Research Paper

Analysis of Structural Equation Modeling Towards Productivity and Welfare of Farmer's Household in Sub-District Selesai of Langkat Regency

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ABSTRACT

This study aims to analyze whether the Factors of Production, Social Demography, and Social Capital affect the Farmers Productivity in Sub-District of South Regency. To analyze whether the Factors of Production, Social Demography, Social Capital, and Productivity affect the Welfare of Households in the Districts of Selesai, Langkat District. The number of population in this research is 2,516 people, while the sample used is 200 people. The data analyze model used in this study is Structural Equation Modelling (SEM). To analyze the data using the SEM method with the help of the AMOS 22 Software, the method used in collecting data is quantitative method. SEM analyze is reduced to determine the best model of productivity and Welfare of the Respondents in the Districts. Based on the results of the study, Social Demographics and Social Capital have no significant effect on Productivity. Social Demographics and Productivity have no significant effect on household Welfare. Then Factors of Production have an effect on productivity. Factors Product and Social Capital effect the significant of House of household welfare.

Keywords: Factors of Production, Social Demography, Social Capital, Productivity and Housing Welfare of Farmers

INTRODUCTION

The purpose of development is essentially to improve the welfare of the community. Welfare according to Behnke and Macdermid (2004) is defined as the quality of life consisting of various aspects, both economic, social, and psychological. Bryant and Zick (2006) describe the quality of life with many choices. The more freedom to make choices, the higher the quality of life. The amount of freedom in choosing is determined by ownership and access to the resources owned, both human, financial, material, and natural resources.

A farmer is someone who is engaged in agriculture, primarily by carrying out land management with the aim of growing and maintaining crops, (such as rice, flowers, fruit, etc.), with the hope of

obtaining yields from these plants for their own use or selling them. to other people. The goal of agricultural development in Indonesia in principle has two main targets, namely to increase production and increase income in the agricultural sector. This is in line with efforts to improve the living standards of farmers and increase national agricultural production which is directly or indirectly influenced by working capital factors, work experience owned and so on .There are several factors that affect farmers' incomes, namely the social and economic sector which consists of the amount of capital, the amount of labor, work experience, technology. Farmer income based on the size of the harvest, there are still several other factors that determine it,

namely social and economic factors other than above.

Creasing future income for welfare. Farmer productivity is influenced by inputs and outputs from farming. Inputs from farming include capital, labor and technology while farm output includes farmers' outputs. In addition, the productivity of farmers is inseparable from the social demographic factors and social capital around them (Ramalia, 2011). Social demographic factors that affect the productivity and welfare of farmer households include experience, age and number of family members (Lilis, 2009). The number of family members will determine the level of welfare of farmers, the more the number of family members the more the number of dependents must be borne to meet their needs.

Productivity is greatly influenced in the use of efficient and effective production factors in farming activities (Prasetyawan, 2011). Factors of working capital production enter into this study because income is strongly influenced by working capital. The labor factor is included in this study because income is strongly influenced by labor. Technological factors, the more sophisticated and the many technologies used for farming, the more productivity will increase and the results will increase production, which implies the conclusion that people will get higher incomes.

An important component in terms of welfare is the personal characteristics of farmers which includes formal education, training and experience (Demi Hartini, 2005). The mastery of innovative technology is certainly used and is often channeled through institutions or groups that are formed on the basis of shared goals with which social capital can be formed. This social capital is formed from trust, networks, and norms between groups of farmers (Dewi, 2014). Social capital is needed in production starting from pre-production, production to post-production such as processing and marketing of production results.

Based on the background of the problem above, researchers are interested in examining the level of welfare of farm households located in Selesai District of Langkat Regency, and find out the level of household welfare seen from the productivity adopted by the head of the family who in a family is the main pillar of the economy in the family, and viewed from the factors of production, social demographics, and social capital.

