

## Improving Income through Farmers' Group Empowerment Strategy

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**Abstract:** *During recent years the concept of farmer empowerment has been put on the agenda and now is a part of Indonesian's government program. Empowerment of farmers' group considered necessary because, in agricultural development, farmers' group are the key development resource and subject in developing their agricultural efforts. This paper aims to explore the farmer's group empowerment strategies to improve their income. The paper is based solely on the reviews of literature on the topic of farmer's group and empowerment to explore the phenomena in the agricultural sector. Based on the findings, the paper proposes the farmers' group empowerment strategies such as farmer's group learning and innovation and information and communication technology (ICT) have a positive influence on improving their income.*

**Keywords:** *Empowerment, farmers group, income, strategy, agriculture, learning, innovation, ICT*

### 1. Introduction

One of the agricultural development activities is improving the quality of human resources (HR) of farmers and their families. It aims to increase the knowledge, attitudes, and skills of farmers and their families so that they can develop a more productive farming and at the same time improving the welfare of their families. The lower crop production will cause a lower level of farming income. To obtain maximum yield and higher incomes it is needed empowerment involving the technical aspects, social and institutional aspects.

During recent years the farmer empowerment's concept has been put on the agenda and now is a part of the government program. One of the government programs is the revitalization of the agricultural sector (Revitalisasi Pertanian, Perikanan dan Kehutanan, or RPPK). It emphasized the development of human resources and the empowerment of farmers. This was to be achieved, among other, through the development of extension service capacity and improved service delivery; improved access to

information; and increased investment in long-term technological research. Many issues concerning farmers' empowerment have been considered in the literature, including, women empowerment in agriculture (Mudege, Nyekanyeka, Kapalasa, Chevo, & Demo, 2015; Sraboni, Malapit, Quisumbing, & Ahmed, 2014; Pini, 2002), factors affecting the farmers' empowerment indicators (Langerodi, 2013), empowerment in practice (Alsop, Frost, & Jeremy, 2005), psychological empowerment and individual performance (Davila-Aguirre, Hanley, Lozano-Fernandez, & Lyons, 2014). Many scholars have suggested empirical approaches that take into account empowerment strategy.

However, these approaches have not fully developed the completed framework. Thus far, there are fewer theoretical or conceptual approaches of the empowerment strategy. These studies done in countries such as China (Zhong, Yang, & Chen, 2015), Mexico (Davila-Aguirre et al., 2014), Tunisia (Dolinska & D'Aquino, 2016), Indonesia (Heryanto, 2013; Karim, Handayawati, & Ruminarti, 2012; Soesilawati, Kariada, &

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Margunani, 2017), Iran (Langerodi, 2013), Pakistan (Murray-Rust, Memon, & Talpur, 2001), Bangladesh (Rashid, Islam, & Quamruzzaman, 2016; Sraboni et al., 2014), Nepal (Westerndorp, 2013), and Malawi (Mudege et al., 2015).

Although these studies have demonstrated that many farmer empowerment strategies, research has yet to be conducted on farmer's group. The importance of empowerment of farmers' group is because farmers' group are the key development resource and subject in developing their agricultural efforts in agricultural development (Heryanto, 2013).

The importance of farmer's group in farm management such as to optimal use of irrigation systems, to overcome institutional barriers, to enable the application of resources, capital, and ecosystem management is emphasized. Empowerment is a process of change whereby individuals or groups gain the ability and power to take control of their lives (World Bank, 2011). Therefore, this idea of farmer's group empowerment using learning, innovation, and ICT will be studied to find out whether the empowerment strategies attempts made some productive impacts or not for farmer's group income.

This paper addresses this research gap by focusing on describe farmers' group empowerment strategy to improve their income. In this study, the paper proposes two empowerment strategy as the important strategy that improving farmer's group income. The contribution of this paper to the literature is twofold. First, using the existing conceptual framework, this paper offers useful information for policy makers and government for developing agriculture in Indonesia by comprehensively arranging relevant theories on farmer's group behavior in empowerment strategy. Second, this study conceptually examines the phenomenon of farmer's group empowerment about the improving their income.

## 2. Literature Study

### *Farmers' Group*

Nuryanti & Swastika (2011) stated that a farmer's group is a group of farmers informally consolidate themselves based on their common goals in farming activities. This is in line with Rangkuti (2007), farmer's group is a forum and vehicle to change the behavior of farmers toward the realization of modern agriculture to be more effective, efficient and productive. Farmers can realize their desires through groups that facilitate community development (Barker, Wahlers, Watson, & Kibler, 1987). In farming activities, the farmer's group play a major function including peer counseling, small group research, and agricultural innovations (Havelock, 1969).

