Proceedings of The 9th International Conference on Agriculture, Vol.7, Issue 2, 2023, pp.1-30

ISSN 2682-7018online
DOI https://doi.org/10.17501/26827018.2023.7201

IMPACT OF ESTABLISHING A FARMER COOPERATIVE TO REACH THE WELFARE OF FARMERS IN INDONESIA

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Abstract: Farmer cooperative, a priority program that must be realized to improve the welfare of farmers who are the main support for economic growth in facing challenges, during COVID-19 pandemic. The problem in Indonesia is that most farmers only have a narrow farming scale or less than 0.5 ha, it is almost impossible for farmers to organize themselves effectively and efficiently. For this reason, the research aims to analyze the extent to which the interests of farmers' corporations in improving the welfare of farmers. The research method is sourced from relevant stakeholders from the farmer level to the government, using a SWOT analysis and supporting secondary data, which was carried out in Demak Regency, Central Java Province. The results show that the rice farmer corporations in Demak Regency started from the Citra Kinaraya Multipurpose Cooperative (KSU) as a Primary Cooperative with its main business being the cultivation and marketing of specially packaged rice. Some of the products that have been produced include brown rice, black rice, milky rice and genki rice (mix) with a rice production capacity of around 40-50 tons/month. This capacity has only reached about 5% of the production target of around 875-1000 tons of special rice per month, which is produced from a harvested area of 18-20 ha·day. Currently the Citra Kinaraya Multipurpose Cooperative is developing into a Provincial Primary Cooperative by consolidating farmers outside the District of Demak, like District of Kudus, Grobogan, Banyumas, Sragen, Semarang and Purworejo. In 2020, it has been initiated that this corporation will become a Farmer Corporations Major Project implemented by the Ministry of Agriculture involving Ministries/Agencies and Local Governments and serve as a benchmark in developing 345 Farmer Corporations until 2024.

Keywords: farmers cooperative, priority program, consolidating farmers, multipurposes cooperative

Introduction

Background

Agriculture is a sector that has a strategic position in Indonesia. Since time immemorial, Indonesia has been known as an agricultural country that uses agriculture as a source of competitive advantage for the country's economy. This is supported, among other things, by the position of Indonesia which is located at the equator, has a tropical climate and fertile land. From the socio-economic aspect, many Indonesians work or rely on the agricultural sector as a source of family livelihood. However,

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the basic problem that occurs in Indonesia is that food crop agriculture tends to be small, owned by individuals and has a low level of yield uniformity due to the various production processes and facilities used. In Indonesia there are many provinces that are part of the national food barn, so that it can become an agricultural locomotive by producing higher quality and competitive products. In small-scale farming, farmers experience losses such as weak bargaining position, most of the activities are spent on on-farm and slow improvement of farmer's welfare.

Farmers' organizations play an important role in the success of farmer welfare improvement programs, national food security, but their existence needs to be considered and regulated regarding agricultural cultivation and all sources of agricultural business. Farmers' organizations, which are currently being intensified by the government in various agricultural development programs, are legalized in the form of a body known as a farmer's corporation. The level of success of farmer organizations/corporations is largely determined by the readiness of farmer organizations in managing all agricultural businesses in the working area of farmer organizations (Adjid 1985, Budianto 2000, Prakosa 2000, PSEKP 1999, Soentoro et al 2002, Suryana et al 1981, PSEKP 20001).

The farmer corporation is one of the priority programs that must be realized to improve the welfare of farmers and build business processes from upstream to downstream, which are the main support for national economic growth in facing challenges, one of which is during the current Covid-19 pandemic. Farmers' corporations are also targeted to have implications for fostering the spirit of the millennial generation to engage in advancing, innovative and competitive agricultural sectors. The corporation that has been running in Demak is one of the pioneers that is able to creatively bring together various commodities and farmer groups, which are united in one corporation. The dimensions of corporate development will be expanded in the future, so that it will not only manage the entire production chain of farming with modern technology, processing, cultivation, post-harvest and marketing, but also be able to create derivative products from commodities. And this will be the background in determining the research location as well as the relevant farmer corporations as respondents in the research.

In fostering farmer corporations, there are three ministries that are intensely involved, namely the Ministry of PUPR, the Ministry of Agriculture, and the Ministry of Home Affairs. Based on the regulatory aspect, it is considered that there are at least two problems, namely 1) the lack of regulatory integration between Ministry/Institution to synergize farmer empowerment programs; and 2) the core or substance of farmer development has not been able to answer the needs of organizational activities, especially organizational empowerment activities and financial or financial management. In fact, the substance of organizational and financial empowerment really determines an organization can run sustainably.

In order to face the challenges of agricultural development towards improving farmers' welfare and national food security, farmer organizations in charge of managing plant cultivation activities and irrigation water need to be made more basic improvements. One alternative and potential that supports these efforts is increasing farmer participation in irrigation network OP (maintenance) activities and synchronizing farmer institutional activities at the tertiary level between farmer group called Poktan or farmer group association called Gapoktan and Water-Using Farmers' Association called P3A or Water-Using Farmers Group Association called GP3A. Because this arrangement is the

basis of all on-farm and off-farm activities of an agricultural business at the farmer corporation level. Re-actualization and a mindset towards integration to form farmer corporations and provide guidance to farmer corporations need to be carried out continuously. Considering the results of several joint studies between Ministry/Institution have not been able to synergize farmer activities as well as fostering and empowering farmer institutions, synergy and synchronization are considered very necessary to be carried out in the interests of farmers. It is time for the technical ministries/agencies involved in fostering and empowering farmers to strive so that the Poktan/Gapoktan and P3A/GP3A institutions can be integrated into a larger economic-scale farmer corporation with integrated crop cultivation and irrigation management arrangements or the integration of activities between farmer institutions.

Institutional financing capacity factor in irrigation management will determine the success of farmers in farming activities. So far, farmers' corporate finance sources come from mandatory membership fees and government assistance. However, government assistance and/or intervention is not obtained every year and is usually/mostly implemented only for primary and secondary needs. Thus, irrigation water services are a problem that often arises because of the poor condition and function of the tertiary irrigation network and the weak financing and financial capacity of P3A. In fact, membership fees in almost all farmer corporations do not work well because the income level of farmers is relatively small, among others due to the very small land ownership factor, on average below 0.3 hectares. In addition, compared to workers in other sectors, wages in the agricultural sector are lower, only better than workers in other service sectors.

Based on the proportion of agricultural workers, based on data released by BPS in 2020, that the total working population in Indonesia until 2020 is 124.54 million people. Based on the field of work in the same year, the majority of Indonesians work in the agricultural sector. In this sector, there are at least 39.68 million people who work, or 31.86% of the total working population. In 2021, the agricultural sector recorded the largest employment of 38.2 million or 29.76% of the total working population of 128.4 million people (BPS). What is even more surprising is that during the COVID 19 pandemic, many people relied on the agricultural sector as employment, and agriculture was also recorded as a sector that was able to grow positively by 1.75% throughout 2021 (BPS, 2022).

Problems

Based on this, the government should pay more intensive attention to the agricultural sector in an effort to realize an advanced, independent and modern agricultural sector. One of the president's directives as head of government in an effort to transform the agricultural sector and realize the welfare of farmers is to create a farmer and fisherman corporation. This is based on the agricultural sector, which currently tends to focus on the on-farm aspect (cultivation) which only focuses on the production aspect, but has not focused on the off-farm (marketing) aspect and efforts to increase added value and competitiveness.

In 2019 the Ministry of Agriculture created a program that focuses on encouraging collective (corporate) agricultural business management for more advanced and competitive agriculture. Agricultural Corporation is a corporate-based agricultural sector development managed by professional management. In general, agricultural corporations can be based on state-owned

enterprises, non-state-owned enterprises or the community. In land management, agricultural corporations must have a minimum area of 1,000 hectares of land.

The development of agricultural areas based on farmers' corporations is part of the national agricultural development carried out on the basis of the Unitary State of the Republic of Indonesia and the 1945 Constitution, and in accordance with the spirit of Pancasila. Farmer corporations are in line with the Pancasila mandate, namely the Gotong Royong or work together economy or a dynamic family system. The provisions of various constitutions related to the community economy require the government to prioritize providing protection and empowerment to the weak in various aspects, including the economy. Therefore, the development of farmer corporations aims to increase welfare as much as possible as part of the affirmation of a prosperous, dignified, advanced, fair and equitable life for all Indonesian people (State Gazette of the Republic of Indonesia, 2018). In accordance with the mandate of Pancasila and the 1945 Constitution, the development of farmer corporations in agricultural areas is carried out with the basic principles of mutual cooperation, people's justice, and independence.

