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The Role of Agribusiness Support Institutions in Increasing Hybrid Maize Farming Production in Marobea Village Sawerigadi Sub-district, West Muna District

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Abstract

This study is motivated by the increasing production of hybrid corn crops in the West Muna region, which has been on the rise. In 2017, the Central Bureau of Statistics (BPS) recorded corn productivity in West Muna reaching 11,378.84 tons/ha, and it increased to 20,221.17 tons/ha in 2018 but declined in 2019 and 2020 to 11,975.63 tons/ha. Due to the decline in corn farming production, farmers' welfare also decreased. Therefore, the role of institutions in supporting the agribusiness system is crucial to significantly improving the welfare of farming communities. This research aims to determine: (1) The role of institutions in increasing production outcomes among corn farmers in Marobea Village, Sawerigadi District, West Muna Regency. (2) The relationship between the role of farmer groups and the increase in corn farming productivity in Marobea Village, Sawerigadi District, West Muna Regency. This research was conducted from January to July 2024. The population in this study consists of hybrid corn farmers who are members of farmer groups, agricultural extension officers, farmers' association groups (Gapoktan), financial institutions, and middlemen. This study employs descriptive analysis and Spearman rank correlation techniques. The results of the study show that (1) The role of agribusiness support institutions in hybrid corn farming in Marobea Village, Sawerigadi District, West Muna Regency: farmer groups are categorized as having a fairly significant role, Gapoktan is categorized as not having a role, agricultural extension officers are categorized as having a fairly significant role, middlemen are categorized as having a fairly significant role, and financial institutions are

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categorized as having no role. (2) Based on the Spearman rank correlation test, the relationship between learning classes and productivity scored 0.668, the relationship between farming production units and productivity scored 0.471, and the relationship between cooperation platforms and productivity scored 0.645, with each showing a positive and significant relationship.

Keywords: Role, Institutions, Productivity, Corn Farmers.

INTRODUCTION

Indonesia is known as an agrarian country where the majority of the population works in agriculture. With the increase in population, adequate food availability is an urgent need. Food production is a top priority for development (Rahayu, 2022). Permana et al. (2015) argued that development is often interpreted as growth and change. Therefore, the success of agricultural development can be interpreted as the high growth of the agricultural sector that brings positive changes to poor rural areas. It is known that the agricultural sector is considered very important in Indonesia. To achieve more progressive agricultural development, it is necessary to strengthen the role of agricultural institutions that contribute to it. Agricultural institutions are the main drivers of agricultural progress. The agricultural system is a system of norms and customs that are structured, systematized, and continuously practiced to meet the needs of community members who are closely related to rural agricultural life. Progress in agriculture cannot be separated from the support of agribusiness institutions. The scope of agribusiness is very broad and includes various institutions that handle agribusiness, including banking, industry, trade, transportation, warehousing, research, education, extension, and other non-governmental organizations.

Efforts to improve farmers' independence and welfare as well as sustainable agriculture require the presence of an institution. The institution is a forum where all stakeholders can work together to find solutions to the problems faced by farmers. Marobea Village is one of the villages in Sawerigadi Sub-district which includes two hamlets, namely Dandila Hamlet and Matandasa Hamlet. The area is 19.19 square kilometers. Most of the population makes a living as corn farmers. The local government has implemented various activities to increase agricultural production and improve community welfare (BPS 2020). Agriculture plays an important role as the sole spearhead of national development. To achieve national development in agriculture (agribusiness) in the future, it is necessary to overcome as much as possible the problems and obstacles that have not been fully resolved and require more serious attention. A very important thing is that the increase in agricultural production has not been accompanied by a significant increase in the social income of farmers on their farms. Farmers, the smallest unit of the

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agricultural economy, have not been able to achieve meaningful value creation commensurate with the scale of *integrated farming systems.* Therefore, the issue of institutional development in the broader agricultural sector is becoming increasingly important.

