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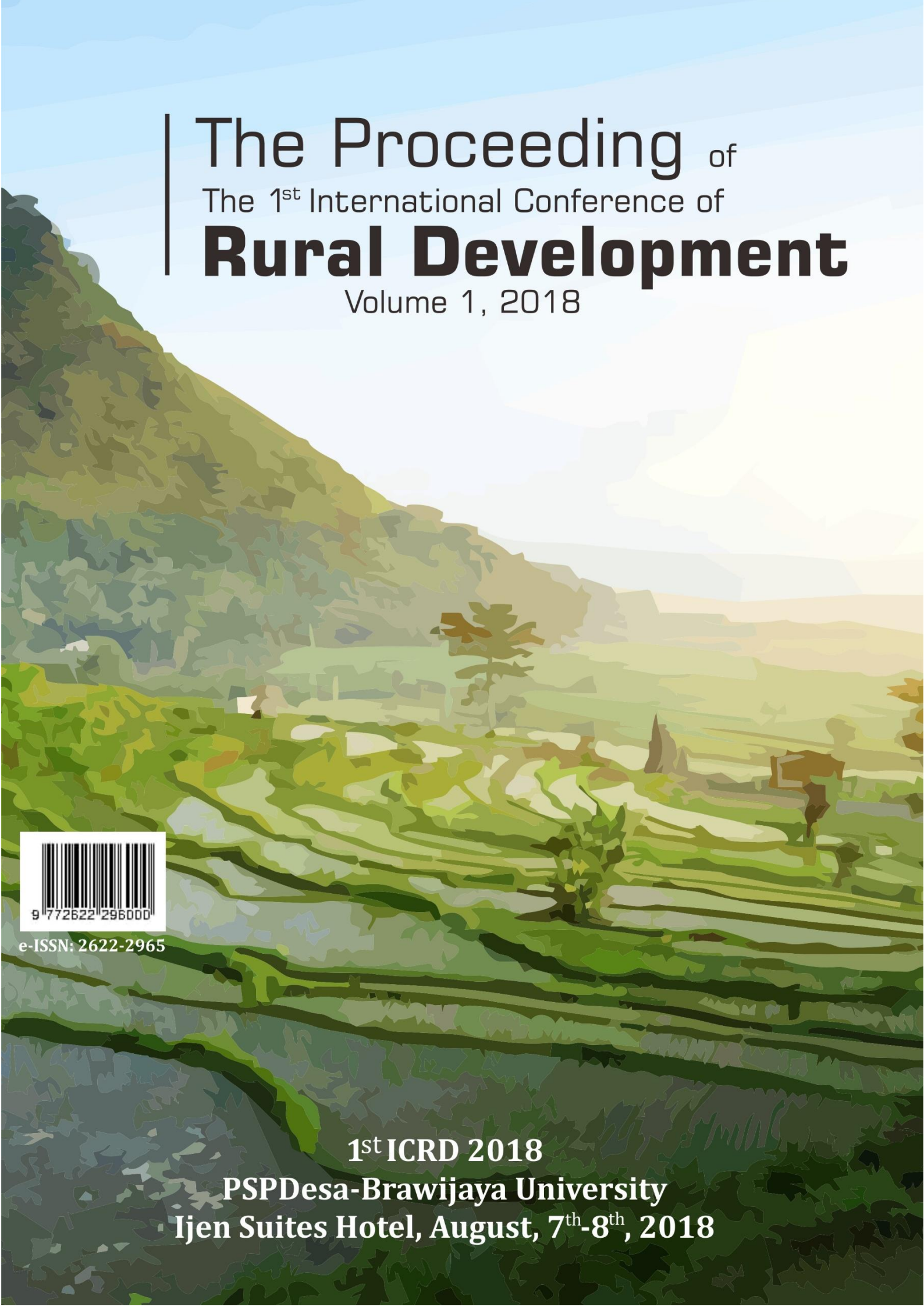

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VILLAGE GOVERNMENT POLICY IN RURAL INDUSTRY DEVELOPMENT IN THE VILLAGE AUTONOMY ERA (Study in Jung Anyar Village, Socah District, Bangkalan Regency)

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ABSTRACT

Village autonomy in Jung Anyar village, Socah sub-district, Bangkalan district, began to be implemented since 2007, followed by a fiscal decentralization policy. This policy is in the form of allocation of funding to the villages used for government administration, development and community empowerment. One of the activities in the framework of community empowerment is to develop rural industries. The purpose of writing papers is to: 1. Analyze the implementation of village autonomy policy, 2. Analyze industrial development policies in the countryside in the era of village autonomy. The expected result of this paper is the compilation of a study containing information related to industrial development policy in rural areas within the framework of village autonomy. Methods of data collection to be used are observation and interview. Data analysis to be used is descriptive analysis. Based on the results of the study obtained data that after the autonomy era the village was given authority. This is also followed by fiscal decentralization. Jung Anyar Village gradually obtained funding schemes, namely: Alokasi Dana Desa (ADD), Dana Desa (DD), Bagi Hasil Pajak (BHP) and Bagi Hasil Retribusi (BHR). The results of the study show that the Jung Anyar village government policy in industrial development has not been optimal. Although the potential exists but the role of village government in industrial development is still limited to facilitation if there is a program that goes into the village. In addition, despite the funding allocation in the era of village autonomy, the Jung Anyar Village Government has not dared to take the opportunity for industrial development.

Keywords: *policy, industry, village autonomy*

A. INTRODUCTION

Background

Regional autonomy is set forth in Undang-Undang No. 32/2004 tentang Pemerintah Daerah and Undang-Undang No. 33/2004 tentang Perimbangan Keuangan Pusat-Daerah. Regional autonomy employs the principle of autonomy as far as possible, ie the regions are authorized to administer and regulate all government affairs outside of the Government affairs specified in the Act.

Village autonomy is the authority of the regions to organize and manage the interests of local people according to their own initiative based on their aspirations in accordance with the provisions of the law. Village autonomy was born to eliminate centralistic practices that were considered detrimental to the region and local government.

Undang-Undang No. 14/2014 mandates the Government to allocate the Village Fund every year. Village funds is budgeted in the APBN given to the village as one source of village income. The purpose of Village funds is to support the duties and functions of the village government.

Village administration has an important role in providing basic services to the community and empowering communities. For this reason, the village government needs to be supported by funds so that it can carry out its duties, both in the government and development fields.

These funds become village rights obtained from: 1. profit sharing of regional taxes and levies, and 2. part of the central financial balance fund (Dana Desa-DD) and, 3. Regions (Alokasi Dana Desa-ADD) received by the district. The funds received are a form and evidence of the government's concern for village development.

Funding allocations received by the village primarily for: governance, development and community empowerment. Development in villages in Bangkalan district was funded with the allocation of village funds (ADD) since 2007. ADDs were taken from 10% of APBD funds. Furthermore, it is published Undnag-Undang No. 6/2014 on Village then starting in 2015 there is an addition of village funds (DD) sourced from the state budget.

According to the mandate of Permendes No.19/2017, the use of DD is prioritized for the development and empowerment of village communities. For the development of the village can be allocated for facilities and infrastructure. For empowerment can be allocated for the activities of PKK, the activities of community institutions and youth clubs in the village. Community empowerment is endeavored to encourage independent villages. The aim is to increase the economic potential of the village-based community. As in the village of Jung Anyar which became a coastal area then there is the potential of marine products that can be activated.

Economic potential in the village of Jung Anyar primarily rests on the fisheries and marine sector. The majority of the population is livelihood as fishermen. The rest as farmers, traders and other professions. The prominent potential of marine products is the small industry of eggplant crackers and blunyu.

Eggplant crackers are white and blunyu are black. The raw ingredients of eggplant crackers and blunyu are dried for 1-2 days depending on the hot conditions. The tools used to make eggplant crackers and blunyu are still traditional. Drying crackers are done by using the sun's heat directly. After eggplant chips and blunyu dry then proceed with processing using cooking oil. The fuel used for cooking crackers is firewood and gas stoves.

Small industry of eggplant crackers and blunyu processing began to be pioneered in 1980. The population of this industry are 20 home industries. The main constraints faced by small and medium industries (SMIs) in the village of Jung Anyar are: 1. Increasingly reduced raw materials, 2. Limited access to capital, marketing and technology, 3. Limited services of infrastructure and facilities of settlements that support the business, 3. Limited institutional capacity social economy, 4. Not yet synergy of SMIs development program.

Rural industrialization is generally defined as emerging entrepreneurship in villages that can move in various fields of business, such as: business, industry, agriculture, and act as potential factors to combine economic development (Das, 2014). In other words, building industrial units became a strategic way to intensify the economy in the village.

Research on SMIs has been widely conducted, among others: Rifai (2013) focus on assessing the effectiveness of SMIs empowerment, Bahrudin (2012) focuses on the development of SMIs model to support One Village One Product (OVOP) and Sukendar (2011) programs on the identification of SMIs development priorities . As for research related to the policy of Village Government in industrial development has not been done. Referring to the data that has been presented, this research is trying to analyze the policy of Jung Anyar Village Government in the development of rural industry in the era of village autonomy.

B. METHOD

The rural industry meant in this study was the small and medium industry (SMIs) in Jung Anyar village, namely: SMIs of eggplant crackers and blunyu. The research method used is explorative and descriptive method. This is because the study related to the development of rural industry is a growing process. An explorative approach is carried out by collecting various secondary data both qualitative and quantitative related to village autonomy and the development of rural industries. Descriptive approach is carried out by describing and concluding things related to prospects and constraints in implementing industrial development policies in the countryside in village autonomy. Data collection for the purposes of the analysis is obtained from the study of regulations, legislation, literature, online media news (internet), newspapers and other relevant sources. Data analysis used is descriptive analysis for the implementation of village autonomy and rural industrial development. To analyze the policy of industrial development in the countryside within the framework of village autonomy will be carried out with descriptive analysis.

C. RESULTS AND DISCUSSION

Implementation of Village Autonomy

Understanding the village according to Widjaja (2003: 3) in his book entitled "Village Autonomy" and Undang-Undang No. 6/ 2014 tentang Desa is very clear that the village is a self-community that is self-governing community. With the understanding that the village has the authority to manage and manage the interests of the community in accordance with the local culture and social conditions, the position of the village that has the original autonomy is very strategic that requires a balanced attention to the implementation of Regional Autonomy. Because with strong Village Autonomy will significantly influence the realization of Regional Autonomy.

The Village Law regulates village governance, both devices, communities, and economic development that may be developed in the village and the strengthening of the village information system. Village government has high authority in village development. In addition, the establishment of a checks and balances mechanism for authority in the village by activating the BPD (Badan Permusyawaratan Desa) to encourage accountability for better services to villagers. If Law Number 6 Year 2014 on the Village is implemented seriously, there will be empowerment from village government units to drive the wheels of development. The autonomy of the village must be accompanied by an awareness of the understanding of the spirit of autonomy for all the movers of the villagers and the capacity of the device as well as the community in understanding governance.

Regulating village existence through Undnag-Undang No.6/2014 must be recognized as providing opportunities for the growth of village autonomy. A number of pressures in some chapters provide a discourse that allows the autonomy of the village to grow along with several conditions that must be considered by village government, village communities, local government and central government.

These conditions are important to be the main concern if you do not want to see the condition of the village is getting worse. From the aspect of authority, there is additional village authority in addition to authority based on origin rights as recognized and respected by the state. It appears that the subsidiarity principle underlying the village legislation provides flexibility in determining local-level authority and decision-making locally for the benefit of the village community.

The local authority of the village is the authority to organize and manage the interests of villagers who have been run by the village or are able and effectively carried out by the villages, or that arise because of village development and village community pracces, such as boat moorings, village markets, public baths, irrigation, environmental sanitation, integrated service posts, art and learning studios, as well as village libraries, rembung villages and village roads.

Since the village autonomy has been imposed, the village has the authority to regulate and manage its community. Village authority based on government regulation (PP No 72/2005) concerning Villages includes: a. Existing governmental affairs based on the right of village origin; b.

Government affairs covering the authority of the district / city submitted to the village; c. Assistance tasks to the Central, provincial and district governments; d. Other government affairs which are submitted by the law to the village.

One of the important elements of the era of regional autonomy is fiscal decentralization. Fiscal decentralization enacted, including aspects of income and expenditure. In principle there are 3 (three) important aspects of the fiscal decentralization process, namely: (1) Release of responsibilities within the central government to vertical agencies to the regions (2) relates to a situation where the region acts as a government representative to carry out the functions (3) devolution (devolution) relates to a situation but also the authority to decide what needs to be done in the region.

Funds received are basically financial assistance from the Central Government, Provincial Government and District Governments to Village Governments sourced from APBN, Provincial APBD, Regency APBD which are channeled through the village treasury in the framework of administering village governance and community empowerment. The implementation of village fund assistance is a manifestation of the fulfillment of the village's right to organize its autonomy so that it grows and develops in accordance with the growth of the village based on diversity, participation, genuine autonomy, democratization and community empowerment. If referring to Article 4 in PP No 60/2014 then the Village Fund should be able to streamline the Village-based programs equally and equitably.

Prior to the implementation of village autonomy, the funding scheme received by village of Jung Anyar was known as Dana Pembangunan Desa dan Kelurahan (DPDK). The funding concept is divided equally for all villages. After the village autonomy era, the villages get funding schemes, namely: the allocation of village funds (ADD), village funds (DD), tax sharing and profit sharing (BHP dan BHR).

According to PerMendagri No 113/2014 tentang Pedoman Pengelolaan Keuangan Desa, ADD is a balancing fund received by the regencies / municipalities within the district APBD after deducting the Special Allocation Fund. According to PP No. 60/2014, DD which originates from the state budget that DD is a fund sourced from the state budget allocated for villages transferred through the district / city budget and used to finance government administration, development implementation, community development, and empowerment. Jung Anyar village received an ADD funding scheme starting in 2007. Furthermore, from 2015 until now obtaining funding from the center known as the Village Fund (DD) and in 2017 received additional funding from the district in the form of tax and retribution revenue sharing (BHP dan BHR).

Table 1. Value of Funding Schemes in Jung Anyar Village

No	Scheme	Year				
		2014 (Rp)	2015 (Rp)	2016 (Rp)	2017 (Rp)	2018 (Rp)
1	Village Fund	-	111.568.000	619.402.000	789.832.000	920.059.000
2	Village Fund Allocation	55.874.000	134.192.000	333.729.000	338.899.115	310.057.000
3	Tax Shares	-	5.483.000	5.597.000	3.887.425	8.570.000
4	Profit Sharing	-			2.090.956	5.045.000
Total		55.874.000	251.243.000	958.728.000	1.134.709.000	1.243.731.000

Source: Dinas BPMD Kab Bangkalan, 2018

Referring to the table above, the total fund received by the village has increased. Of course, this should be a great opportunity for the village to intensify community development and empowerment. Here are details of APBDesa Jung Anyar in 2018 which is presented in the following table:

Table 2. APBDesa Jung Anyar Year of 2018

No	Item	Nilai (Rp)	
1	Income	1.243.731.500	
	a. Village Fund (DD)		920.059.500
	b. Tax Revenue Sharing		8.570.000
	c. Profit Sharing Division		5.045.000
	d. Village Fund Allocation (ADD)		310.057.000
	e. Provincial Financial Aid		-
2	Financing	2.576.533	
	a. Financing Receipts	2.576.533	
	Remaining More Budget Calculations of the Previous Year		2.576.533
	b. Financing Expenditure		-
	Village Equity Participation		-
3	Shopping	1.246.308.033	
	a.Government Implementation		302.033.533
	b. Rural Development		877.969.775
	c.Community Development		7.000.000
	d. Community empowerment		59.304.725
4	Shopping Details (Community Empowerment)	59.304.725	
	a.PKK / Women Activities		8.570.000
	b. Community Empowerment Activities		1.200.000
	c.Community Empowerment Cadre Activities		2.400.000
	d. Youth Organization Activities/Youth / Children		47.134.725

Source: Jung Anyar Village Infographics, 2018

Referring to Table 2, the largest expenditure on physical expenditure items for village development is 70.45%. Meanwhile, the portion for non-physical expenditure, namely for community empowerment of 4.76%, community development 0.56% and government 24.23%. If we look closely, the orientation of budget usage is more on physical development than for economic development.

If you look at the portion of funding for rural economic activities is still low, the village government policy in terms of industrial development can be

said to be still low. In fact, the independence of villages in economic terms determines the direction of moving village autonomy. BUMDES became an important instrument in the implementation of village autonomy. BUMDES was born since the implementation of village autonomy aim to move the village economy through industrial development.

Village autonomy should be reinforced by economic independence through industrial development. This is a strategy to reduce rural poverty by using industrial development in terms of the perspective of rural economy and national economy (Li and Artz, 2009; Muhammad et al., 2014). Economic revitalization in rural areas can be achieved by building entrepreneurial enterprises in rural areas. Unfortunately, until now the village of Jung Anyar Bumdes only has a business in the form of goats. Whereas the potential of small industries in the village of Jung Anyar should be the base of business. BUMDES can be a marketing agent for SMIs eggplant crackers and blunyu. This can overcome the problem of marketing constraints eggplant crackers and blunyu.

Rural Industry Development Policy in the Village Autonomy Era

Rural industrialization has been identified as a strong element for sustainable development (Komolafe.et.al, 2017: 99). Industrial development is the right choice to drive the economy in the countryside. The industry scale can adjust to the amount of resource ownership. The realization of rural development is heavily associated with industrialization and ownership as mentioned in the literature (Foster and Rosenzweig, 2004; Saxena, 2012; patel and Chavda, 2013).

According to Naude (2008), industrialization is considered a strategic development intervention that can accelerate rural development. Industrialization becomes a vehicle for improving the quality of life for individuals, families and communities and for sustaining the economy. Research (Sundar and Srinivasan, 2009; Sharma, Chaudhary, Bala and Chauhan, 2013) proves that industrial expansion in rural areas is able to reduce poverty and leads villagers to sustainable livelihoods, and positively impact on sustainable development.

Furthermore, when observing activities in the research location it can be said that the attributes of the IKM development approach center on growth. As for its characteristics, namely: 1. Focus on small and medium industries, namely the processing of eggplant and blunyu in accordance with the conditions that the majority of their livelihood as fishermen, 2. Utilization of natural resources and environment to increase short-term physical wealth. 3. Ownership of centralized productive assets, 4. Power of IKM adaptation if organized can become a local self-help force.

Table 3 The Fishermen Development Program in Jung Anyar Village in the Village Autonomy Era

No	Agency	Program
1	East Java Province	
	Department of Fisheries	Development Processing and Fishery Product Quality Assurance
	Badan Ketahanan Pangan	1. Food Consumption Diversification Acceleration Program 2. Local and Traditional Food Business Development Program
2	Bangkalan regency	
	Department of Fisheries	Coastal Community Economic Empowerment Program
	Department of Industry	Small and Medium Industrial Development Program
3	Water Police	Fishermen's Care Program: Distribution of basic necessities and buoys
4	Universities	
	Univ.Trunojoyo Madura	Lecturer-Students Service and Research Program
	STIKI Bangkalan	

Source: Primary Data, 2018

If you look at table 3 then there is already a government program policy in terms of development of fishermen who enter the village of Jung Anyar in stages. However, the Jung Anyar Village Government in this case only carried out the facilitation function by preparing program participants. Jung Anyar Village Government has not done intensive coaching to small industry actors.

In fact, based on Permendesa No.1/ 2015 concerning local-scale village authority, the area of community economic empowerment, especially for fishermen groups needs to be done to improve welfare. Furthermore, based on Permendesa No. 5/2015 concerning the determination of the priority of village fund use that Village Community Empowerment is an effort to develop independence and welfare of the community by increasing knowledge, attitudes, skills, behavior, abilities, awareness, and utilizing resources through the establishment of policies, programs, activities and assistance that is in line with the essence of the problem and the priority needs of the village community.

In fact, the Village Government of Jung Anyar in 2015 once gave savings and loan funds but in practice experienced bad credit. This has a negative impact the following year, so that from 2016 until now there is no more allocation for savings and loans. The reason, the Village Government is worried about going bad credit. In fact, the allocation for increasing village economic activities is very important for the welfare of the community.

BUMDES in Jung Anyar Village has not been able to mobilize the economy of the village community. BUMDES has not been directed to follow the economic potential, especially the small industry processing eggplant crackers and blunyu. In fact, BUMDES was born as a form of approach between the village government and the community to improve the village economy based on the management of village potency. The existence of BUMDES is indeed quite necessary considering the natural potential of the coast that has enough prospects. Seeing this potential then BUMDES Jung Anyar should need to be added business units, namely: Marketing eggplant crackers and blunyu.

D. CONCLUSION AND RECOMMENDATION

Conclusion

1. Institutional implementation of village autonomy has been going well, especially the relationship between the Village Government and BPD.

However, for the economic institutions are still not optimal in the development of small industries.

2. The policy of Pemdes Jung Anyar in the framework of industrial development is still not optimal. The potential of SMIs is still not well developed by the village government. BUMDES which is a representation of economic institutions in Jung Anyar village has also not been able to play an optimal role. The role of government in the development of SMIs should be directed directly to the handling of problems that are often faced by small industry entrepreneurs, such as capital and technical management can be integrated with other aspects of development such as technology and entrepreneurship development.

Recommendation

BUMDES in Jung Anyar village should be directed to base of the rural industrial. Therefore, BUMDES needs to add business units, namely: Marketing of eggplant crackers and blunyu industry. Development of the eggplant crackers and blunyu industry players in Jung Anyar village is directed at: business management, capital and marketing.

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STRATEGIC FOOD COMMODITY DEMAND FOR POOR RURAL HOUSEHOLDS IN INDONESIA

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ABSTRACT

Demand analysis of the strategic commodities of poor rural households can be used as policy reference. The main focus of the study is to estimate the poor rural income and price elasticities. The Linear Approximate Almost Ideal Demand System (LAAIDS) is used to estimate the parameters of poor rural households. The empirical result for the specified model for demand functions (LAAIDS) illustrate that all estimated coefficients agree with a priori theoritical expectations. The expenditure elasticities are positive for corn, meat, shallot, chili, and sugar. The expenditure elasticities are negative for rice. According to the values of the cross-price elasticities, among commodity have subtitution and complementary relationship are observed.

Key word: *LAAIDS, SUR, price and expenditure elasticities*

INTRODUCTION

Rice, corn, meat, onion, chili, and sugar are six of Indonesia's seven strategic commodities. As a strategic commodity, these six strategic commodities are always consumed by Indonesian households (Deptan, 2014; Amang, 1995; Simatupang, 2012). Consumption of strategic commodities is carried out either by rural households, urban households, poor households, non-poor households, and poor rural households. The pattern of consumption of each household is different. Differences in household consumption patterns are influenced by income levels, number of household members, the price of each commodity, and so on (Yu, 2008; Widarjono, 2013, Hayat, 2017)

Consumption The number of poor Indonesians in rural areas in 2017 amounted to 16.31 million. This number decreased compared to the previous year which amounted to 17.10 million (Suhariyanto). The National Team for the Acceleration of Poverty Reduction (2014) argues that household consumption expenditure in Indonesia is relatively higher compared to other consumption expenditures. The increase in food prices will affect the purchasing power of households, especially poor households. High inflation in staple foods has a negative impact on poor households, as almost 65% of their consumption is spent on food.

The problem of poverty has existed since time immemorial. In the past, people generally became poor not because of lack of food, but poor in the form of lack of convenience or material. The causes of poverty are three things: poverty caused by the physical and mental condition of a person, poverty due to natural disasters, and artificial poverty (Yuliana, 2014). According Assegaf (2015) poverty reduction needs to be done by using various perspectives, because poverty is a multidimensional problem. The world's concern for this issue is shown by poverty alleviation in one of the main targets and targets of the concept of sustainable development goals that will adorn the face of world development during 2015 to 2030 (Hoelman, 2015). As a commitment to poverty alleviation, programs have been pursued by both central and local government, including the provision of basic needs, such as poor rice (Raskin), health and education services, expansion of employment opportunities, agricultural development, credit schemes, construction of infrastructure and assistance, sanitation counseling and other programs (Hureirah, 2005)

The fact that the reduced poverty rate is not proportional to the government's budget. Data from the Ministry of Finance show that in the last six years the poverty alleviation budget has increased significantly from Rp 74.3 billions (2011) to 212.2 billions rupiah (2016) or up by 186 percent. But the irony is that the poor population reduced by only 7 percent during that time or on average only able to reduce poverty by about 1.17 percent per year (BPS, 2016). This condition indicates that to eradicate household from poverty need big budget.

Research on the effects of food consumption on poverty in a region has long been an important study to better understand the importance of the food sector and poverty alleviation (Seale, 2014). Poverty is closely related to the fulfillment of basic needs of both food and non-food. The large proportion of expenditures for food consumption on all household expenditures can be an indicator of poverty. The higher the public welfare of a country then the share of food expenditure of the population will be smaller, vice versa (Deaton and Muellbauer, 1980).

Good understanding of the study of the consumption of poor households in rural areas is expected to contribute in formulating public policies related to poverty alleviation. The objectives of this study are: (1) to analyze the factors that influence the food consumption of poor households in rural areas, and (2) to analyze the effect of changes in food prices and income on food demand.

MATERIAL AND METHODS

The poor rural households was choosen for study. Data for this study is obtained from SUSENAS (Indonesian National Socioeconomic Survey) for the year 2016. Susenas an alectronic copy of the data sets for poor rural household, with a total sample of 20.629 households.

Empirical Frame work of AIDS model

Model analisis yang digunakan dalam penelitian ini adalah model almost Ideal Demand system (AIDS). Model AIDS ini digunakan karena dapat memberikan perkiraan elastisitas harga, elastisitas silang, dan elastisitas

pengeluaran. Meskipun AIDS adalah model nonlinear, penggunaan indeks harga stone dapat memecahkan masalah nonlinear sehingga memudahkan estimasi. Secara matematis, model AIDS yang digunakan adalah sebagai berikut:

$$W_i = \alpha_0 + \sum_j \gamma_{ij} log p_j + \beta_i \log(X/P) \quad (1)$$

P adalah indeks harga, didefinisikan sebagai berikut:

$$\log P = \alpha_0 + \sum_i \alpha_i \log P_i + \frac{1}{2}\sum_i \sum_j \gamma_{ij}^* \log P_i \log P_j \quad (2)$$

Untuk mencegah non-linearity dan mengurangi efek multikolinieritas dalam model, persamaan (2) biasanya didekati dengan Stone's Price Index : $\log P^* = \sum_i W_i \log P_i$. Dengan demikian, AIDS berubah menjadi Linear Approximation AIDS (LA/AIDS). Dan model LA/AIDS inilah yang akan digunakan dalam penelitian.

The following form of AIDS model was used in the present analysis to estimate the system of demand functions for food items like rice, corn, meat, salloot, chili, and sugar. From the estimated demand function price and income elasticities were derived. Following Deaton and Muellbauer (1980), the linier aproximation AIDS was used:

$$W_i = \alpha_0 + \sum_j \gamma_{ij} log p_j + \beta_i \log(X/P*) \quad (3)$$

Where, W_i is average budget share of the i^{th} commodity, P_j is price of the j^{th} commodity, X is expenditure on food commodities (rice, corn, meat, salloot, chili, and sugar), Ln P* is price index, and α_0, γ_{ij}, and β_i are the parameters that need to be estimated.

The demand elasticities are calculated as functions of the estimated parameters, and they have standard implications. The specific form of expenditure elasticity (η_i), wich measures sensitivity of demand in response to changes in consumption expenditure, is as:

$$\eta_i = 1 + \frac{\beta_i}{w_i} \quad (4)$$

The uncompensated (Marshalian) own-price elasticity ($\in_{ii}^M$) and cross-price elasticity ($\in_{ij}^M$) measure how a change in the price of one product affects the demand of this product and other products with the total expenditure and other price held constant. The spesific form of uncompensated own and cross price elasticities is as, respectively:

$$\in_{ii}^M = -1 + \frac{\gamma_i}{w_i} - \beta_i \quad (5)$$

$$\in_{ij}^M = \frac{\gamma_{ij}}{w_i} - \beta_i \frac{w_j}{w_i} \quad (6)$$

The compensated (Hicksian) price elasticities own and cross ($\in_{ii}^H$ and $\in_{ij}^H$) Which measures the price effects on the demand assuming the real expenditure $X/P*$ is constant, is describe as:

$$\in_{ii}^H = -1 + \frac{\gamma_i}{w_i} + w_i \quad (7)$$

$$\in_{ij}^H = \frac{\gamma_{ij}}{w_i} + w_j \quad (8)$$

To ensure that the assumption of maximizing satisfaction is not violated, there are three restrictions that must be inserted into the model:

1. Adding-up:
   $\sum_i \alpha_i = 1, \sum_i \alpha_{ij} = 0, \sum_i b_i = 0$, allows an expenditure share of a single value.
2. Symmetry:

$C_{ij} = C_{ji}$, shows the consistency of consumer's choices

3. Homogeneity
   $\sum_j C_{ij} = 0$, which is based on the assumption that changes are proportional in to all prices and expenditures do not affect the number of purchased items.

RESULT AND DISCUSSION

The above model in first equation was initially estimated for the poor rural. The empirical result for the specified model for demand functions (LAAIDS) illustrate that all estimated coefficients agree with a priori theoritical expectations.

Table 1 displays the estimates of the structural parameters for food groups of the LAAIDS model for poor rural households. The parameters estimates satisfy the symmetry, the homogenity, and the adding up restriction. Overall, it can also be seen from the estimated results that a reasonable number of coefficients of the explanatory variables are significant.

However of interest to researchers and policy makers is the knowledge concerning elasticities of demand for food. According to value of the expenditure elasticities, the selected food groups are classified as inferior goods ($\eta_i < 0$), necessities ($0 < \eta_i < 1$), or luxuries ($\eta_i > 1$). Demand for a specific commodity is defined as price inelastic (elastic), if the absolute value of its own-price elasticity is lower than unity (larger than unity).

Pairs of commodities are denoted as subtitutes or complements if their compensated cross-price elasticities are positive or negative, respectively. Compensated elasticities indicate the change in demand for a commodity due to a price variation, when the real expenditure change caused by this price variation is compensated by an expenditure variation so that utility is kept constant.

Estimation of Strategic Commodity Demand

The use of the LA-AIDS model in a sample of rural poor households in Indonesia with the price parameters of each commodity, income (expenditure), number of household members, and IMR variable. Simultaneously, independent variables such as household expenditure, strategic commodity prices, number of household members in the LA-AIDS model can be used to estimate the strategic commodity share budget.

The LAAIDS model was analyzed by the SUR method which explicitly included the possibility of contemporaneous correlation. Contemporaneous correlation is the occurrence of correlation between disturbances derived from different equations at a given time. In addition, the combined estimation with this method will be more efficient because the resulting coefficients have more adequate variance (Adriansyah, 1997)

Tabel 1 shows the function parameters of strategic commodity demands in Indonesia in year 2016 . The coefficients of determination R^2 in the demand model for poor rural households were 0.9241, showed that the decisions to consume food commodities was very much affected by other food commodity prices as well as the level of income. Next, the suspected variable

for expenditures of food commodity consumption decisions was very much affected by the size of income, where the positive sign in the equation shows that if increases occurred in the income of the people, consumption of plant food commodities will also increase. Conversely, a negative sign in the equation shows that the proportion of demand for food commodities will decrease along with a decrease in the level of income.

