An Analysis on the Typology of Community Poverty in Lamabanan Village, Mamasa regency, Indonesia

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Abstract: The aims of this study are to identify and analyse the strength of the relationship of factors causing poverty with community poverty level and understand the typology of community poverty within and around the forest area in Mamasa regency. This study was used survey research with the descriptive analytical method. The sample sizes were 63 respondents. The data were used chi-square test method to determine the relationship between independent variable and dependent variable, while contingency coefficients test to analyse the strength of the relationship between dependent variable and independent variable. In additions, qualitative analysis is adopted to understand the poverty topology of the community in the study site by comparing theoretical poverty criteria with real conditions in the field. The results found the poverty of the community who lived within and around the forest area in Mamasa regency in related to several factors: business intensity, knowledge, skills, physical and health access, business capital, natural resources and information access. Based on the typology, the community poverty in the study site consist three types such as natural poverty, cultural poverty and structural poverty.

I. INTRODUCTION

The poverty is a social phenomenon that stills a problem in the society especially in developing countries. Approximately 1 billion people are in poverty category worldwide between 1990 and 2013 [1]. The United Nations had announced a new target in eliminated extreme poverty by 2030 which measured number of people living on less than $1.25 a day [2].

The poverty had limited society's opportunity to gain their human right for subsistence needs such as no opportunity in education health services, public and government policies. Poverty is defined the life under the minimum living standard measured by the basic need for the food [3-6]. The poverty also had correlated with inequality [7]. Indonesia is among developing country which still struggling to overcome the poverty. There were 31.02 million people living below the poverty line and 63% of poor people lived in the rural area in 2010 [8].

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The Indonesian living in the forest is one of the largest poor groups in Indonesia. Most rural communities living within and around state forest area. An estimation of 48.8 million people living in state forest and about 10.2 million are considered in poor category.

The poor in rural areas are among the groups are affected by marginality. Based on National Socio-Economic Survey (SUSENAS) 1999, 76% of the population below the poverty are from rural and depend on agriculture and forestry as their source for livelihood.

In Indonesia, the poverty is mainly caused by overcrowding, limited land ownership, even many farmers who do not have land and only become farm labours; land fertility decreases, limited selling prices for crops and other alternative sources of income are increasingly difficult to find [9]. The limited access of the poor to public facilities such as education and health, as well as sources of clean water also causes poverty. The results of the cluster analysis by Febri and Dwi (2015) show that poor irrigation conditions are the main indicators of a region to get the title of poverty area [10]. The poverty areas in East Java have the characteristics of low accessibility of education, poor road infrastructure, poor irrigation systems, low availability of clean water and low accessibility of health [10].

According to Agussalim (2009), based on the causes, poverty can be divided into natural poverty and structural poverty [11]. Natural poverty occurs because of individual failure or the physical environment as an object until someone becomes difficult in doing business or getting a job. Viewed from individuals, poverty occurs due to laziness, lack of skills, physical weakness, and low response in seeing changes around them. Whereas seen from the environment, poverty can be a result of an environment or nature that is not supportive, failure to obtain resources, and very low technological development [11]. Structural poverty sees poverty as a relative part, where there is a group of poor people while the other group is not poor. The prevailing socio-economic system allows the concentration of power and resources on certain parties, which hinders the chances of other parties to access and use economic facilities and facilities that are actually available to them [11].

Mamasa regency is one region with largest forest resources. Mamasa regency consisted of forest area of 198.871 hectares or 57.27% of the total area of regency. The largest forest area did not reflect any good relationship to the

decline in the number of poor families in the region.

Sulbar district is among the highest poorest population with other 50 districts throughout Indonesia. The poverty rate is still high at 16.25% in 2010. Therefore, the objectives of this study are to identify and analyse the strength of the relationship of factors causing poverty with community poverty leveland understand the typology of community poverty within and around the forest area in Mamasa regency.

II. METHODOLOGY

Study Type

The study was used survey research with the descriptive analytical method.