LITERATURE REVIEW

Factors of production are objects provided by nature or created by humans that can be used to produce goods and services. Factors of production in the economy will determine to what extent a country can produce goods and services. Entrepreneurial expertise, this production factor takes the form of expertise and the ability of entrepreneurs to establish and develop various business activities (Sukirno, 2005). Based on the understanding and history of demographic development, the current demography is not only studied purely, but it is also widely studied by heeding non-demographic variables (social, economic, cultural, environmental and political). Demography is no longer a separate discipline, but rather an interdisciplinary science. Residents can be grouped according to certain characteristics, such as age groups, socio-economic characteristics, and the distribution or distribution of their dwellings. This grouping is very useful for various purposes and objectives (Adioetomo, 2010). Basically the definition of social capital put forward by some experts is not much different. The difference is in the number of dimensions used to measure social capital and how each process and scope. According to Putnam (1993), explaining that social capital has three main elements, namely (1) trust; (2) network; and (3) norms which are considered as "stock" of social capital that can be considered as social assets so as to facilitate collaboration in the future. Productivity is a term in production

activities as a comparison of outputs with inputs. Where productivity is a measure that states how well resources are managed and utilized to achieve optimal results. Productivity can be used as a benchmark for the success of an industry in producing goods or services. So the higher the ratio, means the higher the product produced. Measures of productivity can vary, depending on the aspects of output or input used as basic aggregates, for example: labor productivity index, direct cost productivity, total cost productivity, energy productivity, and raw material productivity (Samuelson and William, 1992: 133). According to Drewnoski (1974) in Bintarto (1989), looking at the concept of welfare from three aspects; (1) by looking at the level of physical development (somatic status), such as nutrition, health, life expectancy, and part of it; (2) by looking at his mental level, (mental / educational status) such as education, work, and so on; (3) by looking at integration and social status (social status).

Based on the existing problems, a framework of thought can be made about the influence of factors of production, social demographics, and social capital on the productivity and welfare of farmers' households in Selesai District, Langkat Regency.
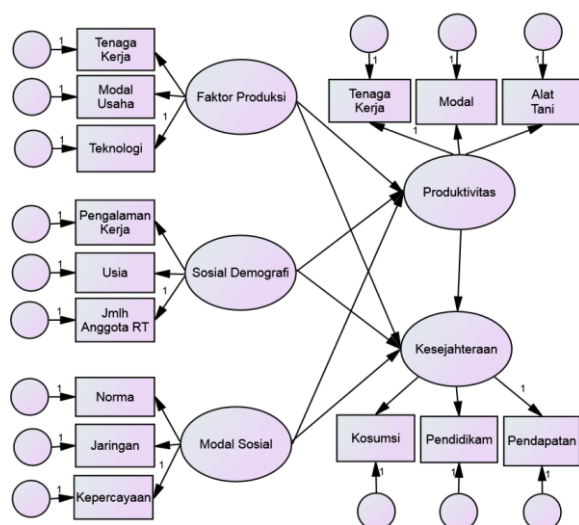

Figure 1 : Conceptual Frame

Hypothesis
Based on the formulation of the problem, the hypothesis of this study is:
1. Production factors affect the productivity of farmers in Selesai District of Langkat Regency.
2. Production factors affect the welfare of farmers' households in Selesai District of Langkat Regency.
3. Social demography has an effect on the productivity of farmers in Selesai District of Langkat Regency.
4. Social demographics affect the welfare of farmers' households in Selesai District, Langkat Regency.
5. Social capital has an influence on the productivity of farmers in Selesai District of Langkat Regency.
6. Social capital has an effect on the welfare of farmers' households in Selesai District of Langkat Regency.
7. Productivity affects the welfare of farmers' households in Selesai District of Langkat Regency.

MATERIALS & METHODS

This type of research is causal research (causal), Umar (2008) mentions causal design is useful for analyzing how a variable affects other variables. The research was conducted in the District of Selesai Langkat Regency, the populations in this study were all farmers located in the District of Selesai, amounting to 2,516 households spread over 122 farmer groups and came from 14 villages and 1 village in the District of Selesai. The sample in this study were farmers who had 345 respondents own land. Data collection techniques used in the form of primary data and secondary data. For data analysis from this study Structural equation modeling (SEM) was used.

RESULT AND DISCUSSION
Validity Test Results

Validity test is used to measure the validity or validity of a questionnaire. A questionnaire is said to be valid if the questions on the questionnaire are able to

reveal something that will be measured by the questionnaire. In connection with the questionnaire in this study, the validity test will be conducted by conducting a bivariate correlation between each score item question with the total construct score. It is known that the validity value of the statement for all variables is valid because the total validity value is greater than 0.3.