Based on table 2 can be explained explanation influence of price, household size, IMR, and expenditure variable to each strategic commodity as follows:

1. Rice

The results of the analysis show that all coefficients of own price, corn price, meat price, shallot price, chili price, sugar price, households size, IMR, and total expenditure are all significant at 1% level of significance. The coefficient of own price variable of -0.5411 can be interpreted that each price increase alone by 1% then the proportion of rice expenditure will decrease by 0.5411%. The value of the corn price coefficient of 0.2790 means that each increase in corn price of 1%, then the proportion of rice expenditure will rise by 0.2790%. This means that between corn and rice there is a complementary relationship whereas the government hopes that between rice and corn commodities are mutually substituted. The price of corn has a significant effect on the proportion of rice expenditure. The value of meat price coefficient of 0.1769, meaning that there is an increase of meat price by 1% then the proportion of rice expenditure will rise by 0.1769%.

2. Corn

The price variables, the price of rice, the price of meat, the price of shallot, the price of chili, the price of sugar, household size, IMR, and total expenditure have a significant effect on the proportion of corn expenditure, with a significance level of 1%. The value of rice price coefficient of 0.2790 means that any increase in rice price of 1% will increase the proportion of corn expenditure by 0.2790%. Rice and corn are mutually substituted commodities, so the increase in rice prices will cause households to switch to corn consumption. The value of the total expenditure coefficient of 0.4804 means that any increase in expenditure / income will result in an increase in the proportion of corn expenditure by 0.4804. The total coefficient value of household expenditure of 0,0508 shows the total increase of household expenditure will cause the increase of corn consumption expenditure, but only 0,0508.

3. Meat

The significant proportion of meat expenditure at a 1% significance level is influenced by own price, rice price, corn price, shallot price, chili price, sugar price, household size, and total household expenditure. The interpretation of the total expenditure coefficient value of 0.3155 is that an increase in household expenditures by 1% will increase the proportion of rural poor household expenditure for meat consumption by 0.3155%.

4. Shallot

The results showed that the proportion of onion expenditure was significantly influenced by the price of rice, the price of corn, the price of beef, the price of onion, the price of chili, the price of sugar, the number of household members, the total expenditure, and the IMR. The IMR variable is a variable used to avoid biased estimation results due to zero consumption. The value of IMR variable coefficient of -1.3808 means that the increase of IMR variable by 1% will cause a decrease in the proportion of onion consumption expenditure by 1.3808%.

5. Chilli

The chili that was analyzed was a combination of large red chili and cayenne chili. The proportion of chili commodity expenditure is influenced by the price of rice, the price of corn, the price of maet, the price of shallot, the price of sugar, hoseholds size, the total expenditure, and the IMR variable. The influence of each independent variable is statistically significant at the significance level of 1% and 5%.

6. Sugar

The proportion of sugar expenditure is influenced by own price, rice price, corn price, meat price, shallot price, sugar price, Households size, total expenditure, and IMR variable. The influence of each independent variable is statistically significant at the significance level of 1% and 5%. The value of corn coefficient of 0.0508 means that a corn price increase of 1% will increase the consumption of sugar by 0.0508%.

Expenditure (income) Elasticities and Marginal Expenditure Share

The effect of changes in expenditure on strategic commodities on demand for each strategic commodity is called the expenditure elasticity. Theoretically, the expenditure elasticity is the percentage change in the quantity of goods demanded in response to a change in expenditure of one percent. The expenditure elasticity is

calculated by involving the coefficient values derived from the LA / AIDS model discussed earlier, and calculated using the formula (4).

Table 3 displays the expenditure consumption (income) elasticities and marginal expenditure share for the food sub the groups for the poor rural households. For the poor rural households, according to value of the expenditure elasticities rice and shallot is necessities goods ($0<\eta_i<1$). Corn, meat, chilli, and sugar is luxury good because value of the expenditure elasticities more than one ($\eta_i>1$).

Another interesting finding is that rice for poor rural household have negative value. This means if consumer income increases, then the demand for food commodities will decreas. This condition is caused by poor rural households consumption of rice is sufficient, so that once there is an increase in income then households will soon increase consumption of other commodities.

The value of income elasticity of corn is 15,6898, meaning that the increase of income by one percent will increase corn consumption by 15.6889 percent. This proves that corn is no longer the staple food for rural poor

households. Corn is a luxury for poor rural households. This is somewhat contrary to the existing theory.

The demand for sugar for poor households in rural areas is elastic to household income. Sugar is still a luxurious commodity for poor households in the countryside. The income elasticity of granulated sugar amounted to 1.9996, meaning that a 10 percent increase in income will lead to an increase in demand for sugar by 19.996 percent.

Meat is a strategic commodity that has the highest income elasticity compared to rice, corn, shallot, chili, and sugar. Meat commodities are very sensitive to increasing income of poor rural households. This is due to the low income levels of poor rural households, which causes households unable to buy meat.

The marginal analysis of expenditure share is used to determine the level of changes in the allocation of expenditure share of a commodity in the future when there is a change in expenditure / income (Asare, 2012). The marginal value of rice commodity share expenditure of -0.1028 shows that in the future there will be a decrease in the budget for consumption of rice commodities in poor rural households. This condition indicates that poor rural households diversify food from rice to other commodities. This is in line with government efforts to reduce rice consumption and improve local food (Ariani, 2010).

Uncompensated Own-Price and Cross-Price Elasticities

Uncompensated own-price elasticities of demand for all food groups are negatif and consistent with the a priori expectation (Azis, 2011; Gould, 2004), exception corn. The absolute amounts of these elasticities for all food groups are lower than unity except for meats in rural and urban households as displays in table 4 and 5.

changes in strategic commodities. All strategic commodities have a negative price elasticity of their own. This corresponds to the theory that the demand curve has downward sloping. The value of rice elasticity is inelastic because its value is less than one, which means that its consumption is not affected by price easily. The inelastic nature of the elasticity of rice commodities due to rice is the main consumption of poor households in rural areas. The value of rice elasticity with negative sign means that the increase of rice price will decrease rice consumption. The rise in rice prices causes households to reduce rice consumption and diversify their staple food consumption to cover their carbohydrate needs. According Mauludyani (2008) the higher the income, the demand for rice tends to be less elastic to the price of rice. The value of rice elasticity of -0.8277 indicates that poor households in rural areas do not have high income.

The maet commodity has its own highest price elasticity value, that is -35,90035. The value indicates if the price of meat increased by 10% then the demand for meat will decrease by 359,0035%.

Cross price elasticity has two possible values, namely negative and positive. The negative value of cross price elasticity indicates that the relationship between the two commodities is complementary. Conversely, a

positive cross-price elasticity value indicates the relationship between two substituted commodities.

The cross-price elasticity of rice commodities all have a negative value, indicating that rice has a complementary relationship with corn, meat, shallot, chili, and sugar. Rice is complementary to the most closely related to meat. The value of cross-price elasticity of rice to meat is -0.7001, which means the increase of meat price by 10% will only decrease demand for rice equal to 7,001%. While other complementary commodities will only reduce demand for rice less than 7,001%. This shows that rice demand is unresponsive to the price change of complementary goods.

Unlike rice commodities, the price elasticity of shallot has a positive value, indicating that shallot has substitution relationship with rice, corn, meat, chili, and sugar. This is somewhat distorted from the theory, shallot supposed complementary relationship between the shallot with chili commodity.

Compensated Own-Price and Cross-Price Elasticities

The Hicksian own price elasticity value (Table 3) shows that rice and chilli are inelastic with elasticity values of -0.9304 and -0.9798 (less than one). Rice is more inelastic than chilies, because with a 10% increase in rice prices will only cause a decrease in rice demand by 9,304%. This is because rice is a staple food source of carbohydrates for poor households in rural areas.

Corn, meat and sugar commodities are elastic with values of -0.45073; -0.35,5866; and -0,1,03337. The value of the elasticity of beef commodities has the highest value, which means the amount of demand depends on the price level. Beef is a commodity that has not been bought by poor households in rural areas.

Table 3 shows a complementary relationship between rice and corn, beef, onion, chili, and sugar; between corn and rice, beef, onion, chili, and sugar; as well as between beef with rice, corn, onion and sugar. While substitution relation occurs between onion with rice, corn, and sugar; and between sugar and rice, corn, beef, onion, and chili.

The magnitude of the elasticity value shows the high level of interrelationship between strategic commodities. It is generally seen that the complementary relationship of meat with rice, corn, shallot, chilli and sugar is very strong because the value of elasticity is greater than one. While the substitution relationship between onion with rice and sugar that occurs is not too strong because the value of elasticity less than one. So is the substitution relationship between sugar and rice, corn, meat, shallot and chilli.

The elasticity of strategic commodity food demand has implications for the consumption and improvement of food consumption of poor households in rural areas. The following implications are as follows:

1. The increase in strategic food prices will decrease its consumption. Therefore, efforts to stabilize food prices are very important in order to improve the consumption of poor households in rural areas can be achieved.

2. Revenue increase causes a decrease in rice consumption. This is because the consumption of rice is excessive, so it needs to do various efforts that support the decline in rice consumption through the acceleration of the implementation of the mainstream rice diversification program in addition to sustainable rice.

CONCLUSION AND SUGGESTION

It is explored that the expenditure and price elasticities for selected food groups are relatively high in Indonesia. Food subsidies can be better targeted to the poor rural household by subsidizing food items and distributing are known to be concentrated. It is important that a number of different food sources be consumed and effort should be made to encourage a wide variety of food to improve the nutritional quality of the indonesian's diet and health of the population.

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Table 1 Parameter Estimates of LAAIDS for Poor Rural Households

Variable	Rice	Corn	Beef	Shallot	Chilli	Sugar
Constant	7.7453*	-6.6280*	-2.0552*	1.2028*	1.0401*	-0.3050*
Price of rice	-0.5411*	0.2790*	0.1769*	0.0061*	0.0283*	0.0508*
Price of corn	0.2790*	-0.1158*	-0.1389*	0.0067*	0.0021*	-0.0333*
Price of Meat	0.1769*	-0.1389*	-0.0466*	-0.0064*	0.0067*	0.0082*
Price of shallot	0.0061*	0.0067*	-0.0064*	0.0041*	-0.0030*	-0.0076*
Price of chilli	0.0283*	0.0021*	0.0067*	-0.0030*	-0.0030*	0.0221*
Price of sugar	0.0508*	-0.0333*	0.0082*	-0.0076*	-0.0091*	-0.0091*
Total Expenditure	-0.8739*	0.4804*	0.3155*	-0.0022*	0.0002**	0.0799*
Household size	0.7980*	-0.4657*	-0.2805*	0.0069*	0.0030*	-0.0617*
IMR	3.6176*	1.4372*	-1.2423*	-1.3808*	-1.5099*	-0.9218*
B	0.0210*	0.0620*	-0.0526*	-0.0066*	-0.0049*	-0.0189*
R^2	0.9989	0.9997	0.9998	1.0000	1.0000	1.0000

Note: Single and double asterisk denote statistical significance at the 1% and 5% respectively
Source: estimated

Table 2. Expenditure Elaticities and Marginal Expenditure share for Poor Rural Household in Indonesia

Commodity	Expenditure Elasticity	Marginal Expenditure Share
Rice	-0.1333	-0.1028
Corn	15.6898	0.5132
Meat	235.4475	0.3169
Shallot	0.9559	0.0468
Chilli	1.0037	0.0661
Sugar	1.9996	0.1598

Table 3. Elasticities of Demand for Strategic Commodity in Indonesia

Komoditas	Rice	Corn	Meat	Shallot	Chilli	Sugar
			Uncompensated			
Rice	**-0.8277**	-0.6646	-0.7001	-0.6461	-0.6269	-0.6110
Corn	-14.8684	**-5.0204**	-3.5598	-4.2592	-4.5079	-4.7140
Meat	-215.3885	-42.2559	**-35.9035**	-46.0662	-50.0363	-53.3248
Shallot	0.1184	0.0858	0.0844	**-0.9135**	0.0883	0.0879
Chilli	-0.0478	-0.0450	-0.0449	-0.0451	**-1.0459**	-0.0452
Sugar	-0.8656	-0.1274	-0.0961	-0.1437	-0.1606	**-1.1935**
			Compensated			
Rice	**-0.9304**	-0.6689	-0.7003	-0.6527	-0.6357	-0.6217
Corn	-2.7688	**-4.5073**	-3.5386	-3.4910	-3.4741	-3.4601
Meat	-33.8168	-34.5552	**-35.5866**	-34.5390	-34.5220	-34.5080
Shallot	0.8555	0.1171	0.0857	**-0.8667**	0.1502	0.1643
Chilli	0.7255	-0.0130	-0.0443	0.0033	**-0.9798**	0.0342
Sugar	0.6576	0.1126	0.0813	0.1289	0.1458	**-1.0337**

LAND LIBERATIONDUE TO OIL AND GAS AND CHANGES IN FARMERS' LIVES (Study in Gayam Sub-district, Bojonegoro Regency)

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ABSTRACT

This paper aims to see changes in livelihoods of farmers after land acquisition for oil and gas (petroleum and gas). The existence of globalization has encouraged the number of incoming investment, one of which is investment in mining sector in Bojonegoro Regency, precisely located in sub district of Gayam. The method used in this research is descriptive qualitative. methods of data collection using interviews, documentation and observation. While the results show the presence of investment in oil and gas sector is causing 700Ha farmers land to be released. The exemption has a positive impact on macroeconomics such as an increase in economic growth. However, land acquisition is also not entirely in favor of the community, especially farmers. The diminishing land caused the peasants to lose their jobs and the difficulty of finding new jobs until eventually some of them were transformed from agricultural to non-agricultural.
Keywords: land acquisition, oil and gas investment, farmers

INTRODUCTION

Globalization needs special attention in Indonesia, where globalization is unavoidable, something that is certain to happen, not only benefits but also other implications that society is forced to adapt to follow the changes that exist. (Yuniarto 2014). The existence of globalization has forced countries to establish mutual free trade, that is, there is no barrier to import-export between countries. This of course brings poi- sive and negative effects. Indonesia itself is an emerging agrarian country, where the largest share of its potential is agricultural resources with some of its inhabitants also working on the agricultural sector, but so far it has not shown how far their lives and wellbeing. (Wibowo 2007)

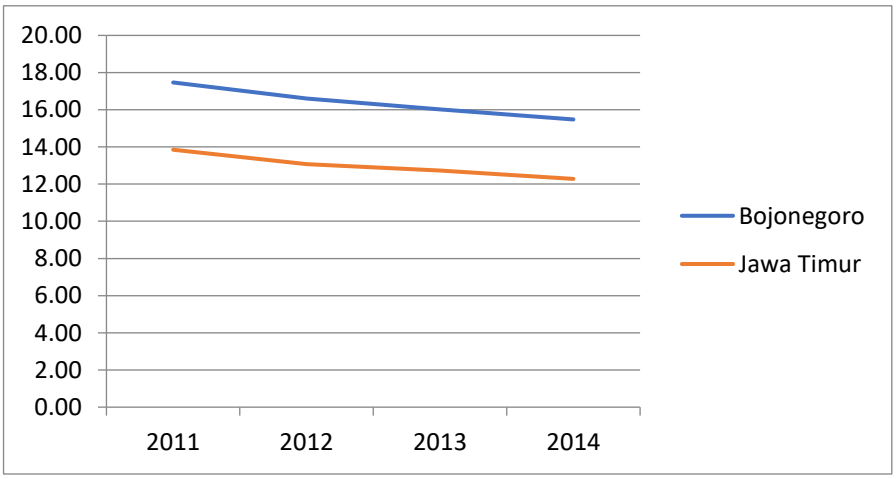
Indonesia BPS data from 2014 to 2017 shows that the agricultural sector still places the agricultural sector in the first position. In 2014 amount 399.030.425. That is indicates if agriculture is still the main livelihood in Indonesia. Globalization have rapidly changed the context for agriculture's role. (Sadoulet,dkk:2009). But decimating the existence of globalization has affected the farmers' life Given that after the signing of AFTA and CAFTA the government adopted a policy of food that is very free market oriented, one of

the policies is the reduction of subsidies, the reduction of import tariffs of food commodities that constitute basic needs (Yuniarto 2014).

In addition, globalization has also made foreign investment more freely enter Indonesia. Many government regulations that support the existence of foreign investment, ranging from the central government such as Permendagri No.52 of 2015 which supports the invetasi, where permendagri is explained about the management of regional investment. To the level of local government such as Bojonegoro regency.The existence of Regional Regulation Bojonegoro No.23 of 2011 on Acceleration of Regional Economic Growth in the Implementation of Exploration and Exploitation and Processing of Oil and Gas in Bojonegoro Regency, has attracted many investors coming to Bojonegoro. It was also reaffirmed by the issuance of Regent Bojonegoro Regulation No. 15 of 2015 on the intensive provision and the provision of ease of investment in Bojonegoro.

The abundant natural resources attract investors, where Bojonegoro is renowned for its oil resources. Nevertheless, poverty is still quite high in Bojonegoro:

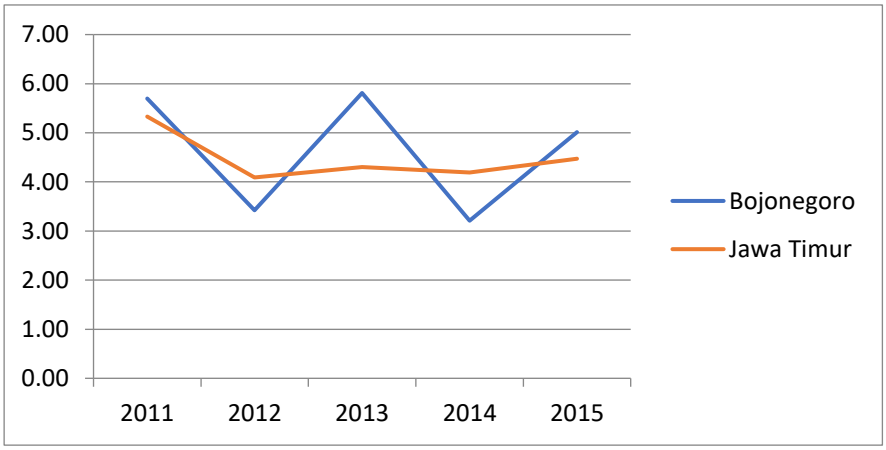
Figure 1.0 Poverty in Bojonegoro and East java (JATIM)



Source: BPS Bojonegoro and East Java (JATIM)

In the table shows that poverty in Bojonegoro Regency continues to decline every year but the figure is still quite high compared with East Java. There should be a high investment in the oil and gas sector to make Bojonegoro poverty reduced and occupy a position above East Java. The existence of oil and gas investment also does not significantly affect unemployment in Bojonegoro. It is shown in figure 2.0 that the existing rate open unemployment in Bojonegoro tends to fluctuate with a sharp increase. The position is also still above East Java.

Picture 2.0 Open Unemployment Rate in Bojonegoro dan Jawa Timur



Source : BPS Bojonegoro and East Java (JATIM)

In addition, this oil and gas investment has led to considerable land acquisition of around 700 ha. The land that is released is a rice field. In table 2.0 it appears that all the land that will be freed is sawahh land with the type of agricultural commodities of rice, corn and cassava. The amount is not a small amount considering the livelihood of Bojonegoro people are farmers.

Tabel 1.0 Distribution of Exploited Land 2013.

No	Location		large	Type of Commodities
	Districts	Village		
1	Gayam	Bonorejo, Mojodelik, Gayam	600 Ha	rice, corn, cassava
2	Gayam	Katur, Ringin Tunggal, Sudu, Sumengko		
3	Ngasem	Bandungrejo	15 Ha	rice, corn, cassava
4	Ngasem	Ngasem	15 Ha	rice, corn, cassava
5	Dander	Ngunut	12 Ha	rice, corn, cassava
6	Kalitidu	Sukoharjo	15 Ha	rice
7	Kalitidu	Ngringinrejo, Pungpungan	15 Ha	rice, corn, cassava

Source : BAPPEDA Bojonegoro .2013

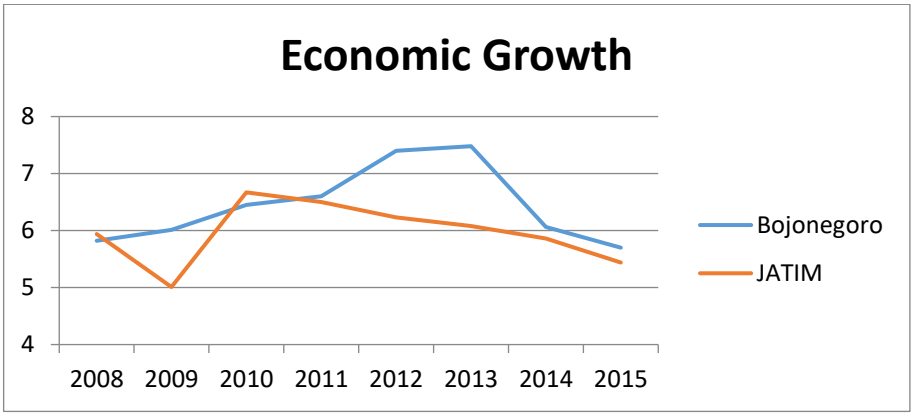
Assumption land liberation amount 700Ha caused losses experienced achieve 4,8 Million – Million in once planting season with the assumption of rice price of Rp 2.000 / Kg. BAPPEDA:2013). Extensive land liberation also caused land agriculture narrower where farmers loss their job, because agriculture for the is mainlivelihood. Another disadvantage is that with limited land resources it is ensured that agricultural products are also inadequate to the needs of the farming families. (Sunarminto dan Bambang, 2010).

Tabel 2.0 Population Development Based on Background of Livelihood of Bojonegoro Regency Year 2009 - 2013

No	Description	2009	2010	2011	2012	2013
1	Agriculture	318.411	334.526	339.930	319.556	321.674
2	Labor	82.170	92.815	102.055	108.442	111.557
3	Trade	117.216	123.401	135.605	134.923	138.569
4	Industry	60.900	63.450	73.417	75.021	77.471
5	Service	74.116	75.321	80.942	81.449	89.512
6	Employes/ABRI/pensionary	12.600	13.028	13.028	12.522	12.042
7	seasonal labor	–	–	–	–	–

Source : Disnakertransos Kab.Bojonegoro.2009-2013

Figure 3.0 Economic Growth in Bojonegoro Regency and East Java (JATIM)



Source: BPS Bojonegoro and East Java (JATIM)

Oil and Gas investment has also made the mining sector as the largest contributor of gross regional income or namely (PDRB) of Bojonegoro. It is can see in below table if 3 years ago the largest procentase in mining sector. However, the good result of macro data haven't yet distribute in low class or poor people especially who having low economic life like farmers. Because not all of farmers losing land can working in non agriculture sector especially in mining sector.

Tabel 3.0 Distribution growth rate PDRB Bojonegoro based on business field.

Distribution of Prosentase Gross Regional Income in Bojonegoro Regency			
Type of Businnes Field	Year		
	2013	2014	2015
Agriculture, Forest and Fisher	14.29	15.06	18.13
Mining and excavation	51.21	48.54	38.47
Processing industry	5.47	5.84	6.87
Electry and gas	0.02	0.02	0.02
Water, waste processing, waste and recycling	0.03	0.03	0.04
Construction	6.57	7.18	8.32
Large trade and retail, motorcycle and acar repair	7.57	7.92	9.45
Transportatioan and werehousing	0.76	0.86	1.08
Accommodation food and drink	0.71	0.79	0.97
Information and communication	4.80	5.04	6.07
Finance and assurance	1.20	1.31	1.61
Real Estate	1.05	1.10	1.28
Firm	0.12	0.23	0.16
Government administration, defense and social security	4.06	3.90	4.81
Education service	1.00	1.05	1.26
Healt and social service	0.36	0.40	0.46
Other service	0.77	0.83	0.99

Source: Bojonegoro in Number 2016

Althought economic growth increasing from any oil and gas firm and mining sector had the fisrt sector who contribute in PDRB, however the large liberating land make part of people losing their main livelihood and must start from zero for full their needs and their livelihood. Remember Perpres No.36 2005 year about land liberating for public interest, it is related for facilitate foreign investor. It is indirectly has narrow move agriculture sector in coutry and has worsened agriculture condition in Indonesia generally (Firdausy dalam dalam Yuniarto 2015).

Land is livelihood for farmers. So if there is no land for farming, the farmers will feel confused beacue farmers is main livelihood for them. While any mining activity has caused losing their land. For them land is one of main resource nad problem farmer uo Sihaloho n.d.). in this land mean agriculture land, which sacred thing as scope and plae for search income. Generally village people especially farmers reach land from their family. It is culture villge people for giving land to their generation.

Decline wide land make farmers feel difficult search ricefield for use. So only small part of farmer who still working in agriculture sector after lossing their land. Only people who buy land back can still work and stay as farmers. However, not all farmers think liket that. Some farmers use their money resulkt of selling land for fulling their need like housesold consumption or pay

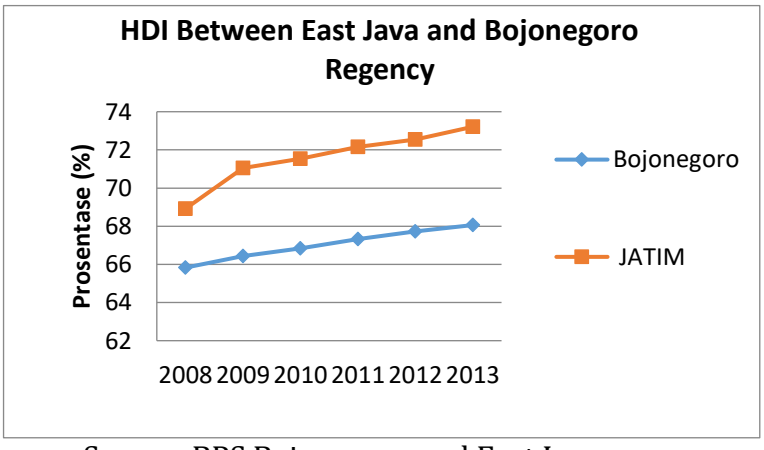
their debt. Affected narrow land , people who was a farmer (landowner) must be willing to become a farm laborer now, not only in their village but in another village until another regency like in Lamongan Regency.

Factually people work as farmer in agriculture sector, while in other sector like trade or businnes just for adding income or side job and not permanent work. However their condition push especially who not having land for moving work from agriculture sector to non agriculture sector like industry or trade. Many of them who moving profession because haven't land agriculture to use for work. If first ricefield still large, and people can farming in their neighborhood, not for now because land not ability to accommodate many worker. The age of farmers who moving jobs average under 50 years old, because they still young and strong. Otherwise age people over 50 year still as farmer or labour farmer. The other reason why moving profession is there is no job or ricefield for use.

Move proffession and seek new job not easy thing to do, remember people just have farming skill and they are low human resource. Moreover average of farmers have low education and just pass from primary school even do not graduate because they do not continue the school until finished. While who pass from senir hight scholl only some people. It is remember if for them seek for food more important than education or go to school.

The low rate human resource more clear in below figure, compare between Human Developmen Indeks (HDI) east java and Bojonegoro Regency. This figure show if HDI Bojonegoro Regency tend increasing but slow and under East Java, it is mean if rate education in Bojonegoro Regency or human resource in this regency still low. The data from this Regency sync with reality in field especially in Gayam sub district if education people Bojonegoro stiil low and under East Java.

Figure 4.0 Rate Human Development Indeks Between East Java and Bojonegoro Regency



Source: BPS Bojonegoro and East Java

Low education often makes farmers lose and susceptible to difficulties. It has also become an inhibiting factor for finding new jobs because of the many obstacles that must be completed. Especially in the field of industry, many

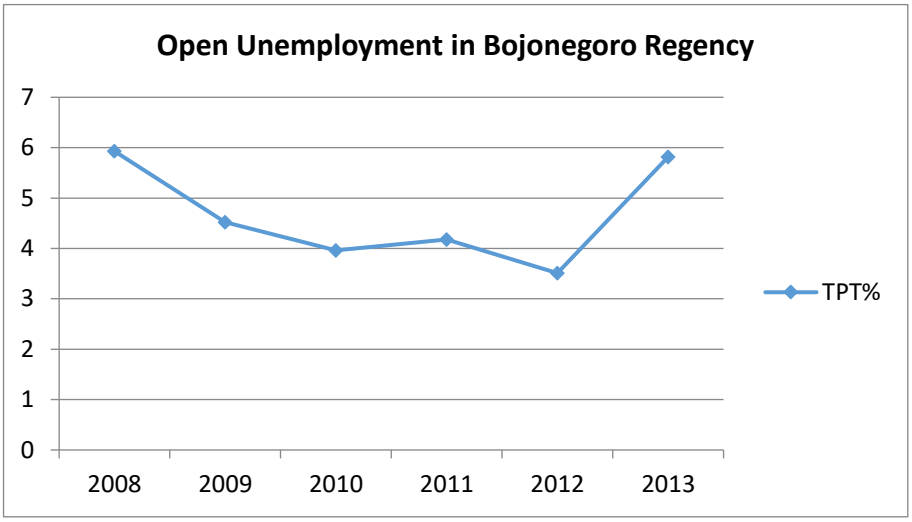
requirements are proposed. Such as a high school diploma, and certificates of expertise such as welding, etc. The existence of elaborate requirements is difficult to make farmers get jobs in the industry because of the low human resources. While some of the farmers who have junior high school certivicate follow the C package to get a high school certivicate to work in the mining industry. So most of the farmers who work in the mining industry sector are rough workers such as coolies or helper. Some who have a rather high education such as high school to be security or security guards and scaffolders, and who work in offices only one or two people.

Introduction to The Contract System.

The existence of investments should be able to open new jobs that ultimately reduce unemployment. But not so, if the existing work is contractual. This in turn makes the people push to lose their jobs in a short time, where when the contract has been completed then they have to find a new job. Contract system itself is new for farmers. Generally farmers only recognize the division of each task in the agricultural system as follows ranging from nampek (planting seeds), tandur, fertilizer, harvest to ngedos (separating between wet and wet rice paddy). The existing contract is usually monthly, like three months. There are also annuals with a period of one year to three years, work with an on going annual contract period usually owned by security or direct employment of partners from oil and gas processing companies such as Tripata.

When the contract has run out it will affect the occurrence of unemployment. This is illustrated in the below figure also shows that the unemployment rate is very fluctuating occurred in Bojonegoro regency. In 2011, unemployment began to increase, in line with the start of the oil and gas company, and in 2011 there was a protest of citizens because many were unemployed or the local people were not employed while the location was close to the residents' homes. So that this year the district government issued a local regulation No.23 of 2011 on the involvement of the community in an industry located in the area of the community, and it can be seen that unemployment has fallen in 2012, while in 2013 increased unemployment occurred again partially people who have only a few contracts have experienced a period of contract expiration when not or have not got a contract extension it will occupy the position as unemployed.

Figure 5.0 Open Unemployment in Bojonegoro Regency



Source: BPS Bojonegoro 2008-2013

Institutional Change Existing On Society

Land liberation also affected some institutional changes like land of ricefiled move to industry, and existing culture tend to city occurred in society. First ne appropiete from agriculture system and move to industry system. Farmer job for society more comfortable and ejoy thanwork on industry sector. So when displacement society have already confused. For them farmer job more free, they are own for their job. If They tired or lazy or there is no proble in family finance. They can rest moment fo a few days (Putra:1993). While the system is known in the industry is very strict and many rules and demands a different discipline as with farmers who are not bound by working hours.