The role of agricultural institutions in supporting agribusiness systems is needed to provide input and consideration to agricultural stakeholders in order to develop maize cultivation. In most areas, the role of agricultural institutions and farmers is still unclear even though their functions are very diverse. The logical consequence of implementing agricultural development is to foster institutional innovation that has basic knowledge, agribusiness, and specialized knowledge, including finance. Therefore, it is very important to have a system that allows us to accurately understand the actual situation and make improvements if there are weaknesses in the system. Based on the description above, researchers are interested in conducting research to explain the role of agribusiness support institutions in increasing corn crop production in Marobea village, Sawerigadi sub-district, West Muna Regency.

METHOD

This research was conducted in Marobea Village, Sawerigadi District, West Muna Regency, Southeast Sulawesi Province. The location of this research was determined *purposively* in Marobea Village, Sawerigadi District, West Muna Regency from January to June 2024. The population in this study were 1 extension agent, 1 gapoktan (farmer group association) consisting of 4 farmer groups with 10 members each, 3 middlemen and 1 member of a financial institution.

Data analysis used to determine the role of supporting institutions in increasing corn farming production in Marobea Village, Sawerigadi Sub-district, West Muna Regency is through weighted average weighting. Each indicator has the same weight using the following formula:

$$Bobot\ nilai\ rata-rata\ tertimbang = \frac{jumlah\ bobot\ kelembagaan\ penunjang}{jumlah\ indikator\ terbobot}$$

To obtain the institutional index value, a weighted average value approach is used with the following formula:

$$Indeks = \frac{total\ nilai\ persepsi\ per\ indikator\ kelembagaan\ penunjang\ terbobot}{total\ indikator\ kelembagaan\ penunjang\ terbobot\ yang\ diisi} x\ nilai\ penimbang$$

To facilitate interpretation of the institutional index value, which is between 25-100, the assessment results are converted to a base value of 25, with the formula, namely, index *x* weighted value (25). This can be seen in the following table:

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Table 1 Table of Interval Values, Conversion Interval Values of Supporting Institutions and the Role of Supporting Institutions

Interval value	Supporting institution conversion interval value	The role of supporting institutions
1,00 - 1,75	25 - 43,75	No role
1,76 - 2,50	43,76 - 62,50	Less of a role
2,51 - 3,25	62,51 - 81,25	Quite a role
3,26 - 4,00	81,26 - 100,00	Very instrumental

Source: Alwi *et, al.* (2016)

RESULTS AND DISCUSSION

Analysis of the Role of Agribusiness Support Institutions in Increasing Farm Business Production

1. Role of Farmer Groups

Farmer groups are a place for farmers to get various information about various things including strengthening the relationship between farmer group members, solving problems in agriculture, as a learning space, and as a production unit (Lestari, 2023). In the agricultural sector, farmer groups have a very important role. In this case, farmer groups mean the function and self-adjustment and process of a group to meet the needs of group members. The role of farmer groups can be seen in table 1.

Table 2 Weight Value, Conversion and Category of Farmer Group Role

Indicator of Farmer Group Role	Weight Value	Conversion Rate (x 25)	Category Role of Farmer Group
learning classroom facilities	3,16	78,89	Moderate Role
a vehicle for cooperation between group members	3,11	77,78	Enough Role
production unit	3,16	78,89	Moderate Role
Average	3,14	78,52	Moderate Role

Based on the description of table 2 above, it is concluded that the role of farmer groups as a learning class, vehicle for cooperation, and as a production unit is quite instrumental. So the category of the role of farmer groups is quite instrumental, meaning that farmer groups in Marobea Village, Sawerigadi District, West Muna Regency play a role. This shows that the farmer

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group as a farmer business production unit is a business unit that can be developed to achieve business economies of scale by maintaining quantity, quality and continuity (MOA, 2016). The role of farmer groups means that they have not fully played a role in supporting farming activities in Morobea Village, West Muna Regency.

