

Development of a Corporate-Based Corn Seed Area in Jatirogo District, Tuban Regency



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ABSTRACT : One form of assessment that can be done is a periodic evaluation which can be a warning if programs and activities run outside the plan and become input for further improvement. After the assessment, it is also necessary to determine the priority of the strategy for developing corn seed areas to continue with better achievements. Based on the situation and conditions described, there needs to be research to make decisions for farmers in working on their farms. Therefore, researchers want to research related to the development of corn seed areas in Jatirogo District, Tuban Regency, East Java. The determination of farmer samples was carried out purposively by taking 3 farmer groups, namely the chairman, secretary, and treasurer so that the number of samples from all farmer groups was 60 people and 10 key informants. The data analysis methods used are the CIPP Evaluation Model and Process Hierarchy Analysis (AHP). The results of this research are in the development of a pilot program for the development of corporate-based corn seed areas in the future are the welfare factors of corn farmers, production factors related to the business of corporate-based seed corn cultivation, and ease of access factors that support the business of corporate-based corn seeds or corn farmer farming.

KEYWORDS: Development, Area Based Corporation, AHP, CIPP Evaluation Model

INTRODUCTION

Corn production in Indonesia is still relatively low and unable to meet consumer needs that continue to increase. National corn production has not been able to keep up with demand which is partly driven by the development of the feed and food industry (Budiman, 2012). The low production of corn is caused by various factors, among others, such as insufficient farming technology, the readiness and skills of corn farmers who are still lacking, the provision of production facilities that are still not appropriate, and the lack of capital of corn farmers to carry out the production process to marketing the results. The development of corporate-based agricultural areas is a management of the development of production centers on an economic scale and is functionally related in terms of natural resource potential, socio-cultural conditions, production factors, and the existence of supporting infrastructure (Ministry of Agriculture 2018). The main objective is to improve the welfare of farmers and producers as well as the added value and competitiveness of the region for agricultural sustainability, in this case, the corn commodity. The development of agricultural areas is intended to (1) Increase the effectiveness and efficiency of supporting services; (2) Ensure the sustainability of pre-production, production process, and post-production activities in the agribusiness system. Activities that need to be carried out related to corn commodities include strengthening the farming system as a whole in one area management supported by the availability of adequate agricultural facilities and infrastructure such as water supply, provision of rice source seeds and assistant services, as well as optimal marketing of results.

Hybrid corn seeding is one solution for increasing corn productivity. Hybrid corn seeds have the potential to have high yields, are generally more resistant to disease, more responsive to fertilization, and planting, and cobs more uniform (Iriany and Destiny, 2007). Market information and market certainty through partnerships between farmers and companies are very important to obtain certainty in the price, quality, and quantity of products desired by the company. Farmer institutions have an important role in agricultural development (Hermanto and Swastika 2011). Institutional development of farmers can be carried out through increased support for extension services, research, external roles, group dynamics, and farmer participation (Anantayu 2009), as well as support for internal characteristics such as productive age, farm experience, active participation, motivation, and education (Prawiranegara 2016).

The application of farmer corporations that are commonly implemented is in the form of corporate farming. Corporate farming institutions are reported to increase the income of member farmers from land rental, help with land management, or

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share land products (Musthofa and Kurnia 2018). However, there has not been much research that discusses the institution of farmers in an agricultural area.

Corn production in Tuban in 2018-2021 was the first highest at the provincial level with total production from 2014 of 628,709 tons/capita/year increased annually until 2021 of 758,213 tons/capita/year, with a land area in 2014 of 112,634 hectares increased by each year until 2021 of 134,215 hectares. This makes the development of corn seed areas to be further improved both production and quality. Jatirogo District is one of the corn crop production centers in Tuban Regency, East Java Province, but farmers' production and income have not been optimal. This is due to the increasing area of land cultivated by farmers due to the increasing population which results in less-than-optimal agricultural land yields. This condition certainly has an impact, one of which is that many farmers have narrow land and there are also farmers who do not have arable land. Based on the situation and conditions that have been described, there needs to be research to make decisions for farmers in working on their farms. Therefore, researchers want to research related to the development of corn seed areas in Jatirogo District, Tuban Regency, East Java.

RESEARCH METHODS

The research location was chosen purposively with a method of determining the location of the research which was determined deliberately based on the consideration of Jatiroto District, Tuban Regency is one of the corn-producing centers and some have carried out corn seed business with partners. The population in this study is corn farmers in Jatiroto District, Tuban Regency, the population of this study is 1,483 farmers. According to Sugiyono (2016), the definition of a sample is part of the number and characteristics possessed by the population. The determination of farmer samples was carried out purposively by taking 3 farmer groups, namely the chairman, secretary, and treasurer so that the number of samples from all farmer groups was 60 people.

In the implementation of AHP, the number of samples used in this study was 10 key informants. The key informants taken were related agencies in managing the program such as 2 people who were Agriculture Offices, 5 members of the Association of Agriculture, and 3 people who were Field Agricultural Extension Workers (PPL) companions in the corn seed pilot program. The key informant managing the corn seed pilot program was chosen because through these people they can obtain more complete and detailed information related to the things studied.

