

# Empowerment of the Smallholders' Cooperative for Palm Oil Plantation Replanting of Pir-Trans Scheme in Dharmasraya District West Sumatera Province, Lectures of Socioeconomic Departement, Faculty of Agriculture

Ira Wahyuni Syarfi, Melinda Noer, Ami Suma Utami  
 Lectures of Socioeconomic Department, Faculty of Agriculture  
 Andalas University  
 Padang, Indonesia  
 irakenedi@yahoo.com

**Abstract**—In West Sumatra, cooperatives of smallholders palm oil plantation (PIR-Trans scheme) generally no longer performs its function as a social economic institution. Therefore, it needs a strategy to empower the cooperatives (KUD) in replanting period. The main objective of this study was to identify and analyze the management of KUD and find a strategy for re-functioning KUD management in order to realize the goal of sustainable palm oil plantation production. The research was conducted in Dharmasraya District. Research method is qualitative descriptive. The study found that KUD has not been able to function as a farmer's social economic institution in replanting because; a). The cooperative is not transparent and accountable b). The cooperative does not yet have data and document about their development planing and monitoring for the implementation of the strategic plan, c) Supervision, control and social responsibility have not been fully implemented. The strategy to solve the problems are: (a) The cooperative must have a financial plan for replanting; (b) The cooperative should obtain institutional guidance, develop operating standards for maintaining during the unproductive and productive period (c) The cooperative need assistance to assure markets and supplies, bargain, purchase inputs production, maintain and harvest the plantation.

**Keywords**—*palm oil; pir-trans scheme; empowerment; KUD*

## I. INTRODUCTION

In the development of Indonesia's national economy, agricultural development has top priority. In agricultural development, cooperatives can hold strategic roles. Efforts to empower agricultural cooperatives have begun in the New Order era through the establishment of KUDs that were developed uniformly throughout Indonesia. Although initially developed as an agricultural cooperative, but later on political considerations KUD was developed as a rural cooperative, with membership that included all rural residents, whose economic interests were very heterogeneous. As a result, agricultural development through cooperatives has become ineffective, as

well as the fate of farmers who want to be appointed through cooperatives, become less attention [1].

However, Cooperative has also been proven to succeed in the exploitation of oil palm plantations managed by the people in Indonesia. Most smallholder farmers are plasma farmers<sup>2</sup> who are gathered in farmer groups and become members of cooperatives (KUD) in every settlement of oil palm farmers. In the PIR scheme the Palm Farmer Cooperative partnered with the nucleus estate (oil palm plantation company). Various PIR schemes have been implemented in Indonesia in developing oil palm plantations; PIR-Bun, PIR-Trans, PIR-KKPA and other PIR-Kemitraan such as adopted children and foster parents / PIR-ABA [2-4]. The scheme of plasma partnership is the mandate of Law No. 18/2004 concerning Plantations. In 2007, the plantation company companies were required to build plasma by setting aside 20% of their HGU area. However, since the enactment of Ministry Regulation No. 98/2013 concerning Guidelines for Licensing of Plantation Businesses, community plasma can be constructed from land outside the concession with an area equivalent to 20% of cultivation right.

The PIR scheme has been implemented since the 1980s to develop smallholder oil palm plantations in Indonesia with a variety of schemes, namely PIR\_Bun, PIR\_Trans, PIR\_KKPA and other self-help partnerships. In the PIR scheme, the development of oil palm plantations involves large state-owned and private plantation companies in building smallholder plantations. The PIR scheme is intended to increase production and prosper the lives of farmers, through company partnerships and oil palm farmers cooperatives.

The revitalization of cooperatives means returning cooperatives to their identity, by making changes to the boundaries, values and principles of the Cooperative in anticipation of changes in the life of the world economy. The cooperative movement must prepare for existence and increase the role in the new economic life, without leaving its identity to the phenomenon that leads to free trade. Revitalizing or

reviving cooperatives must overcome unemployment and poverty. Cooperatives that are small-scale in rural areas, especially their members, must re-unite in developing cooperative identities that contain values and principles that must be adhered to by all members and management of cooperatives in the primary cooperative. Therefore, it must be revived by the cooperative ranks about the definition of cooperatives, the values and principles of cooperatives [5].

West Sumatra is one of the 10 largest palm oil planting provinces in Indonesia. Most of these oil palm companies are smallholder plantations (49.1%) and private plantation companies (48.5%) and government property (2.4%) from 413,158 Ha. The three largest regencies in palm oil concession are Pasaman Barat, Dharmasraya and Pesisir Selatan districts, with percentages of 42%, 18% and 13% of the total area of West Sumatra oil palm [6].