Farmer corporations are explicitly stated in the Ministry of Agriculture Number 18 of 2018 concerning Guidelines for the Development of Agricultural Areas Based on Farmers' Corporations, which states that farmer corporations are "Farmers Economic Institutions with legal entities in the form of cooperatives or other legal entities with most of the capital owned by farmers". The farmer's corporation is a business entity formed from, by, and for farmers in an effort to restore the spirit of mutual cooperation among farmers. Farmer's corporation business is also the basis for supporting farming business. On the other hand, corporate business development is supported by farming owned by individual farmers. Farmer corporations are jointly owned by the member farmers of the corporation to improve the welfare of farmers. Therefore, the development of farmer corporations is directed at realizing the sovereignty of farmers in managing the entire production chain of farming. Farmers are not only sovereign in on-farm management but also off-farm processing and marketing of farm products (Gultom et al, 2020).

The position of the farmer corporation as the driving force of the regional economy is the main key to success in realizing advanced, independent and modern Indonesian agriculture. The transformation of agriculture from a conventional economic principle to a modern economy has an important role in designing farmer corporations. According to the results of the executive report of the Ministry of Agriculture (2021), this transformation can be pursued in three ways simultaneously, namely:

- business/business development transformation so that the business potential of farmers is developed and then implemented into an optimal source of income;
- transformation of farmer's economic institutional development so that business opportunities can be distributed, economic capital and social capital are synergized, and the potential benefits/profits of business can be distributed equitably; and
- technological transformation through the adoption of modern innovations.

Summarized from several literatures by Marvarisi (1995), PSFC (2006), Rangswamy (1993), Rao (1995), Rao and Hanumappa (1999) and Raynold et al (1993) that farmer corporations are a form of

economic empowerment of farmers who have strategic dimension in agricultural development. With the condition of Indonesian agriculture which is mostly cultivated by farmers with relatively narrow farming scales or less than 0.5 ha, it is almost impossible for farmers to organize themselves effectively and efficiently so that farmers tend to work independently.

As a result, the transaction costs of the farming business become larger per unit value of the output produced. It is time for farmers to be organized and encouraged to collaborate in a farmer corporation that has economies of scale so as to improve farming efficiency and welfare. Thus the development of farmer corporations has become a must in agricultural development (Shame 2006, Singh 1994, Singh 2002, Singh 2005, Strohl 1985).

From the background and problems expressed, this study aims to analyze the urgency of the formation of a farmer corporation in an effort to increase production and the economic standard of living of farmers.

Framework

The formation of a farmer corporation can be done by increasing the scale of farming, competitiveness and industrialization upstream to downstream (Agrawal 2000, Bayes and Ahmad 2003, Glover and Kusterer 1990, Goldsmith 1985, Jha 2001). The formation of a farmer corporation is an effort to gather, unite and consolidate farmers in the implementation of joint activities for the benefit of the common farmers. Thus, summarized from several literatures by Q and Gueye (2003), Vyas (2001), Warning and Hoo (2003), Winson (1990) that farmer corporations are a forum for farmers' consolidation in carrying out farming activities. Theoretically, farmers' corporations are a form of farmer's institution based on togetherness and partnership. In simple language, the ideal farmer corporation is based on the principle of work together called is gotong royong.

To realize the ultimate goal of corporate development, farmer corporations can be developed through three alternative models, namely: (1) cooperative-based farmer corporations; (2) a farmer corporation in the form of a limited liability company (PT); and (3) a combination of both models (models 1 and 2) or smallholder corporations with integrated models.

Summarized from several literatures by Benziger (1996), Dash (2004), Dhaliwal (2005), Dagra (2002), and Eaton and Shepherd (2001) that the development of smallholder corporations is carried out in a planned and programmed manner with a good governance system to increase access farmers to productive resources, providing added value and competitiveness for agricultural products, strengthening farmer institutions, increasing farmers' capacity and bargaining position, which leads to increasing farmers' income and welfare.

The flow of this framework can ultimately see the urgency of the formation of corporation as effort to improve the welfare of farmers in Indonesia. The studies conducted by Johl (1995), Johnson (1985), Johnson and Ruttan (1994), Joshi (2006), Lipton (1993), Mani and Pandey (1995), and Mishra (1997) have several aspects that can identified in an effort to improve farmers' welfare, such as: local identification (letany activities), institutional identification (institutional legality), identification of facilities and infrastructure (assets controlled), local government support (local government

participation), to mentoring (management of facilities and services management). agricultural production).

The scope of research

The research is included in the national scope which is supported by case examples in the centers of established and independent farmer cooperatives. Fields of study include: small people's cooperatives, farmers' institutions, farmers' socio-economics, farmers' agribusiness, small and medium business strategies, and all about farmer corporation.

Methodology

Time Research and Data Source

This research was conducted at Citra Kinaraya Corporation rainarjo Village, Gajah District, Demak Regency, Central Java Province in 2021. Data were obtained from incentive interviews by key informants related to farmer corporations in the research area that had been determined. Key resource persons include: Citra Kinaraya farmer corporation actors, socio-economic and agricultural policy researchers, as well as policy makers in the local government agricultural sector related to farmer corporations in the research area.

Research and Analysis Methods

1. Interview

Is one of the data collection techniques that can be done by way of question and answer addressed directly to the resource person. In this case, it is done with smallholders who plant porang in the research area. This technique is carried out to obtain the necessary data by using supporting facilities in the form of a questionnaire. Interviews were obtained from key respondents related to farmer cooperatives in the research location, ranging from farmers to the government. These include the following:

1. Farmer Group Association
2. Middlemen/small traders
3. Wholesalers
4. Rice, fertilizer, seed, disinfectant, etc. industry
5. Researchers in the socio-economic field
6. Local government
7. Central government

2. Recording

Is one way to obtain data by recording the data obtained in the field and then entering the data into the media data recording system.

3. Observation

is a data collection method that involves various factors in its implementation. Observations are carried out without asking questions but are carried out by observing objects (surveys) at the research site. The goal is to match the data obtained with the actual situation.

4. Documentation

Is a qualitative data collection method. Documentation is used to obtain data and information in the form of books, archives, documents, and pictures that can support researchers in conducting research.

The questions in the intensive discussion with key informants were as follows:

- how about cooperative operational
- dynamic activities in corporate farming
- performance business activities
- impact of establishment corporation
- and all aspect in the farmer economic corporation

Results and Discussion

Results

The growth of farmer corporations is carried out from the preparation stage to the stage of determining the form of business institution, management, and legal status. The stages of developing farmer corporations include strengthening business activities, and establishing farmer corporations. Business strengthening is carried out through increasing human resource capacity and developing business networks (networking), which are expected to increase production capacity, increase efficiency in the use of production factors, increase business scale, develop business, and expand marketing. Meanwhile, the independence of farmers is carried out by strengthening the management of business entities and businesses. At this stage, farmers' corporations can be said to have been running stably, especially in the financial sector by maximizing the potential of financing sources, which are not only from the government. At the independence stage, farmer corporations are able to develop their businesses, provide income, and management has been running well. Building a farmer corporation in Demak Regency is carried out through the stages of growing and developing a farmer corporation.

The rice farmer corporation in Demak Regency started from the Citra Kinaraya Multipurpose Cooperative (KSU) as a Primary Cooperative at the Regency level with its main business being the cultivation and marketing of specially packaged rice. Some of the products that have been produced include brown rice, black rice, brown rice, milky rice and genki rice (mix) with a rice production capacity of around 40-50 tonnes/month. This capacity has only reached about 5% of the production target of around 875-1,000 tonnes/special rice/month, which is produced from a harvested area of 18-20 ha/day. Currently the Citra Kinaraya Cooperative is developing into a Provincial Primary Cooperative by consolidating farmers outside the District. Demak, namely Kab. Kudus, Grobogan, Banyumas, Sragen, Semarang and Purworejo.

The process of consolidating farmers and farmers' rice fields scattered in various areas continues to be carried out so that production activities can be well planned and scheduled and meet the quality standards of grain/rice production in accordance with market demand. The Citra Kinaraya Producer Cooperative is currently in the process of institutional strengthening and developing business capital with PT Tasbiha Mulia Tani. Share ownership by cooperatives is 53.3%. Gradually the share ownership of the cooperative will continue to increase until it reaches a minimum of 80%.