To determine the achievements of the implementation of activities, a context, input, process, product (CIPP) evaluation model was used which was proposed by Stufflebeam (1983). The CIPP evaluation model is considered suitable for this study because it is in accordance with the framework for the implementation of regional development and can assess the implementation of programs/activities as a whole, from planning to the results achieved. The model, developed by Stufflebeam and colleagues at Ohio State University, has four important components that will be evaluated in this CIPP model. These four components become the name of the CIPP evaluation model, where CIPP is taken from the initial group of the four components to be studied, namely Context, Input, Process, and Product.

The determination of alternative decision-making in the development of corn seed pilot areas according to the opinions of stakeholders in this study was carried out using the Analytical Hierarchy Process (AHP) technique. AHP is an analysis used in decision-making with a systems approach where this analysis can be used to understand a system and assist in predictions and decision-making. The opinions of stakeholders greatly determine the direction related to the development of corn seed pilot areas in Jatiroto District, Tuban Regency, so it is necessary to know alternative decision-making in the development of corn seed pilot areas according to stakeholders in Jatiroto District, Tuban Regency.

According to Saaty (1993), the steps taken in the AHP method are as follows:

1. Identify or establish emerging problems
2. Set goals, criteria, and results to be achieved
3. Identify criteria that have an influence on the problem set
4. Establish a hierarchical structure
5. Determine the relationship between the problem and the goal, the expected outcome, the doer/object associated with the problem, and the value of each factor
6. Comparing alternatives (comparative judgment)
7. Determine priority factors
8. Determine the order of alternatives by paying attention to logical consistency.

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RESULTS AND DISCUSSION

Performance Achievement Conditions of the Corn Seed Area Pilot Program Based on Farmer Corporations in Jatirogo District, Tuban Regency

The CIPP (Context, input, process, and product) evaluation model looks at operational and planning decision tools in a program. The advantage of this evaluation is the type of evaluation that provides a systematic format at each stage that will facilitate the decision-making process.

Table 1. Results of Value Transformation Evaluation of Performance Achievements of the Farmer Corporation-Based Corn Seed Area Pilot Program in Jatirogo District, Tuban Regency

No	Description of Indicators	Score Indicators	Earned value	Attainment Percentage (%)
1	Context	15	13,9	92,6
2	Input	15	10,5	69,9
3	Process	15	14	93,4
4	Product	15	13	86,6
	Total	60	51,4	85,6

Source: Primer data, 2023

From Table 1, it can be seen that the evaluation indicators of partnership programs using the CIPP model (Context, input, process, and product) resulted in an overall evaluation of 85.6 percent. For evaluation based on context components, it can be said to be good with a percentage of 92.6 percent. Indicators that need serious attention are related to planning the functioning of the farm business system as a whole, effectively, and efficiently does not mention when or how long it will take to be achieved, but in the technical reference, it is mentioned that there is a target setting for five years, and the implementation of pilot activities for two years so far is only at the beginning of the program. Based on Table 1, it can be seen that program evaluation based on input components can be said to be quite good with a percentage of 69.9 percent. In terms of the indicator aspect in the evaluation of input programs that needs attention is the synchronization of development as it is that not many farmers know about the synchronization of development plans because in the agricultural development planning deliberation forum not many farmers are involved so there needs to be socialization for farmers or forums involving farmers.

For program evaluation based on process components, it can be said to be good with a percentage of 93.4 percent. Indicators that need serious attention are related to training and coaching in monitoring, evaluating, and coaching as well as the performance of partnership programs in conducting cooperation. The counseling and training provided, there need to be a little better improved so that the results obtained will be good. For evaluation based on product components, it can be said to be quite good with a percentage of 86.6 percent. Indicators that need special attention are related to land areas where the ability of farmers to increase production. There needs to be quick handling by field officers to be able to overcome various kinds of obstacles faced by farmers so that production results can increase.

Development Strategy for Pilot Program for the Development of Corn Seed Areas Based on Farmer Corporations in Jatirogo District, Tuban Regency

Various alternative strategies that will be responded to by experts in the Analytical Hierarchy Process (AHP) questionnaire are the results of preliminary research that summarizes various references and networks of various opinions of stakeholders involved in policy making and in pilot programs for the development of corporate-based corn seed areas. Then various alternative strategies are assessed in the form of pair comparisons.

The opinions of interested parties (stakeholders) need to be considered in the development of a pilot program for the development of corporate-based corn seed areas. To find out various things that affect the development of a pilot program for the development of a corporate-based corn seed area in Jatirogo District, Tuban Regency, the opinions of various related parties (stakeholders) were explored. In this study, from each agency and farmers, 7 respondents were determined purposively who were considered masters or experts in matters related to the development of a pilot program for the development of corporate-based corn seed areas. The respondents represented various agencies or institutions including the Tuban Regency Food Security, Agriculture and Fisheries Office, Jatirogo District Agricultural Extension Agency – Tuban Regency Food Security, Agriculture and Fisheries Office, Agriculture and Fisheries Tuban Regency, Berkah Abadi Farmer Group, Sekaran Village, Jatirogo District, and Mulyo Desas Besowo Farmer Group, Jatirogo District.

