



## **The Effect of Farmer Group Dynamic on the Income of Red Branches in Indonesia**

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### **ABSTRACT**

The purpose of this study was to know influence of farmer group dynamic (FGD) on the income of red chili farming. The method used in this study is mixed methods. A quantitative method using a sample of 83 respondents, while the qualitative method uses 20 informants for interviews and 9 informants for FGD. Based on the results of the analysis, it was found that FGD had a positive and significant effect on the income of the Red Chili farmer, so that if the FGD activity is carried out properly, on target, and appropriately benefits the farmers, then the business income of the Red Chili farmer will increase, which includes production per planting season for members in carrying out red chili farming that is active in the group, the selling price of the product per planting season for members in carrying out the red chili farming that is active in the group, and the income per planting season for members in carrying out the active red chili farming in the group. FGDs have a positive and significant effect on the income of the red chili farm. So that farm income can be determined by the dynamics of farmer groups that have a purpose, have a function, carry out coaching and group development, group cohesiveness, and group effectiveness.

**Keywords:** Farmer group dynamic, Farmer Group Dynamics, Farmer Income

**JEL Classifications:** Q12, Q13, Q18

### **1. INTRODUCTION**

Efforts to increase vegetable production are closely related to marketing aspects, because vegetable farming, in general, is a commercial farm, with most of its production being sold to the market. According to Adler and Adler (2009), production and marketing have a very close dependency. Increased production without the support of a marketing system that can accommodate yields at a reasonable price level will not last long, instead of in time, it will decline due to farm profit and loss considerations.

Some problems in marketing agricultural commodities are found in developing countries in general and in Indonesia in particular, among others, as follows: (a) The unavailability of agricultural commodities in sufficient quantities continuously (b) price fluctuations (c) the implementation of marketing inefficient

(d) inadequate marketing facilities (e) dispersed location of producers and consumers (f) incomplete market information (g) lack of knowledge of marketing (h) lack of response from producers to market demand (Soekartawi, 2002. p. 11). It has good potential in the development of horticultural crops, especially red chili. Judging from the availability of human resources and the carrying capacity of natural resources and the location of the region has a comparative advantage. Red chili farmers sell their agricultural products to traders, traders who want to buy can come directly to farmers' land. There is a price bargain and after an agreement is made, the red chili will be handed over to the trader. Farmers' passion to increase production and the quality of red chili produced is determined by the high and low prices received. The high and low prices received by farmers are closely related to the state of the market structure and the number of marketing margins, so to increase marketing of red chili can be achieved if the market structure and causes of high marketing margins are known.

Increased production of red chili can be done through the expansion of planting areas, in addition to the production of red chilies can still be improved by improving production technology at the farm level given the low productivity and through improved harvest and postharvest handling.

The harvested area decreased in 2016 by 181 hectares and productivity also decreased by 4.36 Tons/ha, this was due to the occurrence of long droughts and the presence of pests and diseases like a yellow virus and curly disease. This should be a concern of relevant agencies so that farmers in can increase the production of red chili farming by regulating the cropping pattern so that in the future can be the largest chili central area in the end which can improve the welfare of farmers in district.

## 2. LITERATURE REVIEW

### 2.1. Farmer Group Dynamic (FGD)

Concerning Guidance for Farmer Group Development and the Association of Farmers' Groups, the Association of farmer groups serves to facilitate joint business activities from the upstream to downstream sectors commercially and market-oriented. The FGD is a collection of several farmer groups that join and collaborate to improve economic scale and business efficiency.

The FGD is formed to strengthen existing farmer institutions so that government development for farmers will be focused on clear objectives (Djoni and Abidin, 2006). FGD in each village consists of all farmers, breeders, and fishermen in the village. The FGD will always be nurtured and guarded to become a business entity that is independent, professional and has a wide network.

Group dynamics are an organized group of two or more individuals who have a clear psychological relationship between members of one another. Group dynamics describe the strengths in a group situation that determine the behavior of the group and its members.

Understanding group dynamics is a method and process that aims to increase the value of this group collaboration trying to grow and build groups that originally consisted of groups of individuals who have not known each other into a single group.

According to Laelani and Hasan (2006) states that a farmer group can be analyzed by measuring the value of each element of group dynamics. The elements whose values, they are not good are considered to be the less dynamic sources of the group, the elements that are considered good, the group is said to be dynamic, the elements can be seen from Santoso (2004), the dynamics of farmer groups, is an interaction between members of one group and the other group members reciprocally. This means that the dynamics of farmer groups are a group that is socially organized together, from two or more individuals who have a clear membership relationship between members of one another.