Second land is very important for the village society, because all this time inherited from their family is land. In addition, the land is also a place to look for livelihood. For rural people if farmers do not have land to eat causes loss or go broke (fail). Once the land is so important that some society who have sold the land, buy it back in the form of land. However, due to the shifting of land function from agriculture to industry, it has also changed the pattern of piker, especially the youth, where they are now more inclined to think about how to full the present needs rather than the use of land such as farming for their future grandchildren or new generation.

Third attitudes and habits that began to change like the people of the city. Adat that still exist but slowly began to shift the nature of togetherness as well as alms earth, namely nyadran. Nyadran is selametan For javanese society, annual activity called nyadran or sadranan is expression of religious social reflection. (Poerwadarminto in Alfiana : 2013).

Villagers famous with social solidarity, where social solidarity is capital or the best way for problem solving for the weight problem (Firmansyah:1990). However decline solidarity when some society are busy with their work. In addition, society are consumtiv people, also more likely to

consumptive vegetables that usually from their garden or the front yard of the house, for now they more like buy vegetable from market. Even chose modern market than tradisional market

CONCLUSION

Although Bojonegoro's economic growth is increasing with oil and gas investment, but not felt by the weak community ,especially those in Gayam Sub-district. Because the existence of land liberation made the farmers lose their land and main livelihood .The presence of asymmetric information has also caused transaction costs to be paid by farmers. Some of those who have no land to move the profession to non-agricultural sector such as trade. And slightly changed the village culture into a citylike consumptive.

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RURAL DEVELOPMENT PLANNING

RURAL DEVELOPMENT PLANNING THE FRAME OF GREEN DIAMOND PARTNERSHIP, A RURAL DEVELOPMENT MODEL IN BANJAR REGENCY

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ABSTRACT

In order to increase community participation in village development, an approach or method is needed to increase the participation of rural communities in development in the region where the subject of village development is the village community itself. Village development is intended to help villagers to build the necessary village facilities and infrastructure. Steps or policies taken by the local government in carrying out village development need to be put in a unity with the local government in the village and not apart from the awareness of every citizen to participate actively in achieving the success of development which is essentially village development is a process of modernization that brought the village community towards a better life in the future. In realizing the development of the village independently, participation of the willingness itself is more needed and for that society needs to be gathered with a spirit of solid unity in order to create active and harmonious village participation and justice. Therefore, the Green Diamond Partnership Frame was established as a momentum of the awakening of self-help villagers in developing their village in a sustainable manner. To know the level of community participation in the Green Diamond Partnership Frame, the data were collected through questionnaire, interview and direct observation, then the data were analyzed to get information about the level of community participation in the planning and implementation process of development in the village, then it is classified into several levels starting from low participation rates, moderate and high participation. Overall, it can be concluded that the participation of rural community in development with self-supporting system in Green Diamond Partnership Frame has been good enough, but there are some things that still need to be considered, especially in terms of development planning, should the village government involve the whole community in every development planning to further provoke community participation in every development process that will be implemented by the village itself that is in accordance with the wishes, agreements and development priorities needed and desired by the village community

Keywords: The Frame of Green Diamond Partnership, Participation, Rural Development.

BACKGROUND

At this time, regional development as an integral part of national development is not separated and the principles of autonomy are realized by giving broad, real and responsible authority proportionally with more emphasis on the principles of democracy, community participation, equity and justice and by paying attention potential and regional diversity. To provide excellent service and empower the community is a very fundamental aspect in the implementation of regional autonomy so that the community can feel the benefits and take an active role in every process of regional development, it is also associated with the new paradigm of government that is no longer dominant but is a facilitator in the development process, local governments are given wide authority in the implementation of regional development in accordance with the potential resources, as well as the ability and uniqueness that exist in their respective regions.

In other words, regional development in the present and future should characterize socio-cultural, and local (site-specific) socio-cultural characteristics. In relation to development that takes into account the characteristics of local socio-cultural and economic potentials in community life, there are values and institutions social that can be empowered in the process of development, especially in rural areas, the utilization of norms of togetherness, brotherhood and mutual co-operation in the process of planning and implementation of development is expected to realize an independent community.

Similarly, in the case of village development which is an integral part of regional development where the implementation of village development which is a conscious effort of a society, nation and government in realizing its national ideals, implemented by the government by involving local villagers, therefore the implementation of village development can not be separated from the awareness of every resident living in the village, the participation of the community is a condition that can guarantee the success of development which is essentially rural development is a process of modernization that brought the people, the nation and the state of Indonesia towards a better livelihood in the future.

Three elements that need to be considered for the success of village development are:

1. Community participation in the implementation of development;
2. The emergence of new ideas in society about their lives in the future;
3. Applied appropriate technology and labor intensive.

Village development is intended to assist and guide village communities to build the necessary village facilities and infrastructure. The steps or policies that will be taken by the village government in implementing village development should be put in a unity with the local government in the framework of the development of an integrated region. This means that village development is an activity that takes place in Rural and covers all aspects of community life which is implemented in an integrated manner by developing self-help organization within the Green Diamond Partnership Framework that is a spirit of synergic village building by considering the aspects of sustainability which include NEWS elements ie Nature, Economy, Wellbeing and Society. Village development should be directed to optimally utilize the potential of natural resources and develop human resources by obtaining guidance from the government apparatus in accordance with their respective field of duty.

Equity development will only be sustainable if sourced from wider and more equitable public participation in economic life, and this can only emerge in a climate that provides widespread opportunities for the creation of productive initiatives, creativity and work for all levels of society. Furthermore, it is argued that participation is the involvement of community members in the development process voluntarily and on their own. Between the participation of villagers with the ability (morale and material) of the villagers concerned is indeed very closely related, the willingness of the community to participate is a sign of the community's initial ability to develop independently, community participation in development can grow the ability of the community, this because participation is none other than the willingness to help the success of each program according to the ability of everyone without meaning to sacrifice self-interest.

The purpose of development is to improve the standard of living and improve the welfare of the people, every person or group in the community needs to conduct productive activities. In fact, what often happens is that Rural development does not come from the wishes of the local people, so there is a series of development activities that are not done by the local community and this will result in the development activities are less constructive value for the community. Therefore, the effort to grow the passion and independence of the community in order to participate in the development is very necessary to be improved because the community has a very important role in the framework of the implementation of development in the village independently, the efforts to grow the passion and self-reliance of the community, among others by inviting the community to participate as well as in deliberations of villages by providing ideas and suggestions as well as in the form of real activities such as assistance of personnel, materials and other assistance for the sake of the progress of village development independently. And self-help will increase community participation in development.

Therefore development should be based on the approach that development is carried out from the people, by the people, with the assistance of the government and society equally, in this connection the village development prioritizes to the principle of equalization of the mutual obligation between the government, which is required, while the community provides its participation in development in the form of initiative and self- help swong mutual assistance in every development.

This research is a descriptive research. Descriptive research is intended for careful measurement of certain social phenomena by developing concepts and collecting facts. Based on the above definition, it can be stated that descriptive research is a study that examines the status of a group of people, individual traits, circumstances, symptoms, objects or describe systematically, the nature and relationship between phenomena investigated so that the frequency of the spread of other phenomena can be determined community. To obtain data that really fit with the research problem, then the data collection is done in several ways, namely:

1. Questionnaire or questionnaire, which is a method of data collection conducted by using questionnaires to be answered by the respondent. The contents of the questionnaire is information about the facts, opinions and attitudes of respondents associated with research variables.
2. Library Studies, namely taking the data obtained and in the documentation related to the research, in this case the Village Monograph and Village Guidelines.

3. Interview. It is an effort to collect data and information to complete questionnaire in the form of questionnaire, this interview is done directly to the respondent who has been specified as the sample.
4. Observation. Is a data collection technique by conducting direct observation in the research location.

RESULT AND DISCUSSION

A. Analysis of Respondent's Participation in Village Development Planning Self- Reliance in the Green Diamond Partnership Frame

Community development programs in general can be divided into two parts activities that can not be separated the program planning (program planning), and program implementation (action program). In the process of community development, especially independently within the Green Green partnership framework, community involvement is desirable, as development with this system demands the involvement and utilization of resources and potentials owned by the village. The principles of self-reliance in the Green Diamond Partnership Frame are as follows:

1. Implementation of activities carried out by the community itself by using appropriate resources, procedures and technology;
2. Activities to be carried out by villagers, are activities that are planned and can be undertaken by the community itself, and preferably use the materials available in each location / village;
3. The form of self-help community can be material materials (sand, stone, cement, brick etc.), fund, labor, and others.
4. Activity must be based on the NEWS Principle in Sustainability which takes into account the factors N = Nature, E = Economy, W = Wellbeing and S = Society.

In order to avoid irregularities in development, all parties are expected to participate in all stages of development, from development planning, implementation, assessing development outcomes and monitoring and evaluation of development. One of the efforts undertaken to determine the level of community involvement in village development planning is to involve the community in determining development projects in the village. In ideal circumstances the participation of the community in determining or making decisions concerning their lives is a measure of the greater participation of the people to determine their own destiny, it means the greater the participation of the people in development. To see and know the level of participation of villagers in development can be seen in the following table:

Table 1. Involvement of respondents in determining village development projects

Classification of Answers	Number of Respondents	Percentage (%)
Always	18	36
Sometimes	30	60
Never	2	4
Amount	50	100

Source: Processed from primary data, 2017.

From the table it can be seen that as many as 18 responses or 36% always participate in determining development projects with the assumption that any development to be implemented contains benefits for the community so that they will participate in determining the fate of the village and of course for the interests and progress of the village as well, as much 30 respondents or 60% say sometimes participate in determining development projects depending on the development, whether they understand or understand about the development or not, according to them every development to be implemented is a form of mutual agreement so in determining any development project for example and site, building and other designation The 30 respondents believe that the village government and its apparatus will be better informed about the development, these respondents only occasionally provide inputs in determining development projects, and 2 respondents do not had participated in the development project because the two respondents believed that village officials would be smarter and wiser in making decisions in determining development projects.

B. Analysis of Respondent's Participation in the Implementation of Village Development Self-Reliance in the Green Diamond Partnership Frame

Village development is intended to assist villagers in building the various village facilities and infrastructure they need, covering all aspects of community activities by developing self-help concepts with the active participation of the community in every series of development activities. The level of participation of villagers in development in Kabupaten Banjar before the implementation of Green Diamond Partnership Frame is categorized is still quite low. But at this time with the community development approach, the level of community participation increased rapidly. In the implementation phase of development carried out with gotong royong, the number of respondents increased to 70 people. Analysis of the participation of respondents in gotong royong activities can be seen in the table below:

Table 2. Analysis of the participation of respondents in mutual assistance activities.

Classification of Answers	Number of Respondents	Percentage (%)
Always	50	71%
Sometimes	20	29 %
Never	0	-0
Amount	70	100

Source: Processed from primary data 2017

From table 2 above, 50 respondents or 71% always follow gotong royong activities, this is due to their awareness of the importance of facilities and infrastructure to be built in their village, and 20 respondents or 29% sometimes participate in gotong royong activities, this because sometimes the time gotong royong activities collide with the affairs that they can not leave, and no respondents who never participated in this gotong royong activities showed their high sense of solidarity in the village apparatus and community leaders so that they would feel ashamed if they did not join gotong activities royong, besides that this activity is also a tradition that always run on every rural development. Thus it can be concluded that public awareness of the importance of development is very high, this is evidenced by the many people who participate in mutual cooperation activities.

C. Analysis of Respondents' Participation in Utilizing Rural Development Outcomes Self-Reliance in a Green Diamond Partnership Frame

The purpose of development is as much as possible to be utilized by the community, development can be said to succeed if the whole society can feel and enjoy the development result. In the table below, the villagers' involvement in village development with self-help system in the Green Diamond Partnership Frame:

Table 3 Repondent Involvement in the Utilization of Development Outcomes

Classification of Answers	Number of Respondents	Percentage (%)
Always	65	92
Sometimes	5	8
Never	-	-
Amount	70	100

Source: Processed and primary data 2017

From table 3 above, as many as 65 respondents or 92% of the community received the results of development and very use it, because the development is considered in accordance with what they need and only 5 respondents who stated that development is less useful. The success of development is when the community can utilize and feel satisfied for the development that is considered to have been right on target and certainly in accordance with the plan. In order for the community to know the extent of the implementation of development in their village, the community needs to assess the results of the development, with the involvement of the community in assessing the results of this development is expected to prevent deviations in the implementation of development so that development can run in accordance with the plans and development goals. To see clearly the involvement of villagers in assessing village development projects, it can be seen in the following table:

Table 4. Involvement of Respondents In Assessing Development Projects

Classification of Answers	Number of Respondents	Percentage (%)
Always	48	68,57
Sometimes	21	30
Never	1	1,43
Amount	70	100

Source: Processed and primary data 2017

From the above data 4 it can be seen that 48 respondents or 68,57 considered that the development is right on target and they are satisfied with the development which is considered very useful in their life because the development result can support and facilitate in their life and as many as 21

respondents or 30% stated that the development carried out was sometimes right on target, and 1 respondents stated that the development carried out in the village was not beneficial to him because the respondent did not live in the village because the work demanded him to always be outside the village.

Development of rural areas is intended to improve the welfare of rural communities, so ideally planning and implementation of rural development involves adequate regional planning, good coordination will be very effective if supported by community participation. Seeing the desire of the village community to build a large enough then this should be encouraged by the village apparatus to participate in collaboration and help villagers realize their dreams. Village apparatus can coordinate all communities to ecara together utilize existing resources to be utilized maximally in the implementation of development and should the village apparatus involve the community in carrying out development both in the process of development, development implementation and in the utilization of development, so that later development is in accordance with the target and hope of the community thus the results of such development can be useful and beneficial to the life of the village community.

CONCLUSION AND RECOMMENDATION

Based on the results of the research it can be seen that the more affluent groups in the village economic life (farmers, farm laborers) are more effective in participating, at all levels of development projects in the planning, implementation, and utilization of development outcomes than those who do not directly linked to the economic interests of the village. The participation of the community in the development is not merely to contribute funds, but can be in the form of determining or formulating decision-making, present in the implementation, supervise and evaluate the process and results of d In addition to the factual economic factors do not significantly differentiate the level of community participation, it is also examined other factors that concerns the variables of knowledge, awareness and opinion (judgment) of the community on the projects implemented, it turns out that these last three variables are more important, strongly influencing community participation in the planning, implementation and utilization of village development.

The level of wealth of the villagers is not an important factor in the participation of the community, however, at the implementation stage, it appears that richer villagers tend to contribute to various self-help activities, especially in the form of money, building materials and food. In this research, the participation rate of village community in development planning is classified as medium participation level, community participation in high development implementation and society participation level in high development utilization.

In the implementation of village development, respondents generally argued that they would be involved in the implementation of village development, both personnel and materials and minds, if the development was beneficial to them. In utilizing the results of village development that is carried out independently, they generally support the development and the project is basically beneficial and necessary in their lives, the development is felt to have been right on target and the community can widely enjoy the results of the development, and of course the community participate oversee the development in order to avoid irregularities in the development project.

Based on the results of research and discussion the authors suggest that village governments and their apparatus should better socialize the program transparently to all citizens of the community, and can coordinate wisely by inviting all members of the community together to hold village meetings and willing to accommodate all ideas or ideas given by the community, because after all the members of the community are the object and the subject of development, as a valuable asset of course the village apparatus should be better in managing the development by utilizing the potential in the village to the maximum so that development can be realized as planned.

Should the village head and his apparatus work together with community leaders, traditional leaders, as well as religious and youth leaders, because their existence in the midst of society is very influential, they have a lot of power and share in the development of society, provide a good example to the community by participating actively because people tend to follow the example and they will feel ashamed if they do not participate because of the high sense of solidarity.evelopment and receive and utilize the development result.

For the village administration and its apparatus should be able to carry out the mandate that has been given by the community, by carrying out the development project well in accordance with the expected, the supervision of all parties should be done to avoid deviation, but the community must maintain good relations with the village apparatus, with throw off excessive suspicion. Citizens are expected to cooperate with the village government in implementing the development, because after all the development results will be felt and used together, so all citizens also have responsibility in the development. The development of the village based on NEWS concept in Sustainability which refers to the spirit of community self-reliance in the green diamond partnership frame is a very beneficial and beneficial village development paradigm for the people of Kabupaten Banjar.

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THE TYPOLOGY OF COASTAL VILLAGES IN *KECAMATAN JABON* AND INVESTIGATING ITS GROWTH STRATEGY

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ABSTRACT

There are so many regional imbalance occured in Indonesia's development. This problem needs more intention that must be resolved if we don't want this inequality is getting worse. In Sidoarjo Regency, development disparities is also occured, especially region that far from the growth center. In Jabon district, there are 11 village from 15 village that classified into poor village. One of them is Kupang village. In Kupang village itself, there is an inequlity development happened between the village section which located on the north of Porong River and the village section which located on the south of Porong River. One of the major factor is geographical isolation which influence high costs of development. Based on the research result, *Desa Kupang* is classified into C1 type of isolation typology means it has higher accessibility into public services despite nuisance of geographical isolation. Furthermore in classifying of underdevelopment type, it classified into A2 type means it has less supporting infrastructures and services despite their adequate living standards. To solve the problems of poverty in Kupang village its necessary to implement the development of both physical and non physical. That rural development is expected to reduce rural inequality and Kupang village to become an independent village in its economics growth.

Keywords: disparities, growth strategy, rural development planning, rural poverty.

INTRODUCTION

The disparities of development in Indonesia has been bringing trickle down's effect into disparity level among region. Moreover, it has been bringing inequality gap among communities in each region. Development models and formulas which have been implementing for decades are believed causing defaults of this phenomenon. Bias of implementing development among urban and suburban, Java and non-Java, West Indonesia and East Indonesia caused by improper served of regional approach within development formulas.

Major problem of disparity is low accessibility into public services of social and economy especially existed in suburban areas, isolated regions, cross-border regions, and underdeveloped regions. Disparity among urban areas and suburban areas is associated by lower level of social and economic welfare, lower level of development growth and higher level of dependency of suburban areas into urban areas. Those are caused by limited access of

capitals, job opportunities, information, supporting technology, and low access into marketing cycle and product distribution.

Kabupaten Sidoarjo is classified into second ordo by means it closely identical into developed region criteria based on its advantageous location as closest city from capital region of East Java and primary roads were belong within region. Development acceleration is indicated by top highest of Local Government Revenue (LGR) value after Surabaya as a capital city of East Java region. However there is anomaly of development acceleration while level of disparity among east areas and west areas is sharp. Development progress within east area run faster where its primary arterial roads are connected capital region into other regions. East areas have been receiving most development priorities while west areas are less prioritized.

Acceleration of development in *Kabupaten Sidoarjo* also followed by areas with lower economic growth, which one of them namely *Kecamatan Jabon*. It associated with the highest level of poor (20,56%). From about 15 villages and districts within, 11 are classified into poor village groups which one village namely *Desa Kupang* is the highest poor level (43,68%). Public services and supporting infrastructures are limited as it geographical isolation causing its development runs slower both physical and non-physical.

Thus, based on define explanations above, the purpose of this research is investigate and elaborate more deeply about the typology of *Desa Kupang* and types of strategy that will effectively work to boost local development growth in order to accelerate local welfare.

MATERIALS AND METHODS

This research use descriptive analysis method considers on its characteristics and parameters adapted from technical guidance document namely *"Panduan Teknis Identifikasi Lokasi Desa Terpencil, Desa Tertinggal dan Pulau-Pulau Kecil"* issued by City Development of Planning Bureau (accessed through website: http://ciptakarya.pu.go.id). Mapping issues analysis is invited as follow steps to formulate of general strategies of village developments. Then the outcomes of analysis are followed up into EFAS – IFAS as applied complement tools to elaborate more deeply about most effective implementing strategy in *Desa Kupang* based on its quadran position.

RESULTS AND DISCUSSION

1. Village Typology

Typology analysis defines some parameters to classify villages based on its specific attributes there are isolation and underdevelopment levels. Classifying typology made by assessment into some specific criteria and embedded characteristics belong to *Desa Kupang* which written in guidance document namely *"Panduan Teknis Identifikasi Lokasi Desa Terpencil, Desa Tertinggal dan Pulau-Pulau Kecil"*. More details about the characteristics and classifications are represented through following table :

Table 1. Assesment of *Desa Kupang* considers its Isolation Level

No	Criteria	Quantitative Values	Assesment Criteria
Accessibiliy into public services			
1	Connecting roads among villages	Existed	2
2	Connecting bridges among villages	Existed	1
Distances/lenght into The Growth Center			
1	Center District	38 Km	3
2	Subdistrict	17 Km	3
3	Other subdistricts	0 Km	3
Geographical isolation			
1	Inland fisheries	Existed	
2	Rivers and Coastal lands	Existed	1

Source: Processed data analysis, 2016

Refers to isolated village parameters, *Desa Kupang* can be classified into C type means this village is isolated by natural geographic condition which separated from the growth centre. More details, this village inserted into C1 typological group by means it has higher accessibility into public services despite nuisance of geographical isolation.

Table 2. Assessment of *Desa Kupang* Considers Its Underdevelopment Level

No	Criteria	Assessment	Percentage
Basic infrastructure facilities			
1	Water and Sanitation	1	1 %
2	Electricity	1	23 %
3	Irrigation	3	69,08 %
Public Service facilities			
1	Economic services	1	19 %
2	Industry services	1	11 %
3	Health / Medical services	1	24 %
4	Education services	2	59 %
5	Public transportation services	2	33%
Quality of People's daily lives			
1	Quality of their living standards	2	43,68 %
2	Quality of education	1	59 %
3	Quality of production	3	9 %

Source: Processed data analysis, 2016

Refers to underdevelopment's parameters, *Desa Kupang* can be classified into A type means this village has less supporting infrastructures. In detail, it is inserted into A2 typological group by means it has less supporting infrastructures and services despite their adequate living standards.

2. Mapping Issues Analysis

Mapping issues analysis is designed to identify all contributing factors that might cause potential harm into development of *Desa Kupang*. Mapping issues analysis is conducting through assessment into contributing factors of development at *Desa Kupang*. Assessment values are given through SWOT analysis by mapping and classifying of strength and weakness factors which highest point to each factor is 4 whether lowest point is 1. More detail explanation and analysis about *Desa Kupang* represented by following table:

Table 3. Potential Development Resources of *Desa Kupang*

No	Potential Resources	Assessment Values			
		1	**2**	**3**	**4**
1	Ratio of farming lands approximately up to 72 % of total scope lands owned by village	-	-	-	√
2	Major people's livelihood (84 %) are farmer	-	-	√	-
3	Accessibility into raw materials	-	-	-	√
4	Supporting geographical contours into the potential of local economy	-	-	-	√
5	Best quality seaweed output products in *Kabupaten Sidoarjo*	-	-	√	-
6	Highly experiencing in forward inland fisheries industries	-	-	√	-
7	Hold highly technical skills in producing seaweed products and scaling up the industries	-	-	-	√
8	Build sustainable partnership with potential partners in marketing and branding products	-	-	-	√
9	Accessibility into product development and marketing	-	-	√	-

Source: Processed data analysis, 2016

Table 4. Potential Issues of *Desa Kupang*

No	Issues	Assessment Values			
		1	2	3	4
1	Serious transmission of disease attacks to village's embankments caused by uncertainty weather	-	-	-	√
2	Low quality of primary roads were belong	-	-	-	√
3	Isolation	-	-	-	√
4	Low level of land and asset ownership	-	-	-	√
5	No public transportation in connecting villages	-	√	-	-
6	Low access into education services	-	√	-	-
7	Limited accessibility into midwife services / mother and child health services	-	-	-	√
8	Insufficiency work of local market	-	-	√	-
9	Limited accessibility into stocks of pharmaceutical for health/medical treatments	-	-	-	√
10	Low quantity of medical visitation caused by geographical isolation	-	-	√	-
11	Limited accessibility into advance medical equipment and supports for health treatments	-	-	√	-
12	Low quality of education infrastructure facilities	-	√	-	-
13	Low level of education levels	-	-	√	-
14	Low level of supporting facilities in education	-	-	-	√
15	Low level of environmental health	-	-	√	-
16	Low quality of water and sanitation	-	-	√	-
17	Low accessibility into sufficient electricity	-	-	√	-
18	Knowledge insufficiency about inland fisheries development	-	-	-	√
19	Dependent into traditional equipments	-	-	√	-
20	Unskilled generation	-	-	-	√
21	Insufficiency of manufacturing industries	-	-	-	√
22	Limited access into capitals and opportunities	-	-	-	√
23	Asymmetrical information about product development	-	-	√	-

Source : Processed data analysis, 2016

3. Investigating Growth Strategy of *Desa Kupang*

SWOT quadran assessment is designed through scoring of weight value both internal and external factors, then it followed up into the scoring of rating values thus its specific numbers can be located into targeted position on SWOT quadran. Weight value represents value of each factor both internal and external. While rating value represents the value of all contributing factors and measure its influential level into the development acceleration of *Kecamatan Jabon.* More details about scoring of weigh value can be access through the following table :

Table 5. Score Component of Each Variable Influenced Development of *Desa Kupang*

Variable	Component					
	C1	C2	C3	C4	C5	C6
Geographical isolation	,194	-,206	,034	-,267	-,110	,035
Supporting weather	,190	,008	-,009	,027	-,007	-,015
Electricity	,152	,064	-,043	-,151	-,162	-,265
Water and sanitation	,195	-,039	,017	,030	-,162	-,085
Skill off-farm	-,010	,003	,027	,459	,107	-,053
Capitals	-,124	,026	-,036	,388	-,072	-,155
Supporting technology	,061	,011	-,245	,233	-,186	,186
Knowledge	,016	,343	,073	,003	-,036	-,069
Non –physical health	,017	,380	-,034	-,054	,110	,238
Physical health	,089	,015	,200	,296	,041	,142
Sustainable partnership	,054	,019	-,066	-,062	-,004	,769
Sufficient market information	-,046	-,187	,316	,025	,148	-,075
Non – physical education	-,184	,006	,014	-,030	-,005	,031
Physical education	-,162	-,062	-,002	,004	-,038	-,094

Source : Processed data analysis, 2016

According to the scoring value of rotated component matrix through all factors analysis, all score components will be summarize (see table 6) then use it as a source number to measure weigh value or interest value to each variable on SWOT analysis. Thus, the outcome of specific value can be considered in defining and investigating strategy.

Table 6. Weigh Value of Each Variable Influenced Development of *Desa Kupang*

Variable	$C1^2+ C2^2+ C3^2+ C4^2+ C5^2+ C6^2$	Weigh value
Internal		
Geographical isolation	0,037248	0,0144
Electricity	0,148319	0,0575
Water and sanitation	0,074204	0,0288
Skill off-farm	0,225777	0,0875
Capitals	0,197101	0,0764
Supporting technology	0,187348	0,0726
Knowledge	0,1293	0,0501
Non –physical health	0,217505	0,0843
Physical health	0,157607	0,0611
Non – physical education	0,602854	0,2337
Physical education	0,165095	0,0640
	2,579979	1
External		
Supporting weather	0,165842	0,1557
Sufficient market information	0,258271	0,2426
Sustainable partnership	0,427969	0,4019
	1,064807	1

Source : Processed data analysis, 2016

The result of analysis factor describes there is 6 main components influence development of *Desa Kupang* as isolated village in *Kecamatan Jabon.* Rating value is given through the level of eigen value series in each component. Eigen value presents a summary of total diverse explained by each factor and its specific accumulative percentage value at least reach 60%. Determining core variable represents variable group with eigen score > 1. (Malhotra, 1993 in Zaini Fanani, 2003)

Table 7. Rating Value of Each Variable Influenced Development Of *Desa Kupang*

No	Komponen	Nilai Eigen	Rating
1	Accessibility and Nature Condition	5,121	4
2	Utility Factors	2,113	2
3	Production Factors	1,905	1
4	Health Factors	1,510	1
5	Marketing Development factors	1,234	1
6	Education Factors	1,021	1

Source : Processed data analysis, 2016

A. IFAS (Internal Factor Analysis Summary)

IFAS is used to determine weigh value of all internal factors consist both strength and weakness factors on development of isolated village. The detail is in the following table :

Table 8. IFAS on Development Of *Desa Kupang*

No	Variable	Weight Value	Rating	Weight Value x Rating
I	***Strengths***			
I.1	Ratio of farming lands approximately up to 72 % of total scope lands owned by village	0,0638	1	0,0638
I.2	Accessibility into raw materials	0,2337	1	0,2337
Total I		**0,2975**		**0,2975**
II	***(Weaknesses)***			
II.1	Barrier of geographical isolation in forward inland fisheries potential industries	0,0144	4	0,0576
II.2	Improper physical roads support ; broken or noisy roads and deprave roads as an access into embankments	0,0575	4	0,23
II.3	Low quality of administration services and bureaucracy	0,0288	4	0,1152

No	Variable	Weight Value	Rating	Weight Value x Rating
II.4	Limited access into stocks of pharmaceutical for health treatments	0,0875	1	0,0875
II.5	Low level of supporting facilities in education	0,0764	1	0,0764
II.6	Improper quality materials of school buildings (damage)	0,0726	1	0,0726
II.7	Most of local water wells are polluted by mud deposits	0,0501	2	0,1002
II.8	Amount of generators and its workload could not fill of electricity needs	0,0843	2	0,1686
II.9	Low quantity of medical visitation	0,0611	1	0,0611
II.10	Limited access into capitals	0,0640	1	0,0641
II.11	Technological use or first hand tools in process of production	0,0139	1	0,0139
II.12	Low quality of human resources	0,0919	1	0,0919
Total II		**0,7025**		**1,1391**
Range Gap/ Difference value				**-0,8416**

Source : Processed data analysis, 2016

B. EFAS (External Factor Analysis Summary)

EFAS is used to determine weigh value of all external factors consist both potential and threat factors on development of *Desa Kupang*. The detail is in the following table :

Table 9. EFAS on Development Of *Desa Kupang*

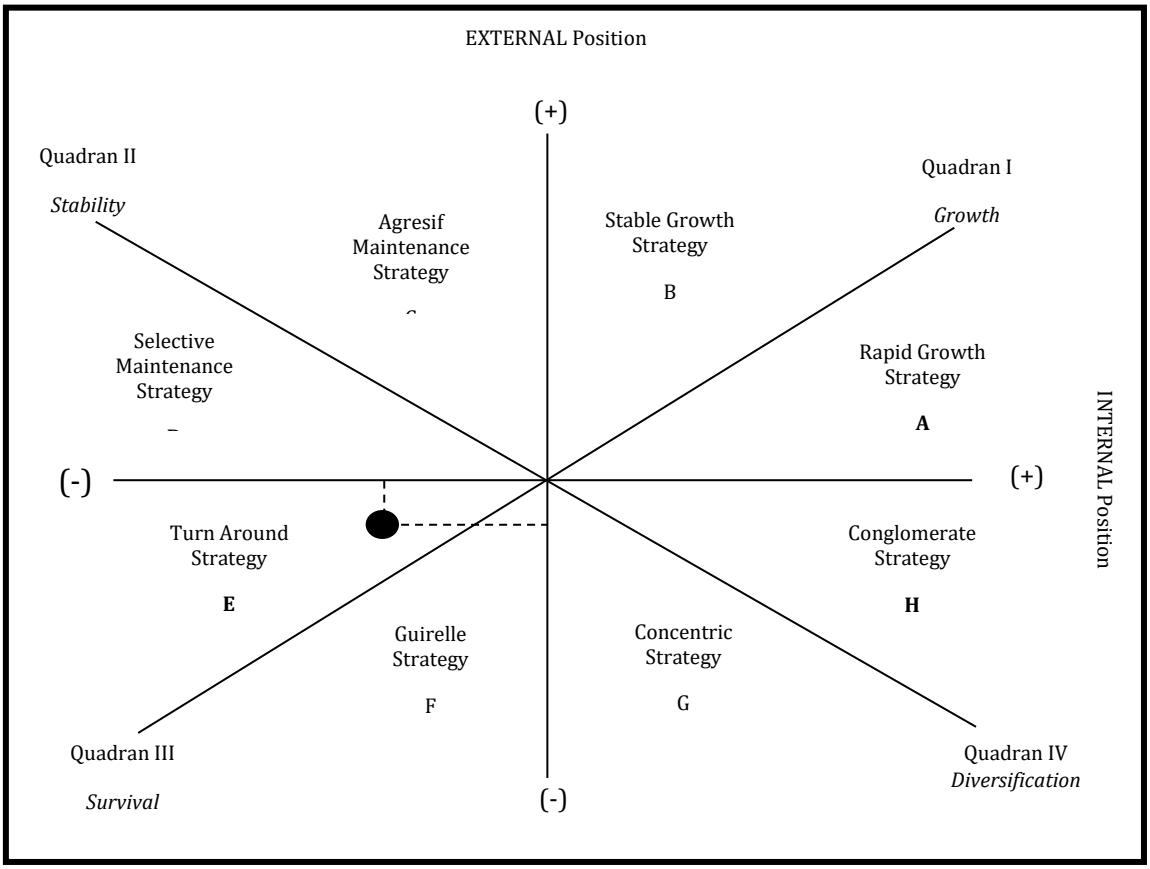
No	Variable	Weight Value	Rating	Weight Value x Rating
I	***Opportunities***			
I.1	Accessibility to expand farm products supported by proper advance marketing strategy	0,0379	1	0,0379
I.2	Gaining sustainable partnership with in production, farm product development and marketing	0,4019	1	0,4019
I.3	Government support through advance research about embankment issues and its potential diseases	0,1618	1	0,1618
Total I		**0,6016**		**0,6016**
II	***Threats***			
II.1	Uncertainty weather caused diminish quantity and quality of farm products	0,1557	4	0,6228
II.2	Limited access into market information	0,2426	1	0,2426
Total II		**0,3983**		**0,8654**
Range Gap / Difference Value				**- 0,2638**

Source : Processed data analysis, 2016

Thus, weight value and rating in each element is multiplied to value of internal factors consist of both strength and weakness factors, include external factors consist of both opportunity and threat to each element. Transmitted into graph, internal factors associated through axis of coordinate (x) and external factors associated through axis of ordinate (y).

x = Strength – Weakness
= 0,2975 – 1,1391
= - 0,8416

y = Opportunity - Threat
= 0,6016 - 0,8654
= - 0,2638



Source : Processed data analysis , 2016
Graph 1. Position of *Desa Kupang* on SWOT Quadran

Based its position on SWOT Quadran, it can be defined that *Desa Kupang* located in Quadran III by ordinate (- 0,8416; -0,2638) means it carry of survival strategy. Negative x value describes weaknesses belong to *Desa Kupang* grew higher more than its strengths. Moreover negative y value also describes the same line which threats faced by *Desa Kupang* grew more than its potential opportunities. In short words, through all assessment *Desa Kupang* can be classified into negative position. Therefore this village should maximize and scaling up its potential strengths .Thus, strategy type match is supporting survival oriented strategy. (Rangkuti, 1997)

More specific *Desa Kupang* located in E chamber means classified into Turn Around Strategy. Strategy type match belongs in that chamber is defense strategy with rotating ways, in other words mean reconstruction of existing infrastructure and public services to accelerate local development and its welfare. In general, defense strategy can be transmitted into development concept through integrating village development by integrate all potential development resources, scaling up management quality of goods and services,

quality of raw materials, production and supply chain up to product development and advance marketing strategy.