According to Aphunu and Otoikhian (2008), the role of the farmer's group is as a medium of communication and social interactions which are natural, sustainable and dynamic and as a foundation for achieving improvement evenly in the agriculture communities. Initial spirit of establishing a farmer's group is to strengthen farmer's bargaining position regarding collective purchasing of farm inputs and to sell their agricultural products efficiently. Farmer's group have the potential to serve as a vehicle for teaching and learning, farm production units, a vehicle for cooperation in addressing various challenges and obstacles, and effective vehicles for the government extension programs in the development of agriculture and rural community development (Abbas, 1995; Karim et al., 2012). Currently, most of the farmer's group in Indonesia are not formed by farmers themselves, but they are mostly formed as a response to the government program that requires farmers to become members of a farmer's group.

### *Empowerment*

Empowerment or self-reliance refers to a manifestation of a person's ability to exploit his own potential in meeting his needs (Hubies, 1992). This is in line with Rifkin (2003), empowerment is a mechanism or process through which individuals, organizations, and groups can work on things and have more

control over what they are involved in. So that individuals, organizations, and groups with a high power could control the resources, build confidence, make capacity and have an active participation in managing their life. The empowerment's concept is considered as the idea of power because empowerment is closely related to the change of power such as expanding, gaining, losing, and diminishing (Page & Czuba, 1999).

Recently, power has been conceived as shared because it can actually become stronger while being shared with others (Kreisberg, 1992). Margono (1995) emphasizes that to cultivate and foster self-reliance of farmers, they need to be sensitized on their strength and ability to work together if they are to achieve success. Empowerment is offering an opportunity to freely choose all kinds of alternatives and make decisions according to the level desire, ability, and awareness, and to learn from successes and failures in response to changes, to be able to control the future (Heryanto, 2013).

### **3. Methodology**

This conceptual paper studies the farmer's group empowerment strategies to improve their income. The study reviews the literature on the farmer's group and empowerment. The factors are analyzed using the conceptual framework of empowerment. The conceptual framework is based merely on a review and analysis of research and data from the literature. Several methods were used to collect and analyze the literature. First, research on four databases pertaining to empowerment and farmer's group were examined. The databases were ProQuest, ScienceDirect, EBSCOhost, and Emerald Insight. A limited amount of journal was found.

Second, research was conducted using the search engine. Terms such as 'empowerment' and 'farmer's group' were used, and a limited amount of information was found. A quantitative study would be conducted for future research to obtain data on the

Empowerment Condition Index (ECI) to assess the real data of the impact of empowerment on farmer's group income.

### **4. Finding and Discussion**

The farmers' group empowerment strategy has been the subject of extensive research in agriculture research. The empowerment strategy in developing country such as Indonesia is an important issue. Because of its importance, many types of research have been done in the local and abroad on how farmer's group empowerment strategy can improve their income. The farmer's group empowerment strategy to improve their income such as:

#### *Farmers' group learning and innovation*

Farmers' group learning and innovation can empower engaging farmers as agents of change in agricultural practice (Dolinska & D'Aquino, 2016). Farmer's group active efforts of improving the knowledge base, skills, and attitude through learning process are characterized by the range of learning activities such as attending the counseling session, discussion groups, training in agriculture, and farming demonstrations (Heryanto, 2013).

The agricultural extension activities implemented in rural areas can involve the agricultural extension workers through the coaching and guidance approaches on a regular basis and sustainable to the farmers. These activities aimed to strengthen the cooperative spirit of farmers and cooperation with other stakeholders in the farming system. Farmers who are members of a farmer group is expected able to implement any new agrotechnologies and gain better revenues of farming (Karim et al., 2012). It can conclude that the more farmer's learning and innovation can lead to improving farmer's group income.

Thus I propose:

*Proposition 1: Farmer's group empowerment strategy through farmer's group learning and innovation have the positive influence on improving their income.*

### *Information and Communication Technology (ICT)*

ICT that can empower farmer's group including email communication, search engine capabilities, mobile banking, SMS (short message service), voice communication, e-agriculture (e.g. e-Petani in Indonesia), and social media through the smartphone (Uphoff, 2012; Babu, Kadian, Kumar, & Sankhala, 2013; Rashid et al., 2016). Information needs and sharing strategies such as information of prices, production amounts, farming schedule, market sales forecasts, weather forecasts, and delivery schedule has been increasingly critical in the development of modern agriculture.

The central information services should empower farmers' group by increasing agricultural productivity and marketing efficiency. Farmers' group must be able not only to access information, to assess its relevance, and to apply it to production or trading decisions but also eventually to act on the information by utilizing agricultural and marketing information appropriately (Zhong et al., 2015). Farmer's group activity to obtain information (Heryanto, 2013), which is empowered by marketing information and production, farmers' group are capable of changing traditional farming into a more sustainable and profitable agricultural business (Tologbonse, Fashola, & Obadiah, 2008).