The only oil palm plantation in the PIR-Trans scheme in West Sumatra is in the District of Dharmasraya which was built starting in 1986. The development of smallholder oil palm plantations in the PIR-Trans scheme is carried out through the partnership of Palm Farmers Cooperatives as plasma and Private Plantation Companies as the core. The beginning of 2010 the plantation companies had planned and carried out the replanting, while the plasma farmers who were gathered in the cooperative (KUD) had not yet carried out the replanting. Of the 8 KUD participants in the PIR-Trans, only one KUD was still active even though only in the purchase of FFB and seven other KUDs were not active. In connection with oil palm plantations, plasma farmers of PIR-Trans participants have entered the non-productive period and replanting activities have not been carried out, while plantation companies have implemented replanting since mid-2010. The delay of the plasma farmers to carry out replanting can be caused by internal and external farmers, along with the farmer institutions, namely the palm oil farmers cooperative (KUD). Limited capital for replanting is a major obstacle for farmers in replanting. With the allocation of funds for replanting by the Palm Oil Plantation Fund Management Agency (BPDPKS), it is expected that farmers will be helped in providing funding for the replanting of their oil palm plantations. However BPDPS requires recipient farmers to be members of cooperatives, while cooperatives (KUD) are generally no longer active.

Based on the analysis of the situation above, a study is needed that can find empowerment efforts of oil palm farmers in replanting activities. Thus the formulation of the problem of this research is: 'How is the management of oil palm plantation cooperatives farmers PIR-Trans schemes and identify empowerment strategies of KUD Oil Palm Plantation Farmers Plasma scheme PIR-Trans.

## II. LITERATURE REVIEW

There are three main historical pathways by which smallholder farmers began participating in the oil palm sector, namely: a). Participant in a government scheme; b). Approached to form a company-community partnership, wherein a company negotiated a deal with the community to secure land use rights for establishing a plantation in the area,

alongside smallholder plots; and c). Farmer independently invested in and established an oil palm plot [7].

The first state led scheme in Indonesia was introduced in the late-1970s. Over time the governmental role in these schemes declined and private partners (plantation companies/mills) were encouraged to become more involved. The KKPA program in the 1990s introduced a new decentralized governance system, in which farmer organizations became engaged in the coordination of smallholders plantations. In 1999, the Pola Kemitraan scheme (Partnership Mechanism) was enacted, introducing new partnership models, including shareholder models, that reduced the active management role of farmers in a reduced autonomy of smallholders regarding plantation management. The most recent models have a private sector focus and include replanting efforts [8].

Many of these smallholders experience substantial benefits from returns of oil palm cultivation [9]. However, benefits are often unequally distributed within and amongst smallholder communities [9], due to the lack of inclusive land use planning, free prior and informed consent, knowledge of and experience in best management practices and financial capital to accomplish sustainable farming. These barriers affect smallholders regardless of their organizational structure, which is why this report does not differentiate between independent smallholders and smallholders organized in cooperatives or plasma schemes.

It is important to note that oil palm plantation development by companies and smallholders is playing a key role in tropical forest cover loss and land use conflicts. Palm oil finance is urgently needed as in the next 25 years (2017- 2041) every year around 175,000 hectares of oil palm require replanting, resulting in a long-term financing need of USD 700 Million per annum [6].

Smallholder farmers are important actors in Indonesia's oil palm sector. It is therefore critical that they form part of the ongoing transition to a more sustainable oil palm value chain. In addition, there are considerable management deficiencies in existing oil palm smallholdings. Oil palm adopters face a set of agronomic and institutional constraints that hinder the achievement of the crop's full production potential [10]. Smallholder yield levels show large variations and are often far below private sector standards [10-12]. Production constraints include the use of poor planting material, inadequate dosage and application of fertilizers, as well as overlong harvesting cycles [10].

Under most plasma arrangements, cooperative institutions provide critical farmer services, including (i) ensuring access to training for continuous learning of good farming practices; (ii) ensuring fair prices are obtained for smallholder FFB sold at mills; (iii) ensuring access to fertilizers and other inputs ( e.g., quality seedlings) at a fair at a fair price; (iv) supporting transport of FFB to mills in a timely and safe manner to maintain quality; (v) providing coherent bargaining with companies (e.g., over terms and conditions of business transactions); and (vi) facilitating business diversification through training, access to credit, and related business support services. Cooperatives often fall short in one or more of these functions due to failed leadership, poor managerial systems, non-transparency, capture by elite interests, and collusion between cooperative leaders and company counterparts [13].