CONCLUSION AND SUGGESTION

Based on research and details analysis conducted by author, *Desa Kupang* is classified into C1 type of isolation typology means it has higher accessibility into public services despite nuisance of geographical isolation. Furthermore in classifying of underdevelopment type, it classified into A2 type means it has less supporting infrastructures and services despite their adequate living standards. After defining village typology, it can be followed up into investigating the type of development and its growth strategy which appropriate applied into *Desa Kupang*.

Based its position on SWOT Quadran, it can be defined that *Desa Kupang* located in Quadran III by ordinate (- 0,8416; -0,2638) means it carry of survival strategy. Through all assessment this village as default can be classified into negative type of village development whether all potential values and factors are growing slower than its obstacles and challenges. Stressing line in here means embedded potential values and factors that contributing into local development must be maximized. In ordinary ways, local people should apply survival oriented strategy. Moreover *Desa Kupang* located in E chamber through Turn Around Strategy. It can be applied through integrating development concept by integrate all potential development resources, scaling up management quality of goods and services, quality of raw materials, production and supply chain up to product development and advance marketing strategy.

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RURAL GOVERNANCE

THE ROLE OF EAST JAVA GOVERNMENT FOR EVALUATING THE HANDLING PRINCIPLES OF POVERTY VULNERABILITY

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ABSTRACT
Poverty is an unresolved problem, East Java Government should pay special attention to implementing a business credit program as well as program evaluation through PK2 (*Penanggulangan Kerentanan Kemiskinan* / Poverty Prevention Susceptibility) program, with poverty in East Java province of 4.78 million or equivalent 12.28% of the population of East Java. Evaluation of Poverty Reduction Program the poverty vulnerability is carried out by 1) evaluating the implementation process of Jalin Matra PK2 program, 2) evaluating success indicators of Program 3) analyzing outputs and impacts of Jalin Matra PK2 program, 4) providing recommendations for improving of Jalin Matra PK2 program and its follow-up. The provincial government's strategy in evaluating poverty reduction programs is done by identifying characteristics of target community groups, characteristics of program beneficiaries, technical requirements already implemented, the appropriateness of assistance, verification, and calculation of NPL (Non Performing Loan). NPL in technical terms see the total compensation borrowed and incoming installments, as indicators of program run smoothly or not and deserve to be continued or stopped.

KEYWORDS: Poverty, Jalin Matra Program, Evaluation, NPL (Non Performing Loan)

INTRODUCTION

Poverty is a problem that has not been resolved and still has to be a special attention of East Java provincial government. Poverty is a condition experienced by a person or group of people who can not afford to conduct their lives to a level that is considered human (BAPPENAS in BPS, 2002).

In general, poverty in East Java can be classified into 3 groups of poor people living below the poverty line. Vultured population (vurnerable) ie the population living above the poverty line but easy to fall into poverty. Population gap inequality of the number of poor and poverty between districts / cities, villages with city or gender. Based on survey results of national statistics center in September 2015, poverty data in Indonesia amounted to 27.73 million or 11.13% of the population of Indonesia, while poverty rate data in the province of East Java in September 2015 by the central body of staistik in the province of Java East sebssar 4.78 million or equivalent 12.28% the population of eastern Java

Poverty supporting program in East Java is known as "Another Road to Self & Prosperity" or often referred to as Jalin Matra. Jalin Matra is not just helping to raise the poor to prosperity, but also specifically targeting the feminization of poverty and the poverty alleviation program. The program is expected to improve the welfare of poor, women and backbone of poor vulnerable families so as not to fall into poverty due to the high external pressure.

In order to support sustainability of Poverty Reduction Program of Poverty in Jalin Matra - PK2 from 2015 to 2017, it is necessary to evaluate the implementation impact of Jalin Matra Unemployment Poverty Eradication program in East Java Province. The result of the study is expected to be a recommendation for improvement and discussion on obstacles of program implementation that has been implemented in the field. In order to support the results of this study, several objectives are formulated including: 1) Evaluating the implementation process of Jalin Matra PK2 program in accordance, 2) Evaluating the success indicators of the program 3) Analyzing the output and impact of Jalin Matra PK2 program 4) Providing recommendations in improving the program Jalin Matra PK2 or follow-up.

MATERIALS AND METHODS

Selection of research sites was conducted in a porposive manner covering 8 districts that have implemented the Jalin Matra Poverty Prevention Relief program in East Java, for the representation of four distinct sub-cultures, namely *Mataram* Culture represented by Magetan and Madiun Regencies, *Arek* Culture is represented by Pasuruan and Malang , *Tapak Kuda* Culture is represented by Situbondo and Banyuwangi, while *Madura* Culture is represented by Bangkalan and Sumenep regencies. Then randomly selected 32 villages representing the district with each respondent in each village amounted to 20 people. The analysis is further strengthened in document studies.

RESULTS AND DISCUSSION

Characteristics of Target Jalin Matra Community

The year of 2016 in Jember District total Community Groups POKMAS *(Kelompok Masyarakat)* in 2 villages identified beneficiaries of Jalin Matra PK2 Program grant aid as much as 13 POKMAS. In the research of evaluation activity of Jalin Matra PK2 Program to be carried out, the research team took 4 village samples in Pasuruan District with description of the recipient villages of Jalin Matra PK2 2015 and 2 villages receiving Jalin Matra PK2 in 2016. The research team selected four villages with characteristics the village has not been done monitoring and evaluation as much as 2, while the rest have been evaluated and monitoring, so that the sample declared have been feasible (representative) to do research.

In Bondowoso District in 2015, total number of Community Groups (POKMAS) in 4 villages identified as beneficiaries of the Jalin Matra PK2 program amounted to 40 POKMAS with a total membership of 297 RTS (*Rumah Tangga Sasaran* / Target Households). Where as in 2016 total

POKMAS in 5 villages identified beneficiaries of the grant aid as much as 35 POKMAS with a total membership of 276 RTS.

In Sampang District there are 8 targeted villages of interlinked program with 22 POKMAS and a total membership of 132 RTS. In the research that will be conducted, the research team took 4 samples of villages in Sampang regency with specifications of 1 villages that have not been monitored and 3 villages that have been monitored and evaluated. The research team selected three villages that had been monitored and evaluated so that the sample was declared as feasible (representative) for the research.

Most of the people there were livelihoods as *"Pracangan"* with the highest percentage (23.53%) and some other communities worked as farmers (17.65%), farmers (17.65%), traders (23.52%) and entrepreneurs (17.65%). The third village sample is Dharma Camplong Village where its main livelihood is as a "Fisher" with a percentage of (46.03%). While other residents have a livelihood as a trader (26.99%), farmers (9.52), entrepreneurs (12.70%), tailors (1.59%) and breeders (3.17%).

In Terosan Village that received a loan of about Rp 5.166.667,00 with the number of POKMAS of 6 and the number of members of his RTS as many as 30 people. While in Taman Village and Dharma Camplong Village receive more loan funds than Terosan Village with the amount of each Rp 15.000.000,00 and Rp 7,500,000.00.

Furthermore, in Sumenep District as an example in Pakondang Village, most of the people there livelihood as "Merchants" with the highest percentage (50%) and several other communities working as farmers (10%) and self-employed (40%). The third village sample is Lombang Village where the main livelihood is as a "Trader" with a percentage of (65%). While other residents have a livelihood as an entrepreneur (30%) and fishermen (5%). In Pakondang Village receive a loan of about Rp 3,600,000.00 with 5 POKMAS and 50 RTS members. While in the village of Prenduan and Lombang village receive more loan funds than Pakondang village with the amount of each Rp 22.500.000,00 and Rp 15.000.000,00.

For the Malang District working in agriculture 38%, 55% trade, and others 7% are still said at the ideal level of composition. Because we need to anticipate the changes physically 10 to 20 years in the future due to development. Of the average number of pokmas per village amounted to 45%, of which the number is still of ideal and able to encourage economic growth at the village level. From the amount of loan obtained by business actors an average of Rp. 1837000. This means that the amount is able to provide stimulus for business actors to continue and even expand its business in a long period of time.

Pasuruan District in 2015 year, focus in Lekok Pasinan Village is 13 POKMAS with average loan amounting to Rp1,346,154.00 and percentage of loan beneficiaries by type of business (trader = 45.45%, farming = 9.09%, self-employed = 36, 36%)

In Magetan District, there are 17% of businesses in the field of trading such as *peracangan*, entrepreneurs, shops and others, followed by other businesses such as workshops, welders only 7%. Trade will be able to boost

its business capacity if it is well integrated with the business in agriculture. From the average capacity of loans obtained by business actors is Rp. 1.277.000 is still relatively ideal if adjusted with the capacity of the business that run periodically.

POKMAS in Ngawi District appear to the people who have farming business through source of the jalin matra as much as 57%. The difference of a few percent is followed by business owners who concentrate on the trade contribution of 36%. With regard to the average loan they get Rp. 1.811.000, in which the value can be considered feasible, because if less than the value of the business actors can not move more flexible because the funds are relatively limited.

Characteristics of Beneficiary Jalin Matra Program

RTS receiver in terms of maximum age is 78 years. According to WHO (1989) age is classified as old age, this can mean the recipient of program is elderly. In contrast to Ministry of Health of Indonesia Republic (2003) stated that such age is included in advanced high risk. In program beneficiaries for a minimum age of 24 years, age condition is still productive in working age. Based on average age of program beneficiaries ranged from 47.30 years. The age categories ranged from 41 to 50 became the dominant part of program beneficiary respondents. According to the Ministry of Health (2003) that age in middle age, which can be interpreted towards the elderly. Dominant category composition subsequently in the 31-40 age range, indicating that productive age generally dominates in receiving program assistance. Expectations with assistance provided in the still productive age of the RTS can be managed as business units in the RTS livelihoods sources.

Distribution of sex for recipients of the intermediate Jalin Matra PK2 program is male. The dominance of male recipients rather than women occurs because RTS of this program is given directly to each head of the family as responsibility of the beneficiary.The number of family dependents in the target area of PK2 Partner Program is generally 3-5 people in one family. This condition becomes the reality that RTS of this program is generally obtained by poor households with a considerable amount of family dependents.

Most of the respondents were educated to the elementary level. The level of education owned by the respondent is an indicator that can be used as a reference to measure a person's ability level in terms of capability to be able interpretation any information it receives. The main work of the target respondents ranging from services, farmers, traders, fishermen, ranchers, and others. The main job in the field of service is quite dominating as a source of income RTS in the target area.

Sources of income from side jobs among the respondents are land brokers, solar retailers, village apparatuses, fishermen, construction laborers, farm laborers, livestock, artisans and motorcyclists. Interfaith program as part of efforts to alleviate poverty can be the basic capital of targeted respondents to improve the family's economic level. The highest receipt of targeted respondents is Rp.8.580.000, on other hand the lowest acceptance of Rp. 750,000.

Technical Terms

Jalin Matra PK2 program in this case there are three technical requirements that must be done that is the program socialization activities, pre *rembug warga* / consultation of citizens, consultation of citizens, and evaluation consultants. Generally, the target area of Jalin Matra PK2 program conducts socialization activities so that the targeted community can know with the related classes of program implementation.

Pre-assembly activities of almost half of the target area have done this activity. Pre-Village Participants include RTS candidates obtained from village data for poor households. This activity was also attended by an approved companion, Bumdes (*Badan Usaha Milik Desa* / Village Owned Enterprise), village officials, Pokmas. This evaluation activity includes the RTS beneficiaries of programs ranging from honesty, liveliness, to feasibility. Evaluation also provides input related to guidance and direction for program implementation.

Participation for village consultation activities is followed by local village apparatus, program beneficiaries, community representatives or community leaders, Bumdes officials, and program counterparts. Various parties provide input and related direction in the implementation of Jalin Matra program there are various obstacles and challenges encountered during the program is running.

In general, target RTS receiver program support was satisfied with the performance of the village counselors in the field. This indicates that the village counselor has implemented the capacity in accordance with the program implementation guidelines.

The ideal village counseling criteria according to RTS target beneficiaries, need to have responsibility, patient, active and skillful, good, nurturing, fast management, willing to explain in detail, have good communication skills, understand the field of business, diligently give direction and descend field, can write and understand accounting of budget report and bookkeeping. Various activities performed by assistants such as RTS Survey, assisting business development, assisting loan collection, field control, facilitation and guidance, providing further loan recommendations and overseeing business issues.

Conformity Support

This program gets a budget increase to Rp 103 billion with a target of 30,890 RTS in 2017. Increasing budget allocations each year will certainly push poverty alleviation efforts intensively in the field. This program is managed by the Community Empowerment Board / *Badan Pemberdayaan Masyarakat* (BAPEMAS).

At the Household Targets Program beneficiaries can apply for a maximum capital assistance of Rp 6,000,000, while the lowest capital assistance is Rp 1,000,000. The proposed capital assistance by RTS will be verified by the management team to evaluate the prospect of the business feasibility. Capital assistance is provided with a 1% interest payment. RTS get capital assistance in the program Jalin Matra PK2 realized maximum of Rp 4,000,000. even, from the filing of Rp 1,000,000, only realized Rp 100,000.

The loan is given a maximum of Rp 6,000,000, as an aid for capital with a 1% interest rate. Various fields occupied by RTS include trade, agriculture, animal husbandry, services, and other fields. In general, the field of trade dominated the form of business developed by RTS from Jalin Matra PK2 program fund. The maximum monthly installment amount is Rp 2,300,000. While the minimum number of installments returned each month amounting to Rp. 108,000. Average return on total installment of beneficiary RTS is Rp 233,800.

The accuracy of RTS in paying installments is generally in accordance with the provisions. Some RTS have not been exact in paying the installment of funds. This of course resulted in the turnover of funds Jalin Matra PK2 Program not running properly, to be borrowed by other RTS.

Some of the RTS are doing delinquent up to 8-10 times. This of course can make the existing funds circulation becomes irregular. The way that is done so that RTS can immediately perform payment installments and orderly administration that is by imposing sanctions in arrears.

Facts in the field indicate that of 9 districts studied by team, the area that causes the largest arrears is in Pasuruan in 2016 is the contributor of RTS who experienced delinquent payments of 8-10 times. While the districts that experienced payment Jalin Matra PK2 Program is Magetan and Bondowoso District.

Verification And Assessment

The village facilitator in Jalin Matra PK2 program has several obligations. Some of the activities carried out include starting from verification of RTS, business feasibility verification, Pokmas Meeting for loan distribution, and other assessment.

There was an increase in business turnover after following the program of Jalin Matra PK2. Increased turnover of Rp. 3. 000,000, quite significant on the RTS of this program. Increased business turnover can be used to meet RTS household needs, additional capital for existing business development, and even additional business capital.

Increased business turnover can be used to meet RTS household needs, additional capital for existing business development, and even additional business capital. Increased turnover has the highest percentage of trade and agricultural products that have significant contribution.

Calculation of NPL (Non Performing Loan)

Jalin Matra PK2 conducted monitoring in Bondowoso District in 2015 there are total customers 196 people is divided into 100 people Wonosari Village and 96 people Dawuhan Village. Total loan amount is Rp 175.000.000,00. Whereas if we match with total installment and total installment realization is equal Rp 187.500.000,00 means that there is no problem loans which is reflected through the calculation of NPL of Bondowoso Regency whose value is equal to zero (0).

While in the calculation of NPL Bondowoso District in 2016 there are a total of 242 customers with details of 100 people Wonosari Village Grujugan

District, 68 people Jurangsapi Village, and 74 people Gunung Anyar Village Tapen District. The total loan is Rp 381.000.000,00, if we compare the total installment and the total realization of the same installment is equal to Rp 412.600.000,00. That is, from the calculation of NPL Bondowoso District in 2016 there is no problem loans, result the NPL Bondowoso District is 0%.

The calculation analysis of NPL of Magetan District is also divided into 2015 and 2016. In 2015 the calculation of NPL of Magetan Regency is 0%, meaning that there is no problem loans conducted by monitoring and evaluation by field team. On total loans amounting to Rp 125,000,000.00; there is the same amount of refunds of agreement and the realization of Rp 143,000,000.00. So the calculation of NPL of Magetan District is equal to 0, the interpretation is that there is no problem loans in Jalin Matra PK2 program in Magetan District.

In 2016 after we analyzed the calculation of NPL of Magetan District, it was identified that out of total customers of 275 people with total loan of Rp 343,000,000.00 there are total installment which differ between total agreement (Rp 379.836.000,00) with total realization (Rp 367.076. 000,00) or if calculated with NPL amounted to 3.36% meaning that there is problem loans amounting to Rp 12,760,000.00.

In Sampang District there are 2015 in both villages there are total customers of 71 people with total loan of Rp 175.000.000,00. While to know the number of problem loans when we see the value of NPL Sampang District in 2015 is 12.16% means there is a difference between total agreement with total realization of Rp 22.550.000,00. This is because in addition to the numerous variations between types of work, it is also 'perceived' by the borrower's lack of lending, which has an impact on business expansion mostly pioneering the business from scratch (Appendix on the questionnaire).

In 2016 in 4 villages in Sampang District which is the target of monitoring and evaluation of Jalin Matra PK2 program there are total customers of 99 people with total loan of Rp 356,500,000.00. While the identification of problem loans that is reflected by calculation of NPL in Sampang District is 1.48% meaning that there is little difference between total installment of equipment and total realization of Rp 5.690.000,00.

While in Sumenep District in 2016 NPL calculations decreased in 2 villages, namely 45.45% from 58 customers and total loan of Rp 180.000.000,00. This is certainly not much different based on the field team that assesses based on the respondents and bookkeeping data obtained in the field. Sumenep District reflects the description of the committee and the recipient of the loan is less ready in the implementation of technical or can be said sustainability program Jalin Matra PK2 there less feasible.

In Malang District In 2015 and 2016 conducted at the same place is known that the calculation of NPL of Malang District in 2015 amounted to 26.47 with the number of credits mancet of 18 customers. While in 2016 there is a calculation of NPL of Malang District equal to 23,88% which means there is inconsistency between total installment plus interest (agreement amounting to Rp 130.450.000,00) with total installment received amount Rp 99.295.000,00. There is a difference between two of them amounting to Rp

31,155,000.00 due to large variation between the business type of customer data and the 'lack of' loan assistance from the Jalin MAtra PK2 Program.

In Pasuruan District In 2015 there is a total loan plus interest (Total loan agreement) of Rp 16,500,000.00 which is allocated for a total of 67 RTSs with details consisting of 11 POKMAS who become facilitators. While the calculation of NPL in Pasuruan is 0%. This means there is no difference between the loan according to the agreement with the total return.

While in 2016 there is a significant difference of NPL calculation compared to 2015, that is equal to 26,43% consisting of 60 RTS that happened problem loans from total RTS become customer equal to 119 RTS. Meanwhile, when viewed from the difference of total repayment of installment loan with total return is Rp 7,654,000.00. This is due to the additional loan from Rp 16,500,000.00 to Rp 28,960,000, making the 'assumption' of the committee or the lending board as in 2015, ie there is no problem loans.

In Ngawi District the total number of customers in Soco Village, Jogorogo Sub District is 53 people. Of the total customers there is a total agreement in installments amounting to Rp 88,550,000.00, while the total installment in accordance with the realization is Rp 88.550.000,00. From the data table we can see that the calculation NPL of Ngawi is 0% means there is no problem loans contained in the Ngawi District.

The calculation of NPL in Jember District is explained through Mumbulsari Village, Mumbulsari District with difference of 2015 and 2016. In 2015, the amount of NPL is 21.93%, meaning that from total of 97 people there are difference of total installment agreement with total installment realization equal to Rp 23.395.000,00.

While in the year 2016 an increase in the percentage of NPL calculation Jember District amounted to 43.92% meaning of total borrowers as many as 97 people there is a difference in total installment agreement with total installment realization of Rp 57.970.000,00. Jember District reflects the description of the committee and the recipient of the loan is less ready in the implementation of technical or can be said the continuity of program conducted Jalin Matra PK2 there less feasible.

CONCLUSIONS AND SUGGESTION

Conclusion

The process of implementing Jalin Matra PK2 program in the preparation stage of almost all villages 85% carried out the socialization process in both the provinces and districts as well as the villages. All villages (100%) also established BUMDes, identified potential, clarified and classified RTS and built POKMAS and conducted technical guidance.

For indicators of program success, on the aspect of target accuracy for the program in 2015 there are still households that have not met the criteria as much as 15%, while for the year 2016 by 10%. This happens because the assistance done after the disbursement is not done continuously so the aid money is not all spent on business but is used for consumption purposes. Meanwhile, for a return rate of 78% RTS returns, 6% 1-4 times delinquent, 5-7 times 5%, and 8-10 times at 11%. The reasons for delinquency include the

cessation of business and from the beginning RTS efforts are not potential to be developed. Overall NPL for the program interlinked PK2 2015 by 18.78% while for the year 2016 of 20.76%. This bad credit was not only caused by the business condition of RTS but also the activity of the management in collecting the installment, because some of RTS in arrears were caused by mutual waiting between POKMAS and BUMDes management.

Output and impact of the program on RTS revenue by 73% RTS increased in revenue by an average increase of Rp. 722.833. Meanwhile, with participation in the RTS program has a new network for joining the group.

Suggestion

Based on the above conclusions, we can formulate the following recommendations:

- The business feasibility proposal should be done per RTS not per POKMAS because the member RTS effort is usually different. Therefore, guidance improvements can be made to citizen pre-consultation guidelines, identification of potential and guidelines for proposal submission and evaluation.
- RTS businesses usually have small receipts with finances mixed with households so the assistance is absolutely necessary. In addition, improving the performance of BUMDes management in collecting installments in RTS is very important as well as increasing the role of POKMAS.
- Need to be clustered / classified business type so that it can be constructed thematic POKMAS that have the characteristics of the same business or who have a close relationship. In addition, it is necessary to consider the distribution of individual assistance for difficult villages to establish POKMAS.

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RURAL ENVIRONMENT

RURAL-URBAN MIGRATION AND IMPACT ON PADDY PRODUCTION:
Evidence from West Sumatera-Indonesia

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ABSTRACT

West Sumatra is one of the provinces with high levels of rural-urban migration. Minangkabau as the largest ethnic in this area has long been known to have high mobility levels. Thus migration has become a trademark inherent in this ethnic. Cultural factors become one of the drivers of the population to migrate. This paper offers an overviews of the impact of rural-urban migration on paddy production. For the people of West Sumatera, this commodity is important. In addition to basic food staples, the level of needs is also high. Due to the level of rice consume population of West Sumatra is greater than the national average. So keeping and increasing the availability of paddy becomes a challenge for the agricultural sector in West Sumatra. Using primary data generated through paddy farmer households survey in three villages, the effects of migration on paddy production is estimated by using a two-stage-least-square (2SLS) regression.

The results suggest that initially increasing remittances lead to negative effect on paddy production as less labor is available for household paddy cultivation. However, remittances may lead to increase input paddy production such as Sp36 fertilizer. An important finding from this study is migration leads rural household to diversification domestic resources with decreasing on farm activity and increase non-farm activity. Thus due to agriculture is still the major sector of employment and livelihood for rural household, improving this sector is the utmost importance for rural development.

Keywords: migration, agriculture, rural, paddy production

INTRODUCTION

Agriculture is an important sector in West Sumatera development, unsurprisingly around 37.55% of the population depends on livelihoods in this sector. The share of agriculture in Regional GDP fell from 23,86%, where 12,4% is the contribution from food crop sub-sector (BPS Sumbar, 2014). Paddy peasant household is the biggest group in food crops sub-sector whilst 90,42% and only 9,48% another food crop. This data further strengthen the important role of paddy farming in supporting development in this area.

The agricultural sector is also the largest labor absorber. However, labor productivity in the agricultural sector is still lower than in the urban services, manufacturing and construction sectors. In addition, the agricultural sector

is challenged by several pressures. Such as land degradation and conversion , irrigation, global climate change, unskill labor, and an increase in the rate of rural-urban migration, cause the agricultural sector to be less attractive to young people. Rural-urban migration flows increased rapidly over 4% per years, bring to pass Indonesia one of the fastest moving countries in the world. World Bank was argue, in years 2025, as many as 63% of the total population of Indonesia is expected to live in urban areas, an increase of about 10% from 2012 data which has reached 52% (World Bank, 2014).

As a consequence of the process of economic development, the activity of rural-urban migration is indeed a common phenomenon in developing countries. Moreover, the geographical condition of Indonesia as an archipelago country, causing migration activity cannot be separated from the life of the Indonesian population. Rural-urban migration flows are predominantly whitin provinces and inter-provincial in Indonesia. These include the people of West Sumatera.

The population of West Sumatra, especially the ethnic Minangkabau has long been known to have high mobility levels, this activity called *merantau*. The habit has been practiced for generations, institutionalized and cultured. So migration is an integral part of the life of the Minangkabau people. There is an idiom that half of the population of West Sumatra live outside the region. For Minang community , migration is not just about leaving the land of birth. But migration is a rite de passage for ethnic Minang especially men to seek knowledge, experience and seek glory in order to self-improvement, family and, hometown (Naim, 1979).

At the first time, migration wa limited only on the regions beyond the borders and belong commuter or circular. Recently Minangkabau people are found throughout all the province of Indonesia and stay in destination areas permanently. Several empirical studies show that Minang migrants have a high level of concern for their families, people and regional development. According to Murad (1978), migration does not appear to reduce kinship recognitions within the kinship and family system. Although migrant stay permanently, they can transfer the remittances for family left behind. In addition, the contribution is not only for family, but also for hometown. Similar with Huri (2006) stated that in general migrant Minang has a high spirit of philanthropy. Such contributions may be made either individually or by migrant organizations.

Clearly , West Sumatera is an interisting province to study the relationship between rural-urban migration and paddy production. The position of rice considered by the ethnic Minang is higher than other foodstuffs and the high level of rice consumption of the population causes the demand for rice is still high. So that the agricultural sector is still an important part of the economic structure of West Sumatra.

The objective of this paper is to assess the impact of rural-urban migration on rice production of household left behind in West Sumatera. It tests the hypothesis of the New Economics of Labor Migration (NELM) stating that migration is judgment between individu and family as a strategy diversification to cope the risks. The results of this paper are expected to

improve rice production, according managing remittances from migrant or migrant organizations and contribute to rural development againts the background of high rural outmigration.

LITERATURE FRAMEWORK

Several previous empirical studies have shown that migration can have a negative or positive impact on agricultural production. The negative impacts of migration on food availability can be seen from changes in the behavior of labor allocation and household production of food farmers. According to Rozelle, et.al (1999) the loss of labor due to migration has an impact on the decline of corn production in China. Similar results are presented by Maharjan (2012); Taylor and deBrauw (2003) and Aryal (2004) who found a negative relationship between migration and agricultural production. Although households hire labor, they are unable to substitute for the loss of family labor due to migration (Aryal, 2004). Refer to Miluka et al (2007) that the decreasing relative importance of agricultural sector is a pervasive phenomenon of economic development which often entails sizeable population movements out of rural areas.

