Implementation Design of Corporate Farming using Warehouse Receipt System Approach in Central Java

Kustopo Budiraharto\textsuperscript{1}, Sunarno\textsuperscript{2}, Solikhin\textsuperscript{3}, Agung Kunaedi\textsuperscript{4}, and Darwanto\textsuperscript{5}
\textsuperscript{1}Faculty of Animal and Agricultural Sciences, Diponegoro University, Semarang, Central Java, Indonesia.
\textsuperscript{2,3}Faculty of Science and Mathematics, Diponegoro University, Semarang, Central Java, Indonesia.
\textsuperscript{4,5}Faculty of Business and Economics, Diponegoro University, Semarang, Central Java, Indonesia.

Email: kustopobrundip@gmail.com

Abstract. Corporate farming is farmland merger activity jointly organized by farmers in an integrated single management. This system can be a solution for many of the problems faced by farmers today. Business efficiency, quality standardization, and effectiveness and efficiency in managing the utilization of resources are expected when the company's agricultural system is implemented. Paddy farming in Central Java is still dominated by narrow-scale farming activities that are managed individually. This results in diverse productivity and is economically less efficient, resulting in low competitiveness. Farming activities currently carried out by farmers will be more efficient if managed by implementing a corporate farming system and supported by the Warehouse Receipt Integrated System makes microfinance institutions interested in distributing funds to capital farmers. The warehouse receipt system is supported by the concept of comparative agriculture, it is hoped that the synergy of both can increase the capital and income of farmers in Central Java.

1. Introduction

The agricultural sector is still a mainstay of economic development in Central Java. However, paddy field farming activities in Central Java are still dominated by small scale businesses. According to Arimbawa & Widanta (2017) to increasing the rice productivity more effective and efficient, the technology is used to support paddy technical production [1]. However, small-scale farming is still unable to optimize productivity and is less efficient in the production process, this is because farmers as managers have not been able to fully implement location-specific paddy farming technology assemblies. The problem comes from the low level of education of farmers, capital and new information technology, procurement of production facilities is carried out individually hence the price is expensive and the use per unit area is relatively low, less efficient use of labor, limited land to be managed, and low level bargaining power.

Corporate farming model is one of way to overcome many problems in farming activity. Corporate farming could raise farmer’s income and gives a benefits to the farmer in farming organization [2]. According to Wahyuni and Tri (2015), Corporate Farming (CF) is an overlay farm whose land management is carried out in an agribusiness institution (one manager) with certain agreed economic cooperation agreements, where farmers become shareholders in accordance with farmer’ expenses [3]. Corporate farming as a form of economic cooperation of a group of farmers with an agribusiness orientation through consolidated land management that continues to guarantee land ownership in each farmer, in order to build business efficiency, quality standardization, and effectiveness and efficiency.
The long-term goal of developing corporate farming is to create an independent, competitive and sustainable farming business through corporate land management. The approach in its development is agribusiness-based rural development by optimally utilizing community resources and institutional opportunities [5].

Economically, corporate farming model can reduce production costs, increase production, and income. While social benefits can improve education for rural communities, strong cooperation between members, and revive the atmosphere of development in the countryside [6]. Thus, if the Corporate Farming model can be applied and followed by the development of off-farm activities, the productivity and efficiency of farming and farmer income will increase. Ton et al. (2018) found that contract farming (corporate farming) could give a benefit to smallholders [7]. The success of corporate farming will be more quickly achieved if supported by various factors, among others: 1) The development of corporate farming is carried out in an integrated manner with the economic development of the local area; 2) The availability of other alternative employment opportunities for farmers who entrust their land management to corporate farming; 3) The availability of special funds to start a business (start-up business) and more capital for farmers to start new activities; and 4) There are institutions (government / non-government) that are able to function as facilitators [4].

Warehouse Receipt System (WRS) has had a legal basis since the enactment of Law No.9 of 2006 concerning WRS which was later amended with Law No.9 of 2011. Warehouse receipt is the document of ownership evidence of goods stored in a warehouse issued by the warehouse manager. This warehouse receipt can later be used as collateral for loans from banks. Meanwhile, the Warehouse Receipt System (WRS) is an activity related to the issuance, transfer, guarantee and completion of the Warehouse Receipt transaction. More specifically for the agriculture sector, WRS is proof of ownership of goods stored by farmers in warehouses (Document of Title) that can be transferred, traded and even used as collateral without the need for other collateral requirements [8].

Warehouse receipts are securities instruments, so warehouse receipts can be traded, exchanged or used as collateral for loans. Warehouse receipts can also be used for shipping goods in derivative transactions as well as warehouse receipt futures contracts. These Warehouse Receipt Derivatives can only be issued by banks, non-bank financial institutions and futures traders who have been approved by the Supervisory Agency. In an effort to support the Corporate Farming model, it can be modified with the Warehouse Receipt system. This, because it can be used as the basis for implementing the tasks of stakeholders who will carry out Corporate Farming where the procedure uses the spirit of the Warehouse Receipt System (Sistem Resi Gudang, WRS) based on profit sharing. Therefore, the role of agricultural commodity financing is crucial because it is a machine to move the Warehouse Receipt System. The Warehouse Receipt System which is integrated with comparative farming can improve the welfare of farmers and is expected to be able to reduce the rate of poverty in Indonesia.