Smallholder agricultural cooperatives in Indonesia have a mixed history, with an equal or greater number of failures than successes. Pitfalls are many, well known and readily overcome if the right support and mentoring can be provided. In this context, the nature and continuity of company support can be a strong determinant of whether cooperatives succeed. Here, we highlight views from cooperative farmers in Plasma Buatan concerning what they view as key ingredients of their success and the role played by PT IIS in helping them achieve this [13].

### III. RESEARCH METHOD

This research was conducted in Dharmasraya District. The selection of this place is done purposively because the research area is the only oil palm plantation in West Sumatra that was developed with the PIR-Trans scheme. Determination of Sukamaju KUD is also done intentionally (purposive) because it is one of the cooperatives that manage large-scale community plantations that are now no longer active. The method used in this study is a case study. Data was collected by indepth interview dan focus group discussion. Analysis of the data used in the study is a qualitative analysis.

### IV. RESULTS AND DISCUSSION

#### A. Overview of Research Area

Nagari Ranah Palabi consists of 4 jorong including Jorong Bukit Subur (plasma SP-6), Jorong Bangun Argo (plasma SP-6), Jorong Bukit Tujuh (plasma SP-8), and Jorong Bukit Jaya (plasma SP-8). Land use in Nagari Ranah Palabi in Timpeh District can be seen in Table 3. The government center is located in Jorong Bukit Subur. In Nagari Ranah Palabi, Timpeh District, there is the SP-6 Plasma Garden which is a member of Sukamaju KUD. SP-6 plasma plantation area is 700 ha and is divided into 350 lots where the per plot area is  $\pm 2$  Ha. The SP-6 Plasma plantation is spread in 14 groups, group A to N.

The condition of plasma SP-6 oil palm plantations is currently quite alarming which can be seen from the lack of care by farmers ranging from weed control, disease, exposure, fertilization and damaged garden road conditions. Nagari Ranah Palabi Sub district sub-district is one of the plasma oil palm plantations in the PIR-Trans project which was built in the 1990s. Before the expansion of the nagari, the SP-6 plasma village, the SP-7 plasma village, and the SP-6 plasma village were included in the Timpeh village. After the expansion of nagari became Nagari Region Palabi, Plasma SP-6 Village became Jorong and Jorong Bukit Jaya, while Plasma SP-6 Village became Jorong Bangun Argo and Jorong Bukit Subur Nagari Ranah Palabi District Timpeh. In the SP-6 plasma there are agricultural facilities and infrastructure including the presence of 1 unit of KUD, 4 fertilizer stalls and 3 people selling agents for oil palm FFB should be typed in 9-point Times, without title.

#### B. Management of KUD Sukamaju

KUD Sukamaju was established in 1995 with the background of the PIR-Trans oil palm plantation program. Since 1997 (after conversion) until 2006 cooperatives played an important role. Some activities carried out by farmers are;

- Sales of plasma FFB,
- Supply of saprotan,
- Providing food needs for members,
- Garden management through farmer groups, namely: conducting garden maintenance (pruning and maintenance) activities in groups between group members (post conversion), weighing FFB in TPH of each group member, sending FFB in groups, arranging groups for withdraw funds for road repairs, replanting, KUD fees, etc.

But after the loan was paid off, the only activity that was done was to sell FFB. This is because the management of KUD Sukamaju is also not going well. According to the KUD Sukamaju supervisor, the inactivity of the KUD was caused by the low quality of the human resources administrators and KUD members. In the previous period KUD could function properly, because farmers were still obliged to pay plantation loans to the core companies. After garden loans were paid off around 2006/2007, farmers were more individualistic (carrying out their own business activities), and this was also in line with the entry of TBS agents.

KUD management period is 1 year. However, if the previous management still wants to be a board, then it is permissible to become a board member again. The election of the board is by way of deliberation by all KUD members during the annual member meeting. The year 2006/2007 was deemed as a turning point for the functioning of cooperatives, because since 1997 to 2006, KUD carried out its function properly with various business activities for its members and partnership with core companies was also well developed by the sale of FFB farmers to PKS. core. But after 2006 the KUD management was no longer active, the KUD functions were no longer running and the large number of FFB farmers sold to PKS other than PT. SAK as a core company.