Location and Time

The study site is determined by using the XY scatter plot method as shown in Figure 1. Mamasa regency is selected since Mamasa is located in quadrant I indicated that Mamasa regency had a large percentage of poor households and a large forest area.This study was conducted for 2 months started August 2012 to October 2012.
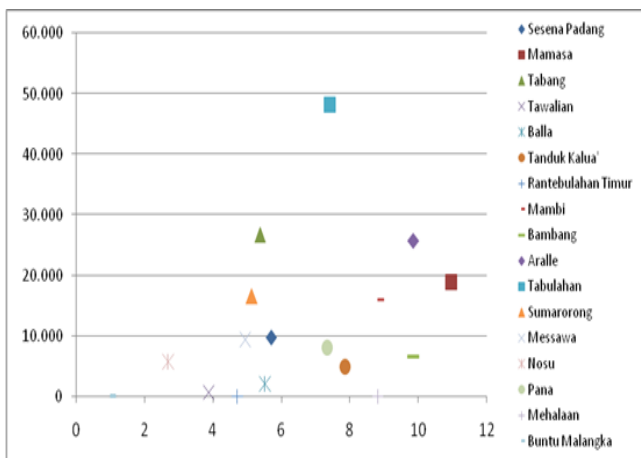

Fig. 1 Site selection with XY Scatter Plot method

Data Collection

The primary data were obtained from the selected respondents, community leaders and local government. Meanwhile, secondary data were obtained from the relating documents for the study such as statistic data, local government reports and others.

Population and Sample

The study population was all poor households living within and round forest area in Lamabanan village, Mamasa regency as many as 170 households. The sample size was 63 respondents by using random sampling method.

Data Analysis

The data had been analysed by using chi-square test method to determine the relationship between business intensity with poverty, knowledge with poverty, skills with poverty, physical and health access, business capital with poverty, natural resources and information access. The contingency coefficient test is used to analyse the strength of the relationship between dependent variable and independent variable. In additions, qualitative analysis to adopt, to understand the poverty topology of the community in the study site by comparing theoretical poverty criteria with real conditions in the field.

Hypothesis

Based on the framework of this study, the hypothesis can be proposed as follows:
1. There is a relationship between the intensity of the business and poverty
2. There is a relationship between knowledge and poverty
3. There is a relationship between skills and poverty
4. There is a relationship between physical weakness and access to health with poverty
5. There is a relationship between venture capital and poverty
6. There is a relationship between natural resource access and information with poverty.

III. RESULT

The study found there was a significant relationship between business and poverty. The X^2 for this study was 23,490 is greater than 9,488 at significant level of 0.01. The contingency coefficient analysis showed business intensity had strength relationship with poverty with "moderate" criteria.

The chi-square test showed there is significant relationship between knowledge with the poverty with $X^2 = 20,950$. At the 0.05 significance level, X^2 from the Table 1 is 9,488 and 13,277 at the 0.001 significance level which meant X^2 calculated is greater than theoretical X^2. The strength of the relationship between knowledge and poverty through contingency coefficient test showed moderate relationship with 0.500.

Based on the results, there is a significant relationship between skills with poverty, $X^2 = 14,106$. At the 0.05 significance level, theoretical $X^2 = 9,488$ and at 0.01 significant level, theoretical $X^2 = 13,277$ meant calculated X^2 is greater than theoretical X^2. The strength of the relationship between skills variable and poverty through contingency coefficient test showed moderate relationship with 0.428.

There is significant relationship between physical condition and health access with poverty. The strength of the relationship between physical condition and health access showed moderate relationship with 0.425.

The statistical test showed there is significant relationship between business capital with poverty with $X^2 = 24,173$ is greater than theoretical X^2 at significance level of 0.05 and 0.01. The contingency coefficient test showed there is "moderate" strength of relationship between business capital and poverty.

The statistical test found there is significant relationship between nature resource and information access with poverty. The contingency coefficient test found there is "moderate" strength of relationship between nature

resources and information access and poverty.

Table. 1 Recapitulation of analysis in relationship and strength of relationship between factors causing poverty with poverty

Aspect	Chi-square test	Contingency coefficient test
Business intensity	23,490	0.521**
Knowledge	20,950	0.500**
Skills	14, 106	0.428**
Physical condition and health access	13,923	0.425**
Venture capital	24,173	0.527**
Nature resources and information access	20,220	0.493**
X^2= 9,488		
** moderate= 0. 400- 0.599		

Overall Discussion

The work intensity is related to the work execution frequency and number of working hours had spent by the respondents in their daily works. The respondents had worked ranged between 3 hours and 6 hours with work intensity between 5-6 times. The poverty occurred among the community due to business intensity is caused by lack of effective working hours utilized by the respondents. The respondents are worked with fewer hours and less work intensity is categorized in poorest and destitute group. Meanwhile, respondents with high business intensity are categorized in the poor category, slightly better than poorest and destitute group. Some respondents had claimed distance from their working place and laziness due to weather and temperature. Besides, the respondents had spent time living in the home after harvesting season, so the working hour had fulfilled with resting time.