The Citra Kinaraya Cooperative also builds partnerships with parties in providing working capital for grain procurement, marketing of rice products and product development research collaboration with the Biogen Center of the Ministry of Agriculture. The rice productivity of cooperative member farmers in Demak is already above the national average, namely 7-8 t·ha^{-1} on planting season-1 and 5-6 t·ha^{-1} on planting season -2. However, there is still a yield gap between the planting periods (planting season -1 and planting season -2) with a difference of about 2 t·ha^{-1}, so technology adoption continues to improve productivity and yield quality.

The technology developed by the Citra Kinaraya Cooperative is seed breeding, by producing unique special seeds, so that it becomes the business strength of the Cooperative. In addition, the milling machine used has been modified according to the grain produced. Some of the infrastructures owned include: vertical dryer (10 t·day-1), bed dryer (8 t·day-1), RMU (1 t·hour-1), Color Sorter, Packaging Unit, SRG Warehouse (1,500 tons), Vacuum Pack Machine double and single, Rice Sieve, Heater Wrap, Continuous Sealer, and Hand Label Printing.

The increase in income obtained by member farmers is around Rp. 10 million per hectare per year, which is calculated from the difference in the selling price of the farmers' grain to the cooperative compared to the price prevailing at local traders, which is Rp. 1000/kg. so all about the dynamics of Citra Kinaraya's corporate development are presented in the following tables and figures below:

Table 1. Corporate Development of Citra Kinaraya Farmers, Demak Regency, Central Java Province, 2021

Numb	Description	Before corporation	Farmers' corporation
1	Land area	Not consolidated in one management.	180 ha belongs to cooperative members and 400 ha belongs to partner farmers. The area of business land is targeted to increase in line with the increase in RMU's capacity.
2	Number of Farmers/ Poktan/ Gapoktan	Farmers are members of Poktan, while Poktan are members of Gapoktan where their farming business is not well consolidated.	There are 127 permanent member farmers from Kab. Demak and 715 partner farmers/prospective members spread across the Regencies of Sragen, Kudus, Grobogan, Purworejo, Banyumas, and Semarang.
3	Peoduction and Productivity	Sold themselves by individual farmers to collectors or local RMUs in the form of GKP/GKG.	The target is 875-1,000 tons/special rice/month produced from a harvested area of 16 ha·day-1.
4	Type of business/product	Grain production and rice processing business.	Savings and Loans, special rice (red, black, jasmine, genki, brown), seedling and development plans: Processing

			premium rice and special rice, making silica powder, making rice eye flour animal feed.
5	Marketing	Ordinary medium or premium rice processing	• Food Station Cipinang • Jagapati.com
6	Working capital, omzet/turnover, profit	Working capital, omzet/turnover and profits are limited to individual farmers for managing their farms.	Working Capital: 125.875 USD per year Turnover: 256.411 USD per year Profit: 18.182 USD per year
7	Cooperative Institution	Poktan/Gapoktan are not consolidated in economic institutions	Provincial Primary Cooperative with members spread over 5 districts (Demak, Kudus, Grobogan, Banyumas, and Sragen).

Source: research primary data, processed, 2021

Table 2. Rice farming activities (on farm and off farm) that have been agreed to be carried out jointly and individually at the location of Corporate Farming activities

Numb	Carried out together	Carried out individual
1	application of cultivation technology	land tenure
2	procurement of production facilities	nursery
3	agricultural equipment services	fertilization
4	irrigation	Weeding (team)
5	tillage	harvest
6	Plant (team)	processing
7	integrated pest control	marketing

Source: research primary data, processed, 2021

Table 3. Citra Kinaraya Corporate Partnership Cooperation, Demak Regency, Central Java, 2021

Numb	Stakeholders	Form of cooperation	Product
1	Food station of Cipinang	Supllying rice 30 tonnes/month and plant contract 2021 for 200 hectar land area (80 tonnes per month)	Black rice, brown rice and milky rice (japonica)
2	Jagapati.com	Supplying rice 2.5 tonnes per month	Brown rice and black rice
3	Common retail	Supplying rice 20 tonnes per month	White rice, brown rice, black rice, and mix rice
4	PT. Novatech Multilink (Kelapa Gading, Jakarta)	Scoping of rice export to Singapore, Vietnam, Hongkong (Asia) and Germany (Europe) Scoping of waste product management and processing	Rice, groats, broken and reject (110 tonnes per month)
5	Center for Research on Biotechnology and Agricultural Genetic Resources, Indonesian Ministry of Agriculture	Product research and development collaboration	Seed cooperation, product laboratory test in Luvnoot, and special permit application support for export to Asia and Europe

Source: research primary data, processed, 2021

Table 4. Corporate Business Performance of Citra Kinaraya Manufacturer, Demak Regency, Central Java Province, 2020-2021

Business scale (hectar)	Capital turnover (USD per year)	Profit (USD per year)
100	159.433	9.297
180	256.360	18.188