The purpose of this article was to study and obtain a model of Corporate Farming by modifying it with a single receipt system in an effort to increase agricultural production.

2. Materials and Method
This research used a literature study by discussing the application of Cooperative Farming through modifying the Integrated Warehouse Receipt System in order to increase capital and farmer income in Central Java. The design of this study used descriptive explanations (explaining research) with reference to literature studies. Secondary data needed in this study were literature sources that explain the concepts and provisions regarding Integrated Warehouse Receipt, Cooperative Farming and Corporate Farming. Most of the data used were secondary data from various sources of books and journal problems in this study. Qualitative research has several kinds of data analysis. One of them was content analysis. The analysis technique using the cooperative approach because of the suitability of the analysis phase in this study.
3. Result and Discussion

The mechanism of the Corporate Farming model with the Warehouse Receipt System approach as an effort to increase capital and agricultural income in Central Java can be explained in the Figure 1.

3.1. Forming Corporate Farming Must Meet the Requirements

Farmers form a farmer group (Cooperative Farming Management) which is coordinated by one farmer group leader as well as a manager. Before forming Cooperative Farming management, the area determined as a potential location for Cooperative Farming activities must meet a number of basic requirements. The basic regional requirements for cooperative farming are: (1) It is a minimum of 50 hectares and is contained in a tertiary irrigation network, (2) the Corporate Farming group is an improvement to the previous farmer group, (3) the Corporate Farming Group can be divided into several Corporate sub-groups Farming in a tertiary irrigation network, and (4) Having Corporate Farming facilities / infrastructure, including group offices, production kiosks and agricultural business capital, agricultural machinery (water pumps, hand tractors, paddy reappers, power threers, rice milling units, and dryer, as well as drying floors and warehouses).

3.2. Submitting harvest to the warehouse manager

Farmers who are members of corporate farming management who at the time of harvest have to collect their harvest in the warehouse in the area. Based on the Cooperative Farming approach that several requirements must be met so that the warehouse receipt pattern can run optimally, namely: (1) stored commodities are vulnerable to price fluctuations, but at certain times the price can rise, (2)
3.3. Make an agreement between the insurance and the warehouse manager
Meanwhile the Warehouse Manager will make a Goods Management Agreement which contains a description of the goods and insurance. Insurance here aims to provide insurance for grain from damage and fire.

3.4. Warehouse receipt issuance
The warehouse manager who has received approval from the Supervisory Agency will issue a warehouse receipt that will be given to the farmers as proof that their harvest is stored in the warehouse.

3.5. Sales of harvest commodities to the market
Warehouse receipts that have been owned by farmers can be traded on the commodity market or can be used as collateral for farmers to get Microfinance Institution financing. For example, farmer groups in an area need agricultural equipment or want to improve the irrigation system on agricultural land in their area. For this reason, they propose financing to the Financial Institution with warehouse receipts as collateral. While commodities that are not in accordance with the appraisal by the Conformity Assessment Agency to be stored in warehouse. It can be sold directly to the market so that the proceeds of the sale can be used as operational costs for Corporate Farming management.

3.6. Financial Institutions conduct a feasibility study
After the Financial Institution has conducted a feasibility study, in general, Financial Institutions can channel funds with agreement with both parties, namely farmers and the Financial Institution. Cooperative farming will be periodically monitored and evaluated for business feasibility by the Financial Institution. The government also actively acts as a partnership facilitator as well as a catalyst for communication between farmer groups (Cooperative Farming Management) and Financial Institutions.

3.7. Farmers submit fund to the fund manager
Farmers can apply for funding both for seedling capital and farmers' technology improvement with the requirements to show evidence of warehouse receipts that have been issued by the warehouse manager.

3.8. Provision of fund to farmers
The fund manager of Cooperative Farming Management provides funds needed by farmers by receiving proof of warehouse receipts. After running for some time (3-4 months), i.e. when the harvest price on the market is quite high, the owner of the fund and the manager / manager of Cooperative Farming sell the farmers' harvest. Selling can be done with an auction system to get the highest price. From the proceeds of the sale, farmers can redeem and return loans to financial institutions. Furthermore, after reducing the sale price of farmers' harvests (market prices at the time of the warehouse receipt agreement), there will be a difference in price or profit. The profits are then shared with all parties bound by a warehouse receipt contract with the proportion in accordance with the profit sharing agreement between the farmer, the manager of Cooperative Farming and financial institutions. The profit gained by the Cooperative Farming manager can be used as a fulfillment of technology needs in the farmer groups so that it can be used together and increase the income of the farmers who are members of the Cooperative Farming.

4. Conclusion
Based on the discussion above, the following conclusions can be drawn: 1) farmer empowerment that is suitable and acceptable to farmers is the "Cooperative Farming" model, which is farm management
by farmers with the application of technology based on group agreements, procurement of production facilities and corporate marketing; 2) the synergy between the Corporate Farming model and the Warehouse Receipt System must be well developed so that the Micro Finance Institution will be more interested in financing the farming business; and 3) successful management of the Warehouse Receipt System requires synergy from all relevant stakeholders. Collaboration between the management of the Warehouse Receipt System, farmers / farmer groups central government, local governments (Industry and Trade Service, Cooperative Service), banking, and insurance are needed to make the Warehouse Receipt System a marketing instrument supporting price stability and food security.

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