According to Pusluhtan (2002), adding that to determine the relationship of FGD s, it is more measured by the ability of the class of farmer groups, namely farmer groups with high ability classes, which can be concluded to play a role in the application

of technology, or the application of Sapta Farming. Whereas farmer groups with low ability classes, it is concluded that they cannot play a role either in the application of technology or in Sapta Farming.

The farmer group has an important and strategic position in an effort to improve the quality of agricultural human resources in particular and human resources in general as a vehicle to improve the knowledge, skills, and attitudes of its member farmers (Herdinan, 2010).

According to Santoso (2004), that behavior in groups is the result of the dynamic interaction between individuals in social situations. This means the formation of a group of inner consciousness (psychology) someone who wants to join and join in a group setting. According to Marzuki (2001), factors that influence group dynamics are goals, structure, task functions, coaching, and development, cohesiveness, atmosphere, pressure and group effectiveness.

This means that to realize a dynamic within the farmer group, it requires three processes of social interaction, namely the process of communication, FGD and participation that involves the farmer group directly involved in the process. According to Djoni Abidin (2006), members of the former group will not be effective in carrying out their duties and obligations without controlling, directing and collaborating with leaders, meaning that relationships such as these are opportunities for members to communicate the results of thinking, between leaders or with members and between members.

According to Djoni Abidin (2006), that a dynamic group is characterized by always an activity or interaction both inside and with parties outside the group to effectively and efficiently achieve its goals.

### 2.2. Farming Income

According to Hernanto (1996), income analysis of farming is important in relation to the objectives to be achieved by each farm with various considerations and motivations. Income analysis basically requires two main information, namely: (a) State of acceptance, and (b) state of expenditure (production costs) for a certain period.

Income is a very important factor in supporting the family economy. The level of income is one of the socio-economic indications of a person in the community, in addition to work, wealth and education. A person's decision in choosing a job is strongly influenced by resources and abilities in the individual, the type of work and level of expenditure a person also determines the level of well-being in one's socioeconomic status (Hernanto, 1996).

Soekartawi (2002) states that farmers with high-income levels have something to do with the use of an innovation. Farmers with high income will find it easier to do what they want so that they will adopt agricultural innovations faster in accordance with the conditions of agriculture owned by farmers, so this generally results in higher farmer income.

Family income received by farmers can come from farming and non-farming activities. Then the revenue allocation is used for: (1) Productive activities among other things to finance its farming, (2) consumptive activities include food, shelter, health, education, recreation, and taxes, (3) investment maintenance, and (4) savings investment. Family income is used to meet the needs of life in line with Engel's Law which states that increased family income will be accompanied by a decreased percentage of food expenditure, the same percentage for clothing, the same percentage of expenditure allocated for housing or repairs, while for recreation, education, health, and others have increased (Hernanto, 1996).

According to Soekartawi (2002), the difference between farm cash receipts and farm cash payments is called income and is a measure of farming ability to make cash. To analyze income, there is two main information about the state of expenditure and income in a certain period. The purpose of income analysis is to describe the level of success of a business activity and circumstances that will come through planning that is made.

The income of cassava farming according to technical and economic aspects has a different statement. if according to the technical aspect, cassava farming income is characterized by increased cassava productivity, but according to economic aspects, cassava farming income is characterized by profit, both are interrelated, if productivity increases with the condition of constant cassava prices, it can increase farmers' income.

### 3. METHODOLOGY

The research method used in this study is mixed methods (mix methods) namely the quantitative method with a descriptive correlational survey research approach, namely seeing the influence of FGD and FGDs on red chili farming income, as well as qualitative methods, through interviews, observation, and focus group discussion.

The research unit in this research activity was a member of the farmer group which carried out the red chili farming activities in. The object of this study was the effect of FGD and the dynamics of farmer groups on the income of red chili farming in.

This research will be conducted in the district. As for the basis of consideration is one of the sub-districts that contributed greatly to producing red chili. The data collected consists of primary data and secondary data. Primary data collection was carried out by field observation, direct interviews (20 members), FGD (9 group leaders) and through a questionnaire. While secondary data was obtained from related agencies related to this research and literature study. The population is an area of generalization consisting of objects or subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions (Sugiyono, 2009).

