to the shortage of soil nutrients from plant needs in increasing crop production (Purba et al., 2021), but with high fertilization costs it will reduce agricultural business income (Stewart, 2020). Based on data reported by Tribunnews.com (March, 2021) Aceh received an allotment of subsidized urea fertilizer of 68,960 tons, but with the need for urea fertilizer for rice plants in Aceh of 300 Kg/Ha (Ministry of Agriculture, 2020) with a rice harvest area of 320,752 Ha (BPS Aceh, 2022) will require 96,226 tonnes of fertilizer. This means that only for the rice commodity there is still a shortage of 27,226 tons of subsidized urea fertilizer, not to mention the needs for other secondary crops. vegetables and fruits cultivated by farmers, as a result, subsidized fertilizers are contested and there is always a shortage. The same problem regarding the scarcity and high price of fertilizer also occurs in other areas such as corn farmers in Kendal Regency, Central Java, where farmers often have difficulty getting fertilizer at the time of planting and even if it is available the price is expensive. Finally, farmers use fertilizer so that maximum production is not achieved (Nugroho, 2015). Because fertilizer has an important role in increasing agricultural productivity, the availability of fertilizer at economically affordable prices is the responsibility of the government, and must be resolved in encouraging the achievement of agricultural development goals. As a result, subsidized fertilizer is a contested material and scarcity always occurs. The same problem regarding the scarcity and high price of fertilizer also occurs in other areas such as corn farmers in Kendal Regency, Central Java, where farmers often have difficulty getting fertilizer at the time of planting and even if it is available the price is expensive. Finally, farmers use fertilizer so that maximum production is not achieved (Nugroho, 2015). Because fertilizer has an important role in increasing agricultural productivity, the availability of fertilizer at economically affordable prices is the responsibility of the government, and must be resolved in encouraging the achievement of agricultural development goals. As a result, subsidized fertilizer is a contested material and scarcity always occurs. The same problem regarding the scarcity and high price of fertilizer also occurs in other areas such as corn farmers in Kendal Regency, Central Java, where farmers often have difficulty getting fertilizer at the time of planting and even if it is available the price is expensive. Finally, farmers use fertilizer so that maximum production is not achieved (Nugroho, 2015). Because fertilizer has an important role in increasing agricultural productivity, the availability of fertilizer at economically affordable prices is the responsibility of the government, and must be resolved in encouraging the achievement of agricultural development goals. The same problem regarding the scarcity and high price of fertilizer also occurs in other areas such as corn farmers in Kendal Regency, Central Java, where farmers often have difficulty getting fertilizer at the time of planting and even if it is available the price is expensive. Finally, farmers use fertilizer so that maximum production is not achieved (Nugroho, 2015). Because fertilizer has an important role in increasing agricultural productivity, the availability of fertilizer at economically affordable prices is the responsibility of the government, and must be resolved in encouraging the achievement of agricultural development goals. The same problem regarding the scarcity and high price of fertilizer also occurs in other areas such as corn farmers in Kendal Regency, Central Java, where farmers often have difficulty getting fertilizer at the time of planting and even if it is available the price is expensive. Finally,

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4. CONCLUSION

The South West Region of Aceh is an Aceh agricultural zone with various agricultural productions that make a major contribution to the regional economy. However, in carrying out their agricultural business various problems are faced by farmers, both problems that can be solved by farmers and are the responsibility of the government as a form of public service. There are 11 problems faced by farmers with 4 problems being above the average score, including agricultural development assistance from the government such as capital, superior seeds, production inputs, counseling and program supervision are not appropriate and complete; agricultural development programs are not planned until a good market is available; it is difficult to get fertilizer, especially subsidized fertilizer, and the prices of agricultural products tend to be low and are detrimental to farmers. While 7 problems are below the average score with the lowest score problem being the plants that are developed are difficult to care for. Solving these problems is an effort to help farmers in running their agricultural business. This problem is also an obstacle in regional development, so that it can become the basis for planning in the implementation of regional development.

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