Source: research primary data, processing, 2021

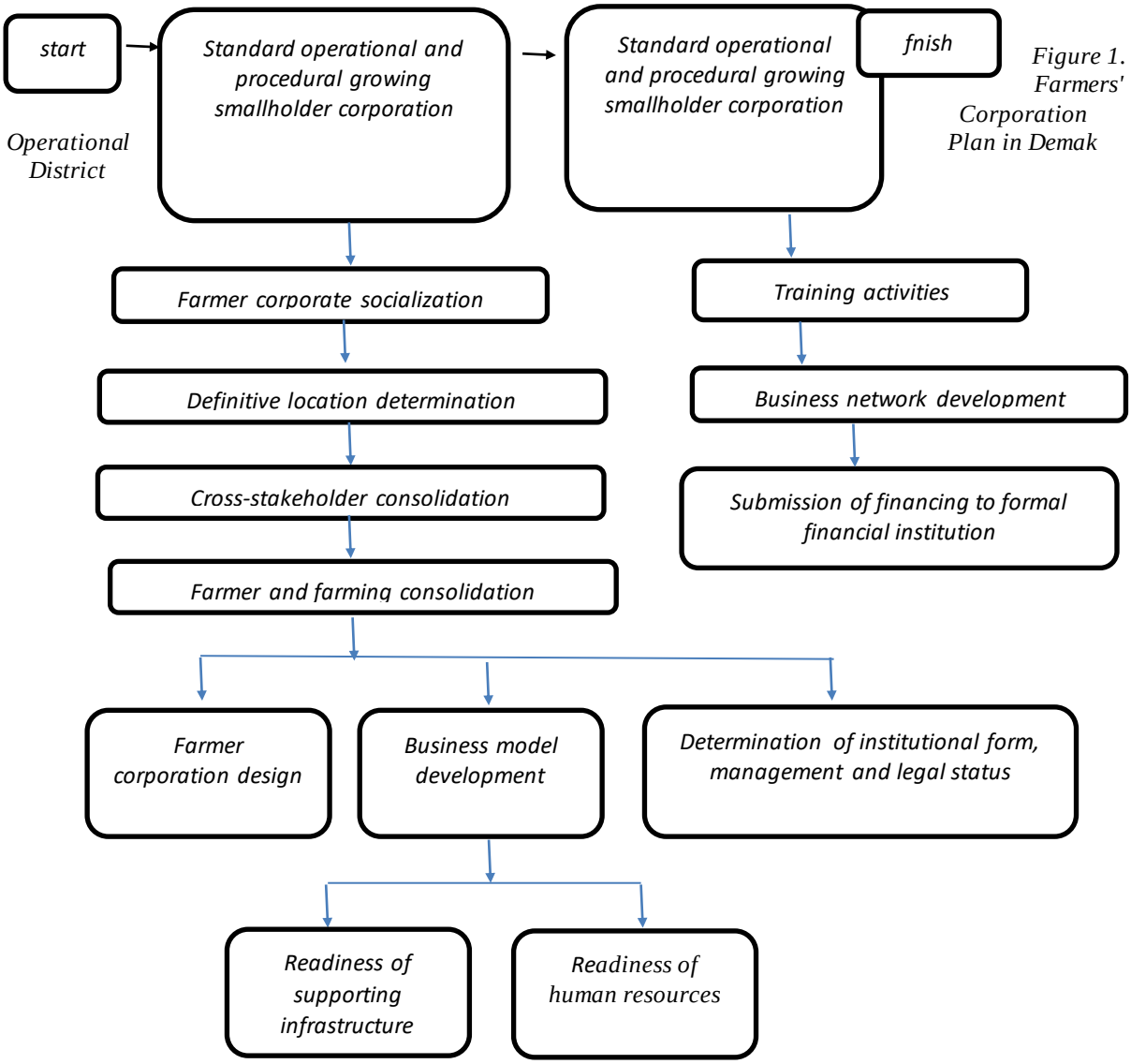

Figure 1. Farmers' Corporation Plan in Demak

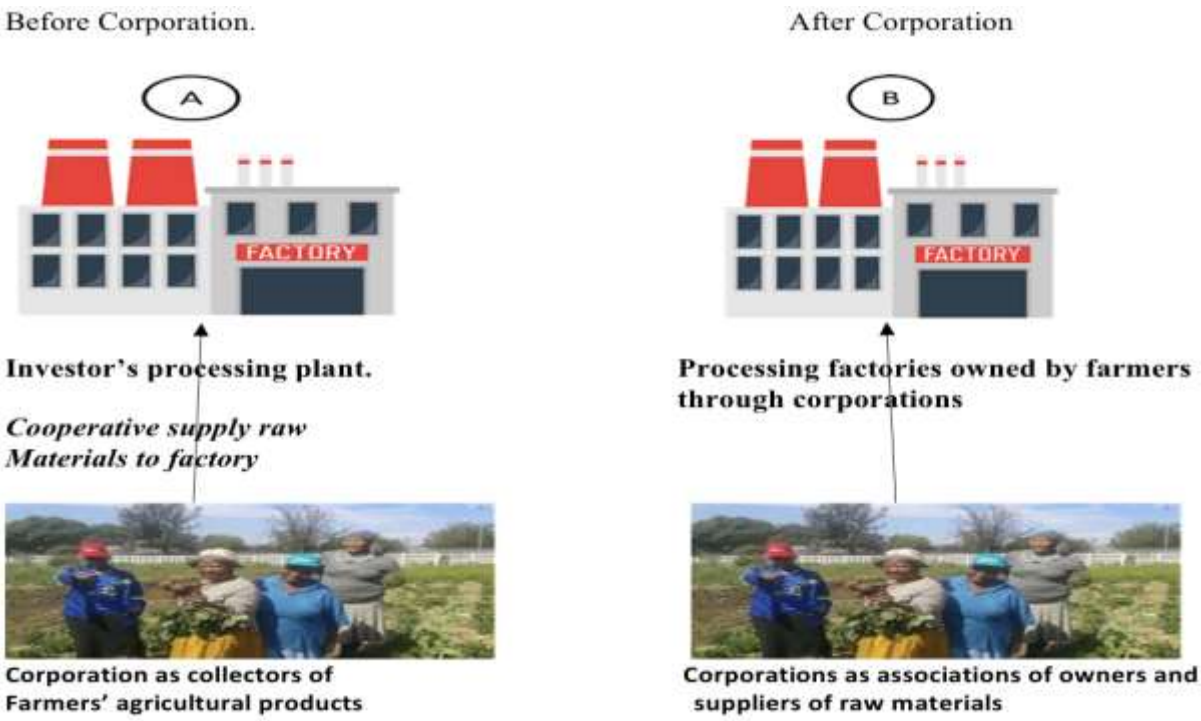

Figure 2. Before and After the Farmers' Corporation in Demak District

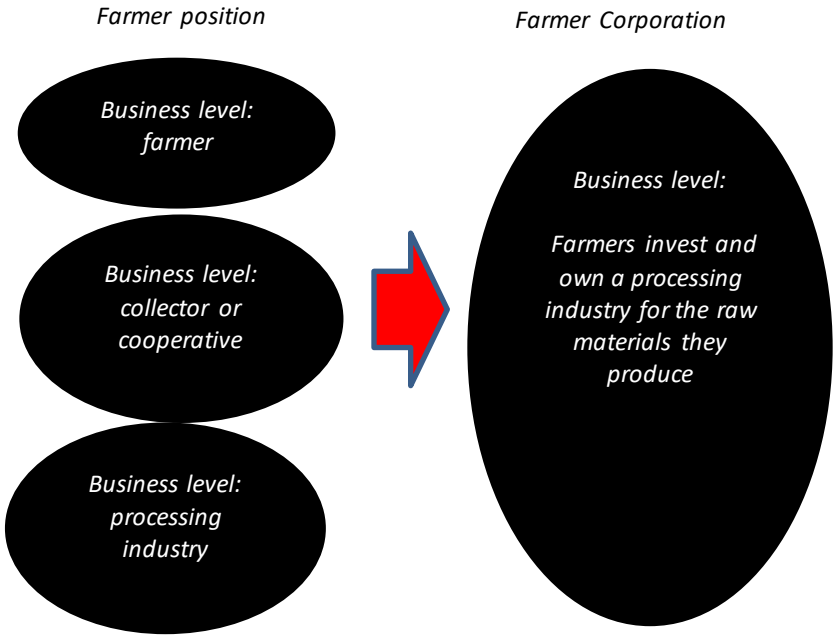

Figure 3. Business Pattern at Citra Kinaraya Corporation

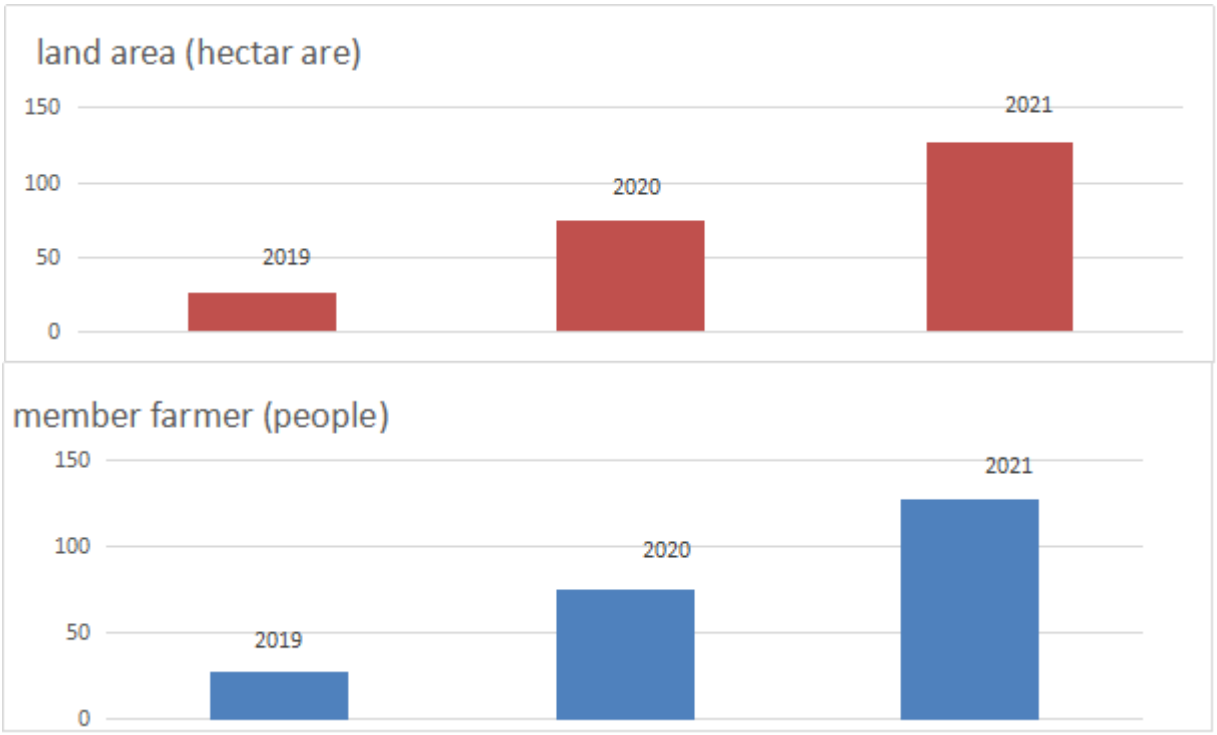

Figure 4. Development of Land Area and Member Farmer of Permanent Members at Citra Kinaraya Cooperative, Demak Regency, Central Java Province, 2021

rice processing factory

regular meetings with local government and Citra Kinaraya cooperative management

grain drying and storage warehouse

Figure 6. Corporate Technology Adoption Activities of Citra Kinaraya, Demak Regency, Central Java Province, 2021

Discussion

Dynamics of Rice Farming Activities in Demak Before and After the Establishment of a Farmers' Corporation

The undeveloped agricultural area is usually due to low production activities (goods and services) and limited infrastructure. Conditions that become inhibiting factors are the still weak economic structure, limited access to marketing products and sources of capital for farmers and agricultural business actors, disparities between regions that are not balanced, small scale farmers and poor, as well as facilities and infrastructure that are less supportive, land conversion and the euphoria of the counter-productive implementation of regional autonomy. In the case of rice, the challenges faced include the occurrence of land use change, limited availability of seeds in a specific location, mastery of farming technology and farmer skills ownership. This resulted in the income and welfare of farmers has not been adequate. These problems make efforts to increase efficiency through achieving economies of scale difficult to achieve (Prasetyo, 2018). One of the efforts to overcome the problems or challenges mentioned above is the development of agricultural areas (Ministry of Agriculture, 2014).