Furthermore, migration causes a shift in farmer activity. Brad (2007) argues that migration has shifted the activity of farm households into the livestock sector. Studies in rural Albania by Miluka et al (2007) and McCarthy et al (2006) found that out-migration negatively affects traditional farming activities. Jokish (2002) and William (2007) say migration has an impact on decreasing interest in agriculture, the changing socio-cultural order in conserving agriculture that results in stagnation in the agricultural sector. Remittances encourage the emergence of the "Moral Hazard" problem because of income guarantees to be a disincentive for households to work in the fields, debilitate enthusiasm in the agricultural sector especially in need of physical strength. On the other hand, Sifelani, T (2009), Katz (2003), Richard and Black (1993) and Schmook (2008) revealed that migration breeds "feminization of agriculture" because of increased responsibilities, the number, and timing of women, to work at home and in the fields.

A number of studies also have provided empirical support to the positive impact of remittances on agricultural productin. Nonetheless, positive effects of migration commonly encountered are the role of remittances in increasing income and reducing poverty. (Adam and Page ,2005), World Economic Outlook (2005), Gupta et al (2009) and Acosta et al (2007). Studies in 74 low-income countries show that an additional 10% of remittance earnings decreased 3 , 5% of the poverty of the household of origin (Adams and Page, 2005). Gray (2009) reported that migration and remittance positively affected small-scale agriculture in the Southern Equadorian Andes.

As a capital transfer, remittances can improve the welfare of farm households (Black.R, 2003). Ratha (2003) further states that in developing countries, remittances not only increase household welfare levels but also have multiflier income effects. Because most of it is spent on consumer goods. William (2007) also reported that remittances can reduce poverty and increase consumption because one of the motivations for migration is to

increase income and diversify livelihoods to reduce the risk of market failure. So migration has helped in improving household welfare and food security.

The positive impact of migration is also found in several regions in Indonesia. Remittances sent migrants are a source of income for rural families in Grobogan District (Rahmi and Rudiarto, 2013). Similar findings are found in the results of the Entus (2011) study on 14 villages in West Java , indicating the positive impact of rural-urban migration on household income. Households receiving remittances generally allocate mostly for consumption and home investment (Arief, 2014).

METHODS OF RESEARCH

The data used in this study come from paddy farmer household survey questionnaires in Sulit Air village in Solok District, Sungai Tarab village in Tanah datar District , and Koto Baru village in Padang Pariaman District. The respondents of the research were that paddy farmer household. Primary data from a total of 238 migrant and non-migrant peasant paddy households was collected from April to Juli 2017. A structured questionnire was developed for the paddy farmer household survey such as demography, household size, labor allocation (on-farm, off-farm, and non-farm), agriculture production, livestock , the number of migrants. It also has data on incomes (sum and sources, government subsidies, remittances, migrant organization grants and others) . For in-depth information key informant interviews were carried out. Additionally, discussions with government officials and ethnic leaders.

In this study, the built model is part of the 57 equations model of household economic behavior of paddy farmers. The effects of migration on paddy production are built from 16 simultaneous equation models. It consists of 11 structural equations and 5 identity equations. In general parameter estimated by using a two-stage-least-squere (2SLS) regression with instrumental variables. Remittances is a determinat of impact migration on paddy production. In order to analyze the impact of rural-urban migration on paddy production, the predicted migration variable is included as an independent variable in the following regression formulas:

$$TKDLP = a_0 + a_1LLP + a_2UPHL + a_3PM + a_4TKDWP + a_5JRT + a_6DRT + \mu_1 \quad (1)$$

$$TKDWP = b_0 + b_1BP + b_2BLP + b_3PM + b_4UKK + b_5TKDLP + b_6PDI + b_7DRT + \mu_2 \quad (2)$$

$$TKLLP = c_0 + c_1LLP + c_2UPHL + c_3KP + c_4TKDRT + c_5BLP + c_6DRT + \mu_3 \quad (3)$$

$$TKLWP = d_0 + d_1TKDWP + d_2SP36 + d_3KP + d_4LLP + d_5DRT + \mu_4 \quad (4)$$

$$TKOFF = g_0 + g_1UPHL + g_2PM + g_3JT + g_4YT + g_5DRT + \mu_5 \quad (5)$$

$$TKNF = h_0 + h_1UPHL + h_2TKOFF + h_3KUP + h_4PM + h_5ET + h_6PDKK + h_7DRT + \mu_6 \quad (6)$$

$$BP = i_0 + i_1HBP + i_2BSAPRO + i_3ELL + i_4KP + i_5LLP + i_6DRT + \mu_7 \quad (7)$$

$$UREA = j_0 + j_1HUREA + j_2BSAPRO + j_3LLP + j_4KP + j_5EENRG + j_6DRT + \mu_8 \quad (8)$$

$$SP36 = k_0 + k_1LLP + k_2BLP + k_3KP + k_4BP + k_5EENRG + k_6DRT + \mu_9 \quad (9)$$

$$QP = l_0 + l_1LLP + l_2TKTP + l_3KP + l_4UREA + l_5SP36 + l_5DRT + \mu_{10} \quad (10)$$

$$SP36 = o_0 + o_1HSP36 + o_2LLNP + o_3BLNP + o_4BSAPRO + o_5KP + o_6EENRG + o_7DRT + \mu_{11} \quad (11)$$

$$BBP = HBP * BP \quad (12)$$

$$BUREA = HUREA * UREA \quad (13)$$

$$BSP36 = HSP36 * SP36 \quad (14)$$

$$BTKP = (TKDLP + TKLLP) * UPHL + (TKDWP + TKLWP) * UPHW \quad (15)$$

$$BPP = BBP + BUREA + BSP36 + BTKP \quad (16)$$

Overall, the previously of simultaneous equation models was identified and clearly overidentified. In terms of theory econometrics, it has provided satisfactory results for estimates of the sturtural parameters with Two-Stage Least Squares method.

RESULTS AND DISCUSSION

Characteristics of the Paddy Farmer Households

Paddy farmer households are defined as those households where the head's main cource of income is from paddy cultivation. Drawing on this Figure 1, that Koto Baru village has a higher percentage of household migrants compared to the villages of Sungai Tarab and Sulit Air (82% versus 56% and 73%).

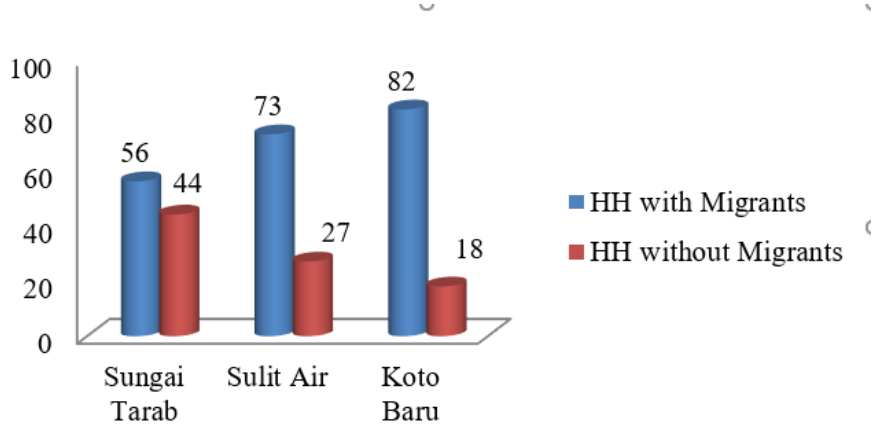

Figure 1. Distribution of Paddy Farmer Household in Three Villages

Of the total migrant households in Koto Baru had average three member migrate and in Sungai Tarab and Sulit Air had two. Koto Baru have higher rates of migration than others. This is suggest to be related to the geographical conditions of hilly villages and valleys causing less developed paddy farming. Ownership of migrant household paddy land in Koto Baru village is relatively smaller compared to Tarab and Sulit Air River (0.18 hectares versus 0.60 and 0.48). An important result of this study is that land tenure rates are thought to be one of the drivers of rural populations in West Sumatra to migrate.

Paddy farmer household with migrants have a somewhat older head of household (57 years versus 51) but with on average less education (7,67 years versus 8,93). Land asset household without migrant is much wider than household with migrant (0,61 hectares versus 0,43), but no difference in number of livestock. Types of ruminant livestock (cows, Buffalos or sheep) owned by household migrants 1 - 11 tail , whereas in household without migrant to 1-8 tail.

In addition to working in the on-farm sector, rural farmer households allocate domestic resources in off-farm and non-farm activities. This

diversification of resources is done by farmer households in order to maximize the value of labor returns (Polzin and McDonald, 1971), increase income, welfare and reduce risk (Yigiong, 2015). For all types of work, the domestic labor allocation of household migrants is smaller than non migrant (203,87 person workers versus 330.65). Hired labor in household migrants for paddy farming more than non-migrant households (84% versus 81). This phenomenon is a common finding in rural areas today, the rapidly urban industrial and service sector has encouraged many agricultural labor migrants to choose. The implication , supplying labor for agricultural is more from hired labor. For example, in Bojonegoro, the fulfillment of 66 percent of the agricultural sector's labor needs comes from outside the family (Andri, 2014). While Giesbert (2007) reports that migration activity in kenya has increased labor demand for leases by 11.4 percent.

Evidence was found that migration reduces the use of household male labor and increases both hired male labor and household female labor. This results reveal an increasing feminization of agriculture as a result of rural-urban migration being male dominated. In household with migrants, the allocation of female labor is slightly higher than male labor (5,97 person working hours versus 4,76), and this phenomenon does not occur in household without migrants. The results of this study are in line with the findings of some researchers including Chang et al. (2011) in China; Maharjan et al (2010) in Nepal; Sifelani (2009); Katz (2003) and Richard and Black (1993) explaining that migration has increasing "feminism" in agriculture. King and Vullnetari (2003) emphasized that there has been substantial reallocation of labor within the household, notably women and teneegers work longer hours to compensate for lack of male labor due to migration.

The average total household without migrant income (Rp 43,496,096 / year) is greater than a household with migrants (Rp 30,598,119 / year). This is consistent with Huy and Nonneman (2016), that households with a larger income tend to have fewer migrant members. In this context, the household tend to decide in migration to improve better standard living conditions. Total revenue from on-farm activity for approximately 33.9% of the total household income of paddy farmers. The average income from on-farm activity on a household with migrant is Rp. 10.376.413 / year while the household without migrant reached Rp. 14.783.821 / year. The sources of income that contribute substantially to the total income of the household with migrants are from on-farm activity, while household without migrants come from non-farm activity. In other words in household with migrant, paddy production is still the main source of income. While in household without migrant there has been a shift of domination of income source from on-farm to non-farm activities. Finally, an important finding is that a more diversified household income, reduce desire to migrate.

EMPIRICAL RESULTS

Labor Allocation Behavior

The results of Appendix 2 show that the number of farmer household members migrating (PM) is not significant influence of labor household

allocation in paddy production, neither of male labor and female. The behavior of the use of labor household significantly influenced by land size (LLP), female labor household allocation (TKDWP), household size (JRT) and type of household (DRT). The negative sign of the parameter of type of households (DRT) indicates that there is a tendency for the use of labor in household with migrants to be smaller than household without migrants. Not surprisingly, this is the result of the lack of households labor within migrant households.

On the contrary, hired labor equations is significantly influenced by remittances. It means that increase remittances may impetus farmer households ability to hiring labor. Presumably it sign that the loss of household labor due to migration compensated by the potential income gains deriving from migrants remittances. Nonetheless, this results only prevailed on hired male labor , either of female.

Futhermore, the lack of households male labor due to migration apparently influence the use of off-farm labor and non-farm labor. Migration reduce the use of both the use of off-farm and non-farm labor on household with migrants. However, the negative coefficients of type households emphasized that the household with migrant use of off-farm labor and non farm less than household without migrants.

Production Behavior

The parameter estimation results of the impact of rural-urban migration on paddy production is described in appendix 1. Production inputs analyzed in this research were paddy seed, labor, Urea and Sp36 fertilizer. The variables that influence the use of paddy seed are seed price, seed subsidy and land area. Remittances have no effect on the use of paddy seeds. There is no difference in the use of paddy seed between migrant and non migrant households.

The next inputs production is fertilizer. Urea fertilizer is influenced by the price of urea, land area and remittance. There are differences in the behavior of urea fertilizers between migrant and non migrant households. The results of this study indicate the positive role of remittances in increasing investment in the agricultural sector. However, the effect of remittance does not appear on SP36 fertilizer use behavior. Influential variables are the area of land and the use of other inputs of production.

The next is the results of the analysis of the behavioral model of paddy production. The value of determination coefficient shows that 84 percent variances of paddy production behavior can be explained by land area variable (LLP), total labor of paddy (TKTP), remittance (KP, urea use (UREA), use SP36 (SP36), and dummy of household type (DRT). The variables simultaneously affect the behavior of paddy production significantly at the level of confidence less than one percent.

Partial test results show that the variables significantly affect the land area, fertilizer Sp36 and submissions. Sp36 land and fertilizer have significant effect on rice production. This result is similar with research by Hardono (2012) which states that rice production is influenced by Sp36 fertilizer and land, but the use of labor and urea fertilizer has no significant effect.

The reason for the total labor and urea fertilizer has no significant effect on rice production is suspected because of other factors outside model is stronger that affect it. As Eicher and Staatz (1990) point out, productivity differences can be caused by non-technical factors outside of conventional production factors (land, employment and capital) such as the contribution of new technologies, human resources and institutional innovation.

An important finding of this research is that the remittances variable have a significant and negative sign. The negative sign of the parameter illustrates the tendency that remittance flows have an impact on the decline in rice production in areas with high levels of migration. Several previous empirical studies reported similar findings. Among them is Tuladhar et al (2014) study which found that migration negatively impacted rice production in Nepal. Each increase of one member of the migratory household causes a decline in rice production of 163 kg / hectare. The coefficient of remittance is negative, it is estimated that the loss of production can not be compensated by the remittances received. The proportion of remittances used for investment in the agricultural sector is still relatively smaller compared to other allocations.

Some empirical evidence found that remittances received by households in rural origin were used for consumption. Almost 80% of remittances are used for daily consumption. Huy and Nonneman (2016) in Vietnam, Jokisch (2002) in Ecuador Canar and Semyonov-Gorodzeisky (2008) in the Philippines also found the fact of the migratory effect on the decline in agricultural production.

According to Maharjan et al (2012) the negative effect of migration on agricultural production is due to the remittances received by rural households not being used to increase production such as buying fertilizer. While Huy and Nonneman (2016) argue the impact of reduced labor availability due to migration is the cause of the decline in agricultural production.

In addition to these reasons, community characteristics and customs can also influence paddy production performance. For the Minang community in general, paddy farming is done only for subsistence purposes. The agricultural sector is still considered a marginal job. That's why about 95 percent of Minang migrants' jobs are trades, employees and craftsmen, while agriculture is only 5-7 percent. Reinforced by urban election as a wandering destination that reaches 92 percent while rural is only 8 percent (Kato, 2005). Unlike the Javanese who still choose rural areas as the destination of migration, so many found Javanese communities living in remote areas of plantation or agriculture in West Sumatra.

Based on the description, the migration activity of the Minangkabau tends to decrease the participation of peasant households with migrant in farming. Cultural factors and customs assumpted driven by this factors. But there is no difference in the behavior of rice production between households with and without migrant. This means that the decrease in the number of residents due to migration not only affects households with migration but also to households without migrant.

CONCLUSION

In this paper we shows that initially increasing remittances lead to negatif effect on paddy production. Suggested it impact of less labor is available for household paddy cultivation. However remittances may lead to increase input paddy production such as fertilizer. The results also suggest that there is an increasing feminisation of the agricultural sector, female labor allocation more higher than male in household with migrant. This condition not occur in household without migrants.

An important findings from this study is migration leads rural household to diversification domestic resources with decrease on farm activity and increase non farm activity. According to this results have some highly relevant policy implication. Thus due agriculture is still the major sector of employment and livelihood for rural household, improving this sector is the utmost importance for rural development. Reallocation contribution from migrant organization on agricultural sector is also important, considering that Minangkabau migrant is generally very high.

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Appendix 1. Results of Estimation of Behavioral Parameters of Labor Behavior

Endogen ous Variables	Exogenous variables	Parameter Estimates	Standar Error	t-Test	Pr > |t|
TKDLP	Intercept	-6,46523	3,953992	-1,64	0,1034
	UPHL	0,000071	0,000049	1,44	0,1513
	PM	0,607267	0,501046	1,21	0,2268
	LLP	4,741181	1,121811	4,23	<.0001
	TKDWP	0,805283	0,204403	3,94	0,0001
	JRT	0,762341	0,296315	2,57	0,0107
	DRT	-2,69697	1,588491	-1,7	0,0909
R^2	=0,20891	F-Hitung	=11,43	Pr>F	=<.0001
TKDWP	Intercept	9,018922	2,524152	3,57	0,0004
	BP	0,005962	0,014606	0,41	0,6835
	BLP	8,03E-10	1,476E-07	0,01	0,9957
	UKK	-0,06403	0,034087	-1,88	0,0616
	PM	-0,16056	0,353265	-0,45	0,6499
	TKDLP	0,260989	0,08704	3	0,003
	PDI	-0,22543	0,110962	-2,03	0,0433
	DRT	0,967051	1,110112	0,87	0,3846
R^2	=0,06689	F-Hitung	=3,43	Pr>F	=0,0017
TKLLP	Intercept	18,62818	15,78057	1,18	0,239
	LLP	53,59035	4,359949	12,29	<.0001
	UPHL	-3,07E-06	0,000186	-0,02	0,9868
	KP	1,105E-06	6,384E-07	1,73	0,0849
	TKDRT	-0,03749	0,016588	-2,26	0,0248
	BLP	8,038E-07	6,928E-07	1,16	0,2471
	DRT	-5,2195	4,906877	-1,06	0,2886
R2	=0,472	F-Hitung	=36,31	Pr>F	=<.0001
TKLWP	Intercept	7,097094	2,836263	2,5	0,013
	TKDWP	-0,12665	0,362974	-0,35	0,7275
	SP36	0,026308	0,020095	1,31	0,1918
	KP	1,086E-07	3,082E-07	0,35	0,7249
	LLP	24,84391	3,23456	7,68	<.0001
	DRT	1,098394	2,321041	0,47	0,6365
R2	=0,4761	F-Hitung	=44,08	Pr>F	=<.0001
TKOFF	Intercept	95,28409	13,5088	7,05	<.0001
	UPHL	-0,00112	0,000173	-6,48	<.0001
	PM	2,692479	1,72839	1,56	0,1206
	JT	41,38419	1,072882	38,57	<.0001
	YT	-3,37E-07	9,96E-08	-3,39	0,0008
	DRT	-12,3866	5,645842	-2,19	0,0292
R2	=0,88399	F-Hitung	=362,17	Pr>F	=<.0001

TKNF	Intercept	143,6546	65,65578	2,19	0,0297
	UPHL	-0,00194	0,000789	-2,46	0,0144
Endogenous Variables	Exogenous variables	Parameter Estimates	Standar Error	t-Test	Pr > |*t*|
	TKOFF	-0,35214	0,109157	-3,23	0,0014
	KUP	-2,63E-06	7,097E-07	-3,71	0,0003
	PM	-4,52695	7,670631	-0,59	0,5557
	ET	8,606E-06	1,083E-06	7,94	<.0001
	PDKK	3,288103	2,850041	1,15	0,2498
	DRT	-42,2446	24,95754	-1,69	0,0919
R2	=0,32621	F-Hitung	=18,82	Pr>F	=<.0001

Appendix 2. Results of Estimation of Behavioral Parameters of Paddy Production

Endogenous Variables	Exogenous Variable	Parameter Estimates	Standar Error	t-Test	Pr > |*t*|
BP	Intercept	27,25071	8,335151	3,27	0,0012
	HBP	-0,00151	0,000918	-1,65	0,1011
	BSAPRO	-0,00003	9,124E-06	-3,29	0,0012
	ELL	-6,62E-08	4,081E-07	-0,16	0,8713
	KP	-1,04E-07	3,7E-07	-0,28	0,7798
	LLP	60,33427	2,485074	24,28	<.0001
	DRT	0,460465	2,924738	0,16	0,875
R^2	=0,74282	F-Hitung	=115,09	Pr>F	=<.0001
UREA	Intercept	112,2497	27,79912	4,04	<.0001
	HUREA	-0,01629	0,008302	-1,96	0,0509
	BSAPRO	-0,00005	0,000047	-1,08	0,2824
	LLP	137,4615	12,39628	11,09	<.0001
	KP	3,525E-06	1,875E-06	1,88	0,0614
	EENRG	-2,33E-06	4,157E-06	-0,56	0,5763
	DRT	-33,519	14,02405	-2,39	0,0176
R^2	=0,39928	F-Hitung	=27,25	Pr>F	=<.0001
SP36	Intercept	38,80822	16,11867	2,41	0,0168
	LLP	101,4951	33,42688	3,04	0,0027
	BLP	7,486E-06	2,118E-06	3,53	0,0005
	KP	2,181E-06	1,876E-06	1,16	0,2462
	BP	0,203785	0,5314	0,38	0,7017
	EENRG	-2,26E-06	4,204E-06	-0,54	0,5906
	DRT	-11,4446	14,15215	-0,81	0,4195
R^2	=0,37542	F-Hitung	=24,74	Pr>F	=<.0001
QP	Intercept	163,4745	215,5933	0,76	0,4491
	LLP	4323,027	414,1052	10,44	<.0001
	TKTP	4,483824	3,289313	1,36	0,1742

	KP	-0,00005	0,000026	-1,82	0,0707
	UREA	0,265588	1,889841	0,14	0,8884
	SP36	4,660197	1,659132	2,81	0,0054
	DRT	171,6612	195,7762	0,88	0,3815
R^2	=0,84238	F-Hitung	=212,1	Pr>F	=<.0001

Appendix 3.. The Name of Variables

TKDRT	=	Total Labor Domestik
BP	=	Paddy Seed
UREA	=	urea
SP36	=	SP36
QP	=	Pady Production
LLNP	=	Paddy land
UREANP	=	Urea for non-paddy
SP36NP	=	Sp36 for non-paddy
QNP	=	Non-Paddy production
BBP	=	Cost of paddy seed
BUREA	=	Cost of a urea
BSP36	=	Cost of SP36
BTKP	=	Cost of labor allocation
BPP	=	Cost of paddy production
BBNP	=	Cost of non paddy seed
BUREANP	=	Cost of urea non paddy
BSP36NP	=	Cost of SP36 non paddy
BTKNP	=	Cost of labor allocation for non paddy
BPNP	=	Cost of non paddy procuction
KUP	=	Profit of paddy production
TNP	=	Total revenue from non paddy production
KUNP	=	Profit of non paddy production
KP	=	Remittances
BSAPRO	=	Input production subsidies
HUREA	=	Price of urea
HSP36	=	Price of SP36
HBP	=	Price of paddy seed
EENRG	=	Energy Household expenditures
DRT	=	Dummy household
ELL	=	Others Household expenditures

DEVELOPMENT STRATEGY OF FISHERY INNOVATION VILLAGE AS EFFORTS TO INCREASE WELLNESS OF SEA VILLAGE SEGORO TAMBAK

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ABSTRACT

Capture fisheries production continues to increase from year to year but in a controlled presentation with respect to the number of catches allowed for the sustainability of fish resources. The production volume of capture fishery for 2010-2014 period has increased average by 4.52% per year, ie 5,384,418 tons in 2010 to 6,200,180 tons in 2014. Potential of capture fishery sector is still very large where the utilization of marine resources Indonesia reaches 4.5 million tons / year, while the potential of Indonesian marine fish production is 6.51 million tons / year or 8.2% of the total potential for sustainable world marine fish production. Nevertheless, the potential of large fisheries commodities is inversely proportional to the level of welfare of coastal communities. By 2014, the number of poor people in coastal areas can be categorized as high, accounting for 25% of the total poor population in Indonesia. The problem in Segoro Tambak Village which is the root of fisherman's poverty is the high dependence on arrest, and if the dependence occurs in the midst of the availability of other jobs outside the fishery sector, it can reduce the fisherman's resilience in the face of the economic pressures that exist To overcome problems of poverty and improving the welfare of the community in Segoro Tambak Village, the local village government plans to develop a fisherman innovation development strategy. This research uses descriptive qualitative method, which is a contextual research that makes man as an instrument and adapted to a reasonable situation in relation to collecting data which is generally qualitative. The success of the Fishermen Innovation Village Development Strategy in Segoro Tambak Village in increasing revenue will be influenced by the business activities that can be developed and the capital that can be provided as well as market conditions that support it.

Keywords: Innovation Village, fisherman, Segoro Tambak village

INTRODUCTION

Indonesia has 17,504 islands with an area of 5.8 million km2 of water, which makes Indonesia as the maritime country and the largest archipelago in the world. Indonesia's marine potential is estimated at US $ 1.2 trillion per year by absorbing 60 million workers. Of the total Indonesian population working in the fisheries sector, 90% of them are small scale fishermen / cultivators (Coordinating Ministry for Economic Affairs, 2015).

Capture fisheries production continues to increase from year to year but in a controlled presentation with respect to the number of catches allowed for the sustainability of fish resources. The production volume of capture fishery in 2010-2014 period has increased by 4.52% per year, ie 5,384,418 tons in 2010 to 6,200,180 tons in 2014. Potential of capture fishery sector is still very large where the utilization of marine resources Indonesia reaches 4.5 million tons / year, while the potential of Indonesian marine fish production is 6.51 million tons / year or 8.2% of the total potential for sustainable world marine fish production. Nevertheless, the potential of large fisheries commodities is inversely proportional to the level of welfare of coastal communities. By 2014, the number of poor people in coastal areas can be categorized as high, accounting for 25% of the total poor population in Indonesia. (Ministry of Marine Affairs and Fisheries, 2015).

In essence fisheries development is an activity to increase the income and welfare of fishermen through the management of natural resources with production factors in the form of human labor, technology and capital. Therefore, fishery development is directed to obtain the optimal results and optimal efficiency in a sustainable manner which means to contain technological, economic, ecological and sociocultural loads. Aspects of technology to support the efficiency and productivity, the economic aspect requires an added value that always increases. Meanwhile, the ecological aspect requires development while maintaining the sustainability of environmental functions. Meanwhile, the sociocultural aspect supports equity that emphasizes on the development of human resources (HR) and its institutions that fully accommodate the needs and involvement of fishing communities in the management of fishery resources (Huraerah, 2008).

Segoro Tambak Village is a village rich in natural resources of fisheries. It's just that the fish catch depends on the fish season alone. The difficulties of living in meeting their daily needs are the economic pressures that society has to face, causing lower welfare. The fish season in Segoro Tambak village is fluctuating, if it is fish season or if the fish potential is relatively good in the coastal waters, then the revenue can be more assured, whereas when it is not the fish season, and the coming famine season is unexpected. fishermen will face economic difficulties to meet the needs of everyday life. This natural factor always repeats every year. The fishermen community of Segoro Tambak Village looking for fish starting from the night until the morning for other fishermen also looking for fish not in accordance with the catch is sometimes also the fishermen get enough income. Even there are many groups of fishermen who fish in the morning with different types of fish and the price is also different. Fishermen in the Segoro Tambak village are uncertain in the fishing income of the sea because it depends on the season, when the fish season arrives then the income received will be many and vice versa if the famine season arrives then the results obtained very little or can not at all. This can affect both the sharing of results and losses.

The problem in Segoro Tambak Village which is the root of fisherman's poverty is the high dependence on capture, and if the dependence occurs in the midst of the availability of other work outside the fishery sector, it can

reduce the fisherman's endurance in facing the existing economic pressures. The diversity of income sources greatly helps the ability of fishermen to adapt to poverty. Fishermen are sometimes less aware that the condition of the aquatic ecosystem is easily changed at any time, so it can affect the income of fishermen.

The dependence of the fishermen of Segoro Tambak Village on others, as a result of their limited ability to provide production facilities such as ships, fishing gear, including operational costs (such as buying of fuel, supplies etc). So that there is a relationship or patron-client bond between the owner of capital (skipper) with the fisherman worker. Some fishermen have their own boats and some do not have the capital to buy boats so that the fishermen are forced to borrow money to the skipper (patron). The profit sharing system used by the fishermen of Segoro Tambak Village pond with the calculation is from the gross for the owner of capital (patron) of 15-20%, and the rest is divided into three parts. The first part is for boat owners, the second part is to buy diesel and the last part for the fishermen members. (source: interview result). In accordance with the agreement between fishermen and boat owners, the sale and purchase of fisherman fish catch is only sold to boat owners (skipper), which has helped by lending so that fishermen can have their own boat. Whereas in Segoro Tambak Village there is a Fish Auction Place (TPI), but it does not work how it should be. Selling on the TPI is pure fish traders who have bought fish on skipper (boat owner) and resell it through TPI.

Villages as a region that relies on local potential, especially the fishery-based economy is weak. There is a dilemma, because poverty and low knowledge lead to the utilization of over-resourced resources to survive, but on the other hand, many power semers are not yet optimally utilized, such as sun, water, wind, crops, fish, livestock and human power. This is due to the backwardness of rural communities, lack of capital, limited knowledge and low productivity levels, resulting in implications for low income levels. Other problems found in rural areas are the weakness of the community and village officials in planning the development, the low participation of the people in the development, the weakness of village economic activities. (Endrika, 2016).

To overcome the problems of poverty and improve the welfare of the community in Segoro Tambak Village, the local village government plans to develop a fisherman innovation development strategy. The innovative village environment will be well managed and planned so that it has unique characteristics as a place for producing fishery products, which provide value to the local community.

Based on the above background, then the formulation of the problems that can be taken in this study are as follows: How is the strategy of village development of fisherman innovation in Segoro Tambak Village ?. while the purpose of this research is: to know and analyze the development strategy of fisherman innovation village in Segoro Tambak Village.

THEORETICAL REVIEW

The village as an area that relies on local potential, especially the fishery-based economy and SMEs in the midst of global industrial growth, thus requiring special attention as mandated by Law No. 6 of 2014, especially Chapter IX Article 78 which states that:

a. Village development aims to improve the welfare of rural people and the quality of human life and poverty alleviation through the fulfillment of basic needs, development of village facilities and infrastructure, development of local economic potential, and sustainable use of natural resources and environment.
b. Village development includes the planning, implementation, and supervision phases.
c. The village development as referred to in paragraph (2) promotes togetherness, kinship and mutual cooperation in order to realize the mainstreaming of peace and social justice.

UU Desa 6/2014 states that the development of rural areas implemented by taking into account the local potential is supported by the development of appropriate technology and innovations undertaken for the welfare of rural communities.

Greg Richards and Julie Wilson in Datta (2007) suggest that innovation is the introduction of new discoveries or the dissemination of the meaning of the new invention into common usage in society (Datta, SK. And Ruma Kundu, 2007). While Hamel (2000) says that innovation strategies are not just top management tasks, but everyone can help build innovative strategies. Innovation is the same with entirely new business concepts and is an investment. The development of innovation village can not be separated from the use of science and technology as proposed by Tatang (2005) that innovative, inclusive and sustainable village development efforts are carried out with the mastery and utilization of science, technology and innovation (IPTEKIN) with innovation system as its vehicle.

