

Analysis of Factors Affecting Rice Farmer's Welfare in Sirampit District

Diwayana Putri Nasution

(Development of Economic, Universitas Pembangunan Panca Budi, Indonesia)

ABSTRACT: This research analyses the variables of social demographics and land to the productivity and welfare of rice farmers in the Serampit subdistrict. The research samples used are rice farming communities in the Serampit subdistrict. The data used are primary data and in collecting data using an interview technique that is guided by the questionnaire provided. In processing the data using the analysis method (Structural Equation Modelling) SEM. The results showed the first conclusion there was a significant influence on the variables of social demographics and land on farmer productivity in the Sirapit subdistrict. The second conclusion has a significant influence on social demographics and lands on farmer's welfare in the Sirapit subdistrict. In the third conclusion, there is an insignificant influence of productivity on the welfare of farmers in the district Sirapit Langkat.

KEYWORDS : Prosperity, Productivity, Social Demographics, Land

I. INTRODUCTION

The role of the agriculture sector is to source the material needs of staples, clothing, and food, provide employment, contribute to the high national income, and provide foreign exchange for the country. The economic growth and welfare of farmers depend on the level of farmer's income and the profit gained from the agricultural sector itself. The agricultural sector is a mainstay to improve the welfare of some Indonesians, as most Indonesians live in rural areas and work in the agriculture sector. Food security is a multidimensional concept that includes chains, food and nutrition systems ranging from production, distribution, consumption, and nutritional status. In brief, food security only concerns three important things: availability, access, and food consumption. The availability of food is dependent on natural, physical, and human resources. Land ownership supported by a climate that supports and is accompanied by good human resources will ensure sustainable food availability. Food security programs have not been able to completely disengage from rice as a strategic commodity base. It is expressed in the formulation of agricultural development that the indicative target of the main commodity production of food crops and government food reserves are also still based on rice. However, with the reduced cultivation area, the limitation of irrigation water supply and expensive input prices and relatively low price of the product can be a limiting factor for the welfare Improvement Program and the independence of farmers based on the local resources. The amount of farmers' income is influenced by complex factors that are internal factors and external factors. The internal factor consists of the age, level of education, and area of land owned by the farmer. External factors are the availability of production facilities and prices. Farming activities undertaken by farmers are expected to increase their income so that the daily necessities of life can be fulfilled. Agricultural sector development aimed to increase the productivity of agricultural products to meet the needs of community food and needs Industry in the state, increasing exports, increasing farmers' income, expanding job opportunities and encouraging opportunities (Soekartawi). As with other regions in Indonesia, a large population of North Sumatera province resides in rural areas with the main search eye in the agricultural sector. It is undeniable that most of them still live below the poverty line. This condition, if not addressed, creates a large inequality in the development, especially between rural areas and urban areas. Understandably why the importance of rice commodities is developed as one of the main commodity of Langkat district, especially in the district Sirapit remember from many agricultural commodities, rice paddy field has ample land, this shows how the big potential of rice commodities to be developed to support the economy of the people. Sirapit subdistrict the majority of its residents make agriculture as the main livelihood to meet the needs of its life because they think Rice has good potential to be developed, and farmers think that rice care is not as difficult as other farming. Therefore, rice is a major source of income for the survival of farmers in the Sirapit

subdistrict. If viewed from the rice farming business, Sirapit has ample land. This indicates how large the production of rice commodities to be developed to support the people's economy. When viewed from the side of labor absorption, the rice farming farmer's business can absorb thousands of rice farmers. This pad has finally impacted the welfare of the Rice farmer's Kecamatan Serapit. Based on the background of the above problem, researchers are interested in researching the level of welfare of rice farmers located in the district of Sirapit Langkat and find out the level of prosperity of the rice farmers are seen from the productivity traveled by farmers and seen from land variables, and social demographics.

II. THEORY

1. Social Demographics

Demographic characteristics have traits including age/age, gender, marital status, number of family members, employment, job type (Mulyadi, 2003). Demographics are a study of the population changes in the change in the amount, distribution and composition or structure of a resident. The changes were influenced by changes in the main components of population growth, namely, fertility, mortality, and migration. Overall the demographic gives an overview of the behavior of the population, both in aggregate and group (Yasin&Adioetomo, 2010:3). The population can be grouped according to certain characteristics, such as age groups, socio-economic characteristics, and distribution of residence. This grouping is very useful for various purposes and objectives (Adioetomo, 2011).

2. Land

The land is an area of the Earth's surface with certain properties namely the similarity in geology, geomorphology, atmosphere, land, hydrology, and use of land (Karmono in I GedeSugiyanta 2007:4). The land is part of a landscape that includes physical including climate, topography/reliefs, soils, hydrology, and natural vegetation that all affect its potential use(FAO,1976).