In 2018, the Ministry of Agriculture has issued Regulation No.18/PERMENTAN/RC.040/4/2018 concerning: Guidelines for the Development of Agricultural Areas Based on Farmers' Corporations. In the Ministry of Agriculture, what is meant by an agricultural area is a combination of agricultural centers that meet the minimum limits of the economic scale of exploitation and the effectiveness of sustainable regional development management and are functionally related in terms of natural resource potential, socio-cultural conditions, production factors and the existence of supporting infrastructure. (Ministry of Agriculture, 2018). Regulation of the Minister of Agriculture No.18/PERMENTAN/RC.040/4/2018, of course, can be used as a reference in the development of the rice farming system, so that it can be completely from upstream to downstream.

The approaches taken to develop agricultural areas based on farmers' corporations for rice commodities are (1) the regional approach; (2) a systemic approach (upstream on farm - downstream off farm), supporting the rice agribusiness system; (3) Farmer empowerment approach and farmer economic institutions; (4) Participatory planning approach. What is meant by the regional approach is a combination of agricultural centers that are functionally related in terms of natural resources, agroecosystem, socio-cultural, and infrastructure factors, in such a way that they meet the minimum area of economic scale and the effectiveness of regional development management. The systemic approach is the integration of rice farming starting from the upstream-downstream industry in an agribusiness system. This means that the activities to be carried out are a unified system related to input procurement, farming, post-harvest and processing which refers to a sustainable rice and beef cattle production system, as well as marketing activities for the products produced to the final consumer.

The approach to empowering human resources and farmer institutions is to empower farming communities through education, training in gaining access to information, technology, infrastructure and public facilities, capital as well as processing and marketing of products. Empowerment of farmers and institutions is intended to be able to adapt to changing conditions continuously, not only changes in appropriate new technology, but also need for innovation of farmer economic institutions. The participatory planning approach (participatory planning) is that the community or

farmers/agricultural entrepreneurs are considered as partners in planning who participate actively both in terms of planning and implementing plans, even though the community or farmers and agricultural entrepreneurs are the biggest stakeholders in the preparation of a product plan.

The essence in the development of agricultural areas based on rice corporations is "sustainable" which is able to meet the needs of the present without compromising the ability of future generations to meet their own needs, ecologically stable, and economically sustainable. Development will utilize capabilities based on local resources, so that external inputs can be minimized. Utilizing science and technology in all activities to increase production efficiency, product diversity and quality as well as added value through processes of adaptation, integration and development of science and technology. However, prior to the establishment of a corporation in the research area, the development of an agricultural area based on a food crop corporation has yet to be seen.

The Ministry of Agriculture in the 2000s had conducted a trial of agricultural development that referred to the Corporate Farming (CF) concept. Corporate Farming (CF) or corporate agriculture can be defined as an agricultural business that is a legal entity, where the main shareholders are farmers who hand over their land management and agricultural business (eg rice, corn and sugarcane farming) or livestock (beef cattle) to management agency unit. One of the main requirements in the development of CF is the implementation of land consolidation owned by farmers and agricultural business consolidation in one unit of institutional management function (Sipayung, 2000; Prasetyo and Pramono, 2001). The idea of developing CF is based on the consideration that agricultural development so far still prioritizes individual management, because the assets controlled by farmers, especially land is relatively narrow, so it is considered less efficient (Agricultural Research and Development Agency, 2000). The main objective is to increase business efficiency, increase farmers' income, and develop employment opportunities in rural areas. For this reason, farmers as land owners submit their management to institutions (Ministry of Agriculture, 2000). By examining the meaning of CF, there are two important keywords that cannot be separated from one another, namely land consolidation and agricultural business management.

Management consolidation can be defined as farming activities or activities that have been carried out by farmers who act as managers are replaced by corporate institutions that are legal entities. This means that the decision-making process in operationalizing the production factors in farming is carried out by an institution called CF (Kirk, 2000; Gillinson, 2004). Business management is carried out by a team that is professionally and legitimately organized and implements farming management functions, starting from planning, organizing, mobilizing, coordinating, and supervising or evaluating (planning, organizing, actuating, coordinating, and controlling; Syarief, 2000). In CF management consolidation is needed to obtain certainty or standard standards in agricultural business processes, both in terms of production, finance, marketing and human resources (HR).

Land consolidation and CF management are based on economic theory that emphasizes achieving efficiency through production on a large scale, but still at the optimal scale, namely the economy of scale. Economies of scale that are emphasized in CF are (a) the use of labor that allows the division of specializations of work, for example, tillers, planting teams, and harvesting teams; (b) Use of agricultural tools and machinery, such as tillage, weeding, and harvesting equipment and (c) discounted prices for production facilities, especially fertilizers and seeds, if purchased in large

quantities. No less important in land consolidation and management is the ease of distribution of water and the application of technology according to its designation.

Determination of economies of scale is important in CF, because innovation and technology can be applied simultaneously in one area, so that the volume and quality of production are relatively not different between individual farmers. Farmers often face non-uniformity in yield quality so that the resulting product is difficult for consumers to accept. This condition often occurs in corn farmers, even though their farming locations are in one area, but the moisture content of the corn produced is different, because post-harvest handling is carried out individually (Najib, 1994). This will not happen if it is managed as a corporation because the application of technology can be controlled by the CF institution. Thus CF can also be said to be a form of economic cooperation by a group of farmers over an area of land for the purpose of obtaining results that meet quality standards according to consumer demand.

Prior to the existence of corporations, agricultural product-based processing businesses in Demak were only as collectors of farmers' agricultural products, so the selling price of raw materials at the farmer level of course depended on their bargaining position against producers or processing factories owned by investors. Generally, the price received by farmers is determined by investors or at least a middleman as a mediator between farmers and investors. So that the price received by farmers is certainly low and does not match the expectations of farmers, because farmers inevitably have to accept the selling price set by middlemen. This situation happened before the existence of farmer corporations. For this reason, with the existence of a farmer corporation, it is hoped that farmers, in this case, through the farmer corporation forum, can act as an association of owners and suppliers of raw materials, as described in Figure 2.

Performance of Paddy Farming Business Activities in Demak with the Establishment of a Corporation

Established in 2011 (Citra Kinaraya Corporation) in 2020 it turned into a cooperative producer of Citra Kinaraya, operates in the Central Java area, office: Desa Rainarjo Kec. District Elephant. Demak, members of rice farmers: 126 and added prospective members of 600 partner farmers, where the pattern of business that has been running so far.

Corporate Farming (CF) which has been developed in Central Java is spread across several regencies including Grobogan, Pati, Sragen, Demak, Sukoharjo, Karanganyar and others. However, what is used as the location for the first pilot project or a complete trial is in Grobogan Regency, while in other districts it is often referred to as pre CF, because it is not as complete as the CF built in Demak Regency. The application of the CF concept refers to the agribusiness system approach, namely the relationship between on farm, off farm, and non farm. This approach is characterized by agricultural businesses being developed in the CF location, which include (1) farming of rice, corn, and beef cattle (on farm); (2) rice mill business, tresher service, hand tractor service business, communal cattle shed, cattle feed procurement (off-farm); (3) savings and loan business (non-farm). The business developed refers to the concept of an integrated system between food crops (rice-corn) and livestock (beef cattle), namely a form of agriculture that optimizes the utilization of land, climate, water, plant, animal, and management resources in a production system.

The business is managed by an institution formed under the name of the CF institution, which is named "CF Bersemi". The forerunner of the CF institution was the joining of farmer groups (Poktan) in the two villages. There were 11 farmer groups that were formed normatively through a process of socialization and discussion with representatives of farmer groups, seven of them stated that they joined the CF institution with a total of 454 members and controlled an area of 106.2 ha. The organizational structure or composition of the management in the CF institution and the rules of the game in the form of articles of association and by-laws (AD/ART) have been drawn up and ratified/agreed upon by Poktan representatives. CF Citra Kinaraya's institution is located in rainarjo Village, Kec. District Elephant. Demak. The location of the two villages is side by side where the rice fields owned by the farmers are located in one stretch and in one unit of irrigation function.