According to Mahroum (2007): rural innovation is defined as the introduction of something new (a novel change) to economic or social life in rural areas, which adds new economic or social value to rural life, that rural innovation is defined as the introduction of something new (new changes) for economic and social life in rural areas, which adds new economic or social value to rural life. The village of innovation refers to a condition in which the village does renewal. This means that villages are able to utilize village resources in new ways. To develop an innovation village, it is important for the government to identify potentials, especially the unique character of a village that allows to be developed into an innovation village, where the development of an innovation village should be in line with its potential. The most important thing in innovative village development is the commitment of all stakeholders.

The strategic framework of the Fishermen Innovation Village is open to creative ideas with clear and rational objectives, strategic and consistent thinking, focusing on the competencies and potentials of the region, enhancing regional economic competitiveness, accommodating expert teams in the best communication forums, helping dissemination of research results and the

development of science and technology. *https://ristekdikti.go.id/desa-inovasi-nelayan-riwayatmu-kini/#6kJJ0V77ihClotmo.99*

RESEARCH METHODS

This research uses descriptive qualitative method, which is a contextual research that makes man as an instrument and adapted to a reasonable situation in relation to collecting data which is generally qualitative. The research approach used in this research is qualitative research. This approach is directed to the background of the individual in a holistic (whole) way. So in this case it should not isolate individuals or organizations into variables or hypotheses, but need to view them as part of a wholeness. According to Nana Syaodih (2005) states that qualitative research is a study aimed at describing and analyzing the phenomena, events, social activities, attitudes, beliefs, perceptions, thoughts of individuals and groups.

The location of the study was determined purposively or purposely selected. The characteristics of the selected research area are in accordance with the objectives of the research, which has the excellent potential of fishery in Segoro Tambak village supported by the natural condition (climatology, topography, and geology) and the conducive environment.

The data analysis technique used in this research is referring to the concept of Milles & Huberman (1992) in Endrika (2016) which is interactive model that classifies data analysis, with data collection and reduction (Data Reduction), data presentation and conclusion (Verification).

RESULTS AND DISCUSSION

The strategy of development of Fisherman Innovation Village in Segoro Tambak Village is an effort to answer the above problems. Through the village innovation development strategy these fishermen with a container group of fishermen have the freedom to choose, plan and establish the economic activities required by deliberation. Thus the fisherman feels owned and is responsible for implementation, supervision and sustainability. Problems that arise relating to the condition of potential resources, technology and business capabilities including moral support in order to improve social conditions and income of fishermen in the Segoro Tambak Village. Through the Village Fishermen Innovation Development Strategy in Segoro Tambak Village, it is hoped that a comprehensive, holistic and harmonious approach can be developed by taking into account the value system, growing and developing institutions in local fishing communities, local potentials, community business units and environmental carrying capacity. It is hoped that this will not only increase the participation of fishermen in the region in decision-making, monitoring and management of resources, but will also ensure continuous improvement of coastal and marine welfare and resources. is one of the leading programs aimed at improving the socio-economic welfare of coastal communities. With the aim to improve the welfare of coastal communities through economic empowerment of the community. Environmental aspects are important for the preservation of coastal and marine resources and settlements. The infrastructure aspect is needed to facilitate the mobility of

economic and social activities. This aspect must be supported by a strong economic institution and developed in a balanced way so that welfare can be improved optimally.

Success in the increase of income (economy) will affect by the business activities developed and capital that can be provided as well as market conditions that support it. It is important to be considered and developed in the framework of economic development that includes business management, partnerships and institutions that dikelolaan. To develop the quality of human resources and economic development, the role of government is still needed, especially in the provision of supporting facilities and infrastructure, including government policies and access to capital and markets and spatial layout of coastal areas.

The success of the fishermen innovation village development strategy in Segoro Tambak Village should be supported by the community's economic activities based on the potential of local resources by prioritizing the participation of the local community and presenting the scale and level of economic feasibility. Organizational development and community-based social economic institutions that are based on local culture need to be undertaken to support the developed social and economic activities. This is especially important to help anticipate and resolve the social conflicts that occur in the utilization of marine and coastal resources.

The success of the Fishermen Innovation Village Development Strategy in Segoro Tambak Village in increasing revenue will be influenced by the business activities that can be developed and the capital that can be provided as well as market conditions that support it. The business activity itself is supported by the condition of existing resources, available technology, and the quality of human resources that will manage them and the environment. It is important to be considered and developed in the framework of economic development including business management, partnerships and institutional management. In the implementation is very helpful to them. Their revenues increased and their economies also increased.

CONCLUSION AND SUGGESTION

Village development innovation strategy Fishermen can be used as a vehicle for implementing innovative programs and activities within the fishermen community in Segoro Tambak Village. Village Development Innovation Strategies Fishermen should at least be able to develop production equipment technology and innovation products. Not only that, in conjunction with efforts to strengthen the science and technology in Fishermen's Innovation Village, it should also be done market development, increasing mutual cooperation with other parties, strengthening organization and institutional management, and developing risk management. Human resources as business actors should be played by people from and who live in the area, if necessary increase their knowledge by educated through academic and non academic level. Therefore, educational facilities also need to be improved especially related to skills education, courses, training including business assistance. Human resources as actors should have adequate

facilities, such as housing, office, access to connectivity and information. So the synergy between local universities, local government and employers and the local community is absolutely done. Science and Technology based business associations, Regional Research Council, Intermediary Institutions, and Universities should play an active role in advancing the Fishermen's Innovation Village.

Village Innovation Development Strategies These fishermen are very useful to: (a) develop local fisheries-based economy of community science and technology, (b) optimize the potential of marine in the region effectively, efficiently and sustainably, (c) build networks to protect sectors of fishermen's economy (e) Creating a conducive investment climate for the maritime industry, and (f) building fisherman-based fisheries-based marine entrepreneurship.

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POLITICAL ECOLOGY OF FOREST RESOURCE MANAGEMENT
(Study in Jatiarjo Village Pasuruan Regency)

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ABSTRAK

This research aims to review process forest utilization by Jatiarjo Villagers, Prigen Sub-District, Pasuruan Regency through political ecology as conceptual framework. Political ecology analyzing the social phenomenon and politic both on local scale and global around causes, experiences and management of forest resources in Jatiarjo Village. In Jatiarjo Village, Pasuruan Regency there is large forest round 1.169.37 Ha. This Village is located on the slopes of Mount Arjuno with many rich natural resources, religious people, and closely related to its culture. Most of life Jatiarjo people depend on forest resource, most of them planting coffee beans under the stand of the land of Perhutani. Post new order management of forest resource regulated democratically involve people participation. One of the conclusions of this paper is that Utilization Forest management in jatiarjo Village a form through the historical aspect as the changes and changes in the conditions of the political regime, the discourse of knowledge, the economy, and the interests of the actors.

Keyword: Political Ecology, Rural Environment, Forest Management, Natural Resource Utilization

INTRODUCTION

Forest resource utilization management related on process regulated how a forest as a natural resource that can be utilize by individual or group through structure, system, and culture which has been established. Now the discussion has been dialectics who involve stakeholder in various levels of scale. On global scale, discussion about natural resource management round is directed on process forest management as function of green space with biodiversity in it. Industry country as backer in discussion of dialectics. They have concerned for decline gas carbon emission which mostly produced by them.

While, in local scale one of discussions which cultivated by people until now is find the best way for forest utilization so can increasing their economics. However, discussion about forest management have many types like a context, study, and approach used. One of the study from forest utilization managements is political ecology. Political ecology review social and politic phenomenon around cause, experience, and problem environment management (Forysth: 2013). Description articulation it is political ecology

discuss about social and politic phenomenon across scales (global and local) then related and interconnected for see the environment condition. In this aspect, political ecology beyond the study of environmental or ecological science.

Political be analytical element to ecological phenomena. This element talks if that there is an antagonism in the essential components of human intercourse (Mouffe in Batubara, 2017). Aspect of political, political ecology can analyses not only see how environment condition, sustainability and biodiversity, but also see how environment condition interaction with people and their culture. Therefore, political ecology be a study can get the extend forest resource management has used with attention to elements of nature and economic justice.

Jatiarjo people has utilize forest from generation to generation. The Village located in slope of Arjuno Mountain, Prigen Sub-District, Pasuruan Regency, East Java Province. Since a long time ago the people use forest as means to fulfilling needs their livelihood. For them, forest save wealth like water, fertile land, various animals, abundant wood, natural beauty and means of reforestation. The wealth they use as means needs and increasing economic. Before colonial period, Arjuno forest be a place for religion worship, even any called as holy mountain (Werdiono, 2016). This is as the discovery of sites and temples on the slopes. The site is also found on the slopes near to Jatiarjo Village.

At the time of the Dutch colonial era, the era of modern forest management began. The growing pattern of trade and timber concessions in Europe was brought by the Dutch to Indonesia. The first authority for forest management control in Java, including in Jatiarjo village, is the VOC VOC (*Verenigde Oostindicche Compagnie*). After VOC forest management move government of Hindia Belanda, in this period Jatiarjo Village be object of forced cultivation. People cultivated planting coffe for Dutch interests. Dutch also move population from Madura island to Jatiarjo Village. In the independence period, Jatiarjo community began to take advantage of the forest

In new order era, constitution about Basic Provisions of Forestry or called UUPK NO.5 in 1967 year has been ratified. 1972 is a milestone in the birth of State-Owned Enterprises or called BUMN that do forest management. The start people cultivated for not direct touch with forest. The period only can take twig branches, water and grass. The Government in that time has made perhutani who have right for forest management. People called *mandor* as person from government who keep forest. ahead of reform in 1993 year, Safari Indonesia Garden II was established in this village. Part of it above forest and part other in people land. Existing Safari Indonesia Garden give impact to narrow land and change the pattern of community agriculture.

After Suharto era, people start do new utilization forest management. People create forest village community institutions or called LMDH in 205 who can give opportunities for people who cooperate with perhutani to forest management. Result of the cooperation people can plant under the forest trees. Most people use this opportunity for planting coffee, until now coffee be source livelihood which increase economic community of Jatiarjo Village.

Based on the background, this research for explore utilization forest resource management in jatiarjo Village. Research not only to knowing in institutionalism aspect, but also have large aim. It is because this research use poltical ecology concept that attention influence social and politic around resource. The research use qualitative method and description with hope can describe the condition.

In the last research, study about political ecology and utilization forest management phenomena has been researched by experts. As the development of this study developed post-World War 2 after the impact caused by the war is increasingly perceived. This study finds a global and national political constellation that influences the management of utilization forest natural resource and finds a pattern of utilization in a participatory form that can lead to economic justice and environmental sustainability.

POLITICAL ECOLOGY

Forest resource utilization management by people in jatiarjo Village will analyze with the concept of political ecology. This study will analyze on complex relation between ecosystem in forest resource and around social political condition, on language, political ecology consists of two wordings, it is political and ecological. Political have various meaning, however the mean of politic can be category in two topics. The first topic is efforts to achieve mutual decisions or common good values. The definition most influenced by flow of thought Aristoteles. While politic can mean a way for get or keep power, such as which is stated by Machiavelli. Harold Lasswell simply define political as "who gets what, when, how?' (Robert E. Goodin, et., al 1996, hal.8). While Ecological mean by Geertz if use as approach can see specific related in relation between human activity, biology activity, and natural process to a analyze system, namely ecosystem. He is explained if task from scientist focus on study ecological is investigating the interdependence of members of an ecosystem and how the system evolves and changes (Geertz,2016).

Between explanation between political and ecological, so political ecology is study which connected between two element there is biology in environment condition and context of related power. This is explained by Peet, et al (1996) "political ecology is study which combination between social science with rooted from ecological and some of principle of the political economy," while Robbin (2012) more detail explain "By introducing political ecology, a field that seeks to unravel the political forces at work in environmental access, management, and transformation, I hope to demonstrate the way that politics is inevitably ecological and that ecology is inherently political,"

Occurrences political ecology study motivated by a review of natural resource crisis issues and the process of human interaction in utilizing them. This study has been basically long formulated by ancient Greek philosophers who then tried to re-elaborate by experts post-World War II. The Experts feel if political ecology study need for reorganization. Such as statement by Watts (1983) that explain " "Political ecology is part of a larger body of work which had its origins in the critique of ecological anthropology and "cultural ecology"

in the late 1970s," (Richard Peet, et., al.1996).Best contextualization from many study political ecology, Hidayat describe if forest political ecology combination and stressing approach political economy and ecology which direct or indirect highlighting actors and schedule of their activity about forest management (Hidayat.2016). To get an idea of how this ecological political study is relevant to village conditions, Putra explains;

> "Approach political ecology try to see on critically the process of natural commodification as an object of production along with a number of social relations and the power contained therein which is responsible for the occurrence of environmental damage. In addition, ecological political approaches also allow for greater state roles to empower and strengthen villages in sustainably controlling and managing natural resources and the environment," (Putra.2016)

Description from experts, this research tend use descriptive from Forysth who mention if political ecology review social and politic phenomena around cause, experiment, and problem environment management (Forysth.2003). If it is contextualized with the issues of forest management under study, ecological politics is a study of social and political phenomena both locally and globally around the causes, experiences and management of natural forest resources in Jatiarjo Village.

METHODOLOGY OF RESEACH

This research used qualitative method with types of descriptive. Qualitative method lead to a study which discuss in depth research topic, detail, detail, and make the researcher as an active learner in the field. Descriptive qualitative research is very suitable in research that describes a phenomenon, where this study will also focus on extracting data from the results of dialogue between informants and informants (Sandelowski,2000). As for using the method of this research is expected to provide an overview of the problems that exist and can provide a systematic analysis. As for using the method of this research, it can provide a systematic analysis.

This research explores data through interviews with resource persons in the field. those who become resource persons are Head LMDH Ngudi Lestari (Dayat), Jatiarjo village youth (Samsury), Head agriculture group Rejo Tani (Ta'im), Head agriculture group sumber makmur abadi (Hidayat), head agriculture group Subur Makmur 3 (Rasub), Head of Jatiarjo Village (Sareh). Therefore, researcher also take secondary data such as documents, and documentation in fields.

RESULT AND DISCUSSION

Forest and Its Management

Based on the definition of forests in Law No. 41 of 1999 about Forestry, forests are a ecosystem unity in the form of landscapes containing biological resources dominated by trees in their natural environment, which cannot be separated from each other. Based on the data from CIA's World Factbook 2011 Indonesia is one of 10 country with largest forest in the word. And the rank is 9, the large forest in Indonesia ranged 884.950 km^2

But over time, the condition of forests in Indonesia increasingly apprehensive. In the dry season it is commonly reported that forest fires occur, mainly in Kalimantan and Sumatra. The burning was mostly perpetrated by the perpetrators with the aim of opening up the palm oil fields. As a result, the number of tropical forests in Indonesia that the world's greening needs has diminished. This phenomenon is captured by Noordwijk, et., al (2008) They are stated if so far deforestation and forest degradation in Indonesia have been caused by forest fires, legal logging, and illegal logging.

In Jatiarjo Village, Pasuruan Regency there is large forest round 1.169.37 Ha. This forest located in Arjuno Mountain. Where most of plants stand in slope of Arjuno Mountain such as pine, mahogany, and sengon. Most of the ground cover is dominated by reeds In this forest area there are various fauna such as deer, antelope, boar and leopard. The diversity of existing ecosystems in Mount Arjuno has become a support of the needs of the surrounding community, like Pasuruan Regency, Malang Regency, Batu City, and Mojokerto Regency. One of the sources of the abundant public needs on Mount Arjuno is water. This is evidenced by the activities of companies engaged in managing water around Mount Arjuno.

Forest jatiarjo Village has manage since kingdom era. It is known after found historic site in the middle of the forest. The existence of this site predicted by the local community as a place to meditate the kingdom workers at the time. Even any called this mountain as holy mountain. It is called holy mountain show that Arjuno Mountain so rescued so not easy for everybody for access or utilize Forest products.

However, when VOC come to Java Island, in Arjuno forest, especially around Jatiarjo Village use be free or on their power. In addition to take forest products, they made implementing forced cultivation by telling people to grow coffee. Need of the large profit economy make them move population of Madurese Island to Javanese Island. Some of java ethnic stay in Cowek Sub-Village, while madura etnic stay on Tonggowa and Tegal Kidul Sub-Village. The division can easily be found so far, the people in Dusun Cowek mostly use Javanese krama, while the people of Dusun Tegalkidul and Tonggowa speak Madura. Although this division is not explicitly encountered due to the acculturation of culture and the distribution of population at each time.

Based on explanation from VOC, it is can describe if existing colonizer be single actor who interest on full intuiting forest products. This is different from Soekarno Era, in the time forest utilizing does base people (public) interest. The Commitment based at article 33 paragraph 3 of the 1945 Constitution which mentions, “earth, water and wealth of nature which contained therein

dominated by the state and used for the greatest prosperity of the people Article 3 Paragraph 33 of the 1945 Constitution. Based on its government mean utilization of natural resource indeed for the welfare of society. Consequently, companies and foreign investments that lead to efforts to exploit natural resources, especially forests are rarely found (Awang,2005).

Significant changes occurred in the Suharto era. Forest management at this time allows the private sector to cut logs. This policy is based on Law no. 1/1967 b and Law No.5 / 1967 on Forestry Law. Robinson (1986) state that Law give code for Indonesia to adopt strategy of economic development oriented to external and capitals (Hidayat,2016). Assets of natural resource still of used dominated by government at the time who still adopt centralization in natural resource use.

In Jatiarjo Village the presence of the state in control of the forest is represented through the presence of the *mandor*. They have an obligation to supervise all activities of forest utilization by anyone, especially by the community. The impact, people at that time could only take tree branches for the need of firewood, water, and grass for their fodder. This repressively was at its peak when Taman Safari II was built in 1993 in part of village and forest land. Deforestation at that time was done without community agreement and without socialization. Consequently, the wave of rejection or protest was carried out by the villagers. Villagers, in particular Cowek Sub-Village agricultural land were partially deprived of their harms. As a result, the Cowek people plantation area is largely lost, because the location of Taman Safari II and most of the access is located in this place.

At the end of the New Order era marked by the economic crisis, large-scale logging occurred where this activity made the condition of the forest to be damaged. In that time logging is done by the community, but mostly utilized by entrepreneurs. This is evidenced by the presence of contractors with large vehicle traffic at that time. Government as main actor in utilizing have been harmonize relation with private. So that people become separated and away from the process of resource utilization. Given the full actions and control of the state, it creates inequalities and poverty in communities surrounding the forest's natural resources. Whereas in the event of forest fires, Jatiarjo village people first flush extinguish the fire rather than the government.

The New Order's policy on natural resource management is also inseparable from the impact of the established liberal economic system. The renewal was reinforced by the presence of Law No. 41 of 1999 on Forestry. Through Article 28 of the law, the community is given space to work with Perhutani to manage production forests. From here came the initiation of Jatiarjo village community groups who wanted joint management in the forest. In the early 2000 communities established groups aimed at conserving and improving the quality of forest resources.

The youths in Jatiarjo Village are pioneers of the conservation and forest utilization movement. The initiation was initiated by forming community groups. In its early phase there was the Gumandar Group, and the Tahura Farmer Group which became the pioneer of the management of village forest utilization in the post-New Order era. Until finally the mission of this group

merged into (LMDH) Ngudi Lestari in 2003. Under the auspices of forest village community institutions (LMDH), forest utilization in Jatiarjo village became open by providing opportunities for people to take advantage of the forest.

Forest Utilization

Decentralization implemented in the management system brings a climate of democratization to local institutions in the region. This effort also leads to principles in the utilization of natural resources. This happened in Jatiarjo Village. Through legal provisions, communities are given the right to organize to form farmer groups that can access forest. Currently, there are 6 groups of active farmers (including Subur Makmur 1, Subur Makmur 2, Subur Makmur 3, Sumber Makmur Abadi, and Rejo Tani) and 4 farmer groups are not active. The active farmer groups mostly use the forest land they planted with plantation crops / dryland farms. In the early days they planted Palawija in the forest, but gradually they chose plants multipurpose tree species (MTPS or plant which used fruit product and follow other). Coffee is the most dominant plant. In addition, there are also Avocado fruit, Jackfruit and soursop. Some forest areas that are not managed by the community are critical, just overgrown with grass and shrubs (Aji,2016).

Their existence is protected by law with a decree established by the government. Not infrequently one of them get help from the government in the form of coffee seeds and fertilizers, or they can also cooperate with private side. The emergence of these groups shows that the process of democratization in natural resource management not only allows the community to access, but also the variations of emerging actors.

In line with that, in the 2000 the world experienced global warming that impact on climate change. The first world country with its industrialization is considered an influential actor who contributes to carbon emissions that cause global warming. From these impacts, countries form a political understanding by stressing developed countries to take the initiative to reduce their carbon gas emissions. But this is not much done by them. Developed countries prefer to contribute to agrarian countries to conserve or reforest their forests. Thus, there are often many government programs on forest reforestation funded by donors from developed countries or civil society groups that campaign for the agenda.

This constellation also influences the existing forest management in Jatiarjo Village. Some donor or CSR funded NGO groups are moved in forest conservation areas, one of which is the conservation of water resources by One Leaf. Several other activities, which once moved in the conservation area are the activities of planting forest stands from CSR Pertamina, forest conservation conducted by CSR Aqua and Sampoerna. It is through these conservation groups that Jatiarjo Village's forest conservation can be controlled in terms of its direct utilization.

It cannot be denied that the reduced destruction of the forest is the result of hard work of many sides. Beginning in the 2000, Kaliandra Sejati Foundation, CSR Sampoerna, East Java Local Government, Pasuruan Regency Government, East Java Forestry Service, Perum Perhutani, Village Forest

Community Institution (LMDH) Ngudi Lestari Jatiarjo Village and Tahura Arjuno Lestari Farmer Group Jatiarjo Village 75,000 trees in the mountains of Arjuno. This cooperation network also runs the community's economic improvement program through the entrepreneurship-based forestry program. forest farmers, in addition to the task of caring for trees, they gain the strengthening capacity of organic cultivation. It is from these organic crops that forest farmers earn extra income.

As the partnership network progresses, LMDH Ngudi Lestari is getting stronger and has a strategic position in mediating farmers and Perhutani. This institution then becomes the facilitator of forest land use for planting activities under stands. The existence of LMDH is quite important since it is they who give permission for forest use by individuals or groups. So, every farmer who wants to grow crops in the forest must be a member of LMDH. Currently, LMDH Ngudi Lestari has approximately 500 members, most of whom are coffee farmers in the forest. These farmers are usually called *pesanggem.* They are given access to plots of land in the forest marked by the presence of tree markers, such as banana trees, kaliandra, or other plants.

Those who work on current coffee do not pay land management taxes to the farmers. This is because the Chairman of LMDH, Dayat, is able to lobby the Perhutani side so that the people is not taxable in managing the forest. With emphasis provided that the people maintain the condition of forests and plantations of Perhutani trees. Earlier in the early days of farming in the forest, the relationship between farmers and Perhutani was not conducive. Perhutani is often indicated by communities damaging their crops. This is due to the interests of Perhutani to limit people access to forests. But once the inter-conflict lobbying interests begin to calm.

The existence of LMDH Ngudi Lestari in Jatiarjo Village is very significant in maintaining the interests of farmers or the community. This could be because the head of the LMDH is a representation of the people who can advocate for them. This representation can be progressive because the LMDH head is elected democratically by direct election, so that the public can give the voting aspirations and control the power. This is different from LMDH in other villages around Jatiarjo Village. Farmers on forest land are withdrawn from taxation and their LMDH chair cannot represent the public interest. This is because there are several assumptions that their LMDH head has a close relationship with Perhutani.

Utilization of forest land which is mostly utilized by the community for coffee plantations is considered not to damage the condition of the forest.

The community considers that the existence of coffee plants does not damage the forest stands and does not damage the land. But in reality, this community activity will inevitably change the original ecosystem of forest, especially about the existence of fauna. Human activity is also declared to affect the existence of water sources. Once, when in the 1900s predicted by the community there are 27 sources of springs in the forest around their village. But the development of time, currently only found 7 springs. The loss of these springs poses a serious threat to the forest ecosystem and the survival of the villagers. Therefore, the villagers are now starting to intensify through efforts

to conserve the water springs by working together by outsiders, such as private, civil society and government networks.

With the access of forest land utilization along with its participative management was able to increase the farming economics of Jatiarjo Village, especially the people of Cowek Sub-Village which in 1993 the garden land has been lost. This economic increase is generated from the one-year crop of coffee. Coffee used by the community directly sold to the contractor or consumed by themselves. But gradually after the introduction of agricultural innovation development programs from the government, private sector, NGOs, the public began selling their own packaged coffee / production groups. From this innovative activity is predicted to improve the economy of Jatiarjo people.

Currently forest land utilized people round 350 Ha. The Subur Makmur 3 group, for example, says from the land that used by their members can product 10 ton dry coffee every crop. The large quantitu dan added the economy needs from their members. In addition, some of communities also already actualization concept of village tourism. Beautiful and wealth natural forest resource of Arjuno be interested tourism to came into Jatiarjo Village. This activity do by youth Jatairjo. They be tour guide for accompany and provide studies on their village forests on the slopes of Arjuno Mountain.

Date of Amount Forest Farmers and Production Coffe jatiarjo Village:

Amount Coffe Farmers	88
trees already to bear fruit	26.405
trees have yet to bear fruit	57.745
Products/year	8.204

Source: Aji,*et., al*.2016

Opening the access of forest resource in Jatiarjo Village has increasing caring youth to agriculture sector. In This time most of youth are farmers who start to plant the coffees and process it. They also has high initiative for keep the forest as a ecologies place which give advantage such as economy for them. The activity planting the coffee in forest through the organization of Ansor Youth Movement Jatiarjo Village is one of the efforts of the village youth to preserve the forest.

The culture of Jatiarjo people also be one of factors in see forest resource. In Jatiarjo Village there is two annual culture activity which relate with nature. First namely *selamatan* water resource. This tradition has been done from generation to generation as a form of gratitude for the favors of the existence of springs in the village forest. Second *Selametan* village or *sedekah* village, in this ritual people are grateful for the abundant natural resources that surround them.

The existing of traditional culture has form attitude Jatiarjo people to natural resource. Such as when there is borekn and forest fires, they already responding to blackouts and preserving the damaged forests. They also always controlled the activity in the forest, both of people and private side.

Unfortunately, this cultural tradition began to fade and began to be seen only as a symbolic suggestion. According to them this is due to the mixing of outside cultures that influence the minds of young people so that they cannot interpreted and articulate their culture.

Forest resource management phenomena in Jatiarjo Village must be one of the most important reflections for the current village development. With the Village Low (UU No.6 of 2014) the village must be able to manage its natural resources by considering the political ecology aspects. Through this concept the village can maintain and utilize the village in a participative manner whose benefits can be advantage for the environment and human. Today it is known that not many villages around natural resources are able to exploit their potential well. In fact, most of them are in the space poverty. This is cause by they inability for management or close access effect any side who dominated natural resource.

CONCLUSION

Utilization Forest management in jatiarjo Village a form through the historical aspect as the changes and changes in the conditions of the political regime, the discourse of knowledge, the economy, and the interests of the actors. In the kingdom era still not many actors who use the forest as a large economic commodity. Because at this time Arjuno Mountain is considered sacred and need to be protected. But when the VOC period there is a single interest of colonists who want to get the maximum profit. This makes people become separated from the surrounding natural resources.

In The independence, decentralization of forest resource management adopt throught concept of populist economy. So people can access the forest again. However, it was not long before the Suharto era implemented a single power system. They also compromised business with entrepreneurs in forest utilization in Jatiarjo Village. Currently people are returning foreign with the surrounding natural resources.

After the time of Suharto, the existence of LMDH is a means of community in managing the forest. Through this LMDH, participatory and democratic forest management can be implemented. The actors concerned at this time to be varied. But every actor keeps each other and interacts.

Utilization of forest involving the community was able to provide positive implications for the surrounding communities. This is evidenced by the increase in people's income after being invited to take advantage of the forest with Perhutani. With this participatory process, people's sense of belonging to the forest has been re-inspired.

On the other hand, the process of forest utilization has decreased the quality of forest sustainability. The culture of the Jatiarjo villagers can actually be a potential how people can have awareness to protect the environment. However, because to the minimal process of deconstruction of cultural traditions (such as village salvation and springs), finally only used as a ceremonial and gradually no demand anymore.

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THE WORKTIME OF FEMALE LABORS IN COCOA CULTIVATION AT UDANAWU DISTRICT BLITAR REGENCY

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ABSTRACT

Cacao is a plantation commodity which the role is pretty important for the national economics. Cacao production in Udanawu District Blitar Regency is supported by the existence of active women farmers in the cacao agricultural business activity, both in the cultivation activity and the handling of cacao post-harvest. The role of women farmers can be supported by the approach of the work allocation. The research about the women farmer work allocation is conducted in Udanawu District Blitar Regency. The purpose of the research aims to find out (1) the female labor and male labor allocation on the cacao agricultural business in Udanawu District Blitar Regency, (2) the contribution of women farmer allocation on the productive activity and domestic activity, (3) factors affecting the female labor allocation. The location of the research is determined intentionally or purposive method, based on the determination that Udanawu District is the region of cacao development in Blitar Regency. The research method uses descriptive, analytic, and comparative. Samples used are chosen by using simple random sampling method. Data are collected by interviews, observations, and documentations. Data analysis use the statistical calculation from the work allocation and the multiple linear regression analysis. The research result shows that (1) The female labor allocation is bigger than the male labor allocation. The female labor allocation is 130.28 HOK/Year, while the male labor allocation is 29.30 HOK/Year. The difference of the work allocation causes the inequality gender, where the female labor is more dominant than the man labor on the cacao agricultural business activity. (2) Women farmers in Udanawu District have the multiple role, which are beside taking care of their household, they also allocate their time to work in economic sector, one of them is on the cacao agricultural business. The women farmers contribution on domestic activity is bigger which is 82.04%, while on the productive activity is 17.96%. (3) Factors affecting the real impact toward the female labor allocation are land area and total peoduction, while the factors not affecting to female labor allocation are age, the amount of family member, and education.

Keywords : Cacao, Women Farmers, Work Allocation.

INTRODUCTION

Plantation crops have an important role in the economic development in Indonesia. Business of various plantation crop commodities has been able to increase the foreign exchange for the country, open job fields, become the income source of citizens, and contribute in the effort to preserve the environment. Plantation subsector is one of the subsectors which becomes a superior in the foreign exchange supply to the country considering that this sector is the biggest export commodity contributor from the agriculture sector which is exist in Indonesia (Suwarto, et al., 2014)

Cacao (Theobrema cacao L) is one of the plantation commodity which the role is important enough for the local economics, especially as the job field provider, income source and foreign exchange. Moreover, cacao is also taking a role in encouraging the development of the region and the development of the agro-industry. In 2002, cacao plantation had provided job fields and income source for around 900 thousand heads of farmer family and gave the third biggest foreign exchange contribution after rubber and palm (The Directorate General of Plantation, 2016).

The production of cacao is dominated by smallholdings, plantation country and private plantation. Smallholdings gave the biggest contribution of cacao production in Indonesia in 2011 – 2016 which were 93, 84% of total cacao production of plantation in Indonesia. Private plantation occupied the second rank with the contribution of cacao production amounting of 3.42% while the remaining amounting of 2.73% was a contribution of cacao production from the plantation country in Indonesia.