2. Role of Gapoktan

There are 3 roles of Gapoktan that are expected to be carried out by Gapoktan, namely, facilitating and guiding farmer group members in solving problems faced by farmer group members as farming actors, as a central institution for distributing subsidized seeds, providing various kinds of assistance needed. The role of gapoktan supporting institutions can be seen in table 3.

Table 3 Weight Value, Conversion and Category of the Role of Gapoktan

Role of Gapoktan	Weight value	Value Conversion (x25)	Category Role of Gapoktan
Facilitate and guide farmer group members in solving problems	1,76	43,89	No Role
As an Institution for the Distribution of Subsidized Seeds	1,69	42,22	No Role
Providing various kinds of assistance needed	1,54	38,33	No Role
Average	1,67	41,48	No Role

Based on Table 3 above, the role of the Gapoktan, namely facilitating and guiding farmer group members in solving problems, obtained a conversion value of 43.89 as an institution for distributing subsidized seeds with a conversion value of 42.22, providing various kinds of assistance needed, obtained a conversion value of 38.33, thus the category of the role of the Gapoktan is that it does not play a role, which means that the role of the Gapoktan in Marobea Village, Sawerigadi District, West Muna Regency does not play a role in supporting their farms. This is due to many things, one of which causes this Gapoktan to not play a role, namely the lack of enthusiasm from farmer groups to form Gapoktan so that there are no activities involving Gapoktan.

3. The role of agricultural extension workers

Agricultural extension officers play a role in optimizing the empowerment process of a

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farmer group. In influencing the group empowerment process, there are several roles of extension workers. His role in this case is as a facilitator, as a guide, consultant, educator, motivator, and innovator. The role of agricultural extension officers as a supporting institution in Marobea Village, Sawerigadi District, West Muna Regency can be seen in table 4.

Table 4 Weight, Conversion and Category Values of the Role of Agricultural Extension Workers

The role of Extension	Weight value	Conversion Rate (25)	Category of Extension Role
Facilitator,	3,11	77,78	Moderate Role
Mentor,	2,98	74,44	Moderate Role
Consultant,	2,6	65	Enough Role
Educator,	2,38	59,44	Lack of Role
Motivator	2,67	66,67	Moderate Role
Innovator	2,87	71,67	Moderate Role
Average	2,76	69,16	Quite a role

Based on Table 4 above, it explains that the category of the Role of Agricultural Extension Officers as Facilitators, Serving the Needs of Farmers in Procuring Infrastructure Facilities with a value of 77.78 means that agricultural extension officers have a role category, in this case not fully playing a role. As a mentor, providing guidance related to land processing to marketing has a role category that is quite instrumental with a converted interval value of 74.44. As a mentor, agricultural extension agents play a role in providing guidance related to land management to marketing in developing their farming business. The role of agricultural extension officers as consultants is very good where agricultural extension officers can solve farmers' problems related to the selection of superior seeds, pest management, to the application of pesticides and balanced fertilization. As educators, agricultural extension workers facilitate the teaching and learning process carried out by farmers, which is quite instrumental with a conversion interval of 59.44. Agricultural extension officers play a role in improving farmers' knowledge of ideas in hybrid maize development. In the process of farmer extension, it is expected that the acceptance of something new by farmers is called adoption. Acceptance here means not just knowing, but until it can actually implement correctly in the farming business. If the technology taught by extension workers can be applied by farmers, there will be an increase in production produced. The condition of smallholder agriculture is still very weak in many aspects while the challenges faced are increasingly severe for it requires extension activities and the role of extension workers that

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are increasingly intensive, sustainable and directed. The role of extension workers must be in a strategic position where the implementation is well coordinated and can run effectively and efficiently. Farmers need to get new inspiration to grow motivation and passion for business with consistency and high commitment in efforts to increase farm production (Sundari, 2015).