In the opinion of stakeholders, the main factors that influence the development of the pilot program for the development of

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corporate-based corn seed areas and their weight values sequentially with a consistency ratio (CR) value of 0.04 are planning factors (0.09), production factors (0.17), welfare factors (0.31), partnership factors (0.13), farmer human resource factors (0.12) and ease of access factors (0.16). Based on stakeholder opinions, the most important factors considered in the development of a pilot program for the development of corporate-based corn seed areas in the future are the welfare factor of corn farmers, production factors related to the business of corporate-based corn cultivation, and ease of access factors that support the business of corporate-based corn seeds or corn farmer farming.

Where the factors that greatly influence the development of a pilot program for the development of corporate-based corn seed areas in Jatirogo District, Tuban Regency are factors of prosperity, production, and ease of access. This is thought to be due to the different scope of research. The hierarchical structure of the main factors and criteria of the main factors influencing the development of a pilot program for the development of a corporate-based corn seed area in Jatirogo District, Tuban Regency according to stakeholders are presented in Figure 1.

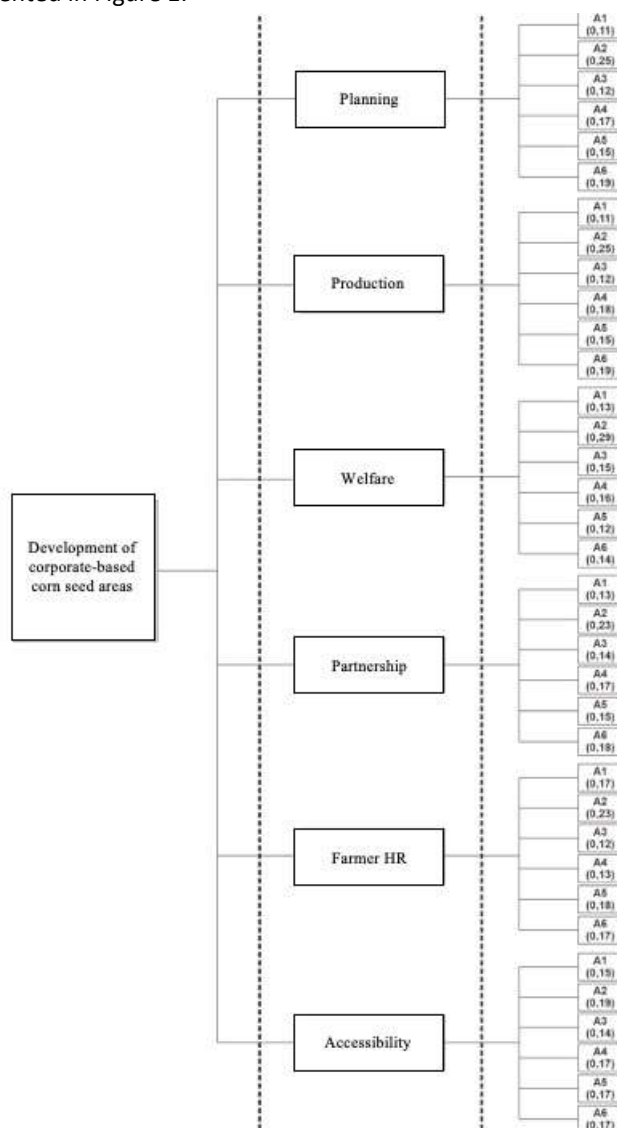


Figure 1. The hierarchical structure of the main factors and the criteria of the main factors

Information:

- A1 : Strengthening regional development planning with an action plan
- A2 : Increase production by increasing production capacity and quality
- A3 : Empowering farmers in farmer economic institutions
- A4 : Developing a partnership system and strengthening cooperation with Bank government institutions and other Companies
- A5 : Training and coaching of farmers and recruitment so that human resources meet the qualifications of needs
- A6 : Provision and strengthening of facilities and infrastructure

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CONCLUSION

Based on research on the Development of Corporation-Based Corn Seed Areas in Jatirogo District, Tuban Regency that has been carried out, it can be concluded that the evaluation of the partnership program using the CIPP model (Context, input, process, and product) resulted in an overall evaluation of 85.6 percent. For evaluation based on context and process components, it can be said to be good with a percentage of 92.6 percent and 93.4 percent. For evaluation based on input and product components, it can be said to be quite good with a percentage of 69.9 percent and 86.6 percent. The main factors influencing the development of the pilot program for the development of corporate-based corn seed areas and their weight values sequentially with a consistency ratio (CR) value of 0.04 are planning factors (0.09), production factors (0.17), welfare factors (0.31), partnership factors (0.13), farmer human resource factors (0.12) and ease of access factors (0.16). Based on stakeholder opinions, the most important factors considered in the development of a pilot program for the development of corporate-based corn seed areas in the future are the welfare factor of corn farmers, production factors related to the business of corporate-based corn cultivation, and ease of access factors that support the business of corporate-based corn seeds or corn farmer farming.

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