In addition, the assistance of KUD from the government was not implemented, so that good KUD management in accordance with its basic principles was further distant. Although KUD management is currently inactive, it still has permits to ship FFB to the PT. SAK. No other KUD administrators want to carry out KUD management functions in terms of selling FFB to PT. SAK, then the sale is taken over by one of the administrators. This means that the permit to send TBS KUD is currently managed by one person who also has a business to purchase FFB from plasma farmers (someone who has large capital to pay SPB / DO for selling FFB to PT. SAK). Members of the Sukamaju KUD are all members who are incorporated into the oil palm plasma farmer group in SP VI. In SP-6 plasma there are 14 farmer groups where each member of the group is 25 people. Thus the number of Sukamaju KUD members totaled 350 people.

The group managed to manage maintenance and harvesting activities, but today farmers tend to cultivate their palm oil plantations individually. Plasma SP-6 KUD named KUD Sukamaju was established in 1996, which was after the conversion of plantation credit to the smallholding credit of smallholders, the KUD played a role in facilitating SP-6

plasma farmers, the core company of PT. SAK and Bank Mandiri are appointed as funding banks by BDN in payment of plantation investment credit for SP-6 plasma farmers. Membership of KUD SUKA MAJU is all Plasma SP-6 farmers. In addition to facilitating the payment of plantation investment credits, KUD also facilitates plasma farmers in the granting of a Fruit Introductory Letter (SPB) as a travel letter in selling TBS to PT SAK and transporting FFB from the plantation location to be sold to PT SAK's palm oil mill. KUD also provides waserda that is able to meet the needs of the entire Plasma SP-6 community ranging from daily living needs to saprotans such as fertilizers, pesticides and palm oil harvesting equipment and savings and loan loans for KUD members.

But for now, KUD only has a role in giving fruit delivery letters (SPB) to plasma farmers. According to the results of the

interview with the head of KUD, the role of KUD for now is not the same as it was when it was first converted into a plantation credit. This is because plasma farmers who are members of KUD have been impressed to walk alone and do not show their needs with KUD.

In Jorong and Bukit Jaya (Plasma SP-6) there are 4 saprotan stalls that provide various agricultural production facilities needed by farmers, especially fertilizer. With this saprotan kiosk, it is quite easy for farmers to obtain fertilizer. In Plasma SP-6 there are also oil palm FFB agents who buy farmers FFB if farmers are reluctant to sell FFB directly to the Palm Oil Mill of PT. SAK. In addition, with the presence of oil palm FFB agents farmers can choose where the FFB will be sold at the price desired by the farmers. Here are the TBS agents that are on Plasma SP-6.

TABLE I. THE ALTERNATIVE SOLUTION OF THE INSTITUTION PROBLEM

No	Related aspects	Potency	Problems	The cause of the problem	Solution alternative
1	Farmers Organization	The desire to activate KUD	KUD management is not active	KUD administrators do not carry out duties	Replacement of KUD administrators New KUD form
2	Management	Administrators are plasma farmers	Lack of human resource	Lack of Knowledge	Mentoring
3	Members	All of plasma farmer of SP-6 (350 persons)	The Benefits of cooperating in the past are forgotten	Loss of awareness about the benefits of cooperating	Mentoring

The potency owned by the KUD are: the desire to active the KUD and the member of the KUD are the plasma farmers (table 1). However the KUD faced the main problem such their lack of Human Resource to manage the KUD so that it is

important to replace the previous administration of KUD to the new administrator that have better knowledge.

TABLE II. THE ALTERNATIVE SOLUTION OF THE MAINTENANCE PLANTATION PROBLEM

NO	Related Aspect	Potency	Problems	The cause of the problem	Solution alternative
1	Fertilization	The need for production facilities	The availability of saprotan for farmers	KUD is not trying to supply SP-6 plasma fertilizer	KUD can open a business unit to supply production suggestions in SP-6 plasma
2	Road Facilities	Roads built by core company	The condition of the production road in the farmers garden is damaged	Not road repairs and maintenance are carried out	KUD can facilitate self-help road improvements and partnership assistance

The main problem for maintenance activity in this KUD are facilities such production facilities (fertilizer, seed, etc.). so that the KUD should open the business of production facilities in

order to supply the production and also increase the income for KUD.