4. The Middleman's Role

Middlemen as providers of capital to farmers, namely providing money or capital to farmers, which then farmers replace capital in installments or exchange for agricultural products according to the agreed price. The presence of middlemen in the village who are in direct contact with farmers has a very reliable role for farmers. The role of middlemen in Marobea Village, Sawerigadi Sub-district, West Muna Regency can be seen in Table 5.

Table 5 Weight Value, Conversion and Category of Middlemen's Role

Indicator of the Middleman's Role	Weight value	Conversion Rate (x25)	Category Role of Middlemen
Buying agricultural products	3.49	87.23	Very Instrumental
Collecting agricultural products	3.25	81.11	Moderate Role
Marketing agricultural products	3.2	80	Moderate Role
Owner or capital provider	2.74	68.34	Moderate Role
Average	3.17	79.17	Moderate Role

Based on Table 5 above, it explains that the indicator of the conversion value of the role of middlemen obtained a value of 87.23 for the indicator of buying agricultural products, 81.11 for the indicator of collecting agricultural products, 80 for the indicator of marketing agricultural products with the category of role and 68.34 category as the owner of capital or provider of capital is quite instrumental, which means that the category of the role of middlemen is quite instrumental.

5. Role of Financial Institutions

The role of financial institutions in providing capital assistance services needed by farmers can be seen in Table 6.

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Table 6 Weight, Conversion and Category of Role of Financial Institutions

Indicators of the Role of Financial Institutions	Weight value	Conversion Rate (x25)	Financial Institutions Category
Provide capital assistance services to farmers	1,43	35,56	No Role
Average	1,43	35,56	No Role

Based on table 6, the Financial Institution, namely providing capital assistance services to farmers, obtained a value of 35.56, which means that the category of the role of the Financial Institution does not play a role. In Marobea Village, Sawerigadi District, West Muna Regency, financial institutions have no role.

Analysis of the Relationship Pattern between Farmer Group Role and Productivity

Table 7 Spearman rank correlation test results

No.	Description	Significance	Correlation Coefficient
1	Study Class	0,000	0,668
2	Farm Production Unit	0,002	0,471
3	Cooperation Vehicle	0,000	0,645

Correlation analysis of learning class variables with corn farming productivity in Marobea Village, Sawerigadi Subdistrict, West Muna District shows a positive relationship or there is a significant correlation between learning class groups and the level of productivity change. The correlation coefficient between the farmer's learning class and farm productivity is 0.668, which means that the farmer's learning class has a strong relationship with changes in productivity levels. Correlation analysis of production unit variables with corn farming productivity in Marobea Village, Sawerigadi Subdistrict, West Muna District shows a positive relationship or there is a significant correlation between the production unit group and the level of productivity change. The correlation coefficient between farmers' production units and farm productivity is 0.471, which means that farmers' production units have a strong relationship with changes in productivity levels. Correlation analysis of cooperation vehicle variables with corn farming productivity in Marobea Village, Sawerigadi Subdistrict, West Muna Regency shows a positive

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relationship or there is a significant correlation between the learning class group and the level of productivity change. The correlation coefficient between the means of farmer cooperation and farm productivity is 0.645, which means that the means of farmer cooperation has a strong relationship with changes in productivity levels.

CONCLUSION

Farmer groups are categorized as playing a role in increasing the production of hybrid maize farming, while the role of farmer groups is categorized as not playing a role, agricultural extension workers are categorized as playing a role, as well as middlemen are categorized as playing a role, and financial institutions are categorized as not playing a role in increasing the production of hybrid maize farming in Marobea Village, Sawerigadi Subdistrict, West Muna Regency. The relationship between farmer groups and productivity shows a unidirectional or positive relationship, namely the increasing role of farmer groups as learning classes, farming production units, and cooperation vehicles, the increasing productivity of corn farming. This shows that the better the role of farmer groups, the better the productivity of farmer group members.

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