Corporate farming that has been running at KSU Citra Kinaraya is a form of economic cooperation from a group of farmers with an agribusiness orientation through consolidation of land management over a stretch of land while guaranteeing land ownership for each farmer, so that business efficiency, quality standardization, and effectiveness and efficiency of resource utilization management This can be seen from the management of rice farming activities that have been carried out, detailed schemes have been made, both carried out jointly and individually in Table 2.

The long-term goal of developing KSU Citra Kinaraya's corporate farming is to create an independent, competitive and sustainable agricultural business through corporate land management. The approach in its development is agribusiness-based rural development by optimally utilizing the opportunities of community resources and institutions.

Agri et al (2016), Chakrabarti (2016) McMillan (2001) stated that the main characteristics of corporate farming are as follows:

1. A group of peasants over a wide area trusts the management of their land to an agribusiness institution with a certain economic cooperation agreement, wherein the farmers act as shareholders according to the area of their land ownership.
2. Corporate farming is formed through deliberation/consensus among its members by taking into account local social and cultural considerations.
3. Corporate farming is led by professional managers, who are selected by farmers and managed transparently and democratically in accordance with commercial business principles.
4. Corporate farming requires an optimal business scale, in accordance with the conditions and capacity of local resources, the potential and capacity for developing agro-industry and marketing, and the availability of technology to increase efficiency, as well as technical capabilities in managing one management.
5. The scope of corporate farming activities still relies on superior commodities in the region, and pays attention to development and diversification opportunities, both vertically and horizontally.

The success of corporate farming will be achieved more quickly if it is supported by various factors, including (Agriculture Department, 2000):

1. The development of corporate farming is carried out in an integrated manner with the economic development of the local area.
2. Availability of other alternative employment opportunities for farmers who entrust their land management to corporate farming.
3. Availability of special funds for start-up businesses and seed capital for farmers to start new activities.
4. There are institutions (government/non-government) capable of functioning as facilitators.

The implementation of corporate farming in Citra Kinaraya cooperative causes changes in cooperative institutions. Farmers who are members of cooperatives, who were previously members of farmer groups, are already accustomed to organizational life and the dynamics in it, as shown in Figure 4. Changes in cooperative institutions can certainly be overcome by farmers who are members of cooperatives, this is also based on the positive response from most of the farmers. members of the corporate farming system (Swain et al 2012). Institutional transformation in the implementation of corporate farming in cooperatives is carried out through a member meeting mechanism. All interviewed farmers stated that institutionally changes in rules and organizational structure can be adapted to the corporate farming system. This can be done when all or most of the members agree to the change (Tuan, 2012). Institutionally, the corporate farming system has good prospects to be implemented in the Citra Kinaraya Cooperative.

Farmers who are members of the cooperative are farmers who own or rent land where decisions regarding land management are determined by themselves without the intervention of other parties. Socially, this makes it easier for farmers to make decisions to entrust their land management in a corporate manner. Although on the other hand, farmers who are accustomed to having full decisions in managing their land will find it difficult to comply with the regulations that will be applied by the cooperative (Bellemare and Bloem 2018, Bellemare and Lim 2018). The willingness of most of the farmers to switch jobs from the previous farmers and the availability of alternative jobs were also found in this study. In making the decision to implement a corporate farming system, the main consideration for cooperative farmer members is the issue of better profits which is not certain to be obtained, while social considerations such as emotional and cultural ties between farmers and land are not taken into account. From a social perspective, the corporate farming system has good prospects to be implemented in the Citra Kinaraya Cooperative.

Farmers' responses and observations show that among the supporting factors and obstacles to corporate farming, there are several factors that can influence the likelihood of success or failure of implementing the corporate farming system at the Citra Kinaraya Cooperative as follows:

1. Integrated development of corporate farming with local economic development Availability of institutions (government/non-government) capable of functioning as facilitators.
2. Emotional and cultural bonds between farmers and their land.
3. Differences in perception among farmers.
4. Lack of integration in the development of the agribusiness system.

The supporting factors and obstacles in every business are natural. Even in corporate farming, which in fact consists of farmers, the majority of whom have low education. However, there are many things that can be anticipated to minimize obstacles, for example by collaborating with various stakeholders, both government and private (Ragasa et al 2018, Ba et al 2019). For this reason, it is necessary to collaborate between KSU Citra Kinaraya and several stakeholders as detailed in Table 3.

In addition to the above factors, Musthofa and Kurnia (2018), Maertens and Velde (2017), Bellemare and Novak (2017), Mishra et al (2018) suggest that there are several other factors that can affect the likelihood of success or failure of implementing a corporate farming system, and this can happen to Citra Kinaraya as follows:

1) Availability of initial capital to start implementing the corporate farming system.

A large enough initial capital is needed to start implementing the corporate farming system so that its availability is an important factor that must be considered. The provision of this initial capital can not be carried out by farmers or cooperative institutions without assistance from other parties. Solutions such as raising funds at the farmer level of cooperative members will not be able to solve the problem of the availability of capital as a whole because of course the amount to be achieved will not be so large. Other solutions, such as borrowing from financial institutions on behalf of the cooperative, are also difficult to implement due to the limited assets owned by the cooperative. The existence of sponsors from the government, educational institutions, or non-governmental organizations is very necessary in answering the problem of availability of initial capital to start implementing the corporate farming system.

2). Better profits that are not certain to be obtained and the process of sharing them.

Profit is the main reason for farmers to join the corporate farming system. Corporate land management is considered more profitable but there are also additional costs in managing it. When there is uncertainty about obtaining greater profits, farmers tend to find it difficult to entrust their land management in a corporate manner. In addition, the standard of profit sharing is also something that must be considered, when profit sharing is only based on the area of land entrusted to the cooperative, of course, different levels of land fertility can be a problem for farmers.

3) The presence of a reliable professional manager.

The limited resources owned by cooperatives are one of the causes of the difficulty in finding reliable professional managers. The majority of farmers who are members of the Golden Gate Agricultural Cooperative are unable to determine who is the right person to serve as a professional manager. The figure of a professional manager can be obtained from outside the cooperative environment such as from government, educational institutions, or non-governmental organizations.

4) The difficulty of farmers to comply with the rules that have been set.

Farmers, owners or tenants, have been managing their businesses independently, where land management decisions are taken by themselves without the intervention of other parties. When deciding to join the corporate farming system, of course, farmers must obey the rules that will be set by the cooperative as the institution that manages their land. Not only land management, the rules set

by the cooperative will also indirectly affect the life of the farmer's household, especially for lands that are located close to the owner's farmer's house.

5) Additional costs that will arise when the corporate farming system is implemented.

In corporate land management, of course, there are additional costs that will arise. The costs for paying employees whose roles have been carried out by farmers as owners/tenants and land managers as well as costs for monitoring land which are located separately are examples of additional costs that are expected to arise.

Along with the implementation of the next stages, some concrete steps in the form of cooperation efforts with several stakeholders, as well as in the effort to manage the corporate financing of Citra Kinaraya farmers, it is necessary to implement the corporate farming system as follows:

1. Socialization to member farmers and cooperative management.
2. Establishment of a committee for the preparation of implementation.
3. Establishment of a corporate farming unit.
4. Contract approval.
5. Profit sharing with a transparent system and proportional equity
6. Intense assistance to all farmer members for all activities related to corporate farming

Rice farming activities generally still experience many problems and obstacles, including: high capital interest, inappropriate use of fertilizers, lack of water supply, rat infestation due to limited harvested area, shortage of labor for land processing and harvesting, land conversion from rice to land crops and even housing, low incentives. Shui et al (2014), Deininger et al (2014), Jin and Deininger (2009), Jin et al (2017), Haldrup (2015) reveal that several problems related to lowland rice farming include: (a) land ownership Farming is relatively small and scattered and even tends to shrink due to the process of land fragmentation as a result of the inheritance system/pattern, (b) limited labor, especially during the harvest season, so that the need for labor generally comes from outside the region, (c) limited capital for farming, so that the productivity achieved is still below its potential productivity and (d) the level of pest and disease attacks which still tend to be high and b variations between regions and between growing seasons such as brown planthopper (Nilaparvata lugens), stem borer (Scirpophaga innotata), rat (Rattus argentiventer) and tungro (Rice tungro bacilliform viruses). In farming practice, even though farmers have long experience in farming, farmers are not always able to achieve the level of efficiency and productivity as expected.