Reliability Test Results

It is known that all statement item values are declared reliable, where the value of all Cronbach Alpha variables> 0.6.

Structural Equation Modeling Analysis (SEM)

Based on the results of the Fit Model assessment, it is known that not all model analyzes have good requirements as a SEM model. To see the relationship between each variable carried out by path analysis (path analysis) of each variable both direct relationships and indirect relationships.

It is known that all exogenous variables affect the total endogenous. The results of the total influence show that the biggest influence on the total effect on productivity is a production factor of 0.998 while the biggest effect on the total welfare of the farmer's household is social capital of 0,843.
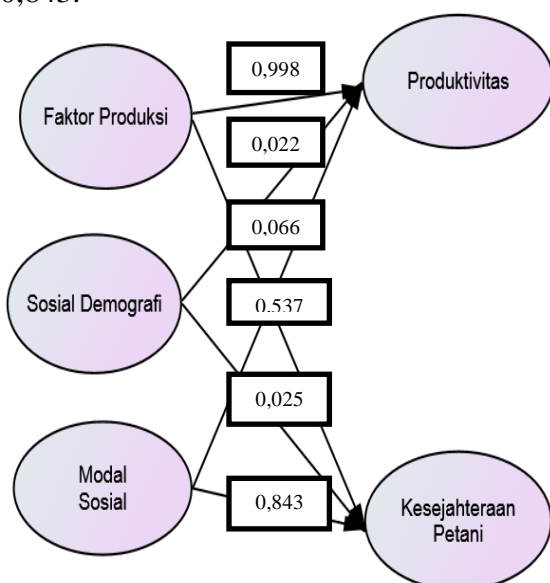

Figure 2 : Total Influence

CONCLUSION AND RECOMENDATION

Based on the results of the study, the conclusions of the hypothesis are:

1. There is a significant influence of production factors on the productivity of farmers in Selesai District, Langkat Regency.

2. There is a significant influence of production factors on the welfare of farmers in the District of Selesai Langkat Regency.

3. There is no significant socio-demographic influence on the productivity of farmers in Selesai District, Langkat Regency.

4. There is no significant socio-demographic influence on the welfare of farmers in Selesai District of Langkat Regency.

5. There is no significant effect of social capital on the productivity of farmers in Selesai District of Langkat Regency.

6. There is a significant influence of social capital on the welfare of farmers in Selesai District of Langkat Regency.

7. There is no significant effect of productivity on the welfare of farmers in Selesai District of Langkat Regency.

Based on the results of the study it can be suggested:

1. The Significance of Production Factors for Productivity is something that must be maintained but the government must continue to ensure that the Production Factor will remain good to support the Productivity of farmers

2. The Significance of Production Factors for Welfare is indeed one indicator in the assessment of Farmers' welfare, but the government must more often assist farmers through subsidies, so farmers can have better welfare.

3. Insignificance of Social Demographics on Productivity because the average age of farmers is not feasible to do farming, in this case the government or farmers who are already retired can more often socialize to the community or the children of farmers how important it is to do farming business that's because farmers are actually food heroes and "without farmers we are nothing".

4. The Significance of Social Capital on Welfare is very beneficial for farmers, but farmers through existing farmer groups must continue to establish good relations between groups so that social capital owned is stronger.

5. The socio-demographic significance of farmers' welfare is due to the large number of family members covered, not proportional to the income received. This can be overcome by the local government by promoting the government program 2 children is enough. So that farmers are aware that it is important not to have more than 2 children, because the income of farmers in the district of Selesai is relatively low.

6. The insignificance of social capital on productivity is due to the very small relations or networks owned by farmers. This can be overcome by more often the Agricultural Extension Center (BPP) to connect farmer groups in the Selesai District with farmer groups, government agencies, farmer organizations that are more towards the economic empowerment of farmers and how farming is done. It is sustainable.

7. The insignificance of productivity towards the welfare of farmers is because capital in the form of money and land owned by farmers is very small. And also farming tools that still do not help ease the work of farmers. In this case the central government and the government must be more responsive to see farmers lacking capital and farming equipment. The government can provide assistance in the form of fertilizers, seeds, farming tools, and others. The government must also be consistent in a program called agrarian reform whose contents are the distribution of land for farmers and the distribution of certificates for farmers.

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