TABLE III. THE ALTERNATIVE SOLUTION OF THE HARVESTING AND MARKETING PROBLEM

No	Related aspects	Potency	Problems	The cause of the problem	Solution alternative
1	FFB	FFB Production from plasma plantations	a. Plantation productivity is getting lower b. Low quality FFB	a. Do not do proper fertilization and maintenance b. Harvest young fruit or not according to the PKS standard	KUD provides farmers fertilizer needs Farmers adhere to the standardization of FFB by PKS
2	Marketing	Availability of market	The high sales of FFB to agents	Competitive prices	PKS determines the price according to the market and yield
3	Transportation	Provision of transportation	High cost (Unloading and sorting FFB)	The policy of SPSI is the power to unload high plasma TBS	Mediation between PKS, KUD and SPSI
4	Plant age	Replanting	Not yet prepared a pattern for replanting	There is no savings for replanting	Increase the role of KUD and Partners and Government

The above problems are factors of threats and weaknesses of both internal and external cooperatives. These obstacles and challenges have caused the cooperative to not be able to

function and act as expected. Various regulations, policies and opportunities or opportunities available to cooperatives have not been utilized by cooperatives for the benefit of members

and the community. In addition there are internal problems as weaknesses of cooperative institutions, among others: Capital and Technology. Thus, cooperative institutions (KUD) must transform themselves into efficient business institutions, and be able to compete and cooperate or partner.

### C. Identification of Internal Strategic Factors

#### 1) Strength factors

- Have a Legal Entity
- Have a business partner
- Having a large number of members (HR) is 350 people.
- Extent of plantations in the management of KUD which is quite extensive (700 Ha)
- Various member activities are managed by Farmer Groups totaling 14 farmer group

#### 2) Weaknesses factors

- Legality of management
- The administrator does not function
- Low awareness of the importance of cooperating
- Cash or capital needs
- Inconsistent with partnership commitment in terms of FFB sales
- There is no deposit of funds for replanting
- There is no reserve fund for maintenance of the production road

### D. Identification of External Strategic Factors

#### 1) Opportunity factors

- Partnership with core companies
- Relevant government agencies
- Replanting fund assistance from BPDPS
- Credit facilities for revitalization

#### 2) Threat factors

- There are individuals who become traders FFB
- The existence of Company Mill (PKS) without oil palm plantations
- There is no KUD financial balance
- No guidance or assistance for KUD
- No guideline/scheme for plasma farmers in replanting

### E. Strategy for Management Development to Empower KUD Sukamaju

Based on the identification of the problems and the potential that exists in the Sukamaju KUD institution and the problems and opportunities outside the Sukamaju KUD institution, the strategies obtained are:

- Organizing good relations among members of farmer groups, and between farmer groups in the KUD container to develop a spirit of cooperation.
- Growing a sense of awareness among farmers of KUD members.
- Collecting potential capital of fellow KUD members to carry out replanting in addition to utilizing replanting capital assistance from BPDPS.
- Organize cooperation with the core company (PT. SAK) as a partner company
- Establish a guidance and existing financial institutions related to replanting
- Organizing and drafting KUD work plans with new management, with the presence of assistants.

### V. CONCLUSIONS AND SUGGESTIONS

Management problems of oil palm plantation cooperatives (KUD Sukamaju) are: (a) Leaders and management of cooperatives have not been able to guide cooperatives to set direction, cooperative values, work culture, communicate with members, and external parties, (b) Cooperatives as business entities have not have a strategic plan, (c) All management and members have not focused on the performance of cooperatives that will be achieved, and have not been able to adapt to changes in the organizational environment, (d) Cooperatives do not yet have data and information in cooperative management aimed at analysis of performance and processes management; decision making, monitoring of the implementation of the strategic plan, and (e). Supervision, control and social responsibility have not been fully implemented by cooperatives.

The strategies to empower the plantation cooperatives in replanting activities are: (a). The cooperative relies its activities on the principles of independence and efficiency, (b) develop capacity in carrying out social missions to serve members and business missions to reduce spending, and (c) cooperatives do not strengthen so that effects in internal supervision by members, (d) cooperatives must have a business plan; and financial plan; (e) develop operating standards in carrying out business activities. (f) Growing awareness of farmers wanting to group again in the KUD container in replanting activities, (g) Functioning KUD management (members, administrators and supervisors) in preparing KUD work plans, especially replanting activities of plasma farmers' gardens and (h) Socialization of cooperative values and importance of replanting, workshops and cooperative assistance (KUD) from the relevant government, KUD Partners namely plantation company companies and other parties such as universities.

Based on the results of the study, the following are suggested: (1) Increasing the role of supporting institutions (external) such as the government or units of cooperatives and NGOs as well as private sector agencies to create a climate that allows the development of cooperative activities; and protect cooperatives from unfair competition; (2) In the relevant government work plan, it is necessary

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