Most respondents in the study site with middle-low education and only a respondent had completed high school education. The knowledge had been influenced by information access factors through the media. The working experience of dominant respondent is between 15 years and 30 years. The result showed the farmers with low education level had poor socioeconomic conditions than farmers with higher education levels. These results indicated that good education level lead to higher household income. The poverty was correlated with lack in the education since parents did not afford to send their children to the school [12]. The factors causing low education that facing by almost respondents in the study site are long distance from the house. Most children are not attending the school due to lack of parent support. The parents had given reasons such as an unwilling parent to be separated from their children and financial problem. The knowledge is gained through formal and non-formal education. Changkid (2013) had mentioned the education qualification had influenced in farmer's decision making in their farms [13].

In the farming field, skills are required in farming activities such as soil cultivation, crop maintenance, harvesting and post-harvest. The statistical result showed most respondents had moderate skill levels, which contributed from work experience as farmers. Besides, no any courses or training provided toward farmers to improve their skills. Their skills are important for the farmers to increase their production.

The lack in physical condition is caused body weakness and low work productivity. The access in the health services is difficult in the rural area since the far distance health care centre and their home and high transportation fee. Besides, the community also had difficulty to obtain the health service because their lack of knowledge in health administration, such as social health insurance (Jamkesmas), referrals and other related document issues. Therefore, the community preferred traditional medicines rather than seek treatment at the health care centres.

The capital play roles in the farming development, but limitations on economy conditions in the farmers lead their difficulty in obtain sufficient capital. The natural resources in the study sites are forests which accessible for agricultural activities and forest product utilization. However, the forest had been declared as reserved forests had limited the community in collecting non-timber forest products and environmental services. In additions, forest lands are not suitable for farming purposes due to high acidity levels. The far distance of farming site and limited in transportation facilities is challenged for respondents. Besides, the respondents in the study site had limited in the information in the farming. The agricultural information gained only from the local radio channel. The respondents also did not have good marketing information which generally their farmer product also sells with brokers with cheap price.

The poverty is due to natural factors in the study site because the lack of natural and human resources. The lack quality of natural resources did not mean the agricultural lands in the study sites are infertile or agro-climates that not suitable for agricultural activities, but its strategic location for agricultural activities. The climate also is among challenged for the agricultural activities especially the cultivation of plantation crops such as cocoa. The lack of human resources quality also observed in this study since most respondents had low education. The low education had limited

respondents in improving their skills and more creative in the farming activities and agricultural products.

Cultural poverty is closely related to the individual or group attitude.

The parents are unwilling to live apart from their children, thus the children did not have a chance to determine their future especially in the education. Besides, the culture also contributed into negative attitude such as easily giving up, despair, avoid from communication and other social interactions which build a better life.

The policies introduced by the government lead to structurally poor community had limited access to existing development resources such as employment opportunities, loan services, product marketing, health care and education. In this study site, the community only depended on the agricultural sector as their main income. The agricultural sector only met the communities' subsistence needs and limited on certain period due to influence of the growing season and fruit season of plantation crops such as coffee and cocoa. The loan services are very limited which could be accessed by the community. Although, there is a public credit service available at the local government bank, the community in the study site is very difficult to obtain since complicated credit requirement need to be fulfilled. The health and education services are still difficult to access among the community in the study sites due to the limited facilities especially in health care service. The health workers are always unavailable in the auxiliary public health centre (Pustu) which located in the village.

IV. CONCLUSION

In conclusions, the poverty of the community who lived within and around the forest area in Mamasa regency in related to several factors: business intensity, knowledge, skills, physical and health access, business capital, natural resources and information access. Based on the test of the Contingency Coefficient, all the factors have a strong relationship with poverty with moderate criteria. According to the typology, the community poverty in the study site consist three types such as natural poverty, cultural poverty and structural poverty. Natural poverty is primarily characterized by low quality of human resources, causing the concerned person to not be able to think and do dynamically to improve his life. Natural resources that do not support especially because of lack of fertility for agricultural activities are also a cause of natural poverty. Cultural poverty is mainly due to the factor of the low intensity of work of the population both in terms of time that can be utilized effectively and the frequency of one's visit to the location of their business. Structural poverty due to man-made especially in the form of policies that is not too pro-poor, such as capital services, education and health facilities and even limited access to other basic needs.

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