This obstacle can be overcome if the institutional system of rice farming is transformed into land consolidation institutions, corporate farming and modern agriculture. Where farmers are gathered in a group to do business together with the aim of increasing productivity, added value and income from rice farming. Farmers' land, with variations in fertility levels and wide variations in ownership and labor contributions can be a share or profit sharing proportionally. The profit margin, after taking into account the productivity of the land around the business, is distributed proportionally between farmers, capital owners and corporate managers. This is in accordance with the opinion of Rejaei et al (2012) and Hiironen and Riekkinen (2016) that land consolidation provides results that can increase production and profitability and reduce production costs in farming. Individually, it seems difficult for rice farmers to move out of their poverty circle without consolidating in farming management. By

consolidating in management with a corporate farming system, it is hoped that the problems of rice farmers in terms of capital, marketing and management can be overcome. Likewise what has been done by CF Citra Kinaraya in an effort to improve the performance of the Corporate business, it can be seen that the results have increased over the last 2 years until 2021 as presented in Table 4.

The definition of an institution as an institution can be recognized through its elements, such as rules of the game, rights and obligations, jurisdictional boundaries or ties and sanctions. Furthermore, institutions in the sense of organization, in addition to the four elements, are also characterized by the presence of an organizational structure, clear goals, having participants and having technology and resources. (Hermanto 2007, Winarso et al 2016). The results of the study can be formulated steps to build land consolidation institutions and corporate farming and overcome obstacles in building institutions with a corporate farming system. The target of corporate farming is to create an independent, sustainable farming business to achieve efficient rice farming through land consolidation (Prakoso 2000, Dusengemungu 2013). What has been revealed by some of the literature, is also carried out on business management at KSU Citra Kinaraya, so this has an impact on the business scale increasing from 100 ha to 180 ha until profits double in 2021 (Table 4).

The distribution of the number of partner farmers at KSU Citra Kinaraya is not large, only about 5 to 300 farmers spread across several cities and regencies around (Figure 6). This is because Citra Kinaraya is a CF that has not been formed for a long time, and is still limited in business scale and types of products being worked on, so it is still necessary to promote vigorously by proving tangible results since the establishment of corporate farming before the existence of the cooperative. As revealed by Dedehouanou et al (2013), Wang et al (2014), Otsuka et al (2016) that there are several main weaknesses of the current rice farming system in Indonesia in general as follows:

1. The orientation is less economical. Farmers only grow traditional types of crops that are of low quality and price.
2. Human resources that do not support both education, knowledge and skills. Labor in the agricultural sector is increasingly being carried out by female workers and older workers who tend to be less productive.
3. Narrow land ownership, so the results are not enough to meet the needs of family life. More and more land that is not cultivated, or that is done so that the productivity is very low.
4. Weak marketing, both marketing institutions and the ability of farmers to penetrate more profitable markets.
5. Weak position of farmers in making profitable decisions as producers
6. Institutional structures that do not support agricultural development as a whole, both at the farmer level and institutions outside the farmers.
7. Inter-sectoral coordination that does not work in improving the welfare of farmers.
8. Weak farmer cooperation in one group and farmer cooperation between groups due to the individual farmer development system.

Moreover, most of the farmers in Indonesia are small farmers. It causes neither the confidence nor the desire of the farmers to increase their business in a more modern direction. This can be seen from the

characteristics as expressed by Ton et al (2018), Michelson (2017), Gatto et al (2017) regarding this matter as follows:

1. The area of ownership and exploitation of land is narrow so that it is difficult to meet the demands of the commercial market, namely quantity, quality and continuity of production. Therefore, the results must be marketing in groups.
2. Due to narrow ownership, farmers are slow to accept innovation because they are more concerned with certainty of results or the principle of looking for safety (safety first). Therefore, it is difficult to make decisions individually, but as a group.
3. Perishable agricultural produce and seasonal production cause too large price fluctuations. Therefore, farmers must have a definite market. A definite market demands a continuous or routine product, in large quantities according to demand and of standard quality.
4. The mediocre economic life of farmers causes farmers to sell to get cash as soon as possible so that the position of farmers is very weak in determining prices.
5. Limited knowledge and skills of farmers to reach the commercial market.
6. Limited capital, equipment and transportation means farmers are unable to shorten marketing channels so that the gap between farmers' income and the price paid by consumers is often too wide.

All of these limitations cause farmers to not have sufficient bargaining position to regulate the market or determine prices. As a result, farmers receive a very small share of the total value of the commodity produced. As a result, the share received by farmers is very small, causing the stimulation to produce to be very low, especially for the production of food crops. In fact, many fertile agricultural lands are left uncultivated (sleeping land) or are being worked on as little as possible. This happens a lot on the island of Java, especially in the province of Central Java, where there are many jobs outside the agricultural sector and the rewards are much higher than the food crop sector. To overcome this situation is to move simultaneously the subsystems of the agribu siness system.

So that farmers can take part as farmers in agribusiness, KSU Citra Kinaraya must strive to encourage business in corporate farming and motivate each other between farmers individually and in groups to develop, promote and maintain the CF that has been formed. Where according to Michelson (2013), Isager et al (2018), Meemken et al (2019), Bellemare (2018), the characteristics of farmer groups that have been or are currently taking part in corporate farming are as follows:

1. A group of farmers who have strong binding factors are grouped into one commercial business unit. Citra Kinaraya is ideally suited to be developed into a single agricultural company unit, because it has a very strong binding factor. This collaboration in one group was developed into cooperation between farmer groups (in Demak Regency and the surrounding City/Regencies, as shown in Figure 5).
2. As a company, this group appoints a manager. The group leader (Chairman of Gapoktan) can immediately become a manager, or specifically appoint a manager besides the group leader. Managers take command of business operations and execute strategies that benefit the company. The company is also equipped with other management structures as needed.

3. Farmers are shareholders. The size of the shares depends on the size of the farmer's rice fields.
4. The agricultural system applied (starting from pre-harvest, determining the type of commodity to post-harvest and marketing) is determined by the company, not by individual farmers' wishes. The treatment of paddy fields and crops is carried out in groups, not individually. For example, fertilization is carried out in groups and is the responsibility of the group so that the dose, time and method of fertilization are uniform
5. Farming is managed commercially. The selection of commodities to be planted is carried out in a diversified manner (in one area planted with various types of commodities), the most economically profitable commodity is selected. Commodity selection is not carried out in a monoculture in one area. Planting in one area of rice fields is carried out by intercropping (a combination of several types of plants on the same land and at the same time). The type of economic commodity planted is determined by the company (farmer group).
6. Marketing is done in groups by the company, not individually by each farmer. Thus the price is set by the company and applies uniformly in one area.
7. The results are owned by the company, the farmers receive the results according to the number of shares (land area) they have.
8. Farmers can work actively in the company and receive wages from the company, but farmers can also become inactive members, making it possible to have other jobs outside the agricultural sector.

According to Rogers and Shoemaker in Lucie (2004), the adoption of an innovation means accepting something that is offered and sought by other parties, to measure the level of adoption of the many factors involved in it. Factors that influence the acceleration of adoption are the nature of the innovation itself and the system that influences adoption is the internal (personal) system. In order to make this happen, Citra Kinraya Corporation as a facilitator, cooperates with the private sector and is supported by the government as a producer and distributor of hybrid rice related to the procurement of seeds and marketing of hybrid rice. In the activities of running the Citra Kinaraya Corporation partnership, farmers need the role of farmers through Poktan-Poktam in procuring superior hybrid seeds and marketing rice and rice.

The level of technology adoption in the Citra Kinaraya corporation is determined by the characteristics of the farmers (age, education, experience, land area and income). In addition, the characteristics inherent in the innovation relative advantage, compatibility, complexity, triability, and observability will also determine the level of innovation adoption. The activity of the Gapoktan institution after the establishment of the Citra Kinaraya Cooperative, has proven to be able to provide benefits to farmers, including participating in jointly initiating work built with the private sector in terms of partnerships, such as rice mills and storage warehouses (Figure 6). Subsidies from the government are also one of the supporters in Citra Kinaraya's corroding business, such as assistance in the form of pesticides and seeds, which are distributed by Gapoktan to farmers. As an institution under it, the farmer groups are also active along with the Citra Kinaraya Corporation. Farmer groups often hold meetings every 2 weeks, and there is an agenda for farmer group meetings throughout Paleran at the Paleran Village Hall. The meeting serves as an exchange of information and coordination between farmers of different groups.

One of the policies of the Ministry of Agriculture for the 2015-2019 period is to strengthen national food security. One of the strategic programs related to strengthening food security is the special effort (UPSUS) to increase rice production aimed at achieving sustainable rice self-sufficiency (Ministry of Agriculture, 2015). In various areas, such as in Java, including in Demak Regency, it has been known that the rice commodity is mostly cultivated by small farmers. In order to make rice farming more efficient, one of the strategies adopted is through the development of agricultural areas with an integrated system approach between the supply side and the demand side. This means that the development of agricultural areas is an integrated system, starting from the procurement of farm production inputs to the marketing of agricultural products into the hands of final consumers (Ministry of Agriculture, 2014).