3. Productivity

The standard of living a nation in the long term depends on the ability of the nation to reach a high level of productivity and sustainability, it is used to achieve better product quality and efficiency higher in the production process. The economy is experiencing the development of productivity will tend to have high ability in competition, both in the form of price and quality of the products produced (Pasay, Gatot and Suahasil, 1995:220).

4. Welfare

According to law No. 11 the year 2009, about community welfare, community welfare is the condition of fulfilling the material, spiritual, and social needs of the citizens to be able to live worthy and able to develop themselves, to carry out its social functions. From the above laws, we can take notice that the measure of the welfare level can be assessed from the ability of an individual or group in his or her business to fulfill his material and spiritual needs. Material needs can be connected with the income that will realize the need for food, clothing, boards, and health. Then our spiritual needs related to education, then security and the spirit of life.

III. RESEARCH METHODS

1. Research Approach

This type of research is causal research, Umar (2008) mentions causal design is useful to analyze how a variable affects other variables, and also useful in experimental research where the independent variable is treated in a controlled manner by researchers to see its impact on its dependencies variable directly.

2. Data Collection Techniques

The data collection techniques used are primary data and secondary data. Primary Data is derived from a direct interview from the respondent with the help of a prepared questionnaire. Besides primary data, this study also used secondary data as supporting data. Secondary Data is obtained from related agencies, such as district offices, village Balai, related agencies and other relevant sources. Data that has been collected from the poll is then tested for validity and reliability.

3. Data Analysis Model

For the analysis of data from this study used Structural equation Modeling (SEM). SEM is a statistical modeling technique that is very cross-sectional, linear and common. Included in the SEM are factor analysis, path analysis, and regression.

IV. RESEARCH RESULTS

1. Overview of SirapitSubdistrict Area

Sirapit District has an area of 9.850 Ha consisting of 10 villages/villages namely Sumber Jaya Village, Semikat Island, Sebertung, AmalTani Plantation, Sidorejo, Mount Tinggi, Serapit, Sukapulung, TanjungKeriah, and AmanDamai. SirapitSubdistrict is bordered by Wampu Sub-district (north side), Salatite Sub-district (south side), Bahorok Regency (west side), Kecamatan completion and Kuala (east side). Sirapit has a population of 16,900 inhabitants, with a population density of 172 Km².

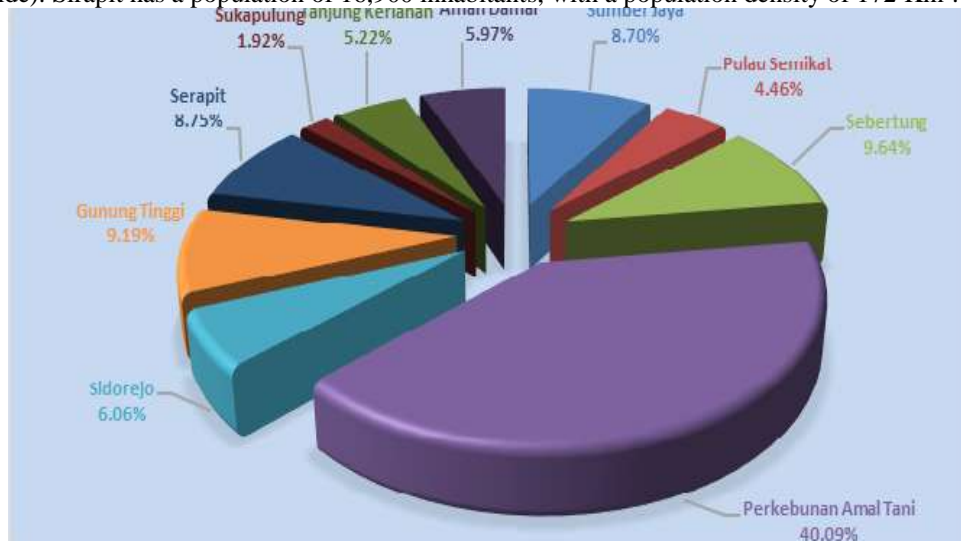


Figure 1. Regional Area ratio chart to Total district Area

From the picture above can be seen in the village of TanjungKeriah 5.22%, Aman peace 5.97%, source Jaya 8.70%, Semikat Island 4.46%, Sebertung 9.64%, Serapit 8.75%, Mount Tinggi 9.19%, Sidorejo 6,06%.

2. Structural Equation Modelling (SEM) Analysis

The evaluation of the model decrease has been essentially done when the model was estimated by IBM-AMOS (version 22). The complete evaluation of this model is done by considering the fulfillment of the assumptions in Structural Equation Modelling (SEM). Data analysis with SEM is chosen because the statistic analysis is a multivariate technique that combines multiple regression aspects and factors analysis to estimate a series of interdependent relationships Simultaneously (Hair et al., 1998). Also, the data analysis method with SEM gives an edge in estimating the measurement errors and estimation of parameters. In other words, data analysis with SEM considers the faults of the measuring model and the simultaneous model of structural equations.