Cacao smallholdings are many spread in several areas in the region of East Java. There are 5 regencies which become the center of the highest cacao production, which are Madiun Regency, Trenggalek Regency, Blitar Regency, Pacitan Regency and Malang Regency. Blitar Regency occupies the third rank as a producer of the production with the production contribution amounting of 12.38%. One of the district which becomes the center of cacao producer crop in Blitar Regency is Udanawu District.

But now, the development of cacao in Udanawu District is less maximal, it is caused by the lack of the intensive treatment by the farmers and the pest and disease attack on the cacao plant. The pest and disease attack makes the production of cacao produced less maximal. The existence of women farmers in Udanawu District Blitar Regency is one of the potency to support the development of cacao commodity. Women farmers in Udanawu District are active in the agricultural activity, one of them is cacao agricultural business beginning from on farm activity to off farm.

Udanawu District has the female labors who are still taking a role in the agricultural activity, especially on the activity related with the cultivation and post-harvest handling of cacao commodity. The female labors meant here are the cocoa farmers' wife. The cocoa farmers' wife is directly working in the farm and also the direct handling of cocoa post-harvest. The activity done by the female labor is more dominant in doing the activity on the post-harvest

handling such as fruit sorting, fruit breaking, fermentation, drying, dry seed sorting, and packaging.

The involvement is directly and indirectly one of the potency which has to be developed because the women are commonly always believed not capable in the term of works. The women are only active as the housewife, however in the fact in Udanawu District Blitar Regency the majority of the women farmers in the district have a multiple role, beside as the housewife they are also allocating their time to work on the cultivation activity and the cacao post-harvest handling. The multiple role of these women farmers is very strategic in the development of the agricultural business productivity and has a potency to increase the income and the food security to the welfare of the farmer household in the village.

The cacao smallholdings in Udanawu District Blitar Regency in the activity use the male labor and female labor. Female labors are needed in the activity of cacao agricultural business because they are believed more tenacious, careful and patient in doing their work. As the explanation that the use of female labor which is more dominant is located on the activity of cacao post-harvest. The female labors in Udanawu District have pretty big role in the development of cacao plant, those things are seen in the use of labors which is also much done by the women.

The purpose of this research is to find out the allocation of female labor and male labor, the contribution of women farmers allocation on the productive production and domestic activity, and factors causing the allocation of female labor on the agricultural business of cacao commodity in Udanawu District Blitar Regency.

RESEARCH METHOD

The area determination of the research is done intentionally (Purposive Method), which is Udanawu District Blitar Regency. The area determination of the research is based that Udanawu District is a district used as the development of cacao commodity and also one of the region by the government of Blitar Regency to cultivate the cacao plant since 1993. Furthermore, Udanawu District also has active women farmers in the activity in the agriculture, one of them is an activity if cacao cultivation and a processing of cacao post-harvest.

The research method used in this research is descriptive, comparative, and analytic method. The descriptive research method is a research method giving the illustration systematically, factually, and accurately about the facts and characteristics of population of the certain area. Literally, it is used to describe the situations or events happening in the society. Comparative method functions to compare several phenomena which are exist. While the analytic method is a method functioning to analyze and calculate precisely and carefully toward the facts or data. Analytic research method is used to analyze the dynamics of the correlation each phenomenon. (Nazir, 2014)

The sample taking in this research uses the simple random sampling method. According to Sugiyono (2014), the simple random sampling method is a sampling taking method randomly giving the member of population the

same possibility to be chosen as a sample. Udanawu District has the population of cacao farmers amounting of 337 farmers. The sample determination in the research is obtained by using the slovin formula where the error value used is 15% or 0.15. The sample measurement from the population can use the slovin formula as follows :

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{337}{1 + 337(0{,}15)^2}$$

$$n = \frac{337}{1 + 7{,}5825}$$

$$n = 40$$

Based on the slovin calculation, it can be known the magnitude of the sample which can be taken of 40 families of cacao farmers in Udanawu District from the total farmer population amounting of 337 families of cacao farmers. All populations have the same probability to be a sample.

The data retrieval method required in answering this research is primary data and secondary data. Primary data is data obtained from the first source such as the result of interview and the result of questioner filling. The data retrieval technique on this research is done by the interview and observation method. Secondary data is data having processed from particular sides, secondary data is obtained through several agencies or institutions related with this research, such as Agricultural Service Offices of Udanawu District.

Analysis method used to answer the first problem about the allocation of female labor and male labor on the agricultural business of cacao commodity in Udanawu Distrct Blitar Regency is measured by using the simple statistical calculation and explained descriptively, by the formula as follows :

$$HOK = \frac{JO \times JK \times HK}{JKS}$$

Explanation :
HOK = day of people work (work day)
JO = the amount of people (person)
JK = work hour (hour)
HK = work day (day)
JKS = standard work hour (hour)

The comparison of female labor and male labor allocation can be known by analyzing the average statistic of female labor and male labor allocation by statistical t-test. Difference test is formulated after doing the homogeneity test.

Homogeneity test is used to find out the similarity of both samples which are the variance of female labor and male labor allocation. The formulation for homogeneity test is as follows :

$$F = \frac{\text{the highest variance}}{\text{the lowest variance}}$$

Decision Making Criteria:

a. If F < 0.05, then H_0 is denied meaning both samples have the different variance on the significance of 5%.
b. If F > 0.05, then H_0 is accepted meaning both samples have the same variance on the significance of 5%.

After done the homogeneity test, the next is doing the difference test average which can be formulated as follows :

$$t - \text{score} = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{{S_1}^2}{n_1} + \frac{{S_2}^2}{n_2}}}$$

Explanation :

$\overline{X_1}$ = The average male labor allocation
$\overline{X_2}$ = The average female labor allocation
S_1 = Standard deviation of male labor allocation
S_2 = Standard deviation of female labor allocation
n_1 = Total samples of male labor allocation
n_2 = Total samples of female labor allocation

Decision Making Criteria:

a. If the significance value t < 0.05 then H_0 is denied meaning there is a real difference between male labor allocation and female labor allocation.
b. If the significance value t > 0.05 then H_0 is accepted meaning there is no real difference between male labor allocation and female labor allocation.

The second analysis tool used to answer the second problem about the contribution of women farmer allocation on the agricultural business of cacao commodity in Udanawu District Blitar Regency uses the calculation from the summation of the allocation of each activity, both on the productive activity as well as domestic activity. Women farmers allocation calculated is on productive activity and domestic activity. Measuring the total allocation is used a formulation as follows :

$$Y_{tot} = Y_{i1} + Y_{i2}$$

Where :

Y_{tot} = Total allocation (HOK/Year)
Y_{i1} = Productive activity allocation (HOK/Year)
Y_{i2} = Domestic activity allocation (HOK/Year)

Next, to find out the contribution of women farmers, it is done a percentage test which is by comparing the proportion of women farmers allocation toward the total allocation. The formulation used is as follows :

$$\text{Female allocation} = \frac{\text{Femal work hour allocation}}{\text{Total work hour allocation}} \text{x } 100\%$$

The third analysis tool used to answer the third problem about factors affecting the women farmers allocation on the agricultural business of cacao commodity in Udanawu District Blitar Regency is used Regression Testing by the formulation as follows (Sugiyono, 2009) :

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5$$

Explanation :

Y : Female labor allocation (HOK/Year)
a : constant
bi : coefficient of regression equation or regression parameter
X_1 : age (year)
X_2 : total family member (person)
X_3 : educational level (year)
X_4 : land area (Ha)
X_5 : total production (kg/year)

Linear regression test also needs the classical assumption test to obtain the data or the result which is not bias. The classical assumption test assumed on linear regression is multicollinearity, heteroscedastic, autocorrelation, and normality. After later done a classical assumption test, the next step is by capital adequacy test containing to F test, t test, and Adj R^2.

Adj R^2 aims to measure how big the effect of whole independent variable can explain the dependent variable variance. F test is used to find out if the independent variable used (age, the number of family, educational level, land area, and production) together has real impact toward the dependent variable (female labor allocation). Here is the formula for F test:

$$\text{F-score} = \frac{\text{Mid square regression}}{\text{Remained mid square}}$$

Decision making criteria :

a. If the probability is ≤ 0.05, then H_0 is denied, meaning the use of female labor allocation factors together has real impact toward the female labor allocation.
b. If the probability is ≤ 0.05, then H_0 is accepted, meaning the use of female labor allocation factors together does not has real impact toward the female labor allocation.

Next, to find out the effect of labor allocation factors partially, it needs to be done the t test. Here is the formula for t test:

$$\text{to} = \frac{\text{bi}}{\text{Sbi}} \text{where Sbi} = \sqrt{\frac{\text{total remained square}}{\text{total mid square}}}$$

Decision making criteria:

a. If the probability is ≤ 0.05, then H_0 is denied, meaning the use of the i-th female labor allocation factors partially has real impact toward the female labor allocation.
b. If the probability is > 0.05, then H_0 is accepted, meaning the use of the i-th female labor allocation factors partially does not have real ipact toward the female labor allocation.

RESULTS AND DISCUSSION

Female Labor and Male Labor Allocation on Agricultural Business of Cocoa Commodity in Udanawu District Blitar Regency

The agricultural business activity of cacao in Udanawu District as the agricultural business activity commonly, which is begun from the land preparation activity until the of cacao plant post-harvest. The agricultural business of cacao in Udanawu District in the activity is done by the farmers themselves with their wife. The farmers' wife is very active in the activity of the cacao agricultural business so that it can be said women farmers. The cacao farmers there are not using outside of family labor because the land area they have to plant the cacao is in the wide coverage, and the amount of cacao tree planted is not too much. Most of the cacao farmers in Udanawu District in their cultivation use the backyard to plant the cacao plant.

The duty of cacao farmers along with their wife in the activity of cultivation until the of cacao post-harvest can be calculated through the analysis of work allocation. Work allocation in this research is referred to a work allocation spent on the activity of cacao agricultural business in one year or in every step of the activity. The *on farm* activities on cacao agricultural business are seed preparation, land preparation, planting, rorak making, irrigation, embroidering, pruning, trimming fertilization, the handling of Plant Disturber Organism (OPT), and harvesting. Next, the *off farm* activities on cacao agricultural business are fruit sorting, fruit storage, fruit breaking, fermentation, mucus extortion, washing, drying, dry seed sorting, packaging, and storage. The male labor and female labor allocation on the cacao agricultural business is served on the Table 1:

Table 1. The Average and Contribution of Male Labor and Female Labor Allocation on Cacao Agricultural Business of Cacao Commodity

No.	Activity	Average Male Labor Allocation (HOK/Year)	Average Female Labor Allocation (HOK/Year)	Total Work Allocation (HOK/Year)	Explan.
1	Seed Preparation	-	-	-	Not done
2	Land Preparation	1.59	-	1.59	Uninvolved women
3	Planting	1.19	-	1.19	Uninvolved women
4	Rorak Making	0.38	-	0.38	Uninvolved women
5	Irrigation	-	-	-	Not done
6	Embroidering	0.04	-	0.04	Uninvolved women
7	Pruning	1.86	-	1.86	Uninvolved women
8	Trimming	1.28	-	1.28	Uninvolved women
9	Fertilization	1.77	1.45	3.22	Involved women
10	OPT Handling	0.37	-	0.37	Uninvolved women
11	Harvesting	8.16	5.34	13.50	Involved women
12	Fruit Sorting	-	5.34	5.34	Involved women
13	Fruit Storage	-	-	-	Not done
14	Fruit Breaking Mucus	7.54	12.00	19.54	Involved women
15	Extortion	-	-	-	Not done
16	Fermentation	-	5.63	5.63	Involved women
17	Washing	-	-	-	Not done
18	Drying	-	81.00	81.00	Involved women
19	Dry Seed Sorting	-	9.90	9.90	Involved women
20	Packaging	5.12	9.62	14.74	Involved women
21	Storage	-	-	-	Not done
	Total	**29.30**	**130.28**	**159.58**	

The Type of Labors	Total Average Labor Allocation	Contribution (%)
Male Labor	29.30	18.36
Female Labor	130.28	81.63
Total	**159.58**	**100**

Source : *Primary Data Processed in 2018*

Based on the calculation of total labor allocation on the Table 1 shows that the one which has the highest work allocation is on the activity of drying amounting of 81 HOK/Year, then followed by the activity of 19.54 HOK/Year. Next, the third rank by the packaging activity amounting of 14.74 HOK/Year.

Table 1 shows that the total average male labor work allocation is 29.30 HOK/Year with their contribution of 18.36%, while the total average female work allocation is 130.28 HOK/Year with their contribution of 81.63%. The calculation of work allocation shows that female labors have more allocation and give higher contribution than male labors on cacao agricultural business in Udanawu District Blitar Regency. Those things show that women farmers are more active in the activity of cacao agricultural business than male labors.

The difference of female labor and male labor work allocation is analyzed using the analysis tool of average test (t-test) to show if there is any difference of female labor and male labor work allocation in Udanawu District Blitar Regency. The difference of female labor and male labor work allocation can be seen with the result of test (t test) for the unpair sample (*Independent Sample T-test*) on the Table 2.

Table 2. The Calculation Result of Average Test of Work Allocation between Male Labor and Female Labor.

	F-score	Sig.	t-score	Df	Sig. (2 – tailed)
Equal variances assummed	40.518	0.000	- 24.638	78	0.000
Equal variances not assumed			- 24.638	47.778	0.000

Source : *Primary Data Processed in 2018*

Based on the Table2 shows that the calculation of average test of work allocation between male labor and female labor, before done the t-test, it is done the test of variances with the F-score, meaning that if the variances are same, then t-test uses *equal variances assumed* and if the variances are different, then it uses *equal variances not assumed.* Table 2 shows that the value of F-score is 40.518 with the significance of 0.000. The value of significance is less than 0.05 (Sig. 0.000 < 0.05), then H_0 is denied, meaning both variances are not the same. Next, the use of t-test uses *equal variances not assumed,* obtained the t-score value is 5.517 with the significance of 0.000. The value of significance is less than 0.05 (Sig. 0.000 < 0.05), then H0 is denied, meaning there is a difference between male labor and female labor allocation.

Time needed from each individual to do a work is basically different, because each individual has each ability and limitation. Each labor both men and women has the advantages and disadvantages. For example, male labors are spending their time on the hard work because basically the physical power of male labor is more needed. Different with the female labor, they are doing a

work which is not too required the physical power, such as on the activity of fruit sorting, fruit breaking, and dry fruit sorting. Some of the activities require the persistence, tenacious, and skill, where only women who are more persistence, tenacious, and skilled rather than men.

The Contribution of Women Farmer Allocation on the Productive Activity and Domestic Activity in Udanawu District Blitar Regency

The women farmers in Udanawu District Blitar Regency have a multiple role because beside taking care their household matter they are still active in the activity of cacao agricultural business. The productive activity meant here is an activity related with the cacao agricultural business. Women farmers in Udanawu District Blitar Regency have pretty active role in the activity of agriculture, one of them is the cacao agricultural business. Domestic activity is an activity within the household related with how the women do their role in paying attention and taking care of the household and the whole family members. The domestic activity in this research is assumed on the activities which are done by the women commonly, such as cooking, taking care of children, arranging the house, social activity, and holiday activity. The allocation of productive activity and domestic activity are served on the Table 3.

Table 3. The Average Allocation of Productive Activity and Domestic Activity of Women Farmers in Udanawu District Blitar Regency

No.	The Type of Activity	The Average Allocation (Hours/Day)	The Average Allocation (HOK/Day)	The Average Allocation (HOK/Year)	Contribution/Year (%)
1	**Productive Activity**				
	Fertilization	0.03	0.004	1.45	17.96
	Harvesting	0.11	0.01	5.34	
	Fruit Sorting	0.11	0.01	5.34	
	Fruit Breaking	0.27	0.03	12.04	
	Fermentation	0.12	0.02	5.63	
	Drying	1.8	0.22	81.00	
	Dry Seed Sorting	0.22	0.03	9.90	
	Packaging	0.21	0.03	9.62	
	Total	**2.87**	**0.354**	**130.28**	
2	**Domestic Activity**				
	Consumption Fulfillment	3.2	0.4	144	82.04
	Taking Care of Children	2.82	0.35	127.12	
	Cleaning Up the House	2.03	0.25	91.68	
	Social Activity	3.47	0.43	5.21	
	Holiday Activity	5.05	0.63	227.25	
	Total	**16.57**	**2.06**	**595.26**	
	Total	**19.44**	**2.41**	**725.54**	**100**

Source : *Primary Data Processed in 2018*

Based on the Table 3 shows that the total average of allocation on the productive activity is 130.28 HOK/Year, while the total average of allocation on the domestic activity is 227.25 HOK/Year. The contribution of time allocated by the women farmers is much more on the domestic activity with the contribution value of 82.04% while the contribution of time on the productive activity is less than the domestic activity which is with the contribution value of 17.96%.

It shows that the women farmers in Udanawu District is much more allocating their time in domestic activity, which is the activity in the household such as cooking, taking care of children, arranging and cleaning up the house, and other supporting activities. Basically, the women's job is to take care of household. Although active in the agricultural business activity especially cacao is also a positive thing, beside as the additional income of the family, women farmers also gain knowledges and in the cultivation process and the handling of cacao post-harvest. Thus, the existence of the use of female labor is also a contribution in the cacao agricultural business activity because it also can be a supporter in the enhancement of cacao production and the enhancement of the cacao seed quality in Blitar Regency. The involvement of women on the cacao agricultural business shows that the women farmers in

Udanawu District have a multiple role, which is a role as housewife and a role in the public sector which is finding to help the family income.

Factors Affecting the Female Labor Allocation on the Agricultural Business of Cacao Commodity in Udanawu District Blitar Regency

The multiple linear regression analysis is used to find out the factors affecting the female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency. Independent variable assumed to affect toward the female labor allocation (Y) is age (X_1), the number of family member (X_2), education (X_3), land area (X_4), and the total production (X_5). The multiple linear regression analysis is done to use SPSS analysis tool.

Based on the classic assumption test including the test of data normality, multicollinearity, autocorrelation, and heteroscedastic which have been done that there is no interference on all variables, so that it can be said that variable used is pass on the classical assumption test.

Based on the classical assumption test it can be concluded that there are five variables that will be tested, which are: X_1 age, X_2 the number of family member, X_3 educational level, X_4 land area, X_5 the total production. Those five variables that will be used to be analyzed use the multiple linear regression. The analysis result explaining about the variance of factors affecting the female labor allocation in Udanawu District Blitar Regency is served on the Table 4.

Table 4. The Analysis of Factors Variance Affecting to the Female Labor Allocation on the Agricultural Business of Cacao Commodity in Udanawu District Blitar Regency

Variance Source	Sum of Square	Degree of Freedom	Mid Square	F-score	Sig.
Regression	16640.420	5	3328.084	16.390	0.000*
Residue	6903.733	34	203.051		
Total	23544.153	39			

Source : *Primary Data Processed in 2018*
Explanation : *) Differs markedly on the level of trust of 95%

Based on the Table 4 shows that the F value is 16.390 with the significance level of 0.000 The value of significance is 0.05 (Sig. 0.000 < 0.05) on the level of trust of 95%. That number means that the whole independent variables are age (X_1), the number of family member (X_2), education (X_3), land area (X_4), and the total production (X_5) affecting to dependent variable which is female labor allocation. Next, to test the effect of each independent variable toward the dependent variable or in this term which is female labor allocation is done a partial test (t-test) as on the Table 5.

Table 5. The Analysis Result of Multiple Linear Regression Factors Affecting to Female Labor Allocation on the Cacao Agricultural Business in Udanawu District Blitar Regency.

Free Var.	Coeff. Regression	Std. Error	t-score	Sig.	VIF
Age (X_1)	0.140	0.220	0.637	0.528	1.144
The Number of Family Member (X_2)	-0.231	1.988	-0.116	0.908	1.244
Education (X_3)	1.110	1.022	1.086	0.285	1.255
Land Area (X_4)	78.530	16.369	4.797	0.000*	1.183
Total Production (X_5)	0.093	0.015	6.166	0.000*	1.156
Constants	79.782				
Adjusted R^2	0.664				

Source : *Primary Data Processed in 2018*
Explanation : *) Differs markedly on the level of trust of 95%

Based on the Table 5 shows that the Adjusted R Square value is 0.664 meaning that 66.4% of dependent variable can be explained by the independent variable while 33.6% is affected by other variable which is not included to regression model. Next, the result of t-test shows that on the level of trust of 95% there are 2 independent variables affecting to female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency which are Land Area (X_4) and Total Production (X_5) and 3 of them do not affect toward the female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency containing to age (X_1), the number of family member (X_2) and education (X_3).

Here is the regression equation from the analysis of factors affecting the female labor allocation on the cacao agricultural agribusiness in Udanawu District Blitar Regency :

$$Y = 79.782 + 0.140\ X_1 - 0.231\ X_2 + 1.110\ X_3 + 78.530\ X_4 + 0.093\ X_5$$

Explanation :

Y = Female labor allocation (HOK/Month)
X_1 = The age of women farmers (Person)
X_2 = The number of family member (Person)
X_3 = Education (Year)
X_4 = Land area (Ha)
X_5 = Total production (Kg/Year)

Based on the regression equation above, known that the constant value is 79.782 meaning before doing the work in cacao agricultural business the female farmers have allocated their time of 79.782 HOK/Year. The effect of each independent variable on the female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency is as follows :

1. Age (X_1)

Regression coefficient belonged to age variable is 0.140 with the positive sign, meaning every addition of 1 year the women farmers' age will increase the work allocation of 0.140 HOK/Year. The age has t value of 0.637 with the

significance level of 0.528. The significance is less than 0.05 (Sig. 0.528 > 0.05), then H_0 is accepted and H_1 is denied, meaning the age variable does not affect markedly toward the female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency.

The age of women farmers does not affect markedly toward the work allocation because both women who are still young and who are old enough they are still active in agricultural activity, especially on the cacao agricultural business. The age of women farmers in Udanawu District Blitar Regency has the average age of 53 years, with the minimum age of 32 years and the maximum of 80 years.

2. Total Family Member (X_2)

Regression coefficient belonged to total family member variable is 0.231 with the negative, meaning every addition of 1 person of total family member will decrease the work allocation of 0.231 HOK/Year. Total family member has t value of -0.116 with the significance level of 0.908. The significance is less than 0.05 (Sig. 0.908 > 0.05), then H_0 is accepted and H_1 is denied, meaning the total family membervariable does not affect markedly toward the female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency.

Total family member also does not affect markedly toward the work allocation because even though women farmers have a big total family member it will not affect them to work on the cacao agricultural business. Basically, cacao that they cultivate is done themselves by the farmer household in Udanawu District Blitar Regency. Thus, depended on how those women farmers organize their time on the productive activity and domestic activity. Besides, cacao that they cultivate is using the backyard so that it makes them easy to organize the time in doing the work related with the cacao agricultural business and doing the activity in the household, such as cooking, cleaning up the house, and others.

3. Education (X_3)

Regression coefficient belonged to education variable is 1.110 with the positive sign, meaning every addition of 1 year the educational level will increase the work allocation of 1.110 HOK/Year. Education has t value of 1.086 with the significance level of 0.285. The significance is less than 0.05 (Sig. 0.285 > 0.05), then H_0 is accepted and H_1 is denied, meaning the education variable does not affect markedly toward the female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency.

The formal education that they take does not affect markedly toward the work in the cacao agricultural business. The time allocated by the women farmers of the work in cacao agricultural business only requires the skill and the ability in working. The women farmers' is obtained directly from their experiences. Almost the whole women farmers in Udanawu District Blitar Regency have had a good skill in doing the work. It is caused because the woman farmers in Udanawu District Blitar Regency in every step of cacao

agricultural business activity in the cultivation as well as post-harvest is done by themselves, they do not use the outside labors.

4. Land Area (X_4)

Regression coefficient belonged to land area variable is 78.530 with the positive sign, meaning every addition of 1 Ha of land area will increase the work allocation of 78.530 HOK/Year. Land area has t value of 4.797 with the significance level of 0.000. The significance is less than 0.05 (Sig. 0.000 < 0.05), then H_0 is denied and H_1 is accepted, meaning the land area variable affects markedly toward the female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency.

Land area affects markedly toward the work allocation because land area is a standard of welfare level of the household. The more widest land area done by women farmers, the more highest the work allocation. It is because the women farmers tend to add their work time if the land area done is wider.

5. Total Production (X_5)

Regression coefficient belonged to total production variable is 0.093 with the positive sign, meaning every addition of 1 kg of cacao seed production will increase the work allocation of 0.093 HOK/Year. Total production has t value of 6.166 with the significance level of 0.000. The significance is less than 0.05 (Sig. 0.000 < 0.05), then H_0 is denied and H_1 is accepted, meaning the total production variable affects markedly toward the female labor allocation on the cacao agricultural business in Udanawu District Blitar Regency.

Total production affects markedly toward the work allocation because if the total production of cacao is much then the work needed to post-harvest will increase. If the total production produced in cacao harvesting is much, then the activities of post-harvest such as fruit sorting, fruit, fermentation, dry seed sorting, fermentation and packaging will require the long work allocation.

CONCLUSION AND SUGGESTION

Conclusion

1. The female labor allocation is bigger than the male labor allocation. The female labor allocation is 130.28 HOK/Year, while the male labor allocation is 29.30 HOK/Year. Based on the calculation result with the test shows that female labor allocation with the male labor allocation is different.
2. The contribution of women farmers in Udanawu District is divided into productive activity and domestic activity. Women farmers in Udanawu District Blitar Regency are much more allocating the domestic activity. The women farmers allocation on the productive activity is 130.28 HOK/Year with the contribution of 17.96%, while the women farmers allocation on the domestic activity is 596.26 HOK/Year with the contribution of 82.04%.
3. Factors affecting to the female labor allocation are land area and total production, while factors not affecting to the female labor allocation are ages, total family member, and education.

Suggestion

Based on the research, then the suggestion which can be given to the enhancement of cacao agricultural business in Udanawu District Blitar Regency is as follows :

1. The work allocation in the cacao agricultural business activity on the male labor in Udanawu District should be more increased considering that the treatment on cocoa plant has a low work allocation.
2. The enhancement of skills for the women farmers so that the time allocated to the cacao agricultural business activity can be shorter, and the time remaining is used to handle other activities related to the cacao agricultural business.

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CORPORATE AND COOPERATIVE FARMING: A Strategic Review of Local Resource-Based Agribusiness Development Partnership In Indonesia

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ABSTRACT

Corporate and Cooperative farming and is a business model for improving farm management by farmers through groups, by doing social engineering, economics, technology, and value-added farming. Limited land ownership due to land conversion increases every year. Therefore, this study was conducted with the aim of knowing the implementation of cooperative farming, challenges and prospects of implementation in Indonesia. This study was studied using literature study in journal with period of 10 years (2008-2018). The results of the review show that the prospect of implementation of cooperative farming in Indonesia is quite high due to cooperative farming, will provide better business benefits to small farmers, greater farming is led by professional managers who are reliable and also the availability of substantial capital. However, the challenges faced are different perceptions of farmers, unfair distribution of profits, emotional and cultural ties between farmers and land that is high enough. Therefore, cooperative farming should be regulated with local resource-based.

KEYWORDS: corporate farming, cooperative farming, partnership

INTRODUCTION

The complexity of agricultural problems in Indonesia almost covers the entire vertex of the production system • The problems include the following: (a) The low knowledge and awareness of the farm community towards the introduction of the innovative technological aids; (b) Insufficient infrastructure facilities for agriculture, particularly damage to irrigation networks with some water supply disadvantages; (c) The small role of farmers' financial institutions and the unavailability of adequate agricultural capital to provide inputs for farming, especially the difficulty of accessing capital, the limitations of providing labor and the lack of applied machineries (Kementan, 2017).

Tenure per household of agricultural enterprises expended by BPS shows that land conversion is still a major problem. Based on extensive data of rice field standard in 2015, the average conversion of paddy field that occurred in Java amounted to 8,346.65 ha / year and outside Java amounted to 2,269.75 ha/year so that the average wetland rice area converted on average each year to reach an area of 10.616.4 ha / year. Although not as massive in Java, the conversion of paddy fields outside Java was unavoidable. This condition is increasingly worrisome, given the rapid economic growth

outside of Java at this time and the rate of population growth outside Java which still reaches 1.36% in the last 10 years. South Sumatra which is one of the national food granaries outside Java was not separated from this condition (Purbiyanti, 2017).

In an effort to overcome the problems faced by farmers, empowerment activities need to be done to empower the farmers themselves. There are four important things that can be done for the empowerment of farmers, namely: first, given the extent and status of agricultural land tenure is a fundamental agricultural problem, then the arrangement of the system and structure of the allocation of agrarian resources is very important. Therefore, the spirit of agrarian reform that berintikan land reform should still be the agenda of agricultural development. Second, access to information (access to information). The most important information known to the public is its "right" as a citizen to participate in determining and controlling the policies issued by the legislature and the executive. Third, is inclusion and participation (inclusion and participation). Inclusion is related to the question of "who?"; in this case the answer is farmers; while participation is related to the question of "how?". Fourth, capacity building of local organizations (local organizational capacity) (Kurnia, 2004).

Institutional building as a prerequisite in the development of agribusiness the largest part of the perpetrators of small and small farmers is the establishment of cooperatives and agribusiness corporations. Substantially, such institutional efforts can basically be seen as a step toward reconstruction in the control and access of productive resources in agriculture, especially with regard to agribusiness development. Cooperatives are more of a soft-step reconstruction, while corporations are more of a "radical" reconstruction, or hard-step reconstruction (Wibowo, 2015). Based on the background, the literature study was conducted to find out: 1) how is the implementation of cooperative and farming corporations and 2) how is the implementation challenge of both forms of business model in Indonesia.

MATERIALS AND METHODS

This research was conducted by using literature review study and secondary data collection from various research results that support with cooperative farming in Indonesia as well as related to the implementation of cooperative farming in agribusiness of agricultural commodities.

RESULTS AND DISCUSSION

Cooperative farming and corporate farming are two important approaches to improving the welfare of Indonesian farmers. Both approaches can address the marginalized position of farmers in everything, such as marketing knowledge, lack of capital, lack of post harvest handling and also associated with farming risks. The large grouping of farmers in a cooperative or corporate farming aims to enable farmers to think with modern management, using modern applications, modern industrial processing and retail industry marketing, as well as marketing by online store. The point is an

improvement in farm management. Cooperative and corporate farming have a more closely related approach to social capital in an agribusiness institution.