### 4. RESULTS AND DISCUSSION

Influence of FGD who cultivate red chili in against the income of Red Chili farming. To determine whether the independent variable

FGD (X1) has an effect on red chili farm income (Y), it is done using Pearson correlation analysis and the software used is SPSS version 21. The influence of FGD on red chili farm income is 26.8%, and another influence is 73.2%, this is consistent with the results of interviews with farmers through in-depth interviews that with FGD, then Farmers find it helpful, both through counselling, coaching, and providing mutual assistance, such as meetings/member meetings held 4-5 times in general in 1 month, meetings to give information to each other generally 3-4 times in 1 month. Likewise, the FGD work plan can be a motivator for farmers to continue to work well because the work plan aims to improve the welfare of farmers. Farmers' understanding of rules and norms is also a very important discussion in FGD. Administration in FGD is also very important because the activities of farmers are well monitored. Upstream and downstream sector businesses that include the division of labour and the benefits that the business sector deals with the upstream and downstream business sectors. Farming/agribusiness is also the target of FGD so that farmers know information about farming, and provide easy access to farming information to farmers.

To find out whether the independent variables are FGD s (X) has affect the income of red chili farming (Y) done using Pearson Correlation analysis and the software used is SPSS version 21. The effect of FGD s on Red Chili farm income is 19.4%, and other influences are 80.6%, this is in accordance with the FGD with nine 9 leaders of the FGD Group, namely 5 people from Lumbang Bahagia, 3 people from Subur Makmur, and 1 person from Agri Karya.

To find out whether the independent variables are FGD (X) has affect on the income of Red Chili Farm (Y) in Lembang district carried out using path analysis and the software used is SPSS version 21. Based on the results of the calculation of the path coefficient variable (X1) to (Y), obtained by using SPSS release 21 for windows programming, thus in accordance with the rules of decision, that t count prices fall in the area of Ho is rejected meaning the path coefficient is significant, so the path diagram doesn't change. Conceptually it can be explained that all aspects of FGD have a positive effect on the income of the Red Chili farm in Lembang district.

From the results of testing hypotheses between variables X and Y, there is a direct relationship between FGD variables on red chili farm income, in full the causal relationship diagram of variables X1 on Y. This is understandable because every indicator of FGD is used as an aspect of measuring the income of Red Chili farms.

### 5. CONCLUSION

Starting from the discussion of the problem, theoretical bases, empirical data analysis, the results of hypothesis testing then in the last chapter in this study some conclusions will be put forward as follows: FGD has a positive and significant effect on the income of the Red Chili farm, so that if the FGD activity is carried out properly, on target, and appropriately benefits the farmers, then the business income of the Red Chili farmer will increase, which includes production per planting season for members in carrying

out Red Chilli farming that is active in the group, the selling price of the product per planting season for members in carrying out the red chili farming that is active in the group, and the income per planting season for members in carrying out the active red chili farming in the group. FGD s have a positive and significant effect on the income of the Red Chili farm. So that farm income can be determined by the dynamics of farmer groups that have a purpose, have a function, carry out coaching and group development, group cohesiveness, and group effectiveness.

## REFERENCES

- Adler, P.A., Adler, P. (2009), *Observation Techniques, Handbook of Qualitative Research*. Yogyakarta: Learning Library Publishers.
- Djoni Abidin, J. (2006), *Group Dynamics among Pondok Pesantren Farmer group dynamic (PONTREN) Implementing Agroforestry Models in Citanduy Watershed (DAS)*. Vol. 10. Development of Agroforestry Model in Citanduy Watershed. Institutional, Sociological, Economic and Biophysical Study Reports. p6-15.
- Herdinan, F. (2010), *Analysis of Farmers Sweet Potatoes in the Village of Gunung Malang, Tenjolaya District, Bogor Regency*. Indonesia: Faculty of Economics and Management, Bogor Agricultural University.
- Hernanto, F. (1996), *Farming*. Jakarta: CV Spreader Self-help.
- Laelani, A., Hasan, S.O.D. (2006), *Group dynamics analysis on mekarsari farmer group dynamic, Purwasari village, Dramaga district, Bogor regency*. *Journal of Agricultural Counseling*, 1(1), 11-21.
- Marzuki, S. (2001), *Group Coaching*. Jakarta: Open University Publisher Center.
- Pusluhtan. (2002), *Coaching of farmers and fishermen groups*. *Journal of Agricultural*, 12(7), 22-31.
- Santoso, S. (2004), *Dinamika Group Revised Edition*. 1<sup>st</sup> ed. Jakarta: Bumi Aksara.
- Soekartawi. (2002), *Agribusiness Theory*. Jakarta: Raja Grafindo Persada.
- Sugiyono. (2009), *Quantitative, Qualitative and R and D Research Methods*. Bandung: Alfabeta Publisher.