3. DISCUSSION

3.1. The influence of social demographics on productivity

The results of the analysis using Structural Equation Modelling (SEM) with the software AMOS 22 proves that there is a significant influence of social demographic on the productivity of farmers in the district SirapitLangkat. This is in line with what Lilis has said (2009) that its social demographic influences the productivity and welfare of the farmer's household including work experience, age and number of family members. The number of family members will determine the level of farmer welfare, the more amount of dependents that must be borne to meet their needs.

3.2. The influence of social demographics on the idolatry of farmers.

The results of the analysis using Structural Equation Modeling (SEM) with the software AMOS 22 proves that there is a significant influence of social demographics on the welfare of farmers in the district SirapitLangkat. The number of family members will determine the level of farmer welfare, the more number of family members the more dependents should be borne to meet their needs. Therefore, the number of family dependents greatly affects revenue. According to Mosher (1987), the most important thing about Kesejahteraan is income, as some aspects of household welfare depend on the income level. Fulfillment of needs is limited by household income owned, especially for low-income. The higher the household income, the more the percentage of income for food will be reduced. In other words, if the increase does not change the consumption pattern, the household is prosperous. Conversely, if the increase in household income can change the consumption pattern, then the household is not prosperous.

3.3. Land influence on productivity

Results of analysis using Structural Equation Modeling (SEM) with software AMOS 22 proved that there is a significant influence of land on the productivity of farmers in the district SirapitLangkat. Agricultural land area affects the scale of farming that ultimately affects the level of efficiency of a farming venture. Often found the wider land used in the farming effort increasingly less efficiency is reduced because 1) weak supervision on production factors such as seedlings, fertilizers, medicines, labor, and other production factors. 2) His limited supply of labor in the area, which in turn affects the level of efficiency of the farmer's business. 3) Limited his capital supplies to finance the farmer's business on a large scale. Conversely, on narrow grounds, the surveillance efforts of the production factors will be better, but the land that is too narrow tends to produce an inefficient effort, due to the use of excessive production factors. Crop productivity on land that is too narrow is lower when compared to productivity on a wide field.

3.4. Land influence on farmer welfare

Results of analysis using Structural Equation Modeling (SEM) with software AMOS 22 proves that there is a significant influence of land on the welfare of farmers in the district SirapitLangkat. The significance of the land on the welfare of farmers because of the vast land supported with good quality also will be a big advantage for a farmer. If it was so, farmers no longer need to be daily work in the land of people. According to Mubyarto (Hijratullaili,2009:13) Land area is the decay of areas that are the place of planting or working on the planting process, land area guarantees the amount or result that will be obtained by farmers. If the land area increases then farmers ' income will increase, as well as vice versa. So the relationship between land area and farmer's income is positive.

3.5. The influence of productivity on farmer's authenticity

The results of the analysis using Structural Equation Modeling (SEM) with software AMOS 22 proves that there is no significant influence of productivity on the welfare of the village SirapitDistrict of Langkat. No significance of productivity on the welfare of the village Sirapit because the efficiency of the production source is still poor, whether it is capital, labor and agricultural equipment. The cause is mental farmers who still have less diligent or less productive in farming. This is mostly due to the age of farmers whose majority are elderly. Therefore, farmers are required to use all sources of production with the most efficient or as healthy as possible. Because so farmers can reduce their production costs and increase their income. With increasing revenues, it will directly affect their welfare. This is in line with the theory posed by ArdikaSulaeman (2014) stating that productivity also reflects the good working ethic of the farmer, both mentally and otherwise. Thus the farmers who jump directly to try to improve their performance with various policies that efficiently, able to increase their productivity. Also, many factors resulted in the decline of the agriculture sector that is seen from its productivity. Productivity is a measure that states how much input is needed to produce some outputs, productivity is defined with the ratio between output measurement and input (Abdullah 1979), productivity contains a sense of mental attitude that the quality of life should be better than ever.

V. CONCLUSION

1. There is a significant influence on social demographics and land on farmer productivity in the Sirapit subdistrict.
2. There is a significant influence on social demographics and land on farmer's welfare in the Sirapit subdistrict.
3. There is no significant influence of productivity on the welfare of farmers in the Sirapit subdistrict. Based on the results of the above discussion is known that productivity is not significant to the welfare of farmers in the district Sirapit Langkat. Advice obtained from the results of the study is due to the mental or nature of most farmers who have not used the principle of efficiency or savings on the source of production to achieve maximum results. One of the causes is the majority of farmers are already elderly. It is necessary for regeneration to produce better products, as well as to use modern innovations and technologies to obtain more optimal results.