1. Cooperative farming

Cooperative farming has several criteria that are better suited to Indonesian agricultural characteristics that have biophysical diversity-sosek between spaces that require decentralized and bottom-up management. Previous programs, such as corporate farming, are more top-down. Landowners are still directly involved in managing farming on each farm. Cooperative farming can be illustrated by the following scheme:

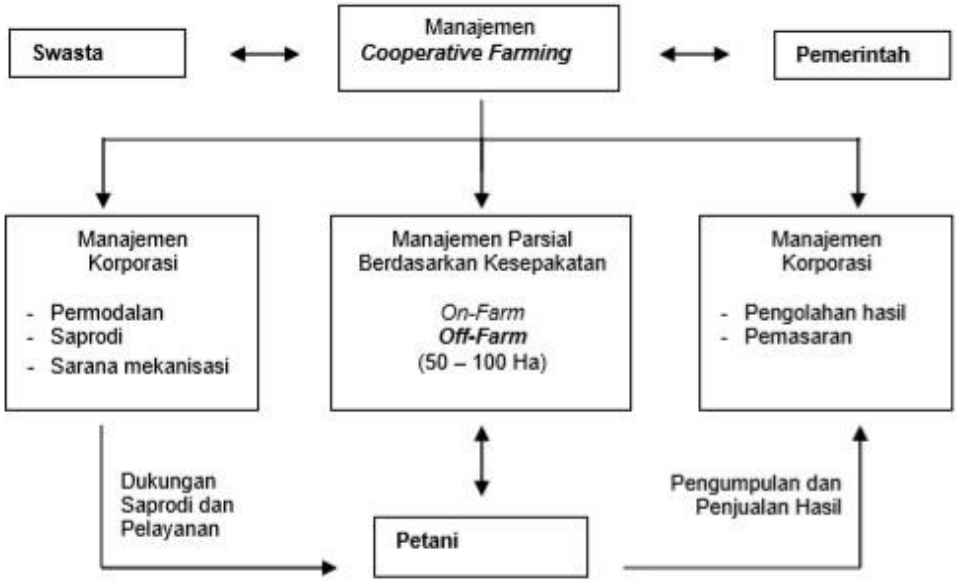

Figure 1. Design of Cooperative Farming Model Based on Rice-Palawija
(Nuryanti, 2005)

Given the implementation of cooperative farming model requires a lot of cost and energy, then in implementing it must pay attention to the following stages: (1) identification of area potential; (2) the organization of farmers belonging to regional groups; (3) determination of location specific technology package; (4) consolidation of procurement saprodi; (5) consolidation of on-farm business operations; (6) consolidation of post harvest activities; and (7) consolidation of marketing activities. Each implementation stage is a critical factor and determines the success of cooperative farming activities. Areas designated as potential locations for cooperative farming activities must meet some basic requirements.

The basic requirements of the area for cooperative farming are: (1) is a stretch of at least 50 ha and is present in a tertiary irrigation network; (2) CF group is a refinement of previous farmer groups; (3) CF groups may be subdivided into several CF subgroups on a tertiary irrigation network; and (4) owns CF facilities, among others group offices, saprodi kiosks and agricultural business capital, agricultural machine tools (water pumps, hand tractors,

paddy reapper, power thresers, rice milling units and dryers, and drying floors and warehouses). In addition to regional requirements, cooperative farming should have a steady organizational structure, equipped with a board, and consist of several sections needed to support the business program. The organizational structure of the top positions consists of deliberations of members, group communication forums, managers (managers, secretaries, and treasurers), sections, and subgroups. Section is formed with the amount as needed (water management, alsintan, capital and saprodi, on-farm, and off-farm).

Collaboration between farmers, the private sector and the government in developing food crop agriculture, especially rice and palawija is a process of integration of economic, ecological, and socio- cultural aspects of society. The collaboration has built social capital with a circle of synergy among stakeholders of cooperative farming in achieving business objectives (Figure 2).

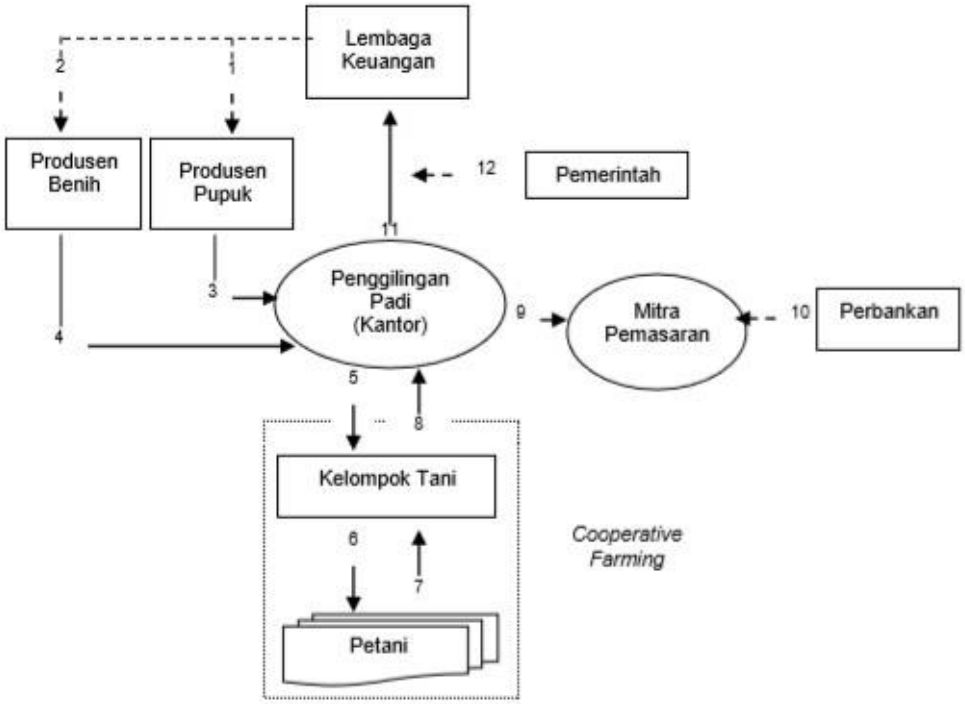

Figure 2. Cooperative Farming Working Mechanism
(Nuryanti, 2005)

Financial institutions from private parties will invest capital to producer saprodi, namely fertilizer (1) and seed (2). Furthermore, the producer of saprodi will provide fertilizer (3) and seed (4) for the farmer who is coordinated by the manager with the office / center of activity in the rice mill belonging to the group (5), used by members for farming (6). When harvested, members perform an integrated postharvest (7) in rice mills (8). When the post-harvest has been completed, the product is marketed by a private marketing partner (9). Capital marketing partners are supported by banks (10). Periodically cooperative farming is supervised and evaluated for

business feasibility by investors (11). The government actively acts as a facilitator of partnership, as well as communication catalyst between farmers and private parties (12).

Cooperative farming has directly empowered existing farming institutions, farmer groups, developing quality human resources through counseling on the importance of partnerships, agreements and togetherness. In addition, a vertically integrated and horizontal collaboration with the private sector, with government facilitators, has been able to reduce top-down and centralized coordination. Top-down and centralized patterns are still reflected in the corporate farming model. While corporate farming facilitates farmers with bottom-up and decentralized empowerment, it is more about the main objective of developing the quality of human resources of farmers. Farmers will be actively involved in each activity and have a high sense of belonging to the success of their group's efforts because the organization is of their own, self-administered, and the success will be taken for themselves. The end goal, the marketing chain becomes shorter and more efficient, so that farmers can get the appropriate price and increase income.

Cooperative Farming (CF) as a solution to improve the performance of good farm management. In practice, CF models will not make farmers lose their ownership of the land, but farmers must be guided collectively and directed in saprodi procurement, land preparation, rice cultivation and marketing results. If each farming phase is carried out jointly under a Cooperative Farming management. It is expected that efficiency will be obtained in the management and improvement of paddy production which leads to the increase of farmer's income and welfare.

2. Corporate Farming

Community corporations (agribusiness farmers) are essentially community-owned enterprises (agribusiness farmers). Community corporations will basically become strong when utilizing all the existing social capital in the community. The example is a lesson from the empirical experience of American Crystal Sugar Company (ACSC) purchased by 1300 farmers in 1973 through NYSE for US $ 86 million. Since then, ACSC has grown rapidly, both in area, production, yield, farm ownership, and joint ventures10. Similarly, the lessons developed in Malaysia in restructuring share ownership through the National Amanah Saham scheme seem to be subject to review11 (Wibowo, 2015).

Corporate farming is a form of economic cooperation from a group of farmers with an agribusiness orientation through consolidation of land management as a whole by ensuring land ownership on each farmer, so that business efficiency, standardization of quality, and effectiveness and efficiency of resource utilization management can be achieved (Dinas Pertanian, 2000). The long-term goal of corporate farming development is to create an independent, competitive and sustainable agriculture business through corporate land management. The approach in its development is agribusiness-based rural development by utilizing the opportunities of resources and community institutions optimally. Dinas Pertanian in Setiawan (2008) states

that the main characteristics of corporate farming are as follows: 1) A group of farmers who believe in the management of their land to an agribusiness institution with a certain economic cooperation agreement, where farmers act as shareholders in accordance with the land area of ownership. 2) Corporate farming is formed through deliberation / consensus among its members with respect to local social and culture. 3) Corporate farming is led by professional managers, selected by farmers and managed transparently and democratically in accordance with commercial business rules. 4) Corporate farming requires optimal business scale, in accordance with local resource conditions and capacities, agro-industry development potential and capacity and marketing, and availability of technology to improve efficiency, as well as technical management capabilities in a single management. 5) The coverage of corporate farming activities is based on superior commodities in the region, and taking into consideration the development and diversification opportunities, both vertically and horizontally. Based on the above, there are 2 differences from corporate farming and cooperative farming namely:

No.	Kriteria	Corporate Farming	Cooperative Farming
1.	Land Consolidation	Ada	Tidak ada
2.	Land and water management	Korporasi	Semi korporasi
3.	Manpower management	Korporasi	Semi korporasi
4.	Planting management and cultivation technology	Korporasi	Semi korporasi
5.	Management of production facilities and tools and agricultural machinery	Korporasi	Semi korporasi
6.	Capital management	Korporasi	Korporasi
7.	Havesting grouping	Korporasi	Semi korporasi
8.	Post harvesting handling	Korporasi	Korporasi

Sumber: (Nuryanti, 2005)

3. Opportunities and challenges of Cooperative and Corporate farming implementation

The ideals of cooperative enterprise in agriculture have had a long history of acceptance and even enthusiastic advocacy in CEE and CIS countries. This legacy was tarnished by experience of State control of cooperatives. The International Labour Office recently summarized the situation as follows (Couture et al., 2002 dalam Gardner, 2006):

> The State-controlled period was characterized by government interference in cooperative affairs at all levels. Most of the time, member registration was compulsory, and the directors and staff were not appointed by the members, but directly appointed by the State. In many countries, cooperatives were not particularly concerned about profitability since they were subsidized by the government and received preferential treatment. In the same way, they were subject to rigid State planning, which did not provide them with the possibility to develop their own entrepreneurial strategies. Their business affairs were often

restricted to a small range of products and services, and State control extended to instructions and directives concerning, for example, the number of employees and their wages.

The success of cooperative and corporate farming will be achieved faster if supported by various factors, among others: 1) The development of corporate farming is implemented in an integrated manner with the economic development of the local area. 2) Availability of alternative employment opportunities for farmers who entrust their land management to corporate farming. 3) Availability of special fund for start-up business and seed capital for farmers to start new activities. 4) There is an (government / non-government) institution capable of functioning as a facilitator. Various obstacles that can be expected to arise in the implementation of corporate farming, if among others: 1) Farmers are not willing to entrust the land to be managed by corporation for reasons of emotional and cultural bond. 2) In the early stage, corporate farming tends to reduce employment, especially for landless farmers. 3) The difference of perception among farmers in one stretch of corporate farming. 4) The difficulty of finding alternative business for small farmers that still involves traditional institutions such as bawon, ceblokan, kedokan, tebasan and others. 5) The establishment of corporate farming can be a source of social rural social conflict between workers and managers. 6) The possibility of non-integration in the development of agribusiness system including the development of infrastructure and the provision of agribusiness facilities (Disperta, 2000).

In addition to the above factors, the researchers also found several other factors that may affect the likelihood of success or failure of the implementation of cooperative and corporate farming system in the Golden Gate Farm Cooperative as follows:

1) Availability of initial capital to start the implementation of cooperative and corporate farming system. A large initial capital is required to start the implementation of both systems so that availability becomes an important factor to be considered. The provision of this initial capital can not be done by farmers or cooperative institutions without assistance from other parties. Solutions such as fund raising at the farmer level of cooperative members will not be able to solve the problem of overall capital availability because of course the amount to be achieved will not be so great. Other solutions such as borrowing to financial institutions on behalf of cooperatives are also difficult to be conducted due to limited assets owned by cooperatives. The existence of sponsorship from the government, educational institutions, or non-governmental organizations is needed in answering the problem of initial capital availability to start the implementation of corporate farming system.

2) Better benefits that have not been obtained and the process of division. Profits are the main reason for farmers to join the corporate farming system. Corporate land management is considered more profitable but there are additional costs in its management. When uncertainties arise to gain greater profits farmers tend to be heavy to entrust their land management in a corporation. In addition, the profit-sharing standard is also a matter to be

considered, when the profit sharing is based only on the extent of land entrusted to the cooperative of course the level of fertility of different land can be a problem for farmers.

3) The presence of a professional manager who is reliable. Limitations of resources owned cooperatives become one of the causes of difficulty in finding a professional manager who is reliable. The majority of farmers members of the Golden Gate Farm Cooperative can not determine who is appropriate to serve as a professional manager. The figure of professional managers can be obtained from outside the cooperative environment such as from government, educational institutions, or non- governmental organizations.

4) Farmers' difficulties to obey the established rules. Owner or tenant farmers have been managing their business independently where their land management decisions are taken without the intervention of others. When deciding to join the corporate farming system of course, farmers must obey the rules that will be established cooperatives as the institution that manages the land. Not only the management of the land alone, the rules established by the cooperative will also indirectly affect the life of farm households, especially for the lands that are located along with the owner's farmhouse. 5) Additional costs that will arise when the corporate farming system is implemented. In the management of land in the corporation of course there are additional costs that will arise. The cost to hire employees whose roles have been carried out by farmers as owners / tenants and land managers and the costs of separately separated land controls are examples of expected additional costs. Along with the implementation of the next steps, some concrete steps need to be done in applying the corporate farming system on the Golden Gate Farm Cooperative. 1) Socialization to member farmers and cooperative management. 2) Establishment of the preparation committee. 3) Establishment of corporate farming unit. 4) Approval of contract.

CONCLUSIONS AND SUGGESTION

1. Farmers will be actively involved in each activity and have a high sense of belonging to the success of their group's business because the organization is from their own members, managed by themselves, and the success will be benefited for themselves. Cooperative farming is considered to be a middle ground to meet the procurement of Indonesia's agriculture sector is stagnant. limited land in Java requires a solution that is starting to expand agricultural outside of Java. On the other hand, the outer regions of Java do not have sufficient agricultural infrastructure, while Corporate farming is an agricultural system by applying a relatively broad land-based approach in one management system by a corporation or corporation.
2. Factors that may affect the likelihood of success or failure of the implementation of corporate farming and cooperative farming system is the existence of integration of corporate farming development with local economic development, availability of institutions (government / non-government) capable of functioning as a facilitator, the existence of emotional and cultural bonds between farmers and land, the differences

of perception among farmers, the existence of unity in the development of agribusiness system, the availability of initial capital to start the implementation of corporate farming system, the existence of better benefits that have not been obtained and the process of distribution, the presence of a professional manager who is reliable.

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VILLAGE GOVERNMENT POLICY IN PROVISION OF SANITATION INFRASTRUCTURE IN COASTAL VILLAGES
(Study on Coastal Villages Jung Anyar Village Socah District Bangkalan)

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ABSTRACT

The problem of slum settlements in the coastal areas, namely in the Pesisir Hamlet in the Village Jung Anyar Socah District Bangkalan District is the reason in the preparation of this paper. The purpose of writing is to: 1. Analyze the condition of sanitation infrastructure in coastal village settlement areas, 2. Evaluate Village Government policy in provision of sanitation infrastructure in coastal village settlement areas. Methods of data collection to be used are observation and interview to obtain data related to the availability of sanitation infrastructure. Data analysis using qualitative descriptive analysis refers to the data reduction stage, data presentation and conclusion. The results show that sanitary conditions in Pesisir Hamlet are generally not feasible in terms of stool disposal, waste water disposal, and garbage disposal. The results showed that the policy of Jung Anyar Village Government in fulfilling sanitation infrastructure is not optimal yet. The role of village government in this case is still limited service to the community. Aspects of community development and empowerment are still not visible in supporting the policy of sanitation infrastructure fulfillment.

Keywords: Sanitation Infrastructure, Settlement, Coastal Village

INTRODUCTION

Background

Jung Anyar Village is one of the coastal areas in the District of Socah Bangkalan. This coastal settlement area is located in a fairly crowded Dusun Pesisir. Dusun Pesisir has a mooring of ferry boats that connect to the Perak and Gresik docks.

The livelihoods of Jung Anyar villagers are mostly fishermen, mainly those living in coastal hamlets. This is related to the location advantage adjacent to coastal areas. Along with the development of time then the population in the coastal Pesisir increasing, so linear with the demand related to land and infrastructure fulfillment.

This condition raises many problems related to the fulfillment of the needs of settlements, namely: clean water, garbage, drainage and household waste. As a result, Dusun Pesisir is known as slums that are vulnerable to health problems.

The unhealthy environmental conditions that still occur today in Jung Anyar village are as follows:

- Most residents use the channel as a waste disposal site
- Toilet wash activities are carried out around the dwelling house, throwing garbage into the channels around the house (for people who own houses on stilts)
- The majority of people do not have healthy latrines, do not manage household waste (liquid and solid) properly.
- Public latrines are still open and dirt is directly discharged into the sea.
- The smell of the environment is not delicious.

If it refers to environmental conditions in the coastal hamlet, it can be said that sanitation is still not feasible. Poor sanitation conditions affect the declining quality of the environment. This is as described in the Health Minister's Circular No. 132 of 2013 on the Implementation of Community-Based Total Sanitation that drinking water, environmental hygiene and sanitation are the health problems facing Indonesia.

The sanitation definition of the World Health Organization is as follows: "Sanitation generally refers to the provision of facilities and services for human waste disposal such as urine and feces. The term 'sanitation' also refers to the maintenance of hygienic conditions through waste management efforts and wastewater treatment. "

Sanitation is one of the basic services that often get less attention from local authorities, in this case the Village Government. In fact, the provision and management of good sanitation is a preventive measure to be taken to reduce the spread of infectious diseases due to poor sanitation (Arifianty, 2017).

Since the implementation of village autonomy, Jung Anyar Village has been given authority in the management of development and community empowerment. The decentralization of this authority was followed by the fiscal grant which enabled the village to set the pattern of development independently. To date, there are 4 funding schemes for villages: 1. Village Funds (DD) coming from the center, 2. Village Fund Allocation (ADD) is derived from district balancing funds, 3. Profit Sharing and 4. For Hasi Levy .

Jung Anyar Village Government policy in village development involves determining village development objectives, village functions, basic strategies for development of sectors and areas of development, population, intensification and extension of village space utilization and development of facilities and utilities.

Coastal areas become the choice to settle because it is close to the location of community work that mostly as fishermen. These conditions have a direct impact on the demands of infrastructure needs. This requires the policy of Jung Anyar Village Government in terms of sanitary infrastructure needs fulfillment. The consequence of the growing population in the region is the increasing number of settlements. Meanwhile, comfort as a residential area depends on the factors of sanitation facilities and infrastructure.

Seeing the problem, the author wanted to know and analyze the policy of Village Government in the development of sanitation infrastructure in the

coastal settlements in the hamlet Pesisir village Jung Anyar district Socah district Bangkalan.

1.2. Formulation of the problem

1. Analyzing the condition of sanitation infrastructure in coastal settlement area in Jung Anyar village, Socah sub-district, Bangkalan district
2. Evaluating Village Government policy in providing sanitation infrastructure in coastal settlement area in Jung Anyar village, Socah sub-district, Bangkalan district.

1.3. Purposes

1. Analyzing the condition of sanitation infrastructure in coastal settlement area in Jung Anyar village, Socah sub-district, Bangkalan district
2. Evaluating Village Government policy in providing sanitation infrastructure in coastal settlement area in Jung Anyar village, Socah sub-district, Bangkalan district.

1.4. Expected Results

The expected result of writing this paper is the compilation of a study containing information related to the policy of the Village Government in the development of sanitation infrastructure in coastal settlement areas.

METHOD

Rural Government policy research in the development of sanitation infrastructure requires data to support the analysis. The infrastructure referred to in this research is Wastewater, Sewage, Drainage, located in the area of coastal settlement of village village of Jung Anyar Pesisi.

The discussion or analysis is done on the availability as the main data, while the compliance policy data as supporting data, namely:

a. Fecal disposal management data: residents' behavior of stool disposal, availability of stool disposal facilities, stool disposal sites, condition of stool disposal facilities, and the role of Village Governments in the management of stool disposal.
b. Wastewater disposal data: residents' behavior regarding wastewater disposal, availability of SPAL (Wastewater Treatment System), SPAL conditions (substances, polluting water sources or not, causing puddles or not, causing odor or not, becoming vector / animal breeding sites bully or not), and the role of Village Government in waste water disposal.
c. Data of garbage disposal facilities: Citizen behavior related to garbage, garbage availability, condition of garbage (construction, closed, easy to clean, easy to transport), and role of Village Government in garbage disposal.

Data collection methods used were observations and interviews to obtain data related to the availability of sanitation infrastructure. Data analysis used descriptive analysis with literature study support.

RESULTS AND DISCUSSION

Sanitation Infrastructure Development

Based on Health Ministerial Decree (Kemenkes) no. 829 / Menkes / SK / VII / 1999, among parameters in housing health and residential environment requirements: management of stool disposal and household waste must meet health requirements, and management of household waste disposal must meet health requirements. Meanwhile, the provision of housing health requirements on the parameters of household waste and household waste management and waste disposal management according to Ministry of Health No. 829 / Menkes / SK / VII / 1999 namely: Household liquid waste does not pollute water sources, does not cause odor, and does not pollute the soil surface; and solid waste must be well managed so as not to cause odors, not pollute the ground and groundwater.

Referring to the legal basis, we reviewed the condition of stool disposal, sewerage and landfills at the research site of Pesisir Village - Jung Anyar Village. The results of observations in the field can be seen in the following table:

Aspects Reviewed	Reviewed Results
1. Behavior of residents related to disposal of feces	Residents still defecate (BAB) in public toilet, especially when the water condition is difficult
2. Availability of fecal disposal facilities	Most residents already have latrines / latrines in each of the residents' houses and there is also an open latrine that is used for the general public
3. Location of fecal disposal facilities	- In some homes of residents who already have latrines / toilets - Open latrines on the seafront
4. Condition of fecal disposal facilities	- Toilets / WCs in individual houses: have been equipped with septic tanks, but residual water disposal of stools is channeled through pipes to sewerage - Public latrines: open and dirt directly into the body of sea water without any processing
5. Role of Village Government in the management of stool disposal	None

From table 1 it can be seen that in general the condition of the management of stool disposal in Pesisir Hamlet is still not in accordance with the condition feasible. Among them is the behavior of residents related to the disposal of faeces that still defecate in public latrines, especially when the water conditions are difficult. While the condition of public latrines whose location on the seafront is still open and there is no stool processing so directly into the body of sea water. This is of course not in line with the target of Indonesia Stop Bleeding Behavior that is expected to be realized in 2019. In addition, this condition can be a place for vector/animal reproduction dangerous. Meanwhile the Village Government did not pay enough attention to this.

Table 2 Wastewater Disposal Management - Pesisir Hamlet, Jung Anyar Village, Socah Subdistrict, Bangkalan District

Aspects Reviewed	Reviewed Results
1. Behavior of residents related to waste water disposal	Residents dispose of wastewater in the channel in front of each resident's house
2. Availability of Wastewater Treatment System	No Wastewater Treatment System
3. Wastewater treatment conditions	Wastewater from the channels in each of the residents' houses is directly channeled into the sea
4. The role of Village Government in the management of waste water disposal	None

Data: Observation Results, 2018

From table 2, it can be seen that the condition of waste water in Pesisir Hamlet is still not good. It is known that there is no SPAL to treat wastewater so that when discharged to surface water bodies can meet the standards of quality standards of Domestic Wastewater in accordance with the provisions of legislation. The waste water from the channels in each of the residents' houses is directly channeled into the sea. In the meantime, there is no significant role of Village Government in managing waste water disposal in the area.

Table 3 Waste Disposal Site - Pesisir Hamlet, Jung Anyar Village, Socah Subdistrict, Bangkalan District

Aspects Reviewed	Reviewed Results
1. Community behavior related to garbage disposal	Residents dump in sewerage and on the seafront. When the sea water recedes, they burn garbage
2. Availability of landfills	There is no trash can in each house and there is no trash can in public places
3. Condition of garbage disposal	Garbage left alone without any container
4. The Role of Village Government in Garbage Disposal	Several years beforehand had implemented Waste Bank, but now it is not implemented anymore

Data: Observation Results, 2018

Observing the problem of waste management, such as: garbage collecting in coastal drainage, absence of garbage collection and transportation, direct disposal of garbage into the sea, absence of Waste Disposal site (TPS), and minimal sanitation supporting facilities cause environmental pollution. This

condition is strongly influenced by the weakness of the implementation of sanctions and the indifference of the residents community to the cleanliness of the environment.

According to Peal and Voorden. (2010), there is a close relationship between sanitation and health. Insufficient sanitary facilities and infrastructure may affect the spread of diseases such as diarrhea and cholera through several transmission paths known as 5F. The pathway of transmission is from Feces (human waste) into human digestion through 1) Fluids (water or fluid), 2) Fields (ground), 3) Flies (flies), 4) Fingers, and 5) Foods (food).

In addition to the direct impact on health, lack of access to sanitation facilities can indirectly affect the health of mothers and children and cases of child malnutrition. Another indirect impact is the difficulties for women associated with the privacy and menstruation services (monthly menses) of Sahoo, et al (2015), which also affects the attendance of female students in schools (Dreibelbis, 2013).

Infrastructure is an indispensable basic component to support the livelihood of an area, and infrastructure as a very important basic building in a built space, and the availability of every infrastructure is very influential on land use control in the area.

The provision of infrastructure in the village of Jung Anyar is the responsibility of the Village Government as the main stakeholders, in this case: Village Head and Village Representative Agency (BPD), both of which are required to work together to realize the fulfillment of sanitary infrastructure needs.

The survey results show that in fact each year the village has developed an infrastructure development plan summarized in RAPBDesa. Since the implementation of village autonomy, the focus of development on basic physical infrastructure, namely: roads, school buildings and irrigation channels. This is in accordance with the opinion of Hudson (1997: 3) which states that the success and progress of community groups depends on physical infrastructure for the distribution of resources and public services. The quality and efficiency of infrastructure affect the quality of life of the health of the social system and the sustainability of economic and business activities.

The main infrastructure mapping problem in basic sanitation conducted in Jung Anyar Village is still not accurate and has not solved the problems faced, so it is feared will cause new problems related to health. In this case, it is caused by the provision of sanitation infrastructure that is less balanced between the provision with the users.

Moreover, not all people are aware of the importance of sanitation. Sanitation is still regarded as less important than any other matter. In fact, health is a need (need) is interpreted in general which is the comparison between real situations and technical standards tetentu that has been agreed. In addition, health is a perceived need (felt need), namely the need perceived by the individual. So the decision to utilize a health service is a reflection of the normative combination and perceived need (Son, 2010).

In sanitation, health is seen as an important aspect. Todaro (2002) states that basically health is one aspect that determines the low level of a person's

standard of living. Therefore, a relatively good health status is required by humans to sustain all of their life activities. So to achieve a good health condition is needed good health facilities as well.

Village Government Policy in Provision of Sanitation Infrastructure

Sanitation is a basic right that must be obtained by society (Kamara.J.K, et.al, 2017). Sanitation is the most basic health service in order to improve public health (Aswathy SK, 2015). The Village Government is an important local authority in the fulfillment of sanitation infrastructure. The local government, according to Hossein, should do whatever is deemed necessary in meeting the needs of the region (Muluk, 2006). In this case the role of local government in sanitation according to Rosensweig and Derko Kopitopoulos (2010), consists of: 1. Strategy and Planning, 2. Advocacy and Promotion, 3. Capacity Building, 4. Supervision, 5. Monitoring and Evaluation, 6. Regulator and 7. Coordinator.

The process, the village role to record and see the condition of sanitation infrastructure. The villages conducted socialization related to sanitation infrastructure that has been established as a priority. The village prepares the budget drawn from the APBDesa to help finalize the provision of sanitation infrastructure.

In the context of sanitation infrastructure development, the village has three main roles, namely: service, guidance and community empowerment. Services to ensure the public is entitled to services provided with clean water, proper drainage and waste. Guidance to ensure people get their rights are given knowledge and assistance in improving the quality of sanitation. Empowerment to ensure people are entitled to their rights are given knowledge and skills in the management of sanitation independently.

The purpose of sanitation infrastructure development in rural areas is to encourage the empowerment of village communities. This is the responsibility of multi-stakeholders, mainly the Village Government. The fulfillment of these needs can not proceed without the important role of the Village Government.

Important policies are needed as a form of intervention in the fulfillment of sanitation infrastructure (Ganesh, et al, 2011). Interventions aim to develop access to clean water and sanitation. Interventions are intended to reduce the adverse health effects of diarrhea in children. Interventions can be educational campaigns, provision of water supply, sanitation improvement (Kamara.J.K, et.al, 2017).

According to (Haller T., et al, 2007), policy changes to incorporate improved water quality management of households to complement coverage expansion and continuous improvement of services will be an effective and efficient health intervention in many developing countries.

The fulfillment of sanitation-related infrastructure, including: waste water, garbage, and drainage. Programs related to the development of sanitation infrastructure ever experienced by the Dusun Pesisir community are presented in Table 4.

Table 4. Government-Related Sanitation Program in Jung Anyar Village

Program	Physical Behavior	Purpose
PNPM-Rural	Channel construction	Drain household wastewater from each resident's house to the sea
Village Funds Program Development	Channels construction	Streaming household wastewater
Allocation of Village Fund Program	Construction of public toilets	To dispose of faeces

Observation Data, 2018

If we pay attention to the above table then the existing programs are PNPM-Rural and Village Fund Program for drainage development, and ADD program with construction of public toilets. Meanwhile, until now there has been no physical development related to the garbage, although a temporary dumping (TPS).

In addition to the policies of the Village Government it is necessary to participate from the community. The community is a primary stakeholder, a stakeholder that has a direct link to the sanitation infrastructure fulfillment policy. Society becomes the main determinant in decision making process. Community as the recipient of the program and the programmer must always synergize with the Village Government in the fulfillment of sanitation infrastructure. The reason, without any commitment of all parties then the goal will not be realized.

If the partnership elements of the Village Government, community and other parties can be realized in the development of sanitation, the clean environment will be easier to be realized. According to Abalo.et al, (2017), a clean environment is essential to support the socio-economic life and health of community members. Community participation is required as a form of voluntary interaction to develop all of its potential.

CLOSING

a. Conclusion

1. The results show that sanitary conditions in Pesisir Hamlet are generally not feasible, in terms of conditions: disposal of faeces, waste water disposal, and garbage disposal.
2. The results show that the policy of Jung Anyar Village Government in fulfilling sanitation infrastructure is not optimal yet. The role of village government in this case is still limited service to the community. Aspects of community development and empowerment are still not visible in supporting the policy of sanitation infrastructure fulfillment.

b. Recommendation

1. With regard to the limited knowledge of sanitation (one of which is waste treatment, septic method, tripicon installation, etc.), it is necessary to socialize and capacity building for the community.

2. From the results of the study obtained the results that the community has a behavior of life is not clean and unhealthy, which has become the habit of descending down dirt and garbage directly to the shore / beach, so as to create poor sanitation. Therefore, the role of Village Government in sanitation should be directed to the aspect of community development and empowerment.

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