Efforts by the government, farmers, agricultural entrepreneurs, and the general public to overcome all challenges related to rice are to build agricultural systems that can increase production and improve production quality in order to be able to compete in domestic and foreign markets. To achieve results that are in line with expectations, one thing that needs to be taken is to carry out various innovations, at least technological, institutional and management innovations that are in accordance with their designation. For this reason, togetherness in innovating must be built, so that a large-scale food agriculture business occurs (economic of scale). This hope will be difficult to realize if the main actors of rice producers, namely farmers and agricultural entrepreneurs, work individually. For this reason, it is suggested that rice farmers in Indonesia will be more successful if they cooperate or form a corporation. But the question is what kind of cooperation so that they can increase their welfare as measured by the level of income. Likewise with the efforts made at the Citra Kinaraya cooperative.

There are five conditions that need to be met in order for this to happen, namely: (1) the existence of a market for agricultural products (2) technology that continues to develop (3) the availability of production facilities and equipment locally (input market), (4) the existence of added value to production for actors, both individually and institutionally, and (5) the availability of smooth transportation (Mubyarto, 2002). In the development of agricultural areas, various correlations will occur between these various variables. In order for the agricultural area development program to run, it is necessary to implement applicable activities at the field level, the point being to develop rice commodity-based agricultural areas from upstream to downstream, by implementing various specific local agricultural innovations as well as empowering human resources and farmer economic institutions.

The government for the 2015 - 2019 period, in this case the Ministry of Agriculture, has set a strategic program, including the achievement of sustainable self-sufficiency in rice commodities. One of the provinces that has a major contribution to achieving rice self-sufficiency is Central Java Province, because it is a center for rice production. The area of rice planted in Central Java in 2017 reached 2,128,789 ha, while the harvested area reached 2,025,856 ha, with a production of around 11.42 million tons, this of course requires a lot of seeds and labor (Department of Agriculture and Plantation of Central Java Province , 2018).

The development of corporate-based agricultural areas implemented in Citra Kinaraya, Demak Regency is a management of the development of production centers in an economic scale and

functionally related in terms of natural resource potential, socio-cultural conditions, production factors and the existence of supporting infrastructure). The main objective is to improve farmers' welfare and production as well as added value and regional competitiveness for sustainable farming, in this case the rice commodity. The development of agricultural areas is intended to (1) increase the effectiveness and efficiency of supporting services; (2) Ensuring the sustainability of pre-production, production, and post-production activities in the agribusiness system. Activities that need to be carried out related to rice commodities include strengthening the whole farming system in an area management supported by the availability of adequate agricultural facilities and infrastructure such as water supply, provision of rice seed sources and agricultural machinery services, as well as optimal marketing of results.

Related to the things above, it is also necessary to empower farmers' human resources and farmer institutions in accessing information, technology, infrastructure and public facilities, capital as well as product processing and marketing. This means that the activities carried out on the rice production system are a unified system related to input procurement, farming, post-harvest, processing, and marketing of the products produced to the final consumer in a sustainable manner (Asngari, 2001). Development will utilize capabilities based on local resources, so that external inputs can be minimized. Activities also utilize science and technology in all aspects to increase production efficiency, product diversity and quality, as well as added value through the process of adaptation, integration and development of science and technology (Aristo, 2004; Solihin, 2006).

The review of the factors of production in farming that has been described above is still at the input level in farming (on farm), while the problem of post-harvest handling and marketing of production products is inseparable in the agricultural business. In this regard, the government has adopted a policy in agricultural development, namely the agribusiness system approach. As an agricultural development paradigm, agribusiness must be viewed as a unified system that is integrated starting from the procurement of farm inputs to the distribution of agricultural products into the hands of final consumers (Arifin, 2005). There are five conditions that need to be met in order for an agribusiness system to occur, namely: (1) the existence of a market for farming products (2) technology that continues to develop (3) the availability of production facilities and equipment locally, (4) the added value of production for actors, and (5) the availability of smooth transportation.

The basic conception of agribusiness development in an area cannot be separated from local potential that is able to compete at the regional level (Najib, 1994). Because agro-industry is a driving subsystem of agribusiness, data on agribusiness agglomeration should be taken from downstream or downstream (agro-industry) sub-sector activities. Although the concept of agribusiness has been understood and implemented by various stakeholders, the activities are still partially and in aggregate there is no synergism between activities that can form a complete agribusiness system. The actors are not yet integrated, sometimes they even exploit each other (Prasetyo and Setiani, 2002). The impact is that there is injustice between the actors, because there is one or several parties who feel oppressed, especially those engaged in the farming sector. The main factor is the limited access to inputs for production facilities (input market) and product marketing (output market).

According to Downey and Erickson (1989), marketing can be interpreted as a study of the physical and economic flow of products from producers through intermediaries to consumers. Agricultural

marketing can be defined as all business activities that can meet the needs of goods or services desired by consumers. In connection with the above, marketing activities (input and output) require strategy, management, pricing, and distribution of goods/services (Ba Ha et al, 2019). These activities will lead to exchanges so that they will be able to meet the needs of individual farmers or group organizations. Understanding marketing is closely related to efforts to provide goods or services and deliver them appropriately to people who need it. Determination of time, place, and price is an integral part of marketing activities.

It has been mentioned above that one of the absolute prerequisites in developing agribusiness is technology that is constantly evolving. The technology developed is not only focused on cultivation technology, but also technology for improving agricultural production facilities and infrastructure, processing products and transporting agricultural products into a unified whole and in rhythm to be developed (Bharwada, 2006). It has been mentioned that human resources must also improve their thinking skills, especially in terms of management, therefore managerial abilities for every agribusiness actor need to be improved so that equality occurs.

The role of institutions is also important in implementing the agribusiness system, because the institutional context will involve the organization and the rules of the game that must be agreed upon, even concerning ethics. Institutional innovation will intersect with the social and cultural aspects of business. In institutional innovation, of course, it needs to be linked to every agribusiness node which includes production facilities and infrastructure, farming (on farm), post-harvest and product processing, as well as marketing. Supporting institutions such as information, sources of capital, communication forums and others also require innovation (Soekartawi, 1993). In this context, it appears that institutional innovation is very strategic in agribusiness development.

One of the efforts that need to be taken so that the agribusiness system can develop sustainably is a synergistic collaboration between input and output markets (Bijman et al, 2012). The input market is related to the materials or production facilities used to produce goods, while the output market is related to the marketing of the products produced. The results of operations in intensive paddy fields in the form of production of raw and processed materials can be marketed to final consumers. Therefore, the farmer institutions that have been built need to continue to establish a network of cooperation on a wider scale.

Conclusions and Recommendations

Conclusion

Based on the results and discussion, as well as the problems described above, the following conclusions can be drawn: Citra Kinraya Corporation, according to the farmers, is a farmer's institution that is a legal entity that is beneficial and has added value in realizing the welfare of farmers by doing mutual cooperation or cooperation, so that any problems faced by farmers and solutions will be carried out effectively and efficiently in accordance with the aspirations of farmers with the principles of justice, equity and transparency, which in detail are: (1) a program aimed at increasing/disseminating knowledge, related to innovation for farmers, as well as institutional strengthening of Gapoktan and farmer groups, (2) a program to improve the standard of living of farmers through increasing farm productivity, (3) a program that has an orientation to disseminate

knowledge, related to innovation for farmers, (4) a form of institutional development of farmer groups. Meanwhile, the characteristics of farmers that correlate with the level of technology adoption such as the use of hybrid seeds, rice mills and storage warehouses are experience, education and land area. The characteristics of innovation that are correlated with the level of adoption are relative advantage, compatibility, complexity, observability and triability.

Recommendation

The results of the study provide recommendations including: (1) Managers of farmer groups and Gapoktan who are members of corporate management along with agricultural extension officers should continue to provide assistance to farmers by providing encouragement, motivation to be able to continue all programs that have been initiated; (2) Managers of farmer groups and Gapoktan who are members of corporate management along with agricultural extension officers cooperate in seeking agricultural information, especially those relating to new innovations and cooperation with partner companies, so that agricultural activities can continue to develop, be stable and maintain continuity, so that the objectives the formation of a corporation in order to achieve an increase in the welfare of farmers is achieved effectively and efficiently.

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