REFERENCES

- [1]. BadanPusatStatistik. 2008. *StatistikKesejahteraanRumahTangga*. BadanPusatStatistik. Jakarta.
- [2]. Darwanto. 2005. *KetahananPanganBerbasisProduksidanKesejahteraanPetani*. IlmuPertanian Vol. 12 No.2, 2005 : 152-164, FakultasPertanian UGM dan MMA-UGM. Yogyakarta.
- [3]. DewiUtami, Ni Putu. 2016. *PengaruhVariabelSosialDemografiTerhadapKeputusanPendudukLanjutUsiaMemilihBekerja Di Kecamatan Kediri KabupatenTabanan. Skripsi*. FakultasEkonomi Dan BisnisUniversitasUdayana.

- [4]. DKP. 2009. Panduan Penyusunan Peta Ketahanan dan Kerentanan Pangan Indonesia (FSVA). Sekretariat Dewan Ketahanan Pangan - Badan Ketahanan Pangan, Departemen Pertanian. Jakarta.
- [5]. Dodik Briawan et al. 2004. Pengembangan Diversifikasi Pangan Pokok Dalam Rangka Mendukung Ketahanan Pangan Nasional. Sekolah Pasca Sarjana IPB. Bogor Dwidjono H.
- [6]. Fadilah, Abidin, Z dan Kalsum U. 2014. Pendapatan dan Kesejahteraan Rumah Tangga Nelayan Obor di Kota Bandar Lampung. *JIA*: 2 (1): 71-76.
- [7]. Hardjanto, W. 1996. Analisis Pendapatan dan Tingkat Kesejahteraan Petani di Kecamatan Jagakarsa, Kotamadya Jakarta Selatan. *Skripsi*. Fakultas Perikanan, IPB. Bogor.
- [8]. Imam Ghozali, 2005. *Aplikasi Analisis Multivariate dengan Program SPSS*. Semarang : Badan penerbit Universitas Diponegoro.
- [9]. Mishabul Munir. 2008. *Pengaruh Konversi Lahan Pertanian Terhadap Tingkat Kesejahteraan Rumah Tangga Petani*. Skripsi. Program Sarjana. Institut Pertanian Bogor. Bogor.
- [10]. Muhamad Dika Yudhistira. 2013. *Analisis Dampak Alih Fungsi Lahan Pertanian Terhadap Ketahanan Pangan di Kabupaten Bekasi Jawa Barat*. Skripsi. Program Sarjana. Institut Pertanian Bogor. Bogor.
- [11]. Nayuna, M. 2005. Beberapa Faktor Sosial Ekonomi yang Mempengaruhi Produksi, Produktivitas dan Pendapatan Bersih Usahatani Karet Rakyat di Kabupaten Asahan. *Skripsi*. Universitas Sumatera Utara, Medan.
- [12]. Prasetyawan. 2011. *Hubungan Karakteristik Sosial Demografi Konsumen dengan Respon Terhadap Produktivitas*. E-jurnal Universitas Padjajaran.
- [13]. Rusmala Dewi Kartika, Ni Putu. 2014. Pengaruh Variabel Sosial Demografi Dan Sosial Ekonomi Terhadap Partisipasi Kerja Penduduk Lanjut Usia Di Desa Penatih Kecamatan Denpasar Timur. *Skripsi*. Fakultas Ekonomi Dan Bisnis Universitas Udayana.
- [14]. Santoso, (2007) structural equation modeling : elex media komputindo Sudira, (2010) *Identifikasi Alih Fungsi Lahan Pertanian dan Kondisi Sosial Ekonomi Masyarakat Daerah Pinggiran di Kecamatan Gunungpati Kota Semarang*.
- [15]. Sarwono Hardjowigeno, Widiatmaka. 2007. *Evaluasi Kesesuaian Lahan dan Perencanaan Tata guna Lahan*. Gadjah Mada University Press. Yogyakarta.
- [16]. Suandi. 2003. Kondisi Sosio-Demografi dan Kemiskinan di perdesaan Provinsi Jambi. *Thesis*. Universitas Jambi. Jambi.
- [17]. Sugiarto. 2008. Analisis Pendapatan, Pola Konsumsi dan Kesejahteraan Petani Padipada Basis Agroekosistem Lahan Sawah Irigasi Di Perdesaan. Pusat Analisis Sosial Ekonomi dan Kebijakan Pertanian Badan Litbang Pertanian. Bogor.
- [18]. Wijaya, toni, (2009) *analisis structural equation model* menggunakan amos. Yogyakarta : universitas majaya Yogyakarta.
- [19]. Yamin, Sofyan, (2009) *Structural Equation Modeling: Belajar Lebih Mudah Teknik Analisis Data Kuesioner dengan Liseter-PLS*. Jakarta: Salemba infotek.