This is in line with Uphoff (2012) that ICT in agricultural production methods by facilitating the urge of changes is helping many farmers' group to improve their food security, increase their incomes, encourage confidence, and greater innovation. It can conclude that the more farmer's group applied the ICT strategies, it can lead to improving farmer's group income.

Thus I propose:

*Proposition 2: Farmer's group empowerment strategy through information and communication technology (ICT) have the positive influence on improving their income.*

From the propositions above, the conceptual framework of the improve income through farmers' group empowerment strategy is illustrated in Figure 1. In this paper, the concept of empowerment has been referred to learning, innovation, and ICT. The interaction between the facilitators (the government, agricultural expert, educational institution, a private institution, and other stakeholders) and the participants (farmer's group) can collaborate to give the empowerment strategies (input) to the farmer's group through the transformation of knowledge program. Therefore, farmer's group active effort and the facilitator's involvement through this empowerment program will increase the farmer's group abilities or farmer's group production with the result that improving farmer's group income (output).

To appraise the influence of empowerment on farmer's group income, Empowerment Condition Index (ECI) of Sendilkumar (2012) will be used. ECI's factor such as economic, political, family and social, psychological, and knowledge empowerment. However, this paper will be used economic factor which is related to income. Economic factor indicators of ECI such as changes in economic empowerment consists of saving money, income due to yield obtaining, investments, purchase of farming inputs, and availing agriculture loans by computed the index for the before and after the use of empowerment strategies. Each respondent's total change or unit free score was considered as the ECI.

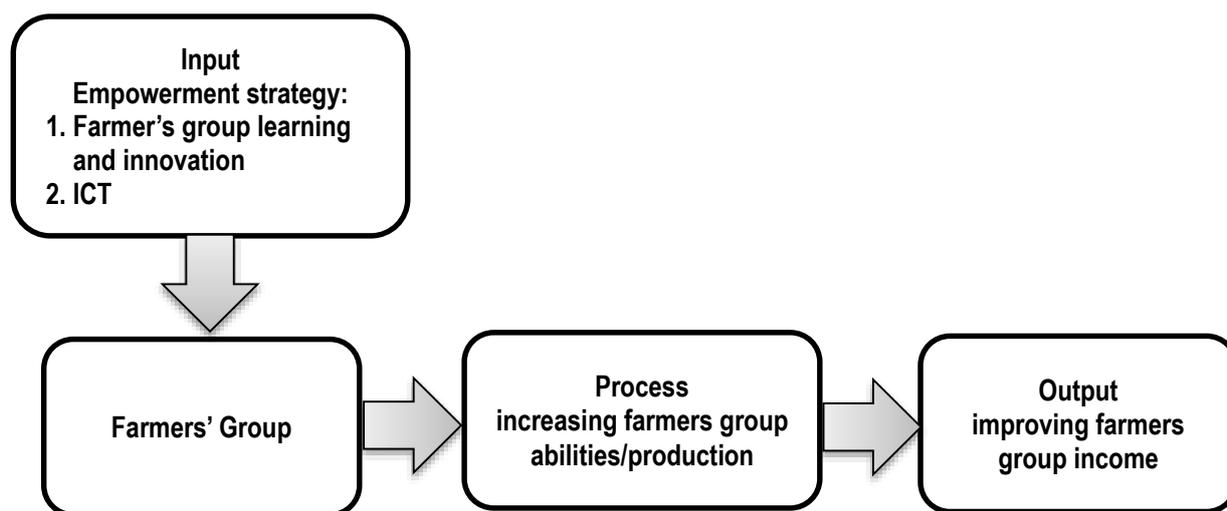


Figure 1. Conceptual Model of Farmer's Group Empowerment Strategy

## 5. Conclusion

The most important empowerment strategy of farmer's group in the relevant literature was identified such as farmers' group learning and innovation and ICT. This study has two implications. First, the understanding and knowledge of the conceptual model need to be increased among policy makers, practitioners, and government for developing agriculture in Indonesia by comprehensively organizing relevant theories on farmer's group behavior through empowerment strategy. Second, this study conceptually examines the phenomenon of farmer's group empowerment about the improving their income.

The author believes that future research on this field could add additional value towards the total understanding of the agricultural empowerment theories in the Indonesian agriculture perspective. Apart from this topic, the topic proffers more potential for future research. First, it would be interesting to repeat this study in other developing countries. Second, research could be increasingly done from other perspectives.

In particular, it would be needed to collaborate with government perspectives. Third, this study has produced some original findings regarding influencing factors which surpassed

previous findings. This study should be tested for robustness and triangulated in future research. Furthermore, it could be interesting to study these influencing factors in other contexts such as animal husbandry and fishery. Additionally, more research could be conducted on other possible empowerment strategies. Moreover, the conceptual model itself should be reconsidered from an application point of view. This paper explains and contributes to the science and practical significance. This conceptual paper then could be upgraded to